



# The power of prevention: boosting vaccine uptake for better outcomes

August 2024

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# **ABOUT**

*Reform* would like to thank Novavax for kindly supporting this briefing paper. Novavax had no influence or involvement in the content, organisation or preparation of any activities related to the paper and *Reform* had full editorial control over the paper.

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# **ACKNOWLEDGEMENTS**

### **External Reviewers**

We would like to express our gratitude to Professor Kate Ardern, Former Director of Public Health for Wigan Council, and Dr Jahangir Alom BEM, former National Clinical Lead for the Staff Vaccination Programme, NHS England, for their helpful comments on an earlier draft of this paper.

The arguments and any errors that remain are the authors' and the authors' alone.

### Interviewees

We would like to thank all 18 interviewees for giving their time and candid insights to support this research paper.

- Dr Jahangir Alom, Former National Clinical Lead for the Staff Vaccination Programme, NHS England
- Professor Kate Ardern, Former Director of Public Health, Wigan Council
- Anne-Marie Gallogly, Committee Member, School and Public Health Nurses Association
- Emily Hackett, Public Health Adviser, Local Government Association
- Victoria Jackson, Senior Programme Manager, Institute of Health Visiting
- Charles Kwaku-Odoi, Chief Executive, Caribbean & African Health Network
- Clare Livingstone, Policy Adviser, Royal College of Midwives
- Jake Morris, Administrator, Royal College of Midwives
- Stephen Morris, UCL Vax-Hub Outreach and Public Engagement Manager
- Paul Ogden, Senior Adviser, Local Government Association
- Sebastian Rees, Senior Policy Analyst, Healthwatch England
- Lucy Seymour, Policy and External Affairs Officer, National Voices
- Dudu Sher-Arami, Director of Public Health, Enfield
- Anca Tacu, Policy Adviser, UCL VaxHub, STEaPP Policy Impact Unit
- Dr Nick Thayer, Head of Policy, Company Chemists' Association

And three interviewees who wished to remain anonymous.

# **ACTIONS TO PROMOTE VACCINE UPTAKE**

**Action 1:** NHS regional teams responsible for vaccination and ICB vaccination teams should be co-located with local Directors of Public Health, to encourage closer professional collaboration and the development of place-sensitive approaches to building vaccine confidence.

**Action 2:** The next Community Pharmacy Contractual Framework should define all adult vaccinations as "advanced services" that are delivered by community pharmacy.

NHS England should adopt the same data integration standards applied for antibiotics, blood pressure checks and contraceptive prescriptions to all new vaccination services.

**Action 3:** In local authorities that employ school nurses, NHS England should not commission School Age Immunisation (SAIS) providers, but instead should commission school nurses to deliver immunisation programmes.

Health visitors with the national minimum standard of immunisation training should be able to deliver all routine childhood vaccinations.

**Action 4:** NHS England should permit all core adult vaccinations to be provided in the workplace.

Working in concert with local Directors of Public Health, it should then establish a targeted offer of workplace vaccination, delivered on pre-agreed dates through mobile units, for areas with the lowest rates of vaccine uptake.

**Action 5:** A programme modelled on the Vaccine Champions programme (CVC) should be funded by the Ministry for Housing, Communities and Local Government, to build a dedicated volunteer network across the country, concentrated in areas of lowest uptake, to make the positive case for vaccination.

This funding should be granted to local authorities and voluntary organisations with as little conditionality as possible, to enable outreach initiatives to be tailored to the needs of local communities.

The programme should be funded for the first three years of the next parliament (2024-27), after which an independent evaluation should be conducted to determine whether this continues to deliver a positive return on investment and contributes to higher rates of vaccine uptake.

# 1. Introduction

Vaccines play a vital role in preventing disease and allowing people to live healthy lives. The COVID-19 vaccines showcased the transformative power vaccination can have when coupled with an effective delivery strategy, and a concerted effort to build trust and communicate the benefits of vaccination to the public.

However, even before the pandemic, a worrying trend was emerging in which the uptake of key immunisation programmes, and particularly childhood vaccines such as MMR (measles, mumps and rubella) and DTaP (diphtheria, tetanus, and pertussis), was declining. This has led to outbreaks of vaccine-preventable diseases, hospitalisation and tragic, entirely avoidable deaths.<sup>1</sup>

While welcome progress has been made, particularly since the pandemic, in diversifying how vaccines are delivered (the 'supply side' of vaccination), there has been a less concerted approach to focusing on the behavioural drivers (the 'demand side') of uptake.

