

Reducing the risk

Improving vaccine
uptake across at-risk
groups in the UK



Immunisation

Health and care

Prevention

Inequalities

Diseases and conditions

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Executive summary

Throughout the UK, millions of people are living with underlying health conditions that put them at greater risk of serious illness from vaccine-preventable diseases, such as influenza (flu), pneumococcal disease and, more recently, COVID-19. However, despite the fact that vaccines could prevent these diseases, uptake of routine vaccination remains concerningly low:

- The average uptake figure for the flu vaccine among at-risk people in the UK is 57%: **Northern Ireland has the highest figure (68%)¹ and Wales the lowest (51%)²**
- In England, 8 million at-risk people were registered for the flu vaccine during the 2020/21 flu season, but **only 53% were vaccinated, leaving 3.75 million at-risk people unvaccinated against the flu last winter³**
- Between 2018 and 2020, of the 579,000 people in clinical risk groups eligible for pneumococcal vaccination,^a **only 17% were vaccinated: less than 100,000⁴**

Nonetheless, uptake of the COVID-19 vaccine has been incredibly high for people in clinical risk groups – the double vaccination rate in England for at-risk people was 81% as of 5 September 2021, while that for clinically extremely vulnerable (CEV)^b people was 92%.⁵

The pandemic has had a positive impact on flu vaccination uptake too: levels have increased by almost 10% compared to 2019. But despite this, routine vaccination rates are still suboptimal for UK risk groups. Our research has found a number of factors that contribute to this, including:

- **Communication barriers:** misinformation, poor communication and inconsistent messaging can increase vaccine hesitancy and cause confusion among people from risk groups, resulting in a lack of engagement

^aPneumococcal vaccine data includes the proportion of adults aged 2 to 64 years who were newly identified as being at-risk between 1 April 2018 and 31 March 2019, and received a vaccine between 1 April 2018 and 31 March 2020. See Table 2. PPV vaccine coverage and uptake by risk up to 31 March 2020 in England [here](#).

^bThe Joint Committee on Vaccination and Immunisation defines “clinically extremely vulnerable” people as those who “have been shielding for much of the pandemic”, and provides a breakdown of the underlying health conditions that attract the need to be vaccinated first in its independent report.

- **Structural barriers:** people from ethnic minorities and those living with HIV are more likely to face these barriers, due to a lack of trust in public organisations and fear of stigma and discrimination from healthcare providers
- **Personal factors:** individual barriers, such as needle phobias, conflicts with individual choices, time constraints, medical pressures, and age, could all dissuade people
- **Accessibility issues:** physical and geographical barriers can limit the ability of people in some risk groups to access vaccination, while inflexibility of appointments and a lack of supplies can also prevent some getting vaccinated

To overcome these barriers, we've identified three key opportunities to help improve vaccination uptake in at-risk people:

1. **Improved vaccination communications and information:** targeted communications and personalised messaging, which speaks to at-risk individuals and their conditions, could help them recognise the importance of routine vaccination
2. **Closer community collaborations and partnerships:** charities, community leaders, public health groups and pharmacies should work together to promote and encourage vaccination
3. **Easier access to vaccination for at-risk people:** finding innovative solutions to overcome access issues, as well as making the immunisation process more inclusive, will be pivotal in ensuring that all at-risk people are able to attend vaccination appointments, regardless of their physical or mental health

We have used these recommendations as the basis of a good practice guide, designed to equip condition-focused charities with solutions to improve uptake and promote vaccination across the risk groups relevant to them. Our research has found that at-risk people regard charities as trustworthy and reliable when it comes to matters relating to their underlying health conditions. Given these charities' independence and specialist knowledge of patient issues, at-risk people sometimes feel more able to approach them than other organisations. As such, we see charities as the changemakers who are best suited to encourage at-risk people to seek routine vaccination.

We have a real opportunity to improve the health and longevity of at-risk people by encouraging them to receive routine vaccinations.

Immunisation plays a fundamental role in not only protecting public health – as highlighted during the COVID-19 pandemic – but also individual health. Vaccination can reduce the risk of serious illness for people with underlying health conditions and help them to protect themselves from largely vaccine-preventable diseases.

Introduction

The COVID-19 pandemic is a stark reminder of the importance of immunisation in preventing disease outbreaks and protecting public health. In particular, safeguarding those who are most at risk from the adverse effects of COVID-19 has become a crucial priority. In the UK, CEV people and those with underlying health conditions were prioritised during the first stage of the COVID-19 vaccination rollout.⁶ In the first six months of 2021, 93% of CEV people and 82% of those with an underlying health condition received their first dose of the COVID-19 vaccine.⁷

However, when it comes to other vaccine-preventable diseases, such as flu and pneumococcal disease, uptake among people with underlying health conditions – who are also referred to as being in particular clinical risk groups – is much lower. While seasonal flu vaccination uptake levels have gone up for risk groups in England during the pandemic – increasing from 43.6% in 2019/20 to 53% in 2020/21⁸ – this still remains far below the 75% target set by the WHO Regional Office for Europe.⁹ Previous ILC research has already highlighted the social and economic consequences of contracting flu for at-risk people; over 100,000 cases of flu could be prevented by vaccination.¹⁰

As such, it's vital that at-risk people receive routine vaccination against illnesses which could have long-lasting impacts on their health and longevity. This is especially true given that at-risk people are more likely to die from complications associated with vaccine-preventable diseases. If COVID-19 has acted as a reminder about the importance of vaccination, then a post-COVID society should feature a greater number of at-risk people receiving vaccination for all vaccine-preventable diseases.

This report aims to highlight the challenges and opportunities facing people from clinical risk groups when it comes to routine vaccination.

We used multiple qualitative research methods: we conducted interviews with individuals from risk groups, condition-focused charities, public health bodies and medical professionals, who outlined the range of different specific attitudes towards, and barriers to, vaccination, as well as potential solutions to help improve uptake. We carried out eight interviews with people aged 18-64, each of whom had one or more of the underlying health conditions listed

below; we carried out 12 interviews with charities and healthcare organisations; and we held two focus groups with senior stakeholders from public health organisations, industry groups and health charities.

We've used our findings to create a best practice guide called *Reducing the risk: Recommendations for charities to help increase vaccination uptake in at-risk people*, aimed at equipping charities with practical solutions. We undertook additional interviews with charities to review this.

While we recognise there are multiple risk groups and underlying medical conditions,^c the research for this report covers eight conditions in particular:

- Asthma
- Chronic heart disease (CHD)
- Chronic kidney disease (CKD)
- Chronic obstructive pulmonary disease (COPD)
- Diabetes
- HIV
- Leukaemia
- Multiple myeloma (a.k.a. myeloma)

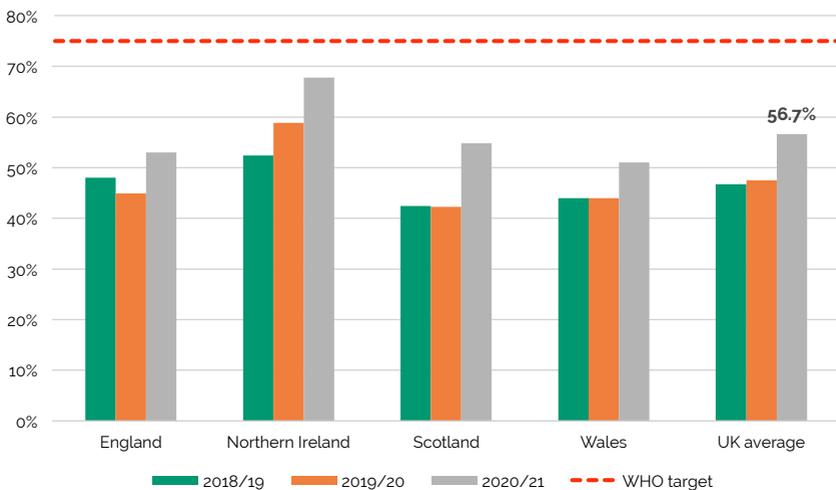
^cThe UK Government's *Green Book of Immunisation* lists a number of at-risk groups that should receive vaccination, including adults with asplenia (absent/dysfunctional spleen), chronic liver disease, haemophilia, morbid obesity and neurological conditions. The recommendations and opportunities outlined in this paper aim to act as a benchmark for all risk groups, including those which have not formed part of our main research.

Vaccination uptake across different clinical risk groups

Current UK Government guidelines recommend routine vaccination for all risk groups, yet UK uptake remains low. For example, despite a considerable increase during the pandemic, take-up for flu vaccination is still almost 20% below the WHO's target of 75%.

The Government's *Green Book on Immunisation* offers guidance on the most recent medical advice on immunisation against vaccine-preventable diseases for 13 risk groups. Those diseases include flu, pneumococcal disease, herpes zoster (shingles), hepatitis and meningococcal illnesses.¹¹ The vaccinations it recommends most often are for flu and pneumococcal disease, in part because of the seasonal occurrence of both diseases and the higher mortality rates: flu, for example, is ten times deadlier for people from a clinical risk group than for those who aren't from one.¹²

Figure 1: Flu vaccination uptake for at-risk people aged under 65 across the UK¹³



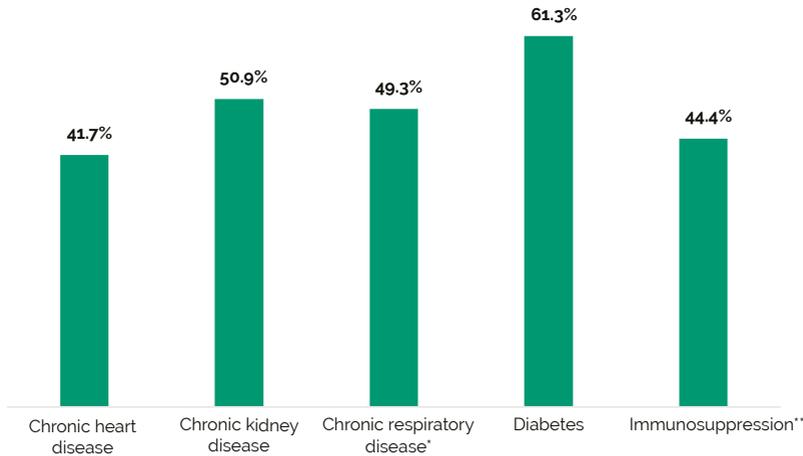
Source: Public Health England (2021)

Figure 1 outlines the annual flu vaccination uptake for at-risk people aged less than 65 in the UK since the 2018/19 flu season. The average uptake level is currently 56.7% – almost 20% less than the target set by the WHO Regional Office for Europe. Nonetheless, a spike in uptake has occurred since 2020, possibly due to an increase in vaccination awareness: in fact, one study suggests that the pandemic has

increased flu vaccination acceptance in eligible groups by 11.9%.¹⁴ While COVID-19 has caused widespread devastation, the pandemic has clearly improved uptake and strengthened the argument for routine vaccinations in clinical risk groups.

