

# Safeguarding healthy ageing

Potential solutions to improve  
immunisation coverage rates  
among older adults in the UK

Summary report



**Health and care**

Carers

Connections

Culture and society

**Immunisation**

Inequalities

**Life expectancy**

Retirement

MSD has initiated and fully funded this activity. MSD had editorial input and final approval of content. This report is intended for healthcare professionals and health policy makers.

## About the ILC

The International Longevity Centre UK (ILC) is the UK's specialist think tank on the impact of longevity on society. The ILC was established in 1997, as one of the founder members of the International Longevity Centre Global Alliance, an international network on longevity.

We have unrivalled expertise in demographic change, ageing and longevity. We use this expertise to highlight the impact of ageing on society, working with experts, policy makers and practitioners to provoke conversations and pioneer solutions for a society where everyone can thrive, regardless of age.

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## Introduction

### ***Vaccination has greatly reduced the burden of infectious diseases.<sup>1</sup>***

Alongside regular exercise, enjoying a varied diet and avoiding tobacco, immunisation is a tried, tested and effective means of staying healthy throughout the life course and a key component of healthy ageing.<sup>2</sup> However, the uptake of adult immunisation is not consistent across the UK, and adults in at-risk groups may not necessarily know or ask about vaccination.

Vaccine-preventable diseases (VPDs) continue to place a significant burden on individuals of all age groups. These diseases threaten the life or impact the quality of life of patients; older adults may suffer more frequently than younger people from these severe infections, and their impact is often greater, with poorer outcomes noted in the older population.<sup>2</sup> This is due to a variety of factors such as underlying chronic medical conditions, age-related reduction in immunity (immunosenescence) and unwillingness among individuals to get vaccinated or complete the vaccination course. Adults contracting these diseases may also infect unvaccinated individuals (e.g. newborn infants or older people), who can also be severely affected<sup>3</sup>

### ***Immunisation is a key component of any healthy ageing strategy.***

Vaccination is not just for infants; it is an indispensable public health tool that can be employed across the life course to protect people of all ages against VPDs.

In many respects, the constituent nations of the UK are international examples of best practice when it comes to vaccination, with relatively good vaccine surveillance and concerted efforts to improve uptake rates. However, recent uptake data has demonstrated a decline in vaccine uptake among the over 65s. This poses a particular cause for concern as older adults may suffer more frequently than younger populations from VPDs and their impact is often greater, with poorer outcomes recorded in the older population.<sup>4</sup>

This summary report outlines interventions that could improve immunisation rates among adults aged 65 and over, given the emphasis placed on over 65s in national immunisation programmes (NIPs) across the UK.

There is evidence that adult immunisation programmes can bring significant health and socio-economic benefits.<sup>5</sup> However, numerous barriers have been identified which may deter adults from seeking vaccination. Lack of awareness, either of the need to be protected from VPDs as adults perceive themselves to be at low risk,<sup>6</sup> or being unsure of their personal vaccine history<sup>7</sup> can act as barriers. Issues around accessibility, including making vaccines available in convenient settings<sup>4</sup> and the lack of a recommendation from a healthcare professional have both been reported as a reason for not being immunised.<sup>8</sup>

Whilst in many respects the UK leads the way in terms of surveillance and uptake, there is certainly room for improvement. Interventions have been trialled in the UK and abroad in attempts to increase vaccine uptake among the over 65s.

This summary report is intended to provide policymakers, healthcare professionals and third-party organisations with an accessible review of what works around the world, and how it could be adapted for the UK.

Looking at the over 65s, the report provides an analysis of:

- The key challenges to accessing immunisation
- Individual motivations that might encourage this age group to ask about immunisation
- Interventions that can be employed to improve access and immunisation for eligible people

*This summary report is part of a comprehensive version which includes a detailed account of the interventions that can be applied to the UK and recommendations to improve immunisation for older adults. To enquire about the full report, please contact Navpreet Singh, MSD ([navpreet.singh@msd.com](mailto:navpreet.singh@msd.com)). Please note that the full report is classified as a promotional material as MSD is the main vaccine supplier for 2 out of the 3 NIPs that are discussed in the report.*

## Uptake: Possible reasons why it doesn't happen

No one has suggested I should have a vaccination.