For a government committed to prevention and achieving the best possible health outcomes, vaccines should be a priority area of investment: but making sure they reach as many people as possible also requires addressing head-on the behavioural reasons why people are not getting vaccinated.

Based on interviews with expert clinicians, academics and health system leaders, this paper analyses vaccine behaviour in the UK, and sets out the practical steps that can be taken to ensure effective vaccination is a core pillar of our approach to prevention.

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<sup>&</sup>lt;sup>1</sup> 'Whooping Cough: Vaccine Expert "very Worried" by Whooping Cough Deaths', *BBC News Online*, 10 May 2024.

# 2. The case for vaccination

Vaccines are one of the bedrocks of prevention policy: keeping people in good health, preventing fatal infections and reducing costs and pressures on other parts of the healthcare system. They are the most effective means we have of preventing infectious disease.<sup>2</sup> As the UK Health Security Agency (UKHSA) states, "After clean water, vaccination is the most effective public health intervention in the world for saving lives and promoting good health".<sup>3</sup>

Owing to successful vaccination programmes, an estimated 154 million lives have been saved globally over the past fifty years.<sup>4</sup> Fatal and life changing diseases such as smallpox have been entirely eradicated,<sup>5</sup> while vaccines currently prevent over 20 life-threatening diseases from significantly impacting people's lives.<sup>6</sup>

Vaccines not only reduce poor health outcomes, but they are also extremely cost-effective: immunisation (the process by which someone achieves immunity after being administered a vaccine) and other health protection programmes in the UK achieve an average return on investment (ROI) of around £34 for every £1 spent.<sup>7</sup>

Economic benefits accrue not just via health gains and avoidable disease-related medical costs, but also through the economic productivity that successful vaccination supports.<sup>8</sup> Investment in vaccines should be seen as an investment in human capital – improving educational attainment through better attendance,<sup>9</sup> reducing rates of absence from work (currently, six million working days a year are lost in the UK due to seasonal flu),<sup>10</sup> and preventing debilitating diseases through to adulthood.<sup>11</sup>

# The example of COVID

More recently, the COVID-19 pandemic and subsequent vaccines highlighted the transformative power of vaccination. The development of the COVID-19 vaccines prevented over 14 million COVID-related deaths in 185 countries during the first year of roll out. As of September 2021, the UKHSA estimated that the vaccines had prevented more than 24 million

<sup>&</sup>lt;sup>2</sup> NHS England, NHS Vaccination Strategy, 2023.

<sup>&</sup>lt;sup>3</sup> Joanne Yarwood, 'Why Vaccinate?', UK Health Security Agency, 1 May 2014.

<sup>&</sup>lt;sup>4</sup> 'Global Immunization Efforts Have Saved at Least 154 Million Lives over the Past 50 Years', *World Health Organisation*, 24 April 2024.

<sup>&</sup>lt;sup>5</sup> Marc Strassburg, 'The Global Eradication of Smallpox', *American Journal of Infection Control* 10, no. 2 (1982).

<sup>&</sup>lt;sup>6</sup> World Health Organisation, 'Vaccines and Immunization', n.d., https://www.who.int/health-topics/vaccines-and-immunization#tab=tab 1.

<sup>&</sup>lt;sup>7</sup> ABPI, 'Economic and Societal Impacts of Vaccines', Webpage, 2024.

<sup>&</sup>lt;sup>8</sup> Paolo Bonanni, Juan Jose Picazo, and Vanessa Remy, 'The Intangible Benefits of Vaccination – What Is the True Economic Value of Vaccination?', *Journal of Market Access & Health Policy* 3, no. 1 (2014).

<sup>&</sup>lt;sup>9</sup> David Bloom, David Canning, and Erica Shenoy, 'The Effect of Vaccination on Children's Physical and Cognitive Development in the Philippines.', *Applied Economics* 44, no. 21 (2012).

<sup>&</sup>lt;sup>10</sup> ABPI, 'Economic and Societal Impacts of Vaccines'.

<sup>&</sup>lt;sup>11</sup> David Bloom, David Canning, and Mark Weston, 'The Value of Vaccination', *Fighting the Diseases of Poverty*, 2017, 214–38.

<sup>&</sup>lt;sup>12</sup> Oliver Watson et al., 'Global Impact of the First Year of COVID-19 Vaccination: A Mathematical Modelling Study.', *The Lancet Infectious Diseases* 22, no. 9 (2022).

infections and more than 105,000 deaths in the UK.<sup>13</sup> The vaccine enabled global lockdowns to end, and for life as normal to return for much of the population.