Overall, however, trends suggest that uptake has been relatively low, with the exception of Northern Ireland where strong increases have occurred year-on-year. Prior to the pandemic, average UK flu vaccination uptake levels among at-risk people remained below 50%. Even in England last year, where around 8 million at-risk people were registered for flu vaccination, only around half (53%) received a dose, which means that **3.75 million at-risk people went unvaccinated against flu during the winter of 2020/21.**¹⁵

Figure 2: Flu vaccination uptake by clinical risk group in England aged 16 years to under 65, 2019-20¹⁶



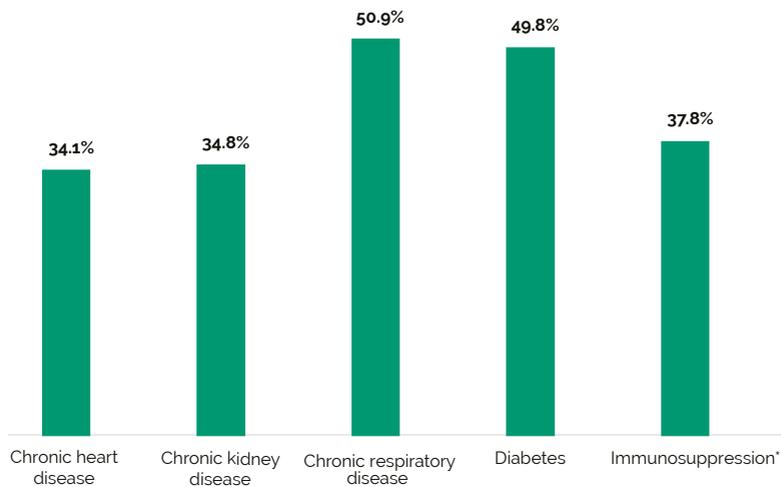
Source: Public Health England (2020)

*Chronic respiratory disease includes asthma and COPD. **Immunosuppression includes HIV, leukaemia and multiple myeloma.

When looking in detail at uptake across different risk groups, there are clear disparities between them, with certain cohorts having better uptake than others (see Figure 2). With the exception of people with diabetes, flu vaccination uptake ranges between around 40% and 50%.

Pneumococcal vaccination uptake is also low in clinical risk groups, with average coverage up to March 2020 for all groups standing at 42%.¹⁷ Uptake in the groups highlighted in this report ranges from 34% to 51% (see Figure 3).

Figure 3: Pneumococcal (PPV) vaccination uptake* by clinical risk group in England¹⁸



Source: Public Health England (2020)

*Cumulative vaccine uptake as a proportion of adults aged 2 to 64 years at risk anytime up to 31 March 2020.

Chronic heart disease (CHD)



Recommended vaccinations: flu, pneumococcal

Number registered for flu vaccination (England, 2020): 912,579

**Number vaccinated for flu in 2020: 380,113
(41.7% uptake)¹⁹**

In England, 9% of fatal flu cases involve people who have CHD.²⁰ Furthermore, the risk of pneumococcal-related illnesses increases between 3.3 and 9.9 times for people with CHD, compared to those without it.²¹ One study has suggested that patients who are vaccinated for flu are 27% less likely to be hospitalised with CHD,²² while another found that unvaccinated individuals are almost twice as likely to have heart attacks.²³ In addition, pneumococcal vaccination is shown to reduce the risk for some adverse cardiovascular events, making it beneficial to vaccinate those at greater risk of cardiovascular diseases.²⁴

Despite this, uptake remains low. One study has suggested that cardiovascular patients were unlikely to receive the flu vaccine because they felt it wouldn't work (23% of respondents) or because they believed it would cause them to contract flu (23%).²⁵ An Italian study has also suggested that some people with severe CHD have more frequent contact with healthcare workers, leading to multiple opportunities for information on flu vaccination as well as opportunities to receive it.²⁶ This would suggest that access to medical expertise could also play a pivotal role in determining uptake in people with CHD, with unequal health access posing a possible barrier to vaccine uptake.

Chronic kidney disease (CKD)



Recommended vaccines: hepatitis B, flu, pneumococcal

Number registered for flu vaccination (England, 2020): 334,968

**Number vaccinated for flu in 2020: 170,644
(50.9% uptake)²⁷**

People with CKD, especially end-stage renal disease, are at increased risk from flu, with infection the second leading cause of mortality for this cohort.²⁸ Furthermore, people with CKD are at a much higher risk (being between 6 and 26 times more likely) of contracting pneumococcal disease than those without the condition.²⁹ Therefore, vaccination helps to minimise long-term complications from flu, pneumococcal disease and the hepatitis B virus (HBV); if vaccinations are administered to people during the earlier stages of CKD after diagnosis, they can produce a more favourable immune response rate.³⁰

While there's only partial literature on the low vaccination uptake for people with CKD, one study has suggested that accessibility is critical when it comes to this group receiving flu and pneumococcal vaccines. Although most (in particular, those on dialysis) visit their GP annually, most prefer to get vaccinated in hospital: 59% prefer vaccination during dialysis versus 17% who favour their GP surgery.³¹ As such, increasing vaccination in dialysis units and ensuring that the record is accessible to GPs may help reduce the vaccination gap.³² Education is also crucial, with some studies suggesting that efficacy and safety concerns, as well as limited knowledge of the importance of immunisation, has had an impact on vaccination uptake among people living with CKD.³³

Chronic respiratory disease (CRD)



Recommended vaccines: flu, pneumococcal

**Number registered for flu vaccination
(England, 2020): 2,679,164**

**Number vaccinated for flu in 2020: 1,319,650
(49.3% uptake)³⁴**

Common CRDs include asthma and chronic obstructive pulmonary disease (COPD). Due to the effects on the respiratory system, people with these conditions are at high risk of developing more severe forms of flu, with increased hospitalisation.³⁵

Despite this, people with asthma have much lower rates of flu vaccination than those required by public health targets; reported uptake is only 40%.³⁶ Misconceptions around efficacy is deemed to have had an impact on uptake rates; mistaken beliefs that the vaccine isn't necessary or could cause flu-like side effects contribute to lower vaccination coverage.³⁷ As such, the health beliefs of non-vaccinated people with asthma differ significantly from those who have been vaccinated: the latter have a much clearer perception of their vulnerability and the chance of complications.³⁸

It has been suggested that multiple psychosocial factors and pre-existing health beliefs are likely to influence flu and pneumococcal uptake rates among people with COPD; ethnicity, low education levels and heavy alcohol and tobacco use all have a negative impact on flu vaccination uptake.³⁹

Diabetes



Recommended vaccines: flu, pneumococcal

Number registered for flu vaccination (England, 2020): 1,587,244

**Number vaccinated for flu in 2020: 972,930
(61.3% uptake)⁴⁰**

People with diabetes are six times more likely to be hospitalised during flu epidemics than non-diabetics.⁴¹ As such, people with both Type 1 and Type 2 diabetes requiring insulin or oral hypoglycaemic drugs, as well as diet-controlled diabetes, are recommended for flu vaccination.⁴²

Nonetheless, while diabetes remains the clinical risk group with the highest flu vaccination uptake, rates have fallen by 4.2% since 2017/18.⁴³ Low uptake can be attributed to varying factors, such as communication issues and general misconceptions about vaccine efficacy. For example, a London-based study in 2018 found that people with diabetes were likely to decline flu vaccination due to fears of how it works, when best to have it, and its side effects. The study also found that practical issues, such as incorrect contact information and language barriers for people from some ethnic minorities, prevented a number of people with diabetes from receiving vaccination.⁴⁴

Immunosuppression (due to a condition or medical treatment)



Recommended vaccinations: see below

**Number registered for flu vaccination
(England, 2020): 394,394**

**Number vaccinated for flu in 2020: 175,291
(44.4% uptake)⁴⁵**

Immunocompromised people, including people with blood cancers and those living with HIV, are advised to have routine vaccinations due to the compromised nature of their immune systems and the vulnerabilities posed by their conditions.

Blood cancers

Recommended vaccinations: flu, pneumococcal, specific childhood vaccines^d

Given that white blood cells help the body respond to infectious diseases, vaccination is critical for people with blood cancers, such as leukaemia and myeloma. While individuals may not respond to vaccination given their weakened immunity,⁴⁶ some studies have shown that flu and pneumococcal vaccinations are worthwhile interventions.⁴⁷

However, other reports have suggested low immune response rates for flu and pneumococcal vaccinations, meaning that they can't eliminate the risk of infection.⁴⁸ Uncertainty around effectiveness may therefore affect uptake for people with leukaemia and myeloma. In fact, research conducted in France indicates lower uptake in individuals with immunosuppressing conditions – including leukaemia – due to unfavourable opinions and inconsistent results on efficacy in previous research, which may make doctors more hesitant to administer vaccination.⁴⁹

^dCancer patients who have undergone stem cell or bone marrow transplants should retake a number of their childhood vaccinations. These should not be live-attenuated and should be inactivated. A list of vaccines from the Department for Clinical Haematology at Oxford University Hospitals Trust can be found [here](#).