I'm healthy. Surely vaccination is for ill people?

I get lots of information from a charity who knows a lot about my long-term condition. But I haven't noticed them mentioning that vaccination would be a good idea.

I know you get the flu vaccine in the winter but should I get other vaccinations at winter too?

I saw a poster in the GPs advertising vaccination but it didn't talk about my long-term condition.

I've heard of the flu vaccine but I didn't even know that there were other adult vaccinations.

I go to see the pharmacist and the nurse regularly, but they haven't ever mentioned vaccination to me.

I'm not vulnerable, am I?

I don't ever see a doctor so haven't been told I might benefit from a vaccine.

How do I know if I'm eligible for a vaccine? I don't know where to go for the information.

Am I really eligible for a free vaccine?

When I was diagnosed with my long-term condition I was given a huge pack of information. But I don't remember it saying I should get any vaccinations.

I know there are lots of leaflets in the pharmacy and in the doctors. But there are so many I didn't see the one on vaccination.



## What might work?

Following our literature review, interventions that have been employed to increase uptake of adult vaccinations in the UK include:



**Online GP records:** User-friendly online platforms designed to provide people with their GP records in an easy to navigate format.



**Out of hours clinics:** Increasing the accessibility of pharmacy-based vaccination through holding out of hours clinics, i.e. the opportunity to be immunised on-site outside of standard 09:00 – 17:00 Monday to Friday working hours.



**Smartphone applications:** Apps that provide details about immunisation schedules and reminders to be immunised when eligible.



**Targeted mailings:** GP surgeries sending personalised letters to patients to inform them of NIP recommendations, outline the benefits of immunisation and invite them to register for an appointment to receive the vaccine.



**Text reminders:** These reminders can be sent to patients to remind them of the benefits of immunisation and offer opportunities to book a vaccination appointment. A number of commercial mass-texting services are available, and messages can be sent to a patient with up to date contact mobile phone details on record.



**Targeted telephone calls:** Telephone calls made by GP surgery staff to patients explaining the risk of VPDs and offering vaccination appointments.

## Application of Interventions to the UK

### Where do the interventions come from?

The interventions reviewed in this report have each been demonstrated to have a positive, significant impact on vaccination uptake rates in their respective settings either locally in the UK or abroad. The report is informed by a literature review focusing on vaccine uptake interventions, and through expert interviews with representatives of key stakeholder groups.

An expert Advisory Board was also established to guide the report's recommendations, composed of senior experts in public policy, healthcare and health communications. Their comments and insights have informed report recommendations and the interventions featured. Full details of advisory board members can be found in the acknowledgements and disclaimers section.

### What are the interventions?

The interventions are based on addressing several challenges through four main routes:

- **Healthcare professionals**

Interventions in the 'healthcare professionals' category are designed to help nurses, pharmacists and doctors access information on which vaccines patients are eligible for, and how best to broach the topic of immunisation.

- **Access**

Interventions in the 'Access' category include examples of initiatives designed to improve vaccine accessibility for the general public.

- **Communications**

Interventions in the 'Communications' category include studies on the efficacy of different messages and mediums to improve vaccine uptake.

- **Technology**

Interventions in the 'Technology' category include examples of how new consumer-facing technologies have been adapted to help inform the public about immunisation and deliver vaccination in the community.