The UK's COVID-19 vaccination programme was hailed as "a near miracle of planning and execution". <sup>14</sup> Only nine months after the pandemic began, the NHS delivered the first vaccination against COVID-19 outside of clinical trials. <sup>15</sup> The UK's rollout and delivery of the COVID-19 vaccines programme was among the fastest in the world, with one of the highest uptakes in its first few months. <sup>16</sup>

# The UK picture

Fortunately, headline levels of vaccine confidence in the United Kingdom remain relatively high. A UKHSA survey published in 2023 found that 86 per cent of parents and 80 per cent of young people agreed that vaccines work; and 78 per cent of parents and 76 per cent of young people agreed that they trusted vaccines.<sup>17</sup> These figures compare favourably with other countries: for example, a recent international comparison found that fewer people in France, Germany and the Netherlands believe vaccines are safe and effective.<sup>18</sup>

However, there is significant variation between demographic groups and places in the UK in how vaccines are perceived, with some communities questioning the safety and benefits of vaccination. <sup>19</sup> This has contributed to ethnic disparities in uptake: with children born to Black, African and Caribbean mothers less likely to receive routine childhood vaccinations than children born to White British and Asian mothers. <sup>20</sup>

Disparities in uptake have in turn led to poor coverage for several key vaccines and exacerbated health inequalities. There has also been a consistent decline in the overall rate of uptake for childhood vaccination programmes over the last 10 years, leading to the recent rise in infections for whooping cough<sup>21</sup> and measles.<sup>22</sup>

In the beginning of 2024, the West Midlands saw a large increase in measles cases and hospital admissions (Figure 2), largely due to declining vaccine uptake.<sup>23</sup> And more broadly, from October 2023 to May 2024, England saw the largest number of measles infection in a

<sup>&</sup>lt;sup>13</sup> Beccy Baird and Nicholas Timmins, 'The Covid-19 Vaccination Programme: Trials, Tribulations and Successes', *The King's Fund*, 30 January 2022.

<sup>&</sup>lt;sup>14</sup> Beccy Baird and Nicholas Timmins.

<sup>&</sup>lt;sup>15</sup> NHS England, 'Landmark Moment as First NHS Patient Receives COVID-19 Vaccination', 8 December 2020.

<sup>&</sup>lt;sup>16</sup> Chris Baraniuk, 'Covid-19: How the UK Vaccine Rollout Delivered Success, so Far', *BMJ*, 18 February 2021.

<sup>&</sup>lt;sup>17</sup> UK Health Security Agency, 'Immunisation Survey 2023 Findings', 17 November 2023.

<sup>&</sup>lt;sup>18</sup> European Commission, *State of Vaccine Confidence in the EU and UK*, 2020.

<sup>&</sup>lt;sup>19</sup> National Audit Office, 'Investigation into Pre-School Vaccinations', 25 October 2019.

<sup>&</sup>lt;sup>20</sup> Claire X. Zhang et al, 'Ethnic Inequities in Routine Childhood Vaccinations in England 2006–2021: An Observational Cohort Study Using Electronic Health Records', *eClinicalMedicine* 65 (November 2023).

<sup>&</sup>lt;sup>21</sup> UK Health Security Agency, 'Whooping Cough Cases Continue to Rise', 9 May 2024.

<sup>&</sup>lt;sup>22</sup> UK Health Security Agency, 'Confirmed Cases of Measles in England by Month, Age and Region: 2023', 6 June 2024.

<sup>&</sup>lt;sup>23</sup> Gareth Iacobucci, 'Measles: Warning given over Low MMR Uptake after Cases Rise to 200 in West Midlands', *BMJ*, 16 January 2024.

decade, with 1,666 cases.<sup>24</sup> Similarly, in January to March this year, 2,793 cases of whooping cough were confirmed, with five infant deaths.<sup>25</sup>

Declining vaccine uptake means that the preventative layer produced by high levels of uptake is diminished. The World Health Organization (WHO) recommends that at least 95 per cent of children are immunised against vaccine-preventable diseases on the national level. However the current coverage rates are below this threshold and have been steadily declining (Figure 4). As the chart below demonstrates, the rates of MMR vaccination in the UK are also lower than in other advanced economies.<sup>26</sup>

