



House of Commons  
Science and Technology  
Committee

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# Flu vaccination programme in England

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**Ninth Report of Session 2017–19**

*Report, together with formal minutes relating  
to the report*

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## Science and Technology Committee

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### Contacts

All correspondence should be addressed to the Clerk of the Science and Technology Committee, House of Commons, London SW1A 0AA. The telephone number for general inquiries is: 020 7219 2793; the Committee's e-mail address is: [scitechcom@parliament.uk](mailto:scitechcom@parliament.uk).

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## Summary

Vaccination is offered annually in the UK to groups who are at a higher risk of serious illness with flu, such as those with pre-existing medical conditions, children, and over sixty-five years olds through annual flu vaccination programmes in England, Scotland, Wales and Northern Ireland. Vaccination provides protection both to the individual and the wider community and is the most effective protection available against the serious effects of flu. In our Report we focus on the flu vaccination programme in England.

The 2017/18 winter period saw the most severe flu outbreak since 2010/11. NHS Improvement have estimated that up to 4,000 beds each day could have been used by flu patients, and that at the peak of the season up to 500 patients were admitted with flu per week—significantly more than in previous winter flu seasons. There had been reports that some of the hospitalisation rates could have been reduced by the use of the quadrivalent vaccination rather than the trivalent vaccination in the 2017/18 season. However, we heard that the data did not support the use of the quadrivalent vaccine in all eligible groups last flu season, and we are convinced by arguments made to us that whilst the B-Yamagata strain was responsible for a significant burden of disease, use of the quadrivalent vaccine in all individuals would not have made a huge difference to the additional burden placed on frontline staff in the NHS.

We welcome the changes introduced to the flu vaccines for the 2018/19 season. The quadrivalent vaccine is being offered to all eligible adults this season, and the over sixty-fives are being offered the adjuvanted vaccine, which is estimated to lead to a 20% improvement in vaccine effectiveness in this group.

It is a professional duty for healthcare workers in hospitals to be vaccinated each year and we welcome recent action taken to improve these rates and ensure that high risk clinical departments have 100% vaccination rates. However, despite the 2017/18 season having the highest flu vaccination uptake ever in healthcare workers, significant variation remains. Some hospital trusts only achieved 30 to 40% uptake, whereas others achieved over 90%. The Government should undertake a review to establish whether flu vaccination should be mandatory for certain categories of healthcare workers.

One area where we were particularly concerned was vaccine uptake rates amongst social care workers. There is no existing system of effectively monitoring uptake in this group in England, and surveys undertaken by Public Health England have had both poor response rates and have shown poor vaccine uptake results. We believe it is as much a professional duty for frontline staff working in the social care sector to be vaccinated as it is for healthcare workers. The Government should review this and determine how uptake data can be collected from care homes. The Care Quality Commission should take action where poor immunisation rates (or poor recording of uptake) could impact on standards of infection prevention and control. There should be an expectation of full coverage amongst staff working with individuals who are most at risk from serious illness from flu.

We heard that there was a lot of work going on internationally looking at the development of a universal flu vaccine. We heard that a licensed clinical product may be several years away. We call on the Government to ensure that it continues to support and invest in

the development of important new medical products, including new and more effective vaccines. Looking to the future, we also urge the Government to take account of the future relationship with the European Medicines Agency and the impact this could have on flu vaccination in the UK as part of preparations for the UK leaving the European Union.

# 1 Introduction

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1. Influenza is a highly infectious acute viral infection of the respiratory tract. It is often self-limiting in healthy people but there are some groups who are at higher risk from serious illness. Flu vaccination is offered annually in the UK to eligible 'higher risk' groups, such as those with pre-existing serious medical conditions, through the annual flu vaccination programmes in England, Scotland, Wales and Northern Ireland.<sup>1</sup> Flu infection rates peak in winter months, and vaccination aims to offer protection against the effects of flu to as many eligible groups as possible, as soon as possible, during the 'winter flu season'. The World Health Organization (WHO) notes that vaccination is the most effective way to prevent the disease, although immunity wanes over time and annual vaccination is recommended.<sup>2</sup> Vaccination provides protection both to the individual and the wider community.