## Healthcare Professionals

### **Verbal recommendation from a healthcare professional**

Multiple studies have demonstrated that the recommendations of healthcare professionals are highly influential in a patient's decision to be immunised or to seek vaccination.<sup>9</sup> For example, a multi-country survey that sought to establish the factors that best explained past vaccination rates found that the most important policy amenable factor was 'social influence, particularly from physicians.'<sup>10</sup>

### **Prompting through electronic health records**

When an electronic health record is opened by a GP, a nurse or a pharmacist at the beginning of a consultation, a pop-up window asks the healthcare professionals to actively choose to either accept or decline (active choice) a vaccination order for eligible patients which has proven to improve vaccination uptake rates.<sup>11,12</sup>

### **Four Pillars Toolkit for healthcare professionals**

The Four Pillars toolkit, developed by the US Centres for Disease Control and Prevention in partnership with the University of Pittsburgh and the Baylor College of Medicine, is a series of recommendations which aim to increase the convenience of vaccination services, communicate with patients about the importance and availability of vaccination, enhance office systems to facilitate adult vaccination, motivate administration through practice-based immunisation champions. A US trial of the toolkit amongst medical practices found that those over 65s in the intervention group practices were 14.7% more likely to be immunised than those in practices that did not trial the Four Pillars Toolkit.<sup>13</sup>

### **Clinical Decision Support Systems (CDSS)**

Clinical decision support systems are software applications that advise healthcare professionals in different clinical settings when a patient should be immunised and what they should be immunised against, in line with NIP recommendations. Their use has been evaluated in a range of care settings, including in pharmacies, where they have been shown to be effective in identification of unmet vaccination needs, education of patients about their vaccination needs, and provide significant improvements in routinely recommended vaccination rates.<sup>14,15</sup>

## **Presumptive announcements**

Presumptive announcements describe an approach that healthcare professionals can adopt when broaching the topic of immunisation with their patients. This approach operates on the precept that healthcare professionals presume that a patient will want to be immunised and announce that they are to be vaccinated and has been shown to be more effective than a conversation approach<sup>16,17</sup>

## **Residential Care Regimes**

Residential care regimes are protocols that can be put in place in residential care settings to maximise vaccination uptake amongst residents. Such measures include creating and circulating written vaccination policies, having staff immunisation champions to organise vaccination programmes and having procedures in place to obtain residents' consent to be protected against disease through immunisation. Putting these measures in place has been shown to increase vaccination coverage rates of facilities compared to not adopting any of these.<sup>18</sup>

## **Access**

### **Out of hours clinics**

This intervention aims to increase the accessibility of pharmacy-based vaccination through holding out of hours clinics, i.e. the opportunity to receive vaccination on-site outside of standard 09:00 – 17:00 Monday to Friday working hours. By holding out of hours clinics, it provides a more convenient access to vaccination services outside of standard working hours.

### **Expanding Pharmacy-Based Immunisation Remit**

Data on the effects of allowing community pharmacists to administer vaccinations per a specified protocol or with a patient-specific prescription suggest that allowing pharmacists to administer vaccines via NHS commissioning could improve immunisation rates.

## Communications

### Targeted mailings

Targeted mailings see GP surgeries sending personalised letters to patients to inform them of NIP eligibility, outlining the benefits of immunisation and inviting them to register for an appointment to receive the vaccine. Personalised letters with an action message have been shown to be most effective in increasing uptake amongst patients.<sup>19</sup>

### Text message reminders

Text message reminders can be sent to patients to remind them of the benefits of immunisation and offer opportunities to book a vaccination appointment. Several commercial mass-texting services are available, and messages can be sent to a patient with up to date contact mobile phone details on record. Text message reminders have shown to be effective in increasing vaccination rates, independent of age.<sup>20</sup>

### Targeted telephone calls

Telephone calls made by GP surgery staff to patients explaining the risk of VPDs and offering vaccination appointments have been demonstrated to be an effective way of improving adult immunisation rates.<sup>21</sup>

## Technology

### Online GP records

These user-friendly online platforms provide people with their GP records in an easy to navigate format. Online GP records include prescribed medications and medical histories, including which vaccines have been administered and when. It's been found that those who can access their health records online are more likely to be vaccinated against than those who do not.<sup>22</sup>

### Smartphone applications

Smartphone applications that provide reminders and details about immunisation schedules have been developed and some have been evaluated to determine how effective they are at encouraging users to keep up to date with NIP recommendations, particularly among younger demographics.

