The BMJ
emahase@bmj.com
Cite this as: *BMJ* 2021;373:n1436
http://dx.doi.org/10.1136/bmj.n1436
Published: 08 June 2021

Childhood vaccination: Access problems in UK began way before covid-19

The coronavirus has reminded us of the power of vaccination but also hugely disrupted routine childhood rollouts. Elisabeth Mahase finds that many of these problems were already known and were exacerbated by the pandemic

Elisabeth Mahase *clinical reporter*

As the UK came out of its first lockdown back in July 2020, the World Health Organization and Unicef sounded the alarm over falling rates of childhood vaccination around the world. They warned that disruption to health services and vaccine deliveries, and a reluctance or inability of people to attend non-urgent health appointments, meant that many children had not received life saving vaccines.

Months later Public Health England sent out a message to parents urging them to continue taking their children to routine vaccination appointments.[1] The warning came as a report found that the number of children receiving the MMR (measles, mumps, and rubella) and hexavalent (diphtheria, tetanus, pertussis, poliomyelitis, *Haemophilus influenzae* type B, and hepatitis B) vaccines had declined early in the pandemic.[2]

"The pandemic has led to a reduced uptake due to anxiety to come into the surgery, despite consistent messaging around general practice being safe and open," explains the London GP and primary care network clinical director Tehseen Khan. "Also, walk-in clinics, which may have been more convenient for certain cohorts of patients, have had to be cancelled to ensure social distancing in the waiting room."

But problems with the UK's childhood vaccination programme began long before covid-19. A few months before news of the mysterious pneumonia-like illness spreading in Wuhan, China, hit the headlines, the latest figures showed that uptake of all 13 routine childhood vaccines for under 5s had fallen in England. The UK also lost its measles free status with the World Health Organization, as cases rose to their highest levels since 2006.[3]

Helen Donovan, the Royal College of Nursing's professional lead for public health, says, "Uptake had been falling before the pandemic: we had seen a gradual decline in the overall uptake of childhood vaccinations in the last few years. And although we had seen some signs that uptake was rallying in the year before the pandemic, the pandemic then bought its own pressures."

Despite concern over antivaccine messaging and the spreading of misinformation getting much attention in the media and from the government, WHO has emphasised that lack of access is still the main factor hindering vaccine coverage.[4] Attitude surveys have supported this, showing that in the UK confidence in vaccines remains high, with around nine in 10 people (89.9%) surveyed in 2018 agreeing that vaccines were important for children and 92% agreeing that vaccines were effective. A Public Health England survey in 2019 then reported that 95% of parents said they had confidence in vaccinations and only 3% had refused one or more vaccines.

"I think that there are challenges for people," says Donovan. "We know that call and recall is absolutely essential. People won't automatically know that their vaccines are due.

"In a similar way, how many women will remember that their cervical smear test or mammogram is due? In reality they will need a reminder. And it's the same for parents with their children's vaccinations."

But the problems do not stop there. Just getting an appointment can be stressful for parents, Donovan explains. "The child's not ill by definition, so it's the sort of thing that can easily be put to one side by a busy parent with the best of intentions to sort it out when they have some time. The recall needs to be done in a way that's supportive and sympathetic to people's needs and questions, so that there is access to someone even at the end of the phone who's able to answer questions."

Health and Social Care Act

Many medical leaders and healthcare professionals link access problems to the 2012 Health and Social Care Act, which abolished primary care trusts in England and fragmented the vaccination programme. In 2019 the National Audit Office released a report saying that when NHS England took responsibility for commissioning vaccine call and recall in 2013 it didn't set out the requirements of GPs. This led to inconsistency in the way parents were invited and reminded to vaccinate their children. Other problems identified included difficulty accessing healthcare, incomplete data on vaccination uptake, antivaccination messages, and vaccine hesitancy among a small minority of parents.

"I do think that some of the changes to the way immunisation strategies have been delivered over the past 10 years since the Health and Social Care Act have had an impact, because it's made a lot of those things far more fragmented, and information and support for the healthcare professionals are far less straightforward," Donovan says. "One example is not having one portal where all of the vaccine immunisation information is kept any more. It's on lots of different sites. And I think that in itself is confusing for people. We used to have an

immunisation website with all of the resources, primarily for professionals but obviously open for the public as well."

The 2012 act also separated health visiting and the delivery of vaccinations in community settings. "It seems illogical that a health visitor cannot vaccinate a child who is due for their jabs due to commissioning barriers," says Khan, who—alongside City and Hackney Clinical Commissioning Group's clinical lead for children and young people, Suki Francis—is leading a project to increase childhood vaccination uptake in Hackney, east London (box 1). "By shifting it to GP delivery, it may have impaired access," says Khan.

Box 1: The Hackney CCG vaccination project

GPs Suki Francis and Tehseen Khan are leading a project for Hackney Clinical Commissioning Group to improve uptake of childhood vaccines. They describe what they are doing:

"Recalling patients to have their vaccine is labour intensive work, especially in areas of low uptake where patients may have barriers to information and reduced digital access and health literacy. This role is assigned to administrators and receptionists, and we're looking at how to strengthen this offer and train recallers to have vaccine confident conversations.

"We are using additional roles, such as the newly recruited health and wellbeing coaches, to have conversations about the importance of childhood vaccinations with parents who attend baby clinics or are referred by health visitors, midwives, and GPs. This is currently being trialled for the covid-19 vaccine programme.

"We're also planning to restart community clinics. For example, we used to have a clinic in an educational-community setting for the Orthodox Jewish community, but this ended because of covid-19. It is being restarted in the next few weeks with the easing of restrictions."

In response to the declining rates the government was due to release a vaccination strategy in spring 2020, though this seems to have been delayed by the pandemic.[5] The consultation document noted that the strategy would set out how the government plans to increase uptake of all childhood vaccines to over 95%, including through the enhanced use of local immunisation coordinators and primary care networks, consistent application of call and recall, and improved data services.

However, Helen Bedford, vaccinations lead at the Royal College of Paediatrics and Child Health, says many of the solutions have already been laid out in National Institute for Health and Care Excellence (NICE) guidance first issued back in 2009.[6] This says that opening times of clinics should be extended and they should be made child and family friendly. "That means not only timing of vaccination sessions to allow for working parents but also the environment: somewhere to park buggies, space for children, etc," explains Bedford, who is professor of children's health at the Great Ormond Street Institute of Child Health.

NICE also recommends that tailored invitations be sent out and that, if appointments are not attended, tailored reminders and recall invitations should be sent, as well as follow-ups through phone calls and text messages. On top of this, parents and young people should be given "tailored information, advice, and support to ensure they know about the recommended routine childhood vaccinations and the benefits and risks." This should include details of the infections the vaccines prevent, provided in different languages as appropriate.

Space and opportunities for parents and young people to discuss any concerns they might have about vaccines should be provided. "This could either be in person or by telephone and could involve a GP, community paediatrician, health visitor, school nurse or practice nurse," NICE states.

Home visits to parents who have not responded to reminders, recall invitations, or appointments should be offered, with healthcare professionals able to give vaccinations there and then if consented to. This could especially help groups of people who may not engage with primary care services, such as Travellers and asylum seekers.

Finally, the immunisation status of children and young adults should be checked at every appropriate opportunity, such as during GP, hospital appointments, and emergency visits. "If all these recommendations were implemented across the board, this would be an important start," says Bedford.

It's normal to ask questions

Although vaccine hesitancy does not seem to be the main issue, it's still a concern. "A lot of vaccine hesitancy and low health literacy levels is leading to mistrust of vaccines generally," says Francis.

But Donovan says she does not like the word hesitancy. "Just because somebody has a question doesn't mean to say that they are going to refuse the vaccine. It just means that they've got a question. We wouldn't expect to give or advise any treatment and not ask questions. People who are antivax are an issue, particularly when it takes over on social media, but these people are a minority. We need to be really clear that people should ask questions, and we should be ready as healthcare professionals to answer them."

This is where better training and support for healthcare professionals come in. "I would also say that vaccine programmes are quite complex now," says Donovan. "We are vaccinating against more and more diseases, which is fantastic. But it does mean to say that the healthcare professionals delivering those programmes need to have constant updates so they can speak knowledgeably and support people to have confidence and accept the vaccines they need—and that can be a challenge." She explains that vaccinations are primarily a nursing role but that, within nursing education, vaccination training is mainly taught after qualification.

Complacency is also an issue in high income countries, Donovan adds. "We don't see these vaccine preventable diseases in the way that we once did. So they don't have the importance in the public eye as perhaps we, as healthcare professionals, think that they should have."

That is where the current pandemic may present an opportunity for improvement. Francis and Khan say that much of what has happened in response to covid-19 can be applied to childhood immunisations, including community activation and education about vaccines, training staff to have conversations to increase vaccine confidence, and adapting vaccine delivery to fit the needs of patients and the community (such as having weekend and evening clinics and offering home visits.)

As Donovan puts it, this is an opportunity: covid-19 has shown the importance of vaccination and has extended conversations over efficacy, trials, and risk-benefit analysis out to the public. "We could use the information and learnings from the covid vaccine to have a better dialogue with the public about how vaccines work," she says.

Competing interests: None declared.

Provenance and peer review: Commissioned; not externally peer reviewed.

1 Public Health England. Parents urged to keep childhood vaccination appointments during national covid-19 restrictions. Nov 2020. https://www.gov.uk/government/news/parents-urged-to-keep-childhood-vaccination-appointments-during-national-covid-19-restrictions.

2 Public Health England. Covid-19: impact on vaccination programmes. Sep 2020 (update May 2021). https://www.gov.uk/government/publications/covid-19-impact-on-vaccination-programmes.

3 Iacobucci G. Child vaccination rates in England fall across the board, figures show. *BMJ* 2019;366:l5773. doi: 10.1136/bmj.l5773 pmid: 31558485

4 Mahase E. Vaccination uptake: access is still biggest barrier, experts warn. *BMJ* 2019;366:l5576. doi: 10.1136/bmj.l5576 pmid: 31530539

5 Cabinet Office, Department of Health and Social Care. Advancing our health: prevention in the 2020s. Jul 2019. https://www.gov.uk/government/consultations/advancing-our-health-prevention-in-the-2020s.

6 National Institute for Health and Care Excellence. Immunisations: reducing differences in uptake in under 19s. Sep 2019 (update Sep 2017). https://www.nice.org.uk/guidance/PH21.