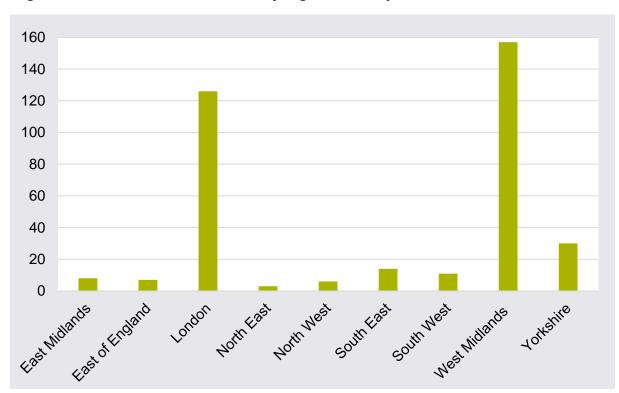


Figure 2: Confirmed measles cases by region, January 2023 to December 2023

Source: UK Health Security Agency, 'Confirmed cases of measles in England by month, age and region', 2024.

The fact that people are choosing not to get vaccinated is cause for great concern. Health, social and economic outcomes worsen, and this particularly affects already-deprived populations.<sup>27</sup> However, it also provides an opportunity to better understand why people are choosing not to get themselves and their families vaccinated. If we can better understand this, then policy makers and leaders can look for ways to change behaviours and get vaccine uptake to the required levels

<sup>&</sup>lt;sup>24</sup> Shaun Lintern, 'Measles on March as Jab Cash Is Cut', *The Sunday Times*, 2 June 2024.

<sup>25</sup> Ibid

<sup>&</sup>lt;sup>26</sup> NHS England, *NHS Vaccination Strategy*.

<sup>&</sup>lt;sup>27</sup> Pfizer and Future Health, *VacciNation and Health Inequalities: Tackling Variations in Adult Vaccination Uptake in England*, 2021.

Percentage of children immunised Hungary Germany Spain UK **France** 100 80 60 40 20 0 31st 27th 17th 7th 1st ····· WHO target

Figure 3: UK measles immunisation coverage compared to OECD countries, 2021

Source: OECD, 'Health Care Utilisation: Immunisation', 2023.

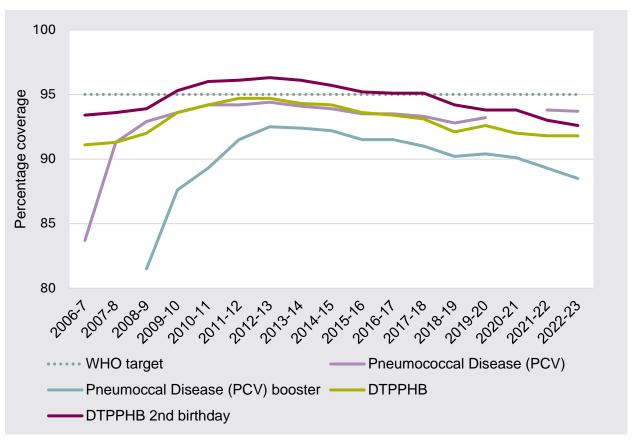


Figure 4: Childhood vaccination coverage in England over time

Source: NHS Digital, 'Childhood Vaccination Coverage Statistics', 2023.

# 3. A brief overview of UK vaccination policy

National oversight of vaccination policy in England is provided by the Department of Health and Social Care, who are advised by the JCVI.<sup>28</sup> The Department of Health and Social Care does not deliver vaccination programmes but instead delegates responsibility to NHS England under the NHS Public Functions Health Agreement.<sup>29</sup>

The NHS offers 16 preventative vaccines and immunisations across the 'life course' of an individual.<sup>30</sup> To streamline the delivery of these vaccinations and increase uptake, NHS England recently released a comprehensive vaccination strategy.<sup>31</sup>

The strategy set out an ambition to widen and deepen vaccine uptake, with a particular focus on "underserved" populations, through the three themes of improved access; targeted outreach; and improving delivery through joined-up services.

It emphasises the need for a simple and convenient vaccination "front door" by, for instance, making better use of the NHS app and National Booking Services for booking, online information, and accessibility.

The strategy also sets a direction of travel to delegate commissioning responsibility to Integrated Care Boards (ICBs). This is designed to promote join-up with other areas of ICB work, and greater flexibility to tailor delivery to the needs of particular localities.

The strategy is largely focused, however, on supply-side factors affecting uptake. Whilst this is useful, it is not the full picture. If people do not come forward for vaccines, then the levels of immunisation needed to maintain a healthy population and reduce the burden of infectious disease will not be achieved.

<sup>&</sup>lt;sup>28</sup> Elizabeth Rough, 'UK Vaccination Policy' (House of Commons Library, 7 March 2022).