2. An annual flu vaccination programme was first introduced in England in the late 1960s—vaccination was offered to those in certain clinical risk groups who were at a higher risk of severe illness.<sup>3</sup> It was extended to all individuals over 65 in 2000 and has since been further extended to other clinical groups. Currently, eligible groups for the flu vaccination include: the over 65s; people with pre-existing serious medical conditions such as diabetes; pregnant women; and those in care homes or other long-stay care facilities.<sup>4</sup> In England a school-based flu vaccination programme also provides vaccinations for children in reception and school years 1–4. NHS hospital trusts, social care providers and others such as dental practices and GP surgeries have an occupational health responsibility to offer flu vaccination to all frontline staff, but this is not part of the NHS flu vaccination programme.<sup>5</sup> Similar vaccination programmes are in place in Scotland, Wales and Northern Ireland.<sup>6</sup>

3. Each country in the UK is responsible for its own vaccination programme. However, the Joint Committee on Vaccination and Immunisation advises all UK health departments. Public Health England collates surveillance data on flu across the UK through its Influenza Surveillance team in collaboration with the devolved nations' public health bodies (who produce reports for their countries).<sup>7</sup>

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1 Public Health England, [National flu immunisation programme plan](#), accessed 16 October 2018; Health Protection Scotland, '[Seasonal Influenza](#)' accessed 16 October 2018; Public Health Wales, '[Vaccines for Risk Groups](#)' accessed 16 October 2018; and Public Health Agency, '[Seasonal Influenza](#)' accessed 16 October 2018

2 [World Health Organization, 'Influenza \(seasonal\)' accessed 16 October 2018](#)

3 Public Health England [Immunisation against infectious disease, The Green Book \(Chapter 19: Influenza\)](#), 15 August 2018

4 Department of Health and Social Care, [Annual Flu plan 2017–18](#), March 2017

5 Department of Health and Social Care, [Annual Flu plan 2017–18](#), March 2017

6 Health Protection Scotland, '[Seasonal Influenza](#)' accessed 16 October 2018

Public Health Wales, '[Vaccines for Risk Groups](#)' accessed 16 October 2018

Public Health Agency, '[Seasonal Influenza](#)' accessed 16 October 2018

7 Public Health England, [Surveillance of influenza and other respiratory viruses in the UK: Winter 2017 to 2018](#), May 2018

4. In England, there are a number of bodies involved in the provision and coordination of the national flu vaccination programme:

- The Department of Health and Social Care is responsible for policy decisions on the response to the flu season. It also holds NHS England and Public Health England to account for their work through a number of framework agreements and mandates;
- The Joint Committee on Vaccination and Immunisation (JCVI) advises UK health departments on immunisation;
- Public Health England (PHE) is responsible for the procurement and distribution of the flu vaccine to children and oversight of the central vaccine supply. It also advises NHS England on the commissioning of the GP based programme. PHE is also responsible for communications on flu, including the vaccination programme to both the public and healthcare professionals, and the collection of data on flu vaccine effectiveness, flu diagnoses, hospital admissions, and laboratory analysis of which viral strains are circulating;
- NHS England has responsibility for commissioning primary care services, including GPs and community pharmacies, who provide flu vaccination to eligible adults; and
- GPs and community pharmacies are responsible for purchasing and delivering the vaccination and are then reimbursed by the commissioner of the service, NHS England.

5. The Government produces an annual Flu Plan<sup>8</sup> which includes other policies aimed at tackling the winter flu season beyond the flu vaccination programme. These include managing and coordinating responses to local outbreaks of flu, public communication campaigns, and overseeing and advising on the use of antivirals.

## Our Inquiry

6. As a result of the high disease burden of flu in 2017/18 (see chapter 2) and discussions on variable uptake of vaccination we held a one-off oral evidence session on the flu vaccination programme in March 2018. We took oral evidence from a number of witnesses:

- Professor Paul Cosford, Director for Health Protection and Medical Director, Public Health England;
- Professor Stephen Powis, National Medical Director, NHS England;
- Professor Jonathan Van-Tam, Deputy Chief Medical Officer for England;
- Professor Andrew Pollard, Chair, Joint Committee on Vaccination and Immunisation; and
- Dr Sue Crossland, Vice President, Society for Acute Medicine.

7. Our Report sets out our findings relating to
  - The flu vaccination programme in 2017/18;
  - Vaccine uptake
  - Vaccine procurement and provision; and
  - Future development in flu vaccination.

## 2 Flu vaccination programme 2017–18

### Disease burden in the 2017/18 season

8. NHS Improvement have estimated that up to 4,000 beds each day could have been used by flu patients, and that at the peak of the season up to 500 patients were admitted with flu per week—significantly more than in previous winter flu seasons.<sup>9</sup>

9. Dr Sue Crossland, Vice President of the Acute Medicine Society, provided us with a view from her frontline experience at Calderdale Royal Hospital in Halifax. She told us that in the 2017/18 season her hospital had seen 200 positive flu admissions by March, compared to just 33 in 2016/17. She also reported observing a significant proportion of young people admitted and an increased requirement for intensive care support.<sup>10</sup>

10. Professor Paul Cosford, Director for Health Protection and Medical Director at Public Health England, provided us with further information about the high rate of hospitalisation due to flu in the season up to the oral evidence session in March 2018:

The interesting thing is that flu this season is not significantly worse than it was last season, or two years before that, in terms of mortality. What we are seeing this season is a very high rate of hospitalisation compared with previous years, so the pressures on NHS colleagues have been very real. If you look at flu circulating in the community, it is a moderate flu season, whereas, if you look at hospitalisations, the figure is very high and has been very high for several weeks.<sup>11</sup>

### Flu vaccines offered in the 2017/18 season

#### *What viruses were in the vaccines?*

11. There are three types of human flu virus: A, B and C. Flu A and B are responsible for most clinical illness and are included in all vaccines offered in the national flu vaccination programme. Type A viruses are further classified into subtypes such as ‘A(H1N1)’. Type B viruses are classified further through the lineage of the virus, for example ‘B-Victoria’. Both A and B virus types can be further broken down into strains within the subtypes or lineages.<sup>12</sup>

12. Flu vaccines may include either three virus strains—two influenza A viruses and one Influenza B virus (Trivalent vaccine) or, since the 2013/14 season, four virus strains—two of both influenza A and B viruses (Quadrivalent vaccine).<sup>13</sup>

13. The specific flu viral strains to be included in the flu vaccination for the Northern hemisphere are decided by the World Health Organization each year in February or March

9 NHS Improvement, [NHS review of winter 2017/18](#), 7 September 2018

10 [Q17](#)

11 [Q19](#)

12 World Health Organization, [‘Influenza \(seasonal\)’](#) accessed 16 October 2018

13 World Health Organization, [‘Influenza \(seasonal\)’](#) accessed 16 October 2018

before the start of winter flu season (i.e. for the flu vaccines to be offered in the 2018/19 season, a decision was taken on 22 February 2018). At this time, recommendations were made for which virus strains should be included in trivalent and quadrivalent vaccines.

14. The Deputy Chief Medical Officer, Professor Jonathan Van-Tam, explained how these decisions were made by the World Health Organization:

The World Health Organisation calls what is known as a strain selection meeting, where influenza virologists from around the world gather twice a year. The best brains in influenza virology come together and formulate an opinion on what are the best strains to put into the vaccine. We as an individual nation do not have any choice, because the manufacturers are committed to following the World Health Organisation instructions.<sup>14</sup>

15. After the WHO decision is made, manufacturers start to produce vaccines in preparation for the flu season and from this time, there is no opportunity to change what virus strains are in the vaccines. Professor Van-Tam described this time lag as one of the scientific problems with the flu vaccine:

From that moment, we are hostages to virological fortune, if you like, as regards anything that might change between March and October. The volumes required—hundreds of millions of doses for the northern hemisphere alone—make it impossible to make a snap decision in July that something needs to change. We have to live with the decision that our experts hand to us in mid-February.<sup>15</sup>

16. The WHO 2017/18 recommendations on the viruses to be included in the vaccine in use in the northern hemisphere were published in February 2017. The WHO recommended that trivalent (three virus) vaccines should contain:

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;
- an A/Hong Kong/4801/2014 (H3N2)-like virus; and
- a B/Brisbane/60/2008-like virus.<sup>16</sup>

The WHO recommended that the quadrivalent (four virus) vaccines should also contain a second influenza B virus: “a B/Phuket/3073/2013-like virus, a B/Yamagata-lineage virus”.<sup>17</sup>

17. Most flu vaccines produced are ‘inactivated’. This means that the virus in the vaccine has been killed. However, the nasal spray flu vaccine offered to children in the UK contains weakened (or ‘attenuated’) live flu viruses.<sup>18</sup>

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14 [Q27](#)

15 [Q28](#)

16 World Health Organization, Recommended composition of influenza virus vaccines for use in the 2018–2019 northern hemisphere influenza season, 22 February 2018

17 World Health Organization, Recommended composition of influenza virus vaccines for use in the 2018–2019 northern hemisphere influenza season, 22 February 2018

18 Public Health England [Immunisation against infectious disease, The Green Book \(Chapter 19: Influenza\)](#), 15 August 2018

### UK vaccine recommendations

18. Recommendations to UK departments of health relating to eligibility for the flu vaccination programme and the types of vaccine offered to eligible groups are made by the Joint Committee on Vaccination and Immunisation (JCVI), an independent departmental expert committee. The JCVI keeps emerging evidence on vaccinations under review and provides new advice based on this.<sup>19</sup>

19. The Public Health England Green Book on Immunisation against infectious disease ('the Green book') provides up-to-date guidance on the flu vaccines to be used in eligible groups.<sup>20</sup> In the 2017/18 season vaccinations were recommended for different groups. We set these out in the paragraphs that follow.

### Children

20. It was advised that children were offered the only live vaccine used in the flu vaccination programme—the live attenuated intranasal vaccine, LAIV Fluenz-Tetra (LAIV). This is a quadrivalent vaccine. Professor Pollard explained why the live vaccination was more effective in children:

The trials show that it works better than inactivated vaccines, because the live vaccine stimulates a better immune response than the inactivated vaccine in children. The problem for adults is that we all have some immunity already. That stops the live vaccine working so well, because it kills some of the vaccine. Therefore, adults have rather poor responses to the live vaccine. That is the main reason for the difference.<sup>21</sup>

21. Where there are contraindications to the live vaccine, such as in children who are immunocompromised, the Green book advises that the inactivated quadrivalent vaccine should be offered.<sup>22</sup>

### Eligible adults

22. The JCVI recommendation in 2017/18 was that all adults eligible for the flu vaccination should be offered either the trivalent or quadrivalent vaccine, with the decision made at a local level by GPs through their procurement choices. As noted above, the trivalent vaccine includes two flu A viruses, and one flu B virus. The quadrivalent vaccine includes an extra flu B virus strain (in 2017/18 this was a B-Yamagata flu virus).<sup>23</sup>

23. For the 2017/18 flu season, Professor Pollard told us that whilst the Green book had set out a preference for the quadrivalent vaccination there had not been a strong preference:

The words that we use are that we “have a preference” for the quadrivalent. However, the data we have looked at have not been strong enough for us to

19 [Q6](#)

20 Public Health England [Immunisation against infectious disease, The Green Book \(Chapter 19: Influenza\)](#), 15 August 2018

21 [Q14](#)

22 Public Health England [Immunisation against infectious disease, The Green Book \(Chapter 19: Influenza\)](#), 15 August 2018

23 World Health Organization, Recommended composition of influenza virus vaccines for use in the 2018–2019 northern hemisphere influenza season, 22 February 2018

say, “You really ought to have the quadrivalent, because it is so much better.” The previous seasons’ data did not support a strong recommendation for that.

[...] When you add the second B strain, you get a bit of additional benefit, but the difference is not huge, because the one B strain gives you some protection against other B strains. You really need to have both of the As. However, for the Bs, you get so much protection from one B strain that having the other is a fairly marginal additional benefit.<sup>24</sup>

24. Professor Powis explained that NHS England was responsible for commissioning the adult seasonal flu vaccination in England. He said that GPs were asked to procure up to ten months in advance and they took into account a number of sources of guidance when making these decisions, such as the annual flu letter and the Green book. He set out what considerations NHS England regional teams and commissioners would make with regards to spending on vaccination:

Commissioners and NHS England regions, both of which can hold budgets to reimburse general practitioners and pharmacists in their procurement, also have a duty, quite reasonably, to use taxpayers’ money efficiently and to consider what they spend on vaccination in the round, against everything else that they commission. In the decisions that they take locally, they will weigh up the evidence that you have heard from JCVI, which is in the Green Book, and place that in the context of all the commissioning decisions that they make.<sup>25</sup>

25. Professor Cosford told us that the best estimate was that two-thirds of individuals vaccinated in the 2017/18 season had received the trivalent vaccine and one third had received the quadrivalent.<sup>26</sup>

### ***Trivalent vs quadrivalent—what impact did this have?***

26. Due to the circulation of the B-Yamagata virus in the 2017/18 season, concerns had been expressed that increased hospital admissions may, to some extent, have been related to the use of the trivalent flu vaccination rather than quadrivalent vaccination in certain parts of the country. The President of the Acute Medicine Society, Dr Nick Scriven, stated that if the quadrivalent vaccine had been used instead of the trivalent vaccine, “probably about half the cases that are coming into hospital [...] may have been prevented.”<sup>27</sup> Dr Sue Crossland, Vice President of the Acute Medicine Society, told us that “even a marginal benefit from a quadrivalent vaccine might [have eased] some of the pressures that we are seeing day in, day out on the frontline”.<sup>28</sup>

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24 [Q20](#)

25 [Q33](#)

26 [Q35](#). At [Q22](#) Professor Cosford explained the types of vaccines ordered by GPs: “This year, roughly one third of the vaccine ordered by GPs across the country was quadrivalent and two thirds was trivalent. Therefore, a significant proportion of the adult groups received quadrivalent, anyway”.

27 The Society for Acute Medicine, [Choice of flu vaccine ‘has increased risk of admissions’ – SAM president](#), 18 January 2018

28 [Q22](#)

27. Professor Andrew Pollard, Chair of the JCVI, disputed the claims made by Dr Nick Scriven. He accepted that, due to the circulating strains, it may have made some difference if the quadrivalent vaccine had been widely used but argued that it would not have made a significant difference, nor would it have prevented half the cases.<sup>29</sup> He explained that the impact was dependent on the circulating strains and the effectiveness of the vaccine:

Even in really fantastic flu seasons, where the vaccine matches the strain very well, we are pretty happy if we get a vaccine that is 50% to 60% effective. That means that, even if you had the vaccine that was perfectly matched, half of the cases would still not be prevented in those who are vaccinated. [...] It is right to say that a lot of B strains were causing disease. If vaccines were 100% effective, the assertion would have been right, but they are not. That is the problem.<sup>30</sup>

28. Professor Cosford provided further information on the virus strains that had been circulating in the 2017/18 season, and reported that the trivalent vaccine appeared to have offered some cross protection against the B-Yamagata strain, despite this not being included in the vaccine:

It is a very early estimate, so we cannot be certain that it will be exactly the same when the final season estimate comes out, but the vaccine effectiveness data that we published last week suggest that, against flu B, of all strains, we have had roughly 50% protection; 53% is the point estimate. That suggests that, although the trivalent vaccine did not include the Yamagata strain, it has been offering quite a significant amount of protection against both B-Yamagata and B-Victoria, which was in the vaccine. That is in addition to the third of people or so who have had the quadrivalent vaccine.

29. Flu vaccine effectiveness varies from year to year, as noted above. Professor Pollard explained that “a problem with the flu vaccine is that in some years it will not work because the strain will not match, and in some years it will work because the strain matches very well”.<sup>31</sup>

30. Public Health England published updated UK flu vaccination effectiveness data in July 2018 for the 2017/18 season.<sup>32</sup> The figures have wide confidence intervals (see table at the end of the paragraph), meaning that there is uncertainty in exactly how effective vaccines were. However, the figures suggest that the vaccines (especially those used in adults) were less effective in 2017/18 than in previous years. The quadrivalent nasal spray vaccination for children offered good protection against one flu A virus (A(H1N1)) and against flu B but was not clearly effective against the other A flu virus (A(H3N2)). In the eligible groups under 65 the vaccines were effective against A(H1N1) but not as effective against flu B or A (H3N2). Commenting on the figures, Professor Paul Cosford, Director for Health Protection and Medical Director at Public Health England, explained that the vaccines could have offered lower effectiveness against flu A(H3N2) due to a number of

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29 [Q20](#)

30 [Q35](#)

31 [Q95](#)

32 Public Health England, [Flu vaccine effectiveness in 2017 to 2018 season](#), 18 July 2018

factors, including “a suboptimal match between the main circulating A(H3N2) viruses and the vaccine”.<sup>33</sup> As with previous years, the vaccines have been the least effective in the over 65s.

Group	A(H3N2) adjusted VE (95% CI)	A(H1N1)pdm09 adjusted VE (95% CI)	B adjusted VE (95% CI)	All adjusted (95% CI)
2–17 year old (LAIV only)	-75.5(-289.6, 21.0)	90.3 (16.4, 98.9)	60.8 (8.2, 83.3)	26.9 (-32.6, 59.7)
18–64 year old (any vaccine)	-14.7 (-72.7, 23.8)	69.1 (11.4, 89.2)	18.2 (-15.1, 41.9)	12.2 (-16.8, 34.0)
>65 year old (any vaccine)	16.8 (-74.2, 60.3)	NA	13.2 (-68.4, 55.2)	10.1 (-54.8, 47.8)
All age	-16.4 (-59.3, 14.9)	66.3 (33.4, 82.9)	24.7 (1.1, 42.7)	15.0 (6.3, 32.0)

CI: confidence interval; VE vaccine effectiveness; NA: not applicable

\*Adjusted for age group, sex, month, pilot area and surveillance scheme.

Source: Public Health England, [Flu vaccine effectiveness in 2017 to 2018 season](#), 18 July 2018

## New recommendations for the 2018/19 season

### *Quadrivalent vaccine for all eligible groups under 65*

31. Professor Pollard told us that in the 2017/18 season and previous seasons the evidence had not supported a strong recommendation to offer the quadrivalent over the trivalent vaccine. However, recent evidence reviewed by the JCVI led to a specific new recommendation that all eligible adults under 65 should be offered the quadrivalent vaccination.<sup>34</sup> The Green book now states that “there are relatively small health benefits to be gained by the use of quadrivalent vaccines, compared with trivalent vaccines, in the elderly”, but that “the benefit is more substantial in at-risk adults under 65 years of age, including pregnant women”.<sup>35</sup>

### *Adjuvanted vaccine for the over 65s*

32. Previously, the flu vaccines used during the national flu vaccination programme had been less effective in older adults. Professor Pollard explained that this was due to the immune system not working as well in this group.<sup>36</sup> Up until recently, there had been no other alternative that worked better. However, a new vaccine—the adjuvanted vaccine—has recently been licensed in the UK. An adjuvant is a substance that is added to a vaccine in order to improve the immune response.

33 Public Health England, [Flu vaccine effectiveness in 2017 to 2018 season](#), 18 July 2018

34 Public Health England [Immunisation against infectious disease, The Green Book \(Chapter 19: Influenza\)](#), 15 August 2018

35 Public Health England [Immunisation against infectious disease, The Green Book \(Chapter 19: Influenza\)](#), 15 August 2018

36 [Q42](#)

33. The JCVI reviewed the evidence on the new vaccine in October 2017 and found that it had higher effectiveness in the over 65s compared with the current vaccine.<sup>37</sup> Modelling data provided by PHE also showed that the adjuvanted trivalent influenza vaccine was cost effective in the over 65 group. The Green book was updated in December 2017 to reflect this recommendation.<sup>38</sup>

34. Professor Van-Tam described the new vaccine as a “game-changer in terms of how the elderly immune response works in relation to a vaccine”. He said that modelling for how it would work in the UK suggested that there would be an expected 20% improvement in vaccine effectiveness.<sup>39</sup>

35. In February 2018, following the change in recommendations, NHS England wrote to all Clinical Commissioning Groups (CCGs), GPs, pharmacies and NHS hospital trusts to advise them of the new guidance from the JCVI. GP practices were recommended to purchase the new adjuvanted trivalent vaccine for those aged 65 and older and the quadrivalent vaccine for eligible groups under 65.<sup>40</sup>

**36. We are concerned about the impact that higher levels of flu had on frontline NHS hospital staff in the 2017/18 season, and reports that this could have been reduced by changes to the vaccination recommendations. However, we heard that the evidence available did not support the use of the quadrivalent vaccine in all eligible groups and we are convinced by arguments made to us that whilst the B-Yamagata strain was responsible for a significant burden of disease in the 2017/18 season, use of the quadrivalent vaccine in all individuals would not have made a huge difference to the additional burden placed on frontline staff in the NHS.**

**37. We have heard that flu vaccine effectiveness varies from year to year and is dependent on how well the strains within the vaccine match those circulating in the flu season. In the 2017/18 season the vaccine was less effective than it had been in previous seasons. Nevertheless, we agree with health professionals that the flu vaccine is still the most effective protection available against the serious effects of flu and it is critical for eligible groups to be vaccinated.**

**38. We welcome changes introduced to flu vaccines in response to new evidence which seek to further improve effectiveness in future seasons. We were reassured by the response of Joint Committee on Vaccination and Immunisation (JCVI) and Public Health England (PHE) to this new evidence and welcome the specific guidance on use of both the quadrivalent vaccine for eligible individuals under 65 and the new adjuvanted vaccine for the over 65s.**

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37 Public Health England, [Summary of data to support the choice of influenza vaccination for adults in primary care access](#), 29 January 2018

38 Public Health England [Immunisation against infectious disease, The Green Book \(Chapter 19: Influenza\)](#), 15 August 2018

39 [Q46](#)

40 NHS England, British Medical Association and Pharmaceutical Services Negotiating Committee, [Flu vaccinations for 2018 and planning flu clinics](#), 2 August 2018

### 3 Vaccine uptake

39. The NHS flu vaccination programme offers vaccination against flu to eligible groups in the UK:

- Two and three-year olds are offered vaccination through General Practice and a school-based programme for all children up to at least nine years old.<sup>41</sup>
- All eligible individuals under sixty-five and all over sixty-five year olds are offered vaccination through their GP or community pharmacy.

Maximising vaccine uptake is listed as one of the strategic aims in the Department of Health and Social Care's annual flu plan, including raising uptake in the lowest performing areas.<sup>42</sup>

40. Flu vaccine uptake in the 2017/18 season was similar or higher than in previous seasons in all eligible groups in England. The table below summarises vaccine uptake in all groups between the 2015/16 and 2017/18 seasons, as well as the uptake and the vaccine uptake ambition:

**Vaccine uptake in eligible groups in England (Public Health England 2018)<sup>43</sup>**

	2017/18	2016/17	2015/16	Uptake ambition 2018/19
Patients aged 65 years or older	72.6%	70.5%	71.0%	75%
Patients aged six months to 65 years in risk groups (excluding pregnant women without other risks factors)	48.9%	48.6%	45.1%	55% (maintain higher rates where this has already been achieved)
Pregnant women	47.2%	44.9%	42.3%	55% (maintain higher rates where this has already been achieved)
Health care workers	68.7%	63.2%	50.6%	75%
Children aged two years old (including those in risk groups)	42.8%	38.9%	35.4%	48–65% (eligible children aged 2 to 10 years)
Children aged three years old (including those in risk groups)	44.2%	41.5%	37.7%	
Children aged four years old (including those in risk groups)	62.6%	33.9%	30.0%	

41 In Scotland and Northern Ireland children up to the age of eleven are offered the school based vaccination.

42 Public Health England, [Annual flu programme](#), accessed 16 October 2018

43 Public Health England, [The national flu immunisation programme 2018/19 slideset](#), accessed 16 October 2018

41. However, there was some significant geographical variation in vaccine uptake among children vaccinated as part of the school-based programme, the Wessex area achieved the highest uptake with 70.7%, whereas London only reached 47.8%.<sup>44</sup> Variation was less in other groups, for those over 65, vaccine uptake “ranged from 66.9% (London) to 75.5% (Cheshire and Merseyside).” In the 18