

Strategic Overview of Immunisations in Birmingham

BACKGROUND

Immunisation prevents disease and protects the health of the local population. Immunisations and vaccinations are delivered to people who are well as an ongoing protective and preventative healthcare strategy, from birth to older age, as part of a basic foundation of good health and wellbeing.

Immunisation is one of the most effective and evidence based public health measures after clean water and has a huge impact on reducing infectious disease and death due to vaccine preventable disease, especially in children. Immunisations and vaccinations are also given in response to emerging infectious diseases, providing protection against significant outbreaks and pandemics. It is one of the most cost-effective public health interventions and reduces people getting avoidable disease and therefore saves expenditure in other areas of healthcare.ⁱ

The [complete routine immunisation schedule](#) is published by the UK Health Security Agency (UKHSA).

The purpose of this paper is to give the Health Overview & Scrutiny Committee a brief strategic overview of immunisations and vaccinations in Birmingham, and associated challenges with uptake. This paper will be followed up with two more detailed papers to be presented at the April committee meeting. The two papers will be authored by the ICB and Public Health respectively.

SYSTEM ROLES

Immunisation and vaccination services are commissioned by NHS England. The primary responsibility for uptake improvement in the different immunisation programmes sits with NHS England's local screening and immunisation teams (SITs).

The Birmingham & Solihull (BSol) Integrated Care Board (ICB) take a systems lead role in immunisation. The ICB has oversight of the programme deliverables and are held accountable for performance. The ICB runs an all-age Immunisations and Vaccinations programme board, under which sit several project boards and further working groups dedicated to all aspects of the national immunisation programme. Partners are drawn from across the Integrated Care System (ICS), and strategic plans for these programmes are agreed at the board.

The Director of Public Health has a responsibility to be assured that there are sufficient plans in place to protect the health of the local population. As part of this, the Director of Public Health (DPH) is required to be assured that there are sufficient plans in place to ensure all citizens in Birmingham are receiving the vaccinations they are eligible for. This assurance is obtained through Birmingham's Health Protection Forum (HPF). The role of Public Health is to scrutinise, challenge and where appropriate support the NHS.

The diagram in Figure 1 illustrates the statutory roles and responsibilities within England's Immunisation Systemⁱⁱ. It demonstrates the complexity of the strategic landscape at the national, regional, and local levels.

It is important to note that the immunisation system also involves other groups that are not recognised below. This includes media channels, employers, and citizens. Citizens interact with the immunisations system through their contact with service providers (including maternity services, GPs, school aged immunisation service, community pharmacies and other providers). This interaction with the immunisation system will usually be limited to vaccination appointments, but in some cases, it can be in the form of short conversations encouraging citizens to take up the offer of vaccinations (e.g. maternity services talking to parents, or GPs talking to vulnerable adults) in advance of these appointments.

Although these groups play essential roles in the immunisation system, there is no systematic or defined route through which they interact with this system, which is why they are absent from this diagram. This absence contributes to system-wide issues with wider partnership working to improve immunisation uptake.