<sup>&</sup>lt;sup>29</sup>EU, International and Prevention Programmes et al., 'NHS Public Health Functions Agreement 2018-2019, Public Health Functions to Be Exercised by NHS England', 26 March 2018.

<sup>&</sup>lt;sup>30</sup> NHS, 'NHS Vaccinations and When to Have Them', n.d.

<sup>&</sup>lt;sup>31</sup> NHS England, NHS Vaccination Strategy.

# 4. Behavioural drivers of uptake

Interviewees for this paper identified three broad factors involved in people's attitudes towards vaccines, which in turn influence uptake. These related to people's trust in vaccines, including their perception of their possible risks and side-effects; the accessibility of vaccination programmes, which can include the economic and opportunity cost of getting vaccinated, and the locations and opening times of vaccine sites; and finally, individuals' judgements about the benefits of vaccines.

These correspond closely with the "3C" model of vaccine uptake developed by SAGE in 2014: vaccine "Confidence", "Convenience" and "Complacency" (related to judgements about the benefits of vaccines, but also "other life/health responsibilities that may be seen as more important at the time).<sup>32</sup>

Interviewees were clear that an approach which takes each of these factors seriously is essential to "normalising" vaccination and maximising vaccine uptake. It is insufficient, in other words, to simply address disinformation and safety concerns about vaccines – though these are both important drivers. The actions this paper proposes to boost vaccine uptake are therefore organised around these themes.

# 4.1 Confidence in vaccines

Public perception of the safety and efficacy of vaccines – including how they are developed, manufactured and potential side-effects they may have – is a key factor in rates of uptake.<sup>33</sup> Interviewees stressed that while mis- and disinformation have a widely understood impact on confidence,<sup>34</sup> and should be addressed as they arise (particularly for vaccines with a history of being undermined through misinformation, such as MMR), there should be also be a wider conservation about the full range of reasons why individuals and communities may not have confidence in vaccines.

Failure to address specific reasons for hesitancy will otherwise result in persistent and unacceptable inequalities in uptake even as overall levels of confidence in the UK remain high by international standards.<sup>35</sup> For example, interviewees highlighted that faith communities can be hesitant towards vaccines containing animal derivates, and increasing uptake in these cases means working closely with faith leaders to provide guidance on the permissibility of specific vaccines.<sup>36</sup> Though healthcare professionals are one of the most trusted sources of vaccine information,<sup>37</sup> some messages are most effectively communicated by trusted members of local communities.

<sup>32</sup> World Health Organization, Report of the SAGE Working Group on Vaccine Hesitancy, 2012.

<sup>&</sup>lt;sup>33</sup> NHS England and NHS Improvement - South East, Vaccination: Race and Religion/Belief, 2021.

<sup>&</sup>lt;sup>34</sup> Sahil Loomba et al., 'Measuring the Impact of COVID-19 Vaccine Misinformation on Vaccination Intent in the UK and USA', *Nature Human Behaviour* 5, no. 3 (February 2021).

<sup>&</sup>lt;sup>35</sup> Vaccine Confidence Project, 'UK', Webpage, 2023.

<sup>&</sup>lt;sup>36</sup> UK Health Security Agency, 'Vaccines and Porcine Gelatine', Webpage, 29 September 2022.

<sup>&</sup>lt;sup>37</sup> Healthwatch, *VacciNation: Exploring Vaccine Confidence*, 2021.

Likewise, first generation migrants' attitudes towards vaccination are typically shaped by experiences from their home countries,<sup>38</sup> and in some communities, women worry that vaccination may have impacts on their fertility and increase risks during pregnancy.<sup>39</sup> Relying on 'one-size-fits-all' messaging from the centre – particularly from government (which may itself be mistrusted), but also from NHS England, the Chief Medical Officer and other public figures – fails to take seriously the plurality of these attitudes.

Interviewees agreed that it is most effective to build confidence in vaccines at a local level: where a smaller footprint enables messaging to be tailored to specific demographics and reach much more effectively into communities. For the UK, as one interviewee put it, the key question is not "how should we build confidence in vaccines nationally?", but rather, "how do we get to the final 15 per cent?".

One of the key barriers to implementing a more local approach is the fragmentation between where this contextual understanding of vaccine confidence is greatest – including in local government, among local Directors of Public Health and in the VCSE sector – and the current model of vaccine commissioning, led by NHS England (though set to be delegated to Integrated Care Boards by April 2025).<sup>40</sup>

In the long-term, this suggests potential for local government to take a more direct role in vaccine commissioning. In the shorter-term, NHS regional teams responsible for vaccination, and ICB vaccination staff should be co-located with local Directors of Public Health. This would encourage closer professional collaboration, and represent an important step towards reducing fragmentation in the system.