HIV

Recommended vaccinations: hepatitis B,^e flu, pneumococcal

Vaccination against vaccine-preventable diseases such as flu is generally considered to be well tolerated in HIV-positive adults.⁵⁰ However, there's limited clinical data on efficacy for people living with HIV.⁵¹ Furthermore, the fact that vaccination guidelines for people with HIV often change, as well as concerns regarding the safety and efficacy of vaccines, has made low uptake more likely for people with HIV.⁵² Research conducted in early 2010 during the flu season and H1N1 pandemic uncovered a number of reasons for this, including personal health beliefs, busy lifestyles and needle phobias.⁵³

Furthermore, fear of stigma and discrimination have acted as a barrier, with around one in five people with HIV choosing not to disclose their diagnosis. This has led to many being excluded from access to vaccination, including for COVID-19. HIV charities have successfully lobbied the UK Government to change its policy so that HIV clinics can refer people for COVID-19 vaccination without notifying their GP.⁵⁴ While measures such as these have been crucial in removing barriers, there are many who may still be unable to access routine vaccinations due to these fears, leaving them more exposed to preventable health risks.

^eWhile Chapter 7 of the *Green Book* doesn't explicitly mention the hepatitis B vaccine for immunosuppressed individuals, Chapter 18 does state that this vaccine may be given to HIV-infected individuals and should be offered to those who are at-risk, since infection acquired by immunocompromised HIV-positive people can result in higher rates of chronic infection.

Barriers to uptake

On the whole, we found that people from at-risk groups regard vaccination as an important part of their health regime. However, both charities and at-risk individuals highlighted a number of barriers which can hinder the process, including:

- Misinformation, poor communication and inconsistent messaging
- Structural barriers and fears of stigma
- Personal factors, e.g. phobias, conflicts with individual choices, time constraints, medical pressures, and age
- Accessibility issues

While some of these barriers were outlined in the previous chapter, the following accounts provide detailed insight.

Significant issues with information and communication

Misinformation, ineffective communication and inconsistent messaging are three key areas reported by both at-risk individuals and the charities that focus on health conditions.

Misinformation

“There’s an enormous amount of misinformation being shared”

Misinformation was a commonly reported barrier, with misleading information about side effects and inefficacy being the two main sticking points. Charities in particular highlighted the misinformation prevalent online and through social media; they weren’t always able to monitor this directly but they were aware of it:

“I think there’s huge social media misinformation which nobody sees. We have an online forum which has about 20,000 people and it’s moderated by people with diabetes...but that’s the type of forum where some of these issues might come through.” (Diabetes UK)

“There’s an enormous amount of misinformation being shared, often on WhatsApp and places like that. We wouldn’t necessarily see it directly but you can see the impact of it in refusal in some places.” (Kidney Care UK)

During the COVID-19 pandemic, misinformation and scepticism about the COVID-19 vaccine also became an issue, in part because it’s a new vaccine. Some charities even stated that false information about

the vaccine had been aired by mainstream media, leading to further misunderstanding by people from some at-risk groups:

"...there were so many questions about whether the [COVID-19] vaccine was live or not, and various media representatives saying that it was live when it wasn't; that misinformation really confused people and really scared people." (Blood Cancer UK)

At-risk individuals also acknowledged that misinformation could affect vaccination decisions. Some people spoke about vaccine scepticism among peers in their risk groups due to fears of complications with their condition, or because of false information:

"You've got the ones that don't believe in vaccines straight off, no matter what...they say, 'I'm not having it.' And then you've got the ones that probably think that it might affect the kidneys." (Person with CKD)

"There'll be lots of patients out there who maybe are unsure about vaccines!...it will be from a science point of view, it will be because the Government's got a microchip in there...especially around COVID and the conspiracies." (Person with CHD)

While we found that the vast majority of at-risk individuals have confidence in vaccination, these discussions highlight the fact that misconceptions still exist in some groups. A small minority of those with underlying health conditions may hold false beliefs, which could have far-reaching consequences if they disseminate misinformation online and elsewhere.

Access to information

"Whilst we're providing supportive information, it's not necessarily as accessible as it could be"

While countering misinformation is crucial, charities suggested that their vaccination information wasn't always accessible or reaching the right audience. Although information is available, some organisations said that it's not always communicated effectively:

"I think what has been highlighted more than ever before in the current pandemic, is that whilst we are providing supportive information, it's not necessarily as accessible as it could be to a wider range of people...I think we are not reaching the whole of the blood cancer community...people from different marginalised

communities; who are less digitally literate; who have less effective and supportive relationships with their treating team.” (Blood Cancer UK)

“I think it all comes back to how do you hear from people that don't really want to come and talk to us about these issues? How do we become more accessible? How do they understand the fact that we're here to help the whole community, not just the parts...we've helped for many years?” (Diabetes UK)

“Information is available but the main issue, of course, is we only reach those who reach out to us. There are many people that we don't have contact with, maybe underprivileged people – some socioeconomic and religious groups – we simply don't reach them.” (Leukaemia UK)

As such, some charities accept that not everyone is fully informed about vaccination. Many marginalised groups are still not addressed in current messaging about routine vaccination. If information doesn't land and resonate with at-risk groups, that message will fail to significantly encourage routine vaccination.

Inconsistent knowledge and communication among healthcare providers

“Some GPs are saying, ‘Why on earth would we want to revaccinate you?’”

Respondents also reported that inconsistent communication and hesitancy from some healthcare professionals has created barriers for people from certain risk groups. Immunocompromised people have faced difficulties trying to access vaccinations due to uncertainty and confusion from those who administer them. While most live vaccines should not be administered to those with immunodeficiencies,⁵⁵ some medical professionals are also tentative about prescribing other types of vaccines. This is despite there being a genuine need for them, with recommendations outlined in the *Green Book*.⁵⁶ During our discussions, we spoke to someone with myeloma who had received a stem cell transplant (SCT). They had been instructed to get revaccinated for a number of childhood vaccine-preventable diseases, but faced difficulties scheduling vaccination appointments with a healthcare worker:

"I think the first one is the flu jab, then it's four or five separate appointments. It's also a bit confusing when they're like 'Well, what's your child's name?' 'No, I'm not booking in for a baby, I'm booking in for myself.' The last one I had, which was the pneumococcal jab, I had to talk the nurse through. She's like, 'But you're 37?' 'Yeah, but I've had this treatment, so I need to have it. If you look on my records, it says.'"

This experience highlights a fundamental lack of awareness about vaccination procedures for immunocompromised SCT patients. The healthcare worker's view was likely reinforced by the common association of routine vaccination with the young.⁵⁷ The same respondent went on to explain inconsistencies between healthcare providers; while some were simply unaware of vaccination requirements for SCT patients, others adopted different approaches:

"I went with a list of what vaccines I had to have...I phoned up and they said, 'But you're an adult.' 'But if you look at my record, I've had a stem cell transplant'...It was on me to arrange, and I was the one asking 'When do I have my childhood vaccines?' Because things like that also aren't consistent...some people will have childhood vaccines, some people won't, some people are told to wait longer. It's quite confusing because it's different from Trust to Trust."

Cancer charities cited similar experiences, as well as confusion around which vaccinations different patients should receive:

"Patients have told us when they go back to their GP, they're saying, 'Why would we want to revaccinate you?' And patients are having to explain that their immune system is very naïve; they're starting from scratch. GPs are quite rightly nervous about revaccinating one of their patients, because they might not 100% understand the complexity of the procedures that they've been through." (Anthony Nolan)

"Live vaccines are often not recommended for people with blood cancer, so the question of which vaccines are suitable comes up regularly for us and can cause some confusion. Whether someone should get the flu vaccine in particular...is a question that always comes up as we head towards winter." (Blood Cancer UK)

Other individuals who experience fluctuating levels of immunosuppression, such as some people living with HIV, may also face issues with inconsistent advice. One charity suggested that adults with HIV might be offered different guidance on vaccination depending on how informed their GP is about their condition:

“People living with HIV report very different experiences with their GPs. Some are fine and really clued-up but others aren’t. That can be the case even in high prevalence areas, like London. But once you get outside London to the more rural areas, where HIV prevalence will be very low, you might be the only person with HIV in your practice. In that situation, the GP might not be across all your specific needs in the same way the HIV specialist would.”
(National AIDS Trust)

These conversations highlight the fact that there’s a lack of consistent clarity among some medical professionals on vaccination for people with weakened immune systems. While the *Green Book* stipulates that flu vaccines, for example, should be decided by a clinician on an individual basis depending on the risk,⁵⁸ it’s crucial to ensure that patients are fully informed about these decisions. Inconsistent guidance on vaccination is causing unnecessary uncertainty among immunocompromised groups, which could damage vaccine confidence and reduce uptake.

Structural barriers

People from ethnic minorities are more likely to distrust the organisations who advise on and administer vaccination, due to a lack of transparency and fears of discrimination. Similarly, people living with HIV face stigmatisation and so may choose not to disclose their condition, reducing their ability to access vaccination and other medical services with confidence and ease.