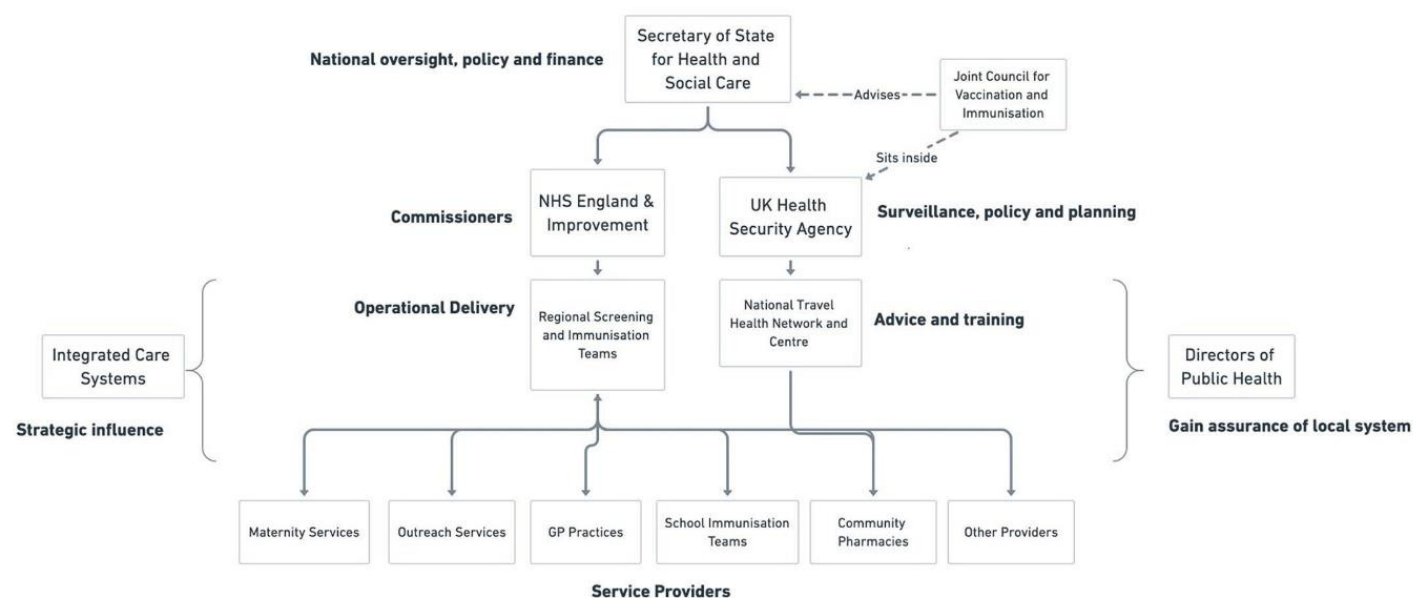


Figure 1. Statutory Roles and Responsibilities within England's Immunisation Systemⁱⁱ

IMMUNISATIONS IN BIRMINGHAM

Immunisation uptake across Birmingham is challenging for all ages and below expected targets for most vaccinations. The level of protection for the entire population is therefore also reduced. In most programmes, uptake has decreased over time, with uptake rates falling year on year for the last three years. Although immunisation provision remained in place during the pandemic, disruption and the associated recovery from this period is evident in uptake data. There is high inequality and variation across the programmes, meaning that there are some groups and communities who have less protection against disease than others. This is an important consideration for communities where there are higher levels of deprivation for example, as these communities proportionately need more effort and resource to offer them protection that would be achieved through vaccinations. National uptake rates do not make these issues visible. This means there will be some communities with significantly lower uptake rates compared to Birmingham's overall rate.

A system priority is focused on rapidly improve childhood immunisation uptake, in order to prevent harm to citizens through a disease outbreak. There is a particular focus on improving the uptake of the MMR vaccine, to ensure Birmingham is protected against future outbreaks of measles. At age 5 the uptake for children has fallen over the last three years to 78.7% compared to the optimum protection level of 95%. Birmingham also ranks near the bottom compared to MMR uptake rates of its nearest neighbours and ranks last compared to other areas within the West Midlands. Birmingham's unvaccinated population is much larger than its nearest neighbours and other areas in the West Midlands, meaning there are more unvaccinated children in Birmingham than in other poorly performing areas such as Nottingham, Liverpool, and Wolverhampton^{iii,iv}. Although low uptake is an issue in other cities, there is a larger scale to this issue in Birmingham that demands serious attention. The level of children living in poverty in Birmingham elevates this risk.

There is also a system priority to improve the uptake of winter vaccinations (COVID-19 and flu). For COVID-19, the number of unvaccinated people across BSol from a population of 1.5m is currently over a third of the population at 542,000. High uptake of both vaccines is important to prevent hospitalisation and death in more vulnerable adults. It is also important to ensure that Birmingham's working age adults remain well throughout winter, ensuring that workforces (especially health and social care workforces) are maintained for the protection of more vulnerable citizens. Behaviour has changed significantly since the first COVID vaccination was delivered at University Hospitals Coventry and Warwickshire on 2nd December 2021, with people now regarding COVID and flu infections as unimportant factors in their daily struggles, low risk and not a threat to life.

STRATEGIC CHALLENGES

There are several strategic challenges that the immunisation system faces. These challenges have been grouped into six broad themes and represent issues that impact all system partners.

Ongoing work and future strategic planning are aiming to resolve, or reduce the impact, of these issues with the ultimate aim of improving Birmingham's immunisation uptake rate and ensuring citizens are protected against vaccine preventable disease. Further details of the ongoing work and future planning will be provided in April's papers.

- **Data**

Access to quality data is an ongoing national issue, for both Public Health and the ICB. Nationally there will be new systems commissioned although the results of this procurement will not be available until 2024 for Children's data. Locally, and to compensate for these challenges we are working on and innovative digital solution to pull patient data for all practices. This will allow us to see directly which patients remain unvaccinated. This work is important, as it allows a more accurate and swift diagnosis of the scale of the issue and allows direct patient contact for follow up. This is particularly important in gaining intelligence from people about why they may not have had their vaccination. Partners can then target the root causes in discrete and very local locations to improve how we engage with citizens and thereby vaccination uptake.

- **Community links**

It is essential to ensure effective engagement links with Birmingham communities to promote immunisation. Much local learning has been acquired about the most effective ways to increase uptake in communities where vaccination rates are low. Positive working with communities has built on BCC approaches and a well-established 'hyperlocal' approach works flexibly in community settings to deliver a bespoke service to citizens. Vaccination vans continue outreach into low-uptake wards to offer residents the opportunity to receive a Covid-19 vaccination. Community centres and local meeting places that people gather in have afforded the vaccination team the opportunity to get to know people who spend time there, engage on a one-to-one level, and support all-age general health and wellbeing conversations. A low-key vaccination offer in a safe space from a small trolley after trusted conversations have proved successful. Embedding this way of working across all immunisation programmes would also enable engagement to create long-term cultural changes on attitudes towards vaccinations in Birmingham. The approach to gentle myth busting and how parents and relatives can protect their families aims to create a demand for vaccinations beyond COVID. Inter-generational influence appears to be a powerful factor – from younger citizens to their older relatives, where people are dissuaded from getting the protection they need. The ICB and its partners are working hard to ensure the right information is available and that every individual practitioner conversation with a citizen can consistently and confidently explain the benefits of uptake. The focus on good early years uptake is to create an environment where having available vaccinations is the norm and embedded into our local culture.

- **Access to services**

The ICB through the all-age Immunisations & Vaccinations programme board has recently considered bold and innovative ways to improve the vaccination offer in Birmingham in order to significantly improve uptake across the city. Alternative provision to the current vaccination delivery model has begun – looking outside a clinical environment and replicating a more flexible offer for parents and their children in places within their community which are

familiar. Learning from the roving COVID vaccination offer we know that access for citizens is a key factor to encourage uptake, showing that the move to a locally accessible service within a ten-minute walk improved a convenience response to uptake. The local community offer would enable conversations with a trusted healthcare professional in confidence to resolve any concerns, feeding back into the 'tailored communications' challenge. An understanding of issues around access to services is now understood, and alternative provision for example at weekends and community locations will enable us to see parents who previously and repeatedly have not attended when called for their child's vaccinations. This approach to alternative provision also offers the opportunity to adopt a MECC and direct intervention approach, ensuring communities are supported and directed to all relevant onward health services through direct links to an appointment with another healthcare professional. This is part of the ICB's broader commitment to work with public health and its partners to improve health and wellbeing for citizens in Birmingham.

- **Vaccine hesitancy**

Acquired evidence through the delivery of a range of community engagement services highlights the high levels of vaccine hesitancy in Birmingham, and a shift in patient behaviour since the inception of the COVID-19 vaccination programme. The level of vaccine hesitancy varies, ranging from a lack of knowledge and or confidence about the safety of the vaccine to entrenched beliefs or previous experiences that influence behaviours and attitudes to vaccinations. The SAGE working group developed the 3 C's model of vaccine hesitancy: confidence (does the group believe the vaccination is safe/effective?), complacency (does the group understand the risks of the disease vaccinated against) and convenience (can the group easily make an informed decision, and easily receive their vaccine?)^v. Community providers in low uptake Birmingham wards reported that many individuals were hesitant about accepting the offer of vaccination but emphasised that the hesitancy they encountered was on a spectrum, and rarely extreme in nature. This indicates that there is room for encouragement and discussion that would be welcomed by some citizens. The ICB vaccinations team has been facilitating and promoting open discussions in low uptake cohorts and their experience echoes these findings. There are many examples of the team securing vaccine uptake following positive conversations that listen to and respond calmly to these concerns. In a specialist piece of work called 'The Big Push' the approach for pregnant women enabled proactive conversations with healthcare professionals. Of 300+ women around 100+ vaccinations were achieved antenatally.

Pandemic fatigue has also impacted on population attitudes to vaccinations. The WHO defines pandemic fatigue as '...demotivation to follow recommended behaviours emerging gradually over time'^{vi}. In Birmingham, residents in low-uptake wards have reported negative attitudes towards Covid-19 vaccinations, and some have reported this negative feeling has impacted on previously positive or neutral attitudes to other routine vaccinations.

- **Partnership working**

In order to improve immunisation uptake across Birmingham, effectively engagement and partnership working is essential to increasing vaccination uptake for all ages. All partners would need to embed the principles and practice that routinely vaccinating our population is part of everyone's core agenda and practice. Long-term, this wider support and engagement would promote immunisations and vaccinations as a civic right and responsibility. BSol's Immunisations and Vaccinations programme board provides a group for partners from across the ICS to form and contribute to strategic plans to improve

immunisation uptake. Support and buy-in from non-health partners will help to address the work needed to create behavioural change within communities to ensure there is a demand for vaccination (linking to the 'Community Links' challenge).

Frontline Health and Care and Social worker uptake in Birmingham is poor compared to the rest of the West Midlands. A sub group to look at how the system works together to encourage our own staff to role model good vaccination behaviour is a vital piece of work to which all partners can contribute.

- **Communications and marketing**

It is important to ensure effective immunisations communications and marketing are in place and effective. To be effective, system efforts are focused on tailoring information as far as possible to Birmingham's large & diverse population. Language issues present barriers to immunisation uptake, including being unable to access information about the vaccine, and feeling uncomfortable with potential communication issues when attending appointments held in English.^{vii} As Birmingham is an ethnically diverse city, it is likely that this issue will affect our residents. Although the Vaccinations team produce information in locally prevalent languages and dialects, more can be achieved to ensure we are all consistent with a common narrative and use of information. Using staff who are multilingual has proven how effective a conversation can be through people who live and work locally. The breadth of languages available and in a range of formats, for all ages is key to improving health literacy.

We know that the route to having a good conversation about vaccinations is by initiating a general wellbeing conversation and exploring other matters later in the conversation. Residents have reported exposure to vaccine misinformation which is trusted above more traditional sources of information. Moreover, community engagement groups have also reported a generally low level of vaccine literacy (understanding how vaccines work, what they are used for and why they are being offered). This suggests that some citizens do not have the necessary information to challenge misinformation they are exposed to, with this messaging especially powerful on social media^{viii}.

The ICB regularly engages with key community groups to distribute tailored communication materials. They are also working towards developing a better-quality communications strategy for the all age immunisation and vaccinations programme. Co-production with practitioners and residents will be essential to tailored future communications to Birmingham audiences. This strategy should also consider the need for constant marketing as an ongoing and long-term approach to vaccination promotion, considering the importance of vaccinations in ensuring good health across the life course. All partners including vaccine information in their own marketing information is a prerequisite to consistent messaging to the public.

NEXT STEPS

The upcoming April papers will present a more detailed look into the current immunisation picture in Birmingham and will provide further information on the challenges mentioned above, as well as the ongoing system work in place aiming to resolve these issues. The papers will also discuss future opportunities to improve and expand existing uptake improvement efforts, and recommendations for how to best progress this work.

The ICB paper will present a more detailed look at immunisation & vaccination delivery, planning, and uptake. The Public Health paper will focus on the division's assurance work related to immunisations & vaccinations.

These papers and subsequent discussion and recommendations from HOSC committee members will be shared with all immunisation system partners to influence future work and planning.

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