**Action 1:** NHS regional teams responsible for vaccination and ICB vaccination teams should be co-located with local Directors of Public Health, to encourage closer professional collaboration and the development of place-sensitive approaches to building vaccine confidence.

# 4.2 The convenience of vaccination

Interviewees stressed that one of the most effective ways to change vaccine behaviour is to "meet people where they are" rather than relying on them to proactively seek out vaccination, As one put it, "getting a jab is low down on a long list of priorities", and so the convenience of accessing vaccines has a major impact on uptake.<sup>41</sup>

Crucially, convenience could be greatly improved by making better use of existing assets, such as community pharmacies, school nurses and involving major employers in adult vaccination.

<sup>&</sup>lt;sup>38</sup> Alison F. Crawshaw et al., 'Driving Delivery and Uptake of Catch-up Vaccination among Adolescent and Adult Migrants in UK General Practice: A Mixed Methods Pilot Study', *BMC Medicine* 22, no. 1 (3 May 2024): 186, https://doi.org/10.1186/s12916-024-03378-z.

<sup>&</sup>lt;sup>39</sup> BBC News, 'Covid Vaccine: Fertility and Miscarriage Claims Fact-Checked', 11 August 2021.

<sup>&</sup>lt;sup>40</sup> NHS England, NHS Vaccination Strategy.

<sup>&</sup>lt;sup>41</sup> World Health Organization, *Report of the SAGE Working Group on Vaccine Hesitancy*.

# **Community pharmacy**

Community pharmacies have a far wider national reach than other vaccine providers, are more likely to be situated in high deprivation areas and are often open in the evening and on weekends.<sup>42</sup> During the pandemic, they delivered more than 22 million COVID-19 vaccines,<sup>43</sup> and by the end of 2023, more than 40 million.<sup>44</sup>

Despite this, pharmacies are not commissioned to provide the majority of adult vaccines.<sup>45</sup> Yet early evidence suggests that where pharmacies have been involved in delivering 'catch-up' vaccines, such as MMR, this has had a positive effect on rates of uptake.<sup>46</sup>

Equally, remuneration for future vaccinations delivered by community pharmacy should better reflect NHS England's own belief in the "extraordinary power" of immunisation – as well as the cost savings vaccines can generate in other parts of the health system.<sup>47</sup>

There is also inadequate real-time data sharing regarding individual's vaccine status between general practice and community pharmacy, meaning the potential to carry out "opportunistic vaccinations" (i.e. to offer vaccinations to people who visit community pharmacies for other purposes) – a core pillar of NHSE's vaccine strategy – is constrained.<sup>48</sup>

Interviewees argued that this is primarily a bureaucratic, not technical, challenge, as data is readily shared between providers regarding antibiotic and contraceptive medications.<sup>49</sup> Putting in place similar approvals for vaccination status would support a more proactive approach to vaccination in primary care.

**Action 2:** The next Community Pharmacy Contractual Framework should define all adult vaccinations as "advanced services" that are delivered by community pharmacy.

NHS England should adopt the same data integration standards applied for antibiotics, blood pressure checks and contraceptive prescriptions to all new vaccination services.

### School nurses and health visitors

School nurses can also massively improve the convenience of vaccination for parents (who do not need to take time off work for vaccine appointments) and young people. However, despite expertise and training in immunisation, and high levels of parental trust, interviewees told us that in most areas, school nurses are not commissioned to provide vaccinations.

<sup>&</sup>lt;sup>42</sup> Robert Ede, Sean Phillips, and Yu Lin Chou, A Fresh Shot, 2022.

<sup>&</sup>lt;sup>43</sup> Community Pharmacy England, 'COVID-19 Vaccination Service', Webpage, 30 June 2022.

<sup>&</sup>lt;sup>44</sup> Company Chemists' Association, 'Community Pharmacy Hits Milestone of 40m Covid-19 Vaccines at the End of 2023', 14 February 2024.

<sup>&</sup>lt;sup>45</sup> Ede, Phillips, and Chou, *A Fresh Shot*.

<sup>&</sup>lt;sup>46</sup> Tammy Lovell, 'MMR Vaccines Should Be Delivered through Community Pharmacy, Says Health and Social Care Committee Chair', *The Pharmaceutical Journal*, 23 January 2024.