Mistrust from historical structural racism

“The structural racism and the mistrust element of [vaccine hesitancy]...is huge, partly because nobody’s made any attempt to understand where those sentiments come from.”^f

^fQuote from an interview with Asian Resource Centre Croydon

Many at-risk people from ethnic minorities are less likely to take up routine flu vaccination than their White British counterparts:

Table 1: Flu vaccination uptake among at-risk people aged 16-64 by ethnicity

Ethnicity	Flu vaccination uptake (%)
Asian or Asian British - Bangladeshi	59.8
White - British	58.5
Asian or Asian British - Indian	56.0
Asian or Asian British - any other Asian background	54.7
White - Irish	53.6
Mixed - White and Asian	48.2
Other ethnic groups - Chinese	48.0
Asian or Asian British - Pakistani	41.9
Mixed - any other mixed background	41.8
Other ethnic groups - any other ethnic group	41.5
Black or Black British - African	39.7
Mixed - White and Black African	39.5
White - Other	36.9
Mixed - White and Black Caribbean	34.2
Black or Black British - any other Black background	33.6
Black or Black British - Caribbean	32.4

Source: Public Health England 2020/21⁵⁹

Charities saw mistrust as the driving force for this low uptake. One charity suggested that a lack of trust in vaccines could be due to a lack of diversity in clinical trials, making some people from ethnic minorities more sceptical of the purpose and benefits of vaccination:

"There's lots of anxiety around not having enough diversity in clinical trials to be representative of the population...the majority of medical research is done on white Caucasians, and in this country as well, the majority of clinical trials recruit people from more affluent, more educated, less diverse backgrounds. This feeds into the scepticism." (Diabetes UK)

Another organisation highlighted similar challenges, particularly with the COVID-19 vaccination programme and trying to encourage uptake among ethnic minority groups:

"We've been giving messages to people that taking the [COVID-19] vaccination is amazing, it's gonna help create herd immunity. But is it actually helping immunity because you can still spread [COVID-19], what is it helping? Those messages are difficult when people ask you and you say, 'Well, we haven't got the research, we haven't got the data yet.' Working in an environment where you're still working with so many unknowns and then trying to convince someone to stick a needle in their arm, it raises questions." (Asian Resource Centre Croydon)

Mistrust of vaccination continues to manifest without reassurance that vaccines are effective for people from ethnic minorities. Given this, misinformation among people from ethnic minorities is also a barrier, with some falling foul of misleading information due to a lack of transparency on efficacy. Although charities accepted that this was difficult to monitor, some also acknowledged that reaching groups through platforms such as WhatsApp was an important way to address misinformation and stop vaccine hesitancy from growing.

Low uptake among at-risk people from ethnic minorities also stems from structural barriers associated with the public institutions that promote routine vaccination and the medical organisations that provide them. There's a higher propensity for mistrust, as suggested by some charities:

"People say to me, 'Well, if your community is the one that's worst affected [by COVID-19], they should be the ones queuing up for the vaccine; why aren't they?' You've got to understand where that mistrust came from in the first place. If the people you don't trust are the ones telling you to take the vaccine, then you're wondering, are we being guinea pigs? Are we being tested on to see if the vaccination is okay?" (Asian Resource Centre Croydon)

"I think there's a really big history of mistrust from lethic minority communities. And you can understand that; there's a lot of history there." (Kidney Care UK)

"Given that HIV disproportionately affects people from Black and Minority Ethnic groups, perhaps a bigger issue is around trust in taking a vaccine given that often levels of trust in authority and government is lower in certain communities." (Terrence Higgins Trust)

Mistrust in the system strengthens scepticism in the vaccination process. As one charity acknowledged, having trust and confidence in medical professionals and expertise is often taken for granted by White British people and disregarded as an issue when trying to understand low uptake:

"We're not very good as White British people at acknowledging our privilege that we're comfortable going to a GP and questioning a doctor. This may not always be the case for minority ethnic patients and could explain the low take up of vaccination for this group." (Anthony Nolan)

Certainly, the COVID-19 pandemic has helped to identify barriers and raised awareness about the health inequalities facing people from minority ethnic backgrounds. In particular, the disparities in uptake are a major challenge which must be addressed by strengthening trust and ensuring that every risk group is being reached throughout each community.

Fear of stigmatisation and discrimination

"If I got a text from the GP lasking me to come in for a vaccination...I would feel a little bit uncomfortable in taking it."

Due to gross misconceptions and historical discrimination against people who have HIV, those living with this condition also face structural barriers when trying to access medical services in general. We heard that people living with HIV often feel stigmatised, leading to a lack of trust in medical professionals and a loss of confidence when seeking vaccination. One interviewee with HIV acknowledged this, referring to comments made by a GP shortly after their diagnosis:

"I remember four years ago going to my GP and saying I've been diagnosed with HIV. I was an area manager for Tesco at the time and the first thing he said to me was, 'Can you now work with

food?' Now, that has changed my opinion of my GP very much. I had that bad experience with my GP, and I've never been able to correct that. That gives me a barrier with my GP at the moment."

As their GP's comments were rooted in misapprehensions about HIV, this experience understandably left our respondent with feelings of anger and disbelief towards medical professionals. As such, when it comes to routine vaccination, they use a pharmacy instead because they find them more trustworthy:

"If I got a text from the GP [asking me to come in for a vaccine] then maybe I would feel a little bit uncomfortable in taking it. The flu vaccine, for example, I will book an appointment with Boots. I respect them as a company. They've been around such a long time."

This makes pharmacies a crucial option for that person, exemplifying the importance of democratised health access and the role of pharmacies in delivering vaccination. Nonetheless, this respondent accepted that their situation might not be the case for others, and that fear of stigma and lack of trust are likely to be the main drivers of low uptake amongst other people living with HIV:

"A lot of those people probably feel very uncomfortable going into Boots, because they do ask you that question of, 'Why do you qualify for the flu vaccine?' That is done within the shop – it's really personal information. So, I think for me, it's stigma and it's having low trust within professionals. If I wanted a flu vaccine, it's very easy to book an appointment in a number of places. So, it's not about availability; I think it's people being scared having to put out that personal information to people that they don't feel they trust."

HIV charities echoed this sentiment, while also suggesting that stigma and discrimination reduces access to vaccination because they mean that some don't disclose their HIV status to their GP. This results in a loss of entitlement to routine vaccination and, more recently, to the COVID-19 vaccine during the initial stages of the rollout when immunocompromised individuals were prioritised by the Joint Committee on Vaccination and Immunisation:

"We were concerned that there would be people missing out on the opportunity to have a vaccine for purely the reason that they didn't want to disclose their [HIV] status, perhaps because of the stigma

and discrimination they might feel they would face if they did that."
(Terrence Higgins Trust)

"Not all people will have told their GP about their status and that's all to do with stigma and discrimination. This has really come up recently with COVID vaccines, that people have not been getting in the right category because they haven't declared their status."
(National AIDS Trust)

If people living with HIV don't make this disclosure, it becomes difficult to reach them. This makes removing the fear of stigma critical; it ensures that people living with HIV feel empowered to disclose their status and allows them better access to routine vaccinations.

Personal factors and reluctancies

Needle phobias, time constraints, conflicts with personal beliefs, a loss of body confidence, and age can all undermine take-up of routine vaccination.

One of the more common personal barriers to vaccination is fear of needles. While the at-risk people we spoke to didn't suggest that this would prevent them, they speculated that needle phobias may discourage others:

"I suppose some people just don't like the idea of taking stuff into their body if they don't have to...there's that whole thing about needles; I don't find it frightening but I know some people don't like needles." (Person with COPD)

"You've got that whole childhood fear of a jab: 'I just don't want that, I don't like needles, I'm not going, full stop.'" (Person with leukaemia)

Other personal factors affecting uptake could also include not having enough time to book routine vaccination appointments or to attend them:

"I think we're all busy, aren't we? If I've ever been guilty of not having my flu jab straight away, it's been because...there's something else that happened or something's got in the way..."
(Person with asthma)

"You've got people who might be just getting on with their life, and they're just too busy, and they just don't get it." (Person with leukaemia)

Time constraints were more often associated with having too many other medical pressures due to having an underlying health condition:

"I was just exhausted [post-transplant]. If I think about how I felt, my energy levels then, if someone had said, 'You've got to go and have all these jabs.' I'd be like, 'Do I?'" (Person with myeloma)

"Many patients have a complicated and difficult post-transplant experience. They're busy trying to remember all their appointments, medications and stay alive, as opposed to worrying about when they should have their revaccination." (Anthony Nolan)

"When you're in the clinic, you're being told a million things; being told about immunisation and you being expected to actually make that happen, it's probably the last thing on your list." (National AIDS Trust)

Conflicts with lifestyle choices and faith beliefs were also mentioned. It was suggested that misconceptions about the contents of vaccines may conflict with these:

"Things like the ingredients of vaccines...if they've got animal protein, if they've been tested on animals, also for religious beliefs...I think things like that perhaps are a factor in why people wouldn't [take vaccines]." (Person with asthma)

"I think there have been questions around whether vaccines contain animal products, and pork products or dairy products for people of faith or people who have particular dietary restrictions or needs." (Terrence Higgins Trust)

Previous studies have also suggested that religious beliefs may act as a potential barrier. For example, areas in England with Jewish populations had significantly lower uptakes than those with non-Jewish populations during the 2015/16 and 2016/17 flu seasons (2.5% lower in 2015/16 and 2.3% lower in 2016/17).⁶⁰

We also heard about a loss in 'body confidence'. An individual with leukaemia stated that their diagnosis had changed their outlook on personal health choices and made them question the effectiveness of vaccination:

"Leukaemia did come as a massive blow, and what that has meant for me is a total loss of confidence in my own body. Therefore, when you're unsure and unclear about what's

happening internally to yourself, why would you add something else alien to that mix, because you actually then don't know how your body would respond anymore?"

This respondent felt that certain routine vaccinations would be redundant and have no positive impact on their health.