## Recommendations

These recommendations are the views of ILC UK based on input from literature reviews, expert interviews and the project's advisory board.

### Optimising the system

#### **1. Taking a life course approach**

Healthcare professionals and policymakers should be mindful of the need for a life course approach to improving adult immunisation rates and consistently frame immunisation as being first and foremost a means of maintaining health and wellbeing.

#### **2. Improve access to standardised data on coverage rates**

The provision of publicly available vaccine uptake data continues to be improved and, where possible, standardised across the UK.

#### **3. Prioritise interventions with a trusted source**

Interventions which involve interaction with a single trusted point of contact (e.g. phone calls or face-to-face interactions with healthcare professionals) should be prioritised.

#### **4. Learn the lessons from other healthcare interventions**

Lessons could be learned from age-related screening programmes, such as prostate-specific antigen testing for healthy men aged 50 and over and the bowel cancer screening programme for those aged 60 to 74.<sup>23</sup>

#### **5. Get commissioning right**

There is sometimes confusion about funding streams for adult vaccination, i.e. whether this is within the remit of national NHS teams or local authorities. It is important that there is no ambiguity as to whether Sustainability and Transformation Partnerships, Clinical Commissioning Groups or local authorities should be funding the vaccine and the appropriate funders are clarified.

## Optimising the communication with the public

### **1. Emphasise personal responsibility**

Healthcare professionals and policymakers should employ interventions that encourage personal responsibility among individuals to proactively seek immunisation, as opposed to relying on individuals to react when a prompt is given from a trusted source.

### **2. Prioritise at-risk groups**

Those aged between 18-65 with long-term health conditions should be priority subjects for the interventions suggested, given that a cultural shift to self-management may mean that they are less likely to be recommended vaccinations by a healthcare professional and may not be aware of the risks which VPDs pose to them.

### **3. Focus on key life events**

For example, upon diagnosis of a long-term condition the motivation for individuals may be to protect oneself, in the interest of self-protection and to be present for loved ones.

### **4. Get the messaging right**

Those with long-term health conditions should be reassured that they are not being offered the vaccination due to increased vulnerability, but because they remain strong enough for immunisation to be an effective means of preventing infectious disease.

### **5. Use generic messaging rather than disease specific**

Some people are likely to benefit from more than one vaccination. Interventions which employing a simple message across more than one vaccine may be useful.

### **6. Patient advocacy groups reaching their audience**

Patient advocacy groups should look to promote awareness of the benefits of immunisation whilst considering the differing motivations that inform the decision to be immunised at different stages of the life course and at different key life events, e.g. at birth and at diagnosis of a long-term condition and reaching those with chronic conditions throughout the life course.

## Acknowledgements and disclaimers

MSD commissioned the International Longevity Centre – UK (ILC-UK) to develop this report on increasing awareness on ways in which older adult's immunisation coverage rates can be improved in the UK. MSD has initiated and fully funded this activity. MSD had editorial input and final approval of content.

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Members of our Advisory Board received an honorarium for their time, paid by MSD in accordance with the Association of the British Pharmaceutical Industry (ABPI) Code of Practice on transfers of value.

In providing their recommendations, Advisory Board members do not directly or indirectly endorse any specific vaccine product or company.

Advisory Board members reviewed shortlisted interventions collated by ILC-UK through a literature review in advance of a one-day meeting conducted in May 2018.

Advisory Board members:

- George Ames, Client Services Director, Forster Communications
- Helen Donovan, Professional Lead for Public Health, Royal College of Nursing
- Professor Ian Philp, Professor of Global Ageing Studies, University of Stirling and Executive Vice President, Research and Development and Chief Scientific Officer, EasyCare Academy
- Professor David Salisbury, Associate Fellow, Centre on Global Health Security, Chatham House
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