<sup>&</sup>lt;sup>47</sup> NHS England, NHS Vaccination Strategy.

<sup>48</sup> Ibid.

<sup>&</sup>lt;sup>49</sup> NHS Digital, 'GP Connect Update Record', Webpage, 2024.

Instead, NHS England separately commissions "School Age Immunisation" (SAIS) providers – creating unnecessary and inefficient duplication in schools which already have nurses.<sup>50</sup> The advantage of school nurses having a trusted relationship with parents and young people, and contributing to higher vaccine confidence and uptake, is also lost.<sup>51</sup>

However, while school nurses can support more convenient vaccination and higher uptake, they are not employed by every local authority and there has been a reduction in the workforce since 2009.<sup>52</sup> Interviewees therefore pointed to the importance of "diversifying" who delivers vaccines, including to other health professionals with high parental engagement and trust, such as health visitors.

Crucially, health visitors are commissioned as a "universal service", coming into contact with every family in England, and so are uniquely placed to promote and deliver comprehensive immunisation programmes.<sup>53</sup> At a minimum, health visitors trained in immunisation should be able to deliver all routine childhood vaccinations and have access to relevant sections of a child's health record (the "red book").

**Action 3:** In local authorities that employ school nurses, NHS England should not commission School Age Immunisation (SAIS) providers, but instead should commission school nurses to deliver immunisation programmes.

Health visitors with the national minimum standard of immunisation training should be able to deliver all routine childhood vaccinations.

## Occupational health

One of the most important aspects of convenience cited by interviewees was the availability of time – for example, for people with caring responsibilities, with more than one job or who regularly work night shifts – to be vaccinated. In particular, several commented that employers could play a greater role in offering vaccines during working hours and that there is currently unnecessary bureaucracy around delivering certain types of vaccine in the workplace (such as COVID-19 boosters).

Others cautioned that, apart from a few national employers, most do not have an in-house or third-party occupational health department; while employees may worry that vaccination will require them to take time off work, or lose out on pro-rata pay. Interviewees suggested that convenience therefore depends on "weighing the immediate risk of feeling unwell" and in some cases lost pay, against the unknown, "potential risk" of getting infected.

<sup>52</sup> Royal Society for Public Health, *Children and Young People's Attitudes towards Vaccinations - What They Know and What They Have to Say*, 2023.

<sup>&</sup>lt;sup>50</sup> Local Government Association, 'Stockport - The Benefits of School Nurses Offering Immunisations', Webpage, 14 July 2022.

<sup>&</sup>lt;sup>51</sup> Ibid.

<sup>&</sup>lt;sup>53</sup> Office for Health Improvement and Disparities, 'Healthy Child Programme', Webpage, 27 June 2023.

In areas with the lowest rates of vaccine uptake, there should be a targeted offer of workplace vaccination, delivered through mobile units, for core adult vaccines (seasonal flu and for eligible adults, PPV).<sup>54</sup> This could be organised on a similar basis to other health programmes offered through the workplace. For example, NHS Blood and Transplant regularly partners with local businesses to host mobile blood donation units at people's place of work – making it more convenient to donate.<sup>55</sup>

**Action 4:** NHS England should permit all core adult vaccinations to be provided in the workplace.

Working in concert with local Directors of Public Health, it should then establish a targeted offer of workplace vaccination, delivered on pre-agreed dates through mobile units, for areas with the lowest rates of vaccine uptake.

# 4.3 Benefits of vaccination

Alongside addressing specific reasons for vaccine hesitancy, and making it as convenient as possible to be vaccinated, interviewees suggested a key behavioural reason for declining uptake is that not enough effort is made to communicate the positive *benefits* of vaccination. In particular, interviewees argued there is little consideration of how the benefits of vaccines can be "personalised" to an individual, and since many of the infectious diseases vaccines protect against are rare, calculations of "risk versus reward" are too often skewed against vaccination. As one clinician put it, "When I speak to patients, it's about perception of benefits. People don't see polio, so they don't understand the value of taking a vaccine".

This form of communication is especially impactful on parents deciding whether to have their children vaccinated: since the perceived risks of vaccination can otherwise have an outsized influence in decision-making compared to the benefit of protection against diseases which, thanks to immunisation, are now rare — including rubella and diphtheria. Indeed, clinicians interviewed for this paper observed that it has become more common to hear high-agency, middle class parents describe vaccines as "not right for their children".

For a health and care workforce faced with competing priorities, and finite resources, there is often limited time to spend with patients to make the positive case for vaccination. Yet the benefits of vaccination are best communicated through a genuinely 'two-way', sustained conversation.

During the pandemic, these conversations were facilitated through a volunteering programme of "Vaccine Champions", developed by the Department for Levelling Up, Housing and Communities (Figure 5), and targeted at voluntary organisations and 60 local authorities with the lowest rates of vaccine uptake.<sup>56</sup>

£22.5 million of direct funding was also made available for supporting activities, often delivered by the Champions and local VSCE organisations, including: community outreach events; the production of culturally appropriate information packages; creating pop-up vaccination sites

<sup>56</sup> Department for Levelling Up, Housing and Communities, '£22.5m of Funding Announced in New Community Push to Get Nation Boosted Now', Press Release, 19 December 2021.

<sup>&</sup>lt;sup>54</sup> NHS England, 'General Practice Vaccination and Immunisation Services: Standards and Core Contractual Requirements', Webpage, 1 May 2024.

<sup>&</sup>lt;sup>55</sup> NHS Blood and Transplant, 'Blood Donor Events', Webpage, 2024.

(in some local authorities, "vaccine buses"); training non-clinical vaccinators; and arranging travel for the hardest-to-reach individuals.<sup>57</sup>

# Figure 5: Vaccine Champions programme

Tens of thousands of volunteers joined the Vaccine Champions scheme, led by councils and voluntary organisations, to deliver a range of initiatives to build confidence and trust in vaccines, provide accurate, up-to-date health information, and communicate the benefits of vaccination.

Teams were comprised of people who spoke a wide range of languages, and had the resources to travel and meet people in popular locations, such as shopping centres, train stations and high streets.

Crucially, Vaccine Champions were recruited from communities as trusted voices, to help "tap into" local networks, run events, and make doorstep visits in areas where uptake was lowest – as well as identify barriers to uptake through informal conversations.

Councils also developed plans with Champions to access hard-to-reach groups, including through school-based initiatives, workplace engagement and phoning at-risk groups.

A 2023 evaluation found that the programme was responsible for a significant increase in COVID-19 booster doses, compared to areas without the programme, and delivering a positive economic and social return on investment. Notably, the programme was said to address health inequalities in a "less hierarchical way than previously", by successfully leveraging community "expertise and relationships".

Source: Department for Levelling Up, Housing and Communities, 'Community Vaccine Champions: Evaluation Report', 2023.

Given the clear importance of making a positive case for vaccination, and the social and economic returns this would bring, there is merit in exploring whether similar voluntary programmes should be reinstated for core childhood and adult vaccinations. As the COVID-19 programme showed, even relatively small investments in interventions like outreach activities and pop-up sites could make inroads in tackling health inequalities and reversing declining rates of uptake.

<sup>&</sup>lt;sup>57</sup> Department for Levelling Up, Housing & Communities and IFF Research, *Community Vaccine Champions Evaluation Report*, 2023.

**Action 5:** A programme modelled on the Vaccine Champions programme (CVC) should be funded by the Ministry for Housing, Communities and Local Government, to build a dedicated volunteer network across the country, concentrated in areas of lowest uptake, to make the positive case for vaccination.

This funding should be granted to local authorities and voluntary organisations with as little conditionality as possible, to enable outreach initiatives to be tailored to the needs of local communities.

The programme should be funded for the first three years of the next parliament (2024-27), after which an independent evaluation should be conducted to determine whether this continues to deliver a positive return on investment and contributes to higher rates of vaccine uptake.

# 5. Conclusion

The pandemic made clear the extraordinary preventive power of vaccination, and led us to fundamentally rethink how vaccines can be delivered to reach as many people as possible. Yet more than a decade before this, and in the years after, uptake of core vaccinations – particularly childhood vaccinations – has been falling. As a result, we have seen entirely avoidable and deadly outbreaks of diseases like measles; and in many areas, vaccines no longer have the necessary levels of coverage to keep the population safe.

It is now essential that we redouble our efforts to promote higher levels of uptake, through better understanding and addressing the behavioural drivers underlying these trends.

This means empowering local leaders to address specific reasons for vaccine hesitancy; making vaccines as accessible as possible to people through the everyday course of their lives; and setting out the positive case for vaccination, leveraging local volunteers who know their communities best.

By taking the practical steps outlined in this paper, we will achieve a double dividend: reducing unwarranted variation in health outcomes, and protecting the most vulnerable; while freeing up valuable, limited resource in the rest of the health system.



# REFORM