Perceptions about personal health is something charities also spoke about, although this was more in terms of people not seeing themselves as being at high enough risk to warrant vaccination:

"I'd say probably one of the main barriers we see is people not perceiving themselves as being at high risk...I think people feeling that they are not personally at risk from flu." (Asthma UK and the British Lung Foundation)

In particular, these perceptions were more closely related to age:

"Particularly younger adults who are in a risk group – they're not believing themselves to be at high risk." (Asthma UK and the British Lung Foundation)

One person with diabetes also suggested that low uptake was likely to be age-related, with younger people believing that vaccination wasn't as necessary:

"I'd say 16 to 35's will say 'I don't need that [vaccine], I know about diabetes, I'm under control, I won't have it.' But when you start getting older...and it's [diabetes] not as in control, you get wiser. And you say 'Well, what I'll do is I'll have some safety net.' So maybe that's why [uptake is low]."

If younger at-risk people regard their age as something which protects them, then vaccination uptake may be lower among this demographic. In fact, there are noticeable differences in uptake with age. In England in 2020/21, flu vaccination uptake among people aged over 65 was ~28% higher than those under 65 with an underlying health condition.⁶¹ And uptake is higher when comparing older at-risk adults to overall cohort numbers: 66% of at-risk people aged 50-64 were vaccinated for flu in 2020/21: 13% more than the average figure.⁶²

Accessibility issues

Previous studies suggest a number of barriers that could prevent adults from accessing vaccinations in the UK, including:

- Physical accessibility of vaccination facilities, and accessibility of transport
- Accessibility of information, including language barriers and the use of digital systems
- Costs associated with vaccination, such as transport or taking time off work⁶³

Our findings suggested that accessibility issues sometimes stem from physical barriers; in particular, mobility issues often prevented respondents from reaching appointments. We also found that supply issues prevented some from receiving seasonal vaccinations. Our respondents also cited inflexibility of appointment times as a potential barrier to access.

Some individuals stated that mobility issues were affecting their access; one described their experiences of being unable to attend their appointment for the COVID-19 vaccine at a vaccination centre:

"I never worried about physical accessibility with any of my other jabs, but I did with COVID...I can't stand for very long. I can't stand in a queue...like an hour-long queue, I literally wouldn't be able to, I'd have to sit on the floor." (Person with myeloma)

While they were able to make alternative arrangements, this might not be the case for others. Ensuring more flexibility in making appointments for at-risk people is therefore essential, as highlighted by one charity:

"It probably comes down to accessibility issues...about being able to get an appointment at a time that works for you and there's not always a lot of flexibility in it." (Asthma UK and the British Lung Foundation)

Others suggested that insufficient supplies could stop them or others getting vaccinated:

"I always have the [flu] vaccine. I now always attempt to get one – and I say attempt – because they're hard to get...I have to wait until the doctors have got sufficient supply, for example. I remember last

year trying for weeks on end to get a vaccine because the supply was so slow.” (Person with asthma)

“I would say that some of them don't get it because every single year, we run out of vaccines. And so therefore, they've had an appointment, there's no vaccine, and then they just don't get round to rescheduling.” (Person with leukaemia)

Given the recent spike in flu vaccination as a result of the pandemic (see Figure 1), supply chain issues may become less of a concern in the future. Nonetheless, ensuring that demand is met is crucial.

Opportunities

Both charities and individuals from different clinical risk groups highlighted a number of potential opportunities to help improve uptake, focusing on:

- Improving communication and information on vaccination
- Working closer with local leaders to promote vaccination within communities
- Finding practical solutions to make vaccination more accessible

Current vaccination information could be communicated more effectively

Charities suggested that the information currently available could be targeted to specific risk groups, with personalised messaging to improve how much individuals engage with it. They also considered peer-to-peer communication, where people share information and their experiences with vaccination, to be an effective way to encourage uptake. Finally, they saw signposting to existing information as an important step to ensure that at-risk groups are aware and able to make informed choices.

Tailor messaging to suit specific risk groups

“I think there needs to be far more appreciation and clear messaging that ‘This vaccine is for you.’”

One concern raised by charities was that vaccination communications sometimes fail to reach the right audience. They regarded it as important to ensure that messages are targeted and condition-specific, as this could help people from different risk groups recognise the importance of vaccination. A number of different organisations highlighted this need for better targeted communication:

“I think it's so important that we tailor any communications to something that feels accessible and relevant, rather than just assuming that one size fits all in our communication...Even if it feels very neutral and very clinical, I think there are ways and means of making that feel more like it's meant for you, whoever you are.”
(Blood Cancer UK)

"Publicly, I think there needs to be far more appreciation and clear messaging that 'This [vaccine] is for you...'I think there's a really clear need for targeted information." (Kidney Care UK)

Some at-risk individuals also mentioned a greater need for targeted messaging. While the individuals we spoke to had strong vaccination awareness, they acknowledged that this wasn't the case for everyone. They too suggested using more tailored messaging to help inform a wider range of people:

"We need to work out how to tell these people to try and pick up the [vaccine] offer more...I think that fact [about flu vaccine uptake] is quite shocking. '48% of people with lung respiratory problems don't take up the offer of a flu jab. Do you?'...I would use that as some sort of tool to get people to have a think. Because you're basing that on a fact. It's not just a made-up sort of clever slogan, it's a fact that these people aren't taking up." (Person with COPD)

"I think it [information] needs to be personalised more. I think especially for the cohort of people who should be getting the vaccine who do not take the vaccine." (Person with leukaemia)

One charity also suggested a personalised approach that might evoke a better response than generic messaging:

"I think the more case studies we have of 'My grandmother ended up taking it, and now she didn't get flu this year' or 'My neighbours did' – people seeing the evidence, there is an evidence base that we need to track." (Kidney Care UK)

Another spoke of the need to include representation from different marginalised communities within those risk groups:

"If we're talking about recommendations at any stage, I think that representation of all communities within all of your comms is absolutely vital because I think people naturally feel more attuned to the messaging that's coming out from people like them." (Blood Cancer UK)

There's a clear need for tailored messaging to ensure that people from different risk groups recognise themselves. Messaging centred on the significance of having a specific underlying health condition could encourage more people to get routine vaccinations and treat them as something beneficial to their health, rather than as optional. Inclusivity and diversity is also crucial to ensure all sociodemographic groups recognise themselves in the messaging.

Encourage peer-to-peer communication

“If your mate’s getting it, and they’ve got some good information...I think you’re much more likely to get vaccinated”

While we’ve established that vaccination messaging needs to be tailored to different health conditions, ensuring these messages are delivered effectively is also crucial. Our respondents highlighted closer collaboration with local communities and organisations as a key way of achieving this (see below), but they also suggested that stronger peer-to-peer communication could help too. Charities felt that at-risk people are more trusting of information stemming from individuals with similar health experiences:

“I think people will trust...using peer-led approaches to educate and communicate with people. Somebody who looks like you and is living with HIV is far more likely to convince you to take something like a vaccine than a Government minister.” (Terrence Higgins Trust)

“I actually think word of mouth amongst support services, if your mates getting it, and they’ve got some good information...I think you’re much more likely to do it [get vaccinated].” (National AIDS Trust)

“Some people will have quite fixed views that won’t be changed by others. Some will have views that will be changed by others and will receive reassurance from peers, or from the information that we’re able to give them about what’s going on.” (Kidney Care UK)

Communication between at-risk people is a fundamental way of disseminating vaccination information within those risk groups, with individuals sharing their experiences with vaccines. This type of communication includes online support groups, which one person with COPD suggested was a useful way of seeking vaccination information:

“There’s things online...COPD support networks and people have contact with each other...That can be good for pure word of mouth. So if you could get people online to support and promote [vaccines] almost like a friend-to-friend thing.”

Charities also spoke about the benefits of helping people sharing their concerns and ideas:

“We have a peer support digital platform which people can sign up to and come and meet others living with HIV and get questions

answered, or concerns addressed, and get support from their peers.” (Terrence Higgins Trust)

Peer-to-peer communication can allow people from at-risk groups to gain confidence in the process and recognise the health benefits of routine vaccination. Hearing from like-minded people could help some at-risk individuals to make more sense of vaccination and how it can help them.

Signposting to existing information sources

“It’s certainly important that we signpost to government websites and reference where we’re getting our information”

While targeted messaging is key, our respondents felt that guiding patients to existing vaccination information and relevant sources of expertise was crucial:

“I think with the pandemic, it’s certainly important that we signpost to the Government websites and reference where we’re getting our information. But it’s something that we will always translate onto our website so it’s relevant and tailored to our community.” (Blood Cancer UK)

“We’re an overarching charity that supports a number of people with long-term conditions, but we’re not long-term condition-specific. So, while we can provide some information, we would also signpost to more tailored guidance.” (Age UK)

At the same time, our respondents recognised that public sector organisations should be signposting to charities too, as charities can offer bespoke information aimed at specific groups:

“I think signposting to charities is vital because I think all along we’ve been able to see the issues that are coming up for our community and respond to it, even if that response is asking for more clarity, or for more information from the Government...Very little from Public Health England or the Department of Health that’s come out in the in the UK last year, it hasn’t been specific to those individual [patient] communities, and I think it can’t be. But I think that support to show people where they can find more tailored information is really important.” (Blood Cancer UK)

It’s crucial to form closer links between the public and voluntary community and social enterprise (VCSE) sectors for sharing communications and information through signposting and guidance

for at-risk people. While public health organisations can provide scientific and medical guidance, charities make this information more accessible and adapt it for people with certain conditions. Equally, charities recognise that sometimes they may not have all the answers; they need to direct their particular risk groups to the public health organisations that offer scientific detail on some occasions.

Organisations should expand and strengthen partnerships to ensure that information reaches the most underserved and marginalised groups

Many charities stated that they're already collaborating with local organisations to maximise their vaccination outreach. However, some emphasised the need to expand and strengthen partnerships to ensure that they reach the most underserved and marginalised risk groups. For example, they regarded closer collaboration with leaders of different ethnic minority communities and faith groups as an important way of providing trustworthy sources of vaccination information to people from these groups.

Other charities highlighted the need for greater collaboration between the VCSE sectors to ensure people respond to Government communications. Some individuals from risk groups reiterated this idea, reaffirming that many are more likely to trust information that comes through independent organisations focused on their underlying health condition.

Work with community leaders to disseminate information

“We need to tackle these issues in partnership with community groups that have those real connections and are trusted”

As uptake is lower among at-risk people from ethnic minorities, and given that religious and cultural factors can act as barriers to uptake, our respondents saw working with community leaders as an important way of ensuring greater engagement. Charities acknowledged that stronger partnerships were essential, as at-risk people from these communities were more likely to trust information if it came from a trusted source:

“I think outreach is absolutely vital when talking about any health issue, so that people hear things and are educated about things in their own environment. So we're not asking people to come to us, but rather, we're going to those communities who need it most.

And that those messages are being provided by [people] who they see as leaders; it might be community leaders, religious leaders, whoever that might be.” (Blood Cancer UK)

“It’s a really complex but fundamental issue that we understand and tackle these issues, in partnership with other charities, with Government, but also with these community groups that have real connections and are trusted.” (Diabetes UK)

“For us, it’s about working with faith leaders from the Hindu and Muslim communities and some of the Black churches who encourage people by saying ‘This [vaccine] is really good, please go for it.’” (Kidney Care UK)

“Focusing on local and community leaders is really crucial; those organisations will often have ongoing relationships with individuals and have already built the trust; they’re relatable.” (Royal Society of Public Health)

Partnering with community leaders could instil greater confidence and uptake among their communities. As one charity summarised, collaboration is important because of *who* is providing the vaccine information, not necessarily because of *what* is being said:

“It’s not just thinking about the message, but also thinking about the messenger.” (Terrence Higgins Trust)

This makes working locally to deliver information a crucial element of vaccination communications. As previous ILC research has suggested, messaging should come from trusted sources, such as community or faith leaders and members, as well as other institutions or individuals that are trusted within the community.⁶⁴

Cross-sector partnerships

“There’s a real opportunity for the public health sector to understand more about how charities can influence and how they can support.”

In addition to working more closely with local communities, charities acknowledged that better partnerships with public sector organisations could help to increase uptake. They suggested that public health bodies should work closer with the VCSE sector to enhance vaccination information and reach out to wider at-risk populations:

“I think that one of the great strengths of the charity sector is that we are experts at communicating difficult messages in a way that resonates with our core audience and through the diverse digital channels that we know are available and appropriate for them. This is why closer collaboration between the third sector, PHE and NHS England is so important.” (Anthony Nolan)

“I also think that there’s a real opportunity for the public health sector to understand more about how charities can influence and how they can support. I don’t think they need to be a completely separate unconnected entity. It’s really important that charities do exist because they’re providing that information and service.” (Blood Cancer UK)

One respondent with diabetes also suggested that non-governmental organisations were deemed more trustworthy and would, therefore, be better at communicating information:

“There’s always people who won’t listen to them [the Government]. But charities – Diabetes UK, BHF, the Stroke Association – they’d be a really good platform...to get the message over. That would have a positive impact on the vulnerable category, for anybody who’s got an illness.”

In essence, charities are there to provide support and guidance to risk groups; public sector organisations should use the expertise of charities in their outreach and messaging on vaccines.

Overcoming barriers to access

Our respondents suggested opportunities to make vaccination more practically accessible and inclusive:

- Providing more privacy in public spaces, such as GP surgeries and pharmacies, for people to disclose conditions that require vaccinations
- Checklists of the vaccine(s) required for different conditions, to ensure that both at-risk people and medical professionals are clear about the routine vaccinations needed
- Offering vaccination in locations more suitable for certain risk groups, e.g. in hospitals during routine check-ups and treatment appointments

Avoid the need for disclosure in public spaces

“...you walk into a pharmacy, and they say why do you [qualify for free flu vaccination] in front of everyone, that’s got to stop.”

For people from some risk groups, fear of stigma and discrimination in public spaces could deter them from accessing health services such as routine vaccination. Our respondents recommended improving confidentiality in locations that offer vaccination, such as GP surgeries and pharmacies. One person living with HIV suggested that disclosure of underlying health conditions should be made when booking appointments:

“I think privacy is important...you walk into a pharmacy, and they say at the front desk in front of everyone, ‘Why do you need to get [the vaccine]?’ That’s got to stop. Not just for people with HIV; if you’ve got asthma, or you’ve got diabetes, you don’t want the whole world knowing...I don’t understand why you can’t give the reason why you need the flu vaccine in the online booking system; ‘tick’, that’s the reason, and it’s never mentioned again... so when I walk into the pharmacy, they don’t ask me why because they’ve already got that information. That for me would be perfect, because I don’t have to have that conversation.”

Create standalone vaccination documentation

“People could have something written down that says you need to have X, Y, and Z vaccines on these dates”

One charity suggested that vaccination documents would help people from risk groups understand which routine vaccinations they require, as well as informing medical professionals which vaccinations they should be administering:

"Where patients are managing a long-term condition...there's a high propensity of mental health issues, perhaps a shortened life expectancy, increased risk of chronic fatigue. Where all of these things start to come into play, I'm really in favour of us simply doing whatever we can do to support them. So, if they have something written down that is peer-reviewed and evidence-based that says you need to have this particularly vaccination or follow-up from these dates, there's no reason this couldn't work."
(Anthony Nolan)

Anthony Nolan is, in fact, going through the process of designing such a product for people who have undergone SCTs and require revaccination. The charity has initiated a working group of clinical nurse specialists to find practical solutions for the post-transplant vaccination programme, which has included a vaccination record.⁶⁵ This is aimed at helping to remove confusion and hesitancy around vaccinating people with conditions such as myeloma. Replicating this throughout other risk groups could provide potential benefits too.

Expand vaccination to more locations

"If you're at an appointment and they can stick it in your arm, then you probably will get it done straightaway."

Finally, our respondents suggested that expanding the number of places where vaccination can be administered could make it easier for some people from at-risk groups. For example, offering vaccines to at-risk people during routine appointments and check-ups. According to one charity, this already happens for some CKD patients receiving dialysis, and could be replicated elsewhere:

"Most dialysis patients are probably getting their vaccinations in the dialysis unit. It's coming from trusted healthcare teams and you haven't got to get someone out for something else, they're already there having their dialysis. They can see the nurses they've known for years giving the vaccinations, they can see their fellow patients having the vaccinations. So I think there is an opportunistic thing to be done." (Kidney Care UK)

More than anything, when people are offered vaccination while receiving routine treatment, they see it as coming from a trustworthy source, making routine vaccination seem more reliable and worthwhile. Furthermore, not having to arrange a separate appointment for vaccination is highly convenient. One person with COPD even stated that they had received their flu jab during a GP appointment:

"It's also having the ease of just going to either your GP or your pharmacy and having the ease of just having the flu injection as routine...Last time I was there, the doctor did it and said, 'Shall we do your flu jab while you're here?' So I was like, 'Oh, yeah, go on then.' And then of course, I got the reminder and I'd already had it."

Both charities and at-risk individuals listed time constraints and being overwhelmed by medical pressures as concerns; they suggested expanding access to more practical locations to help remove these barriers:

"There's something very practical if someone says, 'Oh, you should go and do this' and if you're there [in an HIV clinic] and they can stick it in your arm, then you probably will get it done straightaway." (National AIDS Trust)

"Getting the vaccination when you went to your hospital appointment, I think is probably really good...possibly the uptake in [blood cancer patients] would be greater if in that period of time from October to February, say, if when they were at that appointment. I can see no reason why the nurses within the department when you're there, if you've not had your flu jab, them saying, 'Well, we've got them here today, you can have it...I think the uptake would increase.'" (Person with leukaemia)

They also suggested providing vaccination in the community as a way of making it more practically viable, especially for those who face physical barriers. One at-risk individual suggested that vaccination at home might help those who are unable to get them elsewhere:

"If you were house-bound, I think they should send the nurse or the doctor to your house to give it [a vaccine] to you." (Person with CKD)

Similarly, one charity suggested changing how vaccination can be administered through community care:

"People like clinical nurse specialists are probably more trusted voices...for some...those are their lifelines. These...are probably the most clinically vulnerable people; the people who can't actually get to a clinic, people who probably need the jab the most. But the nurse can't carry a vaccine in a bag and stick it in someone's arm when they're at home, right? Well, why not? Let's sort that out with commissioning." (National AIDS Trust)

In fact, recent changes during the COVID-19 pandemic have meant that some district nurses have been able to administer COVID-19 vaccinations at home.⁶⁶ Ensuring that this continues in the future, as well as making people from risk groups aware of this option, could be crucial way to improving accessibility.

Recommendations for charities, medical professionals and public health bodies

While our findings have unearthed a number of barriers to vaccination for people from clinical risk groups, we've also uncovered many opportunities to improve their uptake.

Specifically: charities, medical professionals and public health bodies should improve vaccination communications, foster greater collaboration with each other and with local communities, and improve access to vaccination for at-risk people.

The recommendations in this report form part of *Reducing the risk: Recommendations for charities to help increase vaccination uptake in at-risk people*, our best practice guide for charities.⁶⁷ We created this guidance to equip charities with the tools to encourage and promote routine vaccination within the risk groups they cater to.

Improving vaccination communications and information

We need greater focus on the messaging used when communicating with risk groups. We must improve vaccination messaging so that it delivers a clear message and boosts at-risk people's understanding of vaccines and how they protect people like them from illness. We must also work to better direct people from risk groups to relevant information on vaccination, giving them a wider range of sources and allowing them to make more informed choices.

a) Increase signposting between charity and Government websites

Although charities and public health bodies both provide information on routine vaccination, more consistent signposting to each other's information would create greater transparency. Charities offer advice tailored to the specific clinical risk groups they focus on, while public health organisations can provide more in-depth information on the science of immunisation and how vaccination works. The two types of organisation can inform at-risk people better if they work together – but this will require acknowledging each other's content, to make sure each reader can find the information most relevant to them.

Public health websites should include signposts to the relevant condition-based charities, which can offer more user-friendly, tailored guidance for each risk population. Signposting can help vaccination feel more accessible without making the process seem overly complex.

Charities should consider creating specific sections on their websites covering vaccine-preventable disease – much as they've done with COVID-19 – that include links to the relevant Government information, such as NHS flu vaccination guidance and PHE's *Green Book*.

Terrence Higgins Trust has a section on their website, "Flu jab and other vaccines",⁶⁸ which gives clear information about which routine vaccinations people living with HIV should get, a list of the ones they shouldn't have, and answers to common queries people with HIV may have about vaccination. It also provides links to the PHE website for further information about the seasonal flu campaign.

b) Target communication material

Vaccination communications often treat multiple clinical risk groups as a single mass of vulnerable people, rather than specifically targeting individual medical conditions. Messaging is more likely to resonate if individuals can see the connection between their condition and the benefits of vaccination.

The material often doesn't attempt to represent different races and ethnicities, despite the fact that some underlying health conditions are more prevalent in certain ethnic minorities.

Both charities and public health bodies should tailor communication material for a range of specific conditions, explaining how vaccination benefits those particular health complexities. Ideally, charities and public bodies should work in partnership to co-produce the messaging. It should include facts and statistics about each underlying health condition, and the effects of vaccine-preventable diseases, to explain why vaccination is a beneficial prevention measure.

There's also an opportunity to tailor communications to dispel common misconceptions, such as "the flu vaccine gives you the flu", and make information more positive.

Finally, charities and public bodies should ensure that messaging is culturally appropriate and accessible to marginalised groups, for example by translating it into relevant languages.

Kidney Care UK has worked in partnership with the NHS to produce a “Winter Wellness” guide,⁶⁹ which advises people with CKD on how to remain healthy during winter when they’re more vulnerable. It includes information on flu and pneumococcal vaccines, why they’re important for people with CKD, and links to resources about accessing vaccination.

c) Vaccine checklists

The NHS should update its digital services to include a vaccination checklist, which could be used by patients to record their vaccinations and shared with medical professionals.

In addition, charities could produce checklists of the specific vaccines their service users require, based on the *Green Book*. It could include details for when each vaccination should be administered.

Anthony Nolan’s post-transplant “vaccination record” is an example of a checklist which could be replicated by other condition-based charities. This document will be ready for use by June 2022; it will contain information about vaccinations required by SCT patients, with the ultimate aim of creating consistency of care across the UK as well as improved patient education.⁷⁰

In Canada, the “CANImmunize” mobile app allows individuals to store all their vaccination records in one place.⁷¹ It also offers tailored information for at-risk people and a personalised immunisation tracker to help them better manage their routine vaccinations.⁷²

d) Personalised vaccine reminders

Personalised reminders could encourage at-risk people to get vaccinated. Charities could send these out to their service users along with tailored information about why they should receive routine vaccinations, along with how and where to access them and when to ask for them. There’s also an opportunity to use the new NHS app⁷³ to send reminders to at-risk people at the beginning of the autumn.

e) Peer-to-peer support networks

Providing a platform for people from different risk groups to share their experiences is crucial. As mentioned in our research, this has

been achieved already to some extent, through social media groups and online forums.

Diabetes UK run local peer support group services, allowing people to share information and their experiences of living with the condition.⁷⁴ This has the potential to help inform individuals going through similar procedures about immunisation and encourage people to get vaccinated.

f) Greater information for medical professionals

Medical professionals should not be reluctant to administer the appropriate vaccinations to patients from specific risk groups, especially immunocompromised people.

The NHS should provide training and information on vaccines to healthcare workers, to increase awareness and understanding about which vaccines are suitable for different risk groups and remove any hesitancy or confusion. This should include the difference between 'live-attenuated' and 'inactivated' vaccines, and explain that the latter are safer for at-risk people.

Research has shown that healthcare professionals' knowledge about vaccination is an important determinant of not only their own vaccination uptake, but their intention to recommend vaccination to their patients and the subsequent vaccination uptake of those patients.⁷⁵ As such, the more informed the healthcare worker, the more likely they are to recommend and administer vaccination.

Fostering greater collaboration

We need greater collaboration between organisations to ensure that vaccination communications are delivered effectively and reach a wider audience.

Sociodemographic factors are often linked to lower uptake, making collaboration with local communities imperative to reduce vaccine hesitancy and health inequalities.

Stronger partnerships between charities, medical professionals and public health bodies can strengthen vaccination communications and help organisations share their experiences with each other to improve future vaccination practices.

a) Work with local community and faith leaders

Charities and public health bodies should work with local leaders and community groups to educate at-risk people from ethnic minority communities. Information and resources should be disseminated in places of worship or local community centres.

A great example of this is the Asian Resource Centre Croydon's "Health Champions", who engage with people in the community about their long-term health conditions. In Croydon, 51% of residents are from an ethnic minority. The Health Champions are there to amplify key messages about health prevention, engage in conversations about the barriers affecting people, and signpost them to other resources, such as condition-focused charities and local GP services.⁷⁶ Grassroots engagement like this can help to ensure that more people are being reached and allows vaccination information to be delivered in a more targeted sense within the very heart of the community.

b) Collaboration between public health bodies and charities

The Department of Health and Social Care (DHSC), the NHS and PHE should work with condition-focused charities to promote vaccination information and advice. These groups should work together to share their ideas and formulate material. In turn, this could help to strengthen at-risk people's perceptions of public health bodies and their legitimacy.

DHSC worked with 16 condition-focused charities to co-produce communication material to encourage people with long-term health conditions to get the COVID-19 vaccine.⁷⁷ As part of the "Every vaccination gives us hope" campaign, they also co-produced material for social media platforms, including adverts for Facebook, Instagram and TikTok.⁷⁸ This partnership shows how the Government can work with charities on vaccination, and these campaigns could be emulated to raise awareness about other routine vaccinations.

c) Partner with local pharmacies to deliver targeted information

As people often get prescriptions and other health services – like routine vaccination – at pharmacies, there's a good opportunity to target people who have underlying health conditions with tailored

vaccination information. For example, charities could share leaflets and handouts for people with specific conditions with pharmacists, to disseminate when those people collect prescriptions.

Making vaccination more accessible

Improving uptake also requires improving access to vaccination. Many at-risk people experience physical, mental and geographical barriers that prevent them from accessing routine vaccination with confidence and ease.

a) Redevelop booking systems to ensure privacy

Some risk groups, particularly people living with HIV, fear being stigmatised when going for routine vaccinations. Pharmacies and GP surgeries should consider implementing vaccination booking systems that allow patients to disclose their eligibility for free vaccination while booking their appointment. This means they need not disclose their health condition in a public space and ensures the healthcare worker is aware of it before administering the vaccination.

The COVID-19 vaccination appointment system should act as a model for future routine vaccination bookings. There's scope to integrate elements of this system into the new NHS app, enabling patients to book free routine vaccinations through their patient records.

b) Partner with local taxi firms and volunteer groups

We must do much more to ensure that at-risk people can physically access vaccination locations and appointments. Charities could partner with local taxi firms and volunteer groups to offer at-risk people free rides to vaccination appointments.

Age UK worked with ride-hailing firm, Uber, to ensure that people could get to their COVID-19 appointments. They offered vouchers to those who needed to travel to or from a mass vaccination centre, with fares up to the value of £15.⁷⁹ Beyond the pandemic, this kind of partnership could be replicated for other vaccinations such as flu, with local and national charities working with lift services.

c) Signposting to all vaccination locations

While most at-risk people will be familiar with pharmacies and GP surgeries as vaccination locations, there are other locations offering routine immunisations which some may be unaware of. Ensuring that all locations are signposted may enable some at-risk people to find more suitable locations which are convenient for them.

On their “Flu jab and diabetes” webpage, Diabetes UK has effectively signposted the different locations available, including supermarkets, as well as giving instructions for housebound people.⁸⁰ This is a good way of ensuring that people with diabetes can evaluate the best place for them to get vaccinated. Similar signposting could be replicated by other condition-based charities to promote wider access.

Conclusion

People with underlying health conditions face a number of challenges which could hinder their ability to access and receive routine vaccinations.

We have a clear opportunity to tackle many of these barriers. While vaccination will always come down to individual choice, it's clear that access issues and structural barriers have reduced some at-risk people's ability or desire to get vaccinated. Furthermore, where personal issues do exist, it is often the result of ineffective communication that hasn't resonated with at-risk individuals.

There's work to be done to ensure that people from clinical risk groups understand the importance of vaccination, while providing them with greater opportunities to access it. If we are to achieve the WHO Regional Office for Europe's flu vaccine target of 75%, we must take multiple measures to improve uptake for these different risk groups.

Improving communications about vaccination, fostering stronger partnerships to communicate these messages, and widening access to vaccination are all necessary.

Charities should lead the way in achieving these aims, alongside healthcare professionals and public health bodies. They should act as the key changemakers to help improve vaccination uptake, as at-risk people evince strong levels of trust in them. Our recommendations guide aims to offer charities a series of best practice measures to incentivise greater vaccination uptake among their service users.

Vaccination offers everyone the opportunity to better protect themselves against serious illness. But vaccinations offer the most vulnerable health groups in society an even greater chance of maximising longevity and ensuring greater protection throughout their lives.

Ensuring that people with underlying health conditions have better access to, awareness of, and appreciation of vaccination is crucial, and will guarantee that the risks posed by vaccine-preventable diseases are greatly reduced in the future.

References

- ¹Public Health Agency (2021) Influenza Weekly Surveillance Bulletin, Northern Ireland, 2020/21
- ²Public Health Wales (2021) Weekly Influenza Activity in Wales Report
- ³Public Health England (2021) Seasonal flu vaccine uptake in GP patients: monthly data, 2020 to 2021
- ⁴Public Health England (2020) Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2019 to March 2020, Table 2
- ⁵NHS England (2021) COVID-19 weekly announced vaccinations 09 September 2021
- ⁶BBC News (2021) Covid vaccine: All over-50s and high risk groups offered first dose
- ⁷NHS England (2021) COVID-19 weekly announced vaccinations 03 June 2021
- ⁸Public Health England (2020) Seasonal flu vaccine uptake in GP patients: winter 2019 to 2020; Public Health England (2021) Seasonal flu vaccine uptake in GP patients: monthly data, 2020 to 2021
- ⁹WHO Regional Office for Europe (2016) Methods for assessing influenza vaccination coverage in target groups
- ¹⁰ILC-UK (2018) An economic analysis of flu vaccination
- ¹¹Public Health England (2020) Immunisation against infectious disease
- ¹²The Green Book of Immunisation (2020) Chapter 19: Influenza (see Table 19.1)
- ¹³Public Health England (2021) Seasonal flu vaccine uptake in GP patients: monthly data, 2020 to 2021; Public Health Agency (2021) Influenza Weekly Surveillance Bulletin, Northern Ireland, 2020/21; Health Protection Scotland (2021) Influenza vaccine uptake in Scotland; Public Health Wales (2021) Weekly Influenza Activity in Wales Report
- ¹⁴Bachtiger, P. et al (2020) The Impact of the Covid-19 Pandemic on Uptake of Influenza Vaccine: A UK-Wide Observational Study
- ¹⁵Public Health England (2021) Seasonal flu vaccine uptake in GP patients: monthly data, 2020 to 2021
- ¹⁶Public Health England (2020) Seasonal flu vaccine uptake in GP patients: winter 2019 to 2020
- ¹⁷Public Health England (2020) Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2019 to March 2020
- ¹⁸Public Health England (2020) Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2019 to March 2020
- ¹⁹Public Health England (2020) Seasonal flu vaccine uptake in GP patients: winter 2019 to 2020
- ²⁰The Green Book of Immunisation (2020) Chapter 19: Influenza
- ²¹Torres, A. et al. (2015) Which individuals are at increased risk of pneumococcal disease and why? Impact of COPD, asthma, smoking, diabetes, and/or chronic

heart disease on community-acquired pneumonia and invasive pneumococcal disease

²²Mohseni, H. et al. (2016) Influenza vaccination and risk of hospitalization in patients with heart failure: a self-controlled case series study

²³MacIntyre, C.R. et al. (2013) Ischaemic heart disease, influenza and influenza vaccination: a prospective case control study

²⁴Marra, F. et al. (2020) The protective effect of pneumococcal vaccination on cardiovascular disease in adults: A systematic review and meta-analysis

²⁵Connolly, N. (2020) Influenza vaccine uptake in a cardiology outpatient department setting: a missed cardiovascular disease prevention opportunity

²⁶Stefanati, A. et al (2020) Influenza coverage rates in subjects with chronic heart diseases: results obtained in four consecutive immunisation seasons in the Local Health Unit of Ferrara (North Italy)

²⁷Public Health England (2020) Seasonal flu vaccine uptake in GP patients: winter 2019 to 2020

²⁸Wang, I-K. et al (2013) Effectiveness of Influenza Vaccination in Patients with End-Stage Renal Disease Receiving Hemodialysis: A Population-Based Study

²⁹Hernández-García, I. and Aibar-Remón, C. (2020) Effectiveness of an intervention to improve the vaccination coverage against *Streptococcus pneumoniae* in patients with chronic kidney disease

³⁰Ma, B.M. et al. (2020) Vaccination in patients with chronic kidney disease – Review of current recommendations and recent advances

³¹Wilmore, S.M.S. et al. (2013) Influenza and pneumococcal vaccinations in dialysis patients in a London district general hospital

³²Wilmore, S.M.S. et al. (2013) Influenza and pneumococcal vaccinations in dialysis patients in a London district general hospital

³³Bitsori, M. and Galanakis, E. (2015) Vaccine-preventable infection morbidity of patients with chronic kidney disease and cocoon vaccination strategies

³⁴Public Health England (2020) Seasonal flu vaccine uptake in GP patients: winter 2019 to 2020

³⁵Schwarze, J. et al. (2018) Influenza burden, prevention, and treatment in asthma - A scoping review by the EAACI Influenza in asthma task force

³⁶Keenan, H. et al. (2007) Influenza vaccination in patients with asthma: why is the uptake so low?

³⁷Schwarze, J. et al. (2018) Influenza burden, prevention, and treatment in asthma - A scoping review by the EAACI Influenza in asthma task force

³⁸Keenan, H. et al. (2007) Influenza vaccination in patients with asthma: why is the uptake so low?

³⁹Trethewey, S.P. et al. (2019) Interventions to Increase the Rate of Influenza and Pneumococcal Vaccination in Patients with Chronic Obstructive Pulmonary Disease: A Scoping Review

- ⁴⁰Public Health England (2020) Seasonal flu vaccine uptake in GP patients: winter 2019 to 2020
- ⁴¹Dovedi, V.K. and Iyer, A.K. (2018) Boosting the uptake of the influenza vaccine in diabetics in general practice
- ⁴²The Green Book of Immunisation (2020) Chapter 19: Influenza (see Table 19.4)
- ⁴³Public Health England (2018) Seasonal flu vaccine uptake in GP patients: winter 2017 to 2018
- ⁴⁴Dovedi, V.K. and Iyer, A.K. (2018) Boosting the uptake of the influenza vaccine in diabetics in general practice
- ⁴⁵Public Health England (2020) Seasonal flu vaccine uptake in GP patients: winter 2019 to 2020
- ⁴⁶The Green Book of Immunisation (2020) Chapter 19: Influenza
- ⁴⁷La Torre, G. et al. (2016) Influenza and Pneumococcal Vaccination in Hematological Malignancies: a Systematic Review of Efficacy, Effectiveness, and Safety
- ⁴⁸Etling, L.S. et al. (1995) Epidemiology of influenza A virus infection in patients with acute or chronic leukemia; La Torre, G. et al. (2016) Influenza and Pneumococcal Vaccination in Hematological Malignancies: a Systematic Review of Efficacy, Effectiveness, and Safety
- ⁴⁹Loubet, P. et al. (2015) Attitude, knowledge and factors associated with influenza and pneumococcal vaccine uptake in a large cohort of patients with secondary immune deficiency
- ⁵⁰Ceravolo, A. et al. (2013) Influenza vaccination in HIV-positive subjects: latest evidence and future perspective
- ⁵¹British HIV Association (2015) British HIV Association guidelines on the use of vaccines in HIV-positive adults 2015
- ⁵²Crum-Cianflone, N.F. and Wallace, M.R. (2014) Vaccination in HIV-Infected Adults
- ⁵³Houlihan, C. et al. (2011) Pandemic and seasonal influenza vaccination uptake in an HIV positive cohort: Category: Lesson in Microbiology & Infection Control
- ⁵⁴Butterworth, B. (2021) Covid-19 vaccines: NHS England allows people with HIV to access jabs without informing a GP
- ⁵⁵The Green Book of Immunisation (2017) Chapter 6: Contraindications and special considerations
- ⁵⁶The Green Book of Immunisation (2020) Chapter 7: Immunisation of individuals with underlying medical conditions
- ⁵⁷ILC-UK (2019) Under the skin: Listening to the voices of older people on influenza immunisation
- ⁵⁸The Green Book of Immunisation (2020) Chapter 19: Influenza
- ⁵⁹Public Health England (2021) Seasonal flu vaccine uptake in GP patients: monthly data, 2020 to 2021

- ⁶⁰Tessier, E. (2018) Population-level factors predicting variation in influenza vaccine uptake among adults and young children in England, 2015/16 and 2016/17
- ⁶¹Public Health England (2021) Seasonal flu vaccine uptake in GP patients: monthly data, 2020 to 2021
- ⁶²Public Health England (2021) Seasonal flu vaccine uptake in GP patients: monthly data, 2020 to 2021
- ⁶³Nuffield Council of Bioethics (2021) Vaccine access and uptake
- ⁶⁴ILC-UK (2021) Delivering prevention in an ageing world: Inspiring and engaging people with prevention
- ⁶⁵Anthony Nolan (no date) Patient focused research
- ⁶⁶Priestley, C. (2021) District nurses deliver Covid vaccines to patients at home
- ⁶⁷www.ilcuk.org.uk (2021) Reducing the risk: Improving vaccine uptake across at-risk groups in the UK
- ⁶⁸Terrence Higgins Trust (no date) Flu jab and other vaccines
- ⁶⁹Kidney Care UK (2020) We're here to help you stay well this winter: A handy guide for people living with kidney disease.
- ⁷⁰Anthony Nolan (2021) 2021 action plan a pathway for post-transplant care
- ⁷¹CTV News (2020) Scientists study app as possible way to track COVID-19 vaccine safety
- ⁷²ILC-UK (2021) Delivering prevention in an ageing world: Democratising access to prevention
- ⁷³NHS (2021) NHS App
- ⁷⁴Diabetes UK (no date) Peer support groups
- ⁷⁵Dubé, E. et al (2013) Vaccine hesitancy: An overview
- ⁷⁶Asian Resource Centre Croydon (no date) LTC (Long Term Conditions)
- ⁷⁷Department of Health and Social Care (2021) UK charities join together to boost vaccine drive
- ⁷⁸Facebook – nhs.uk (2021) Every vaccination gives us hope
- ⁷⁹Age UK Croydon (2021) Uber Vouchers for Travel to Covid-19 Mass Vaccination Centres
- ⁸⁰Diabetes UK (no date) Flu jab and diabetes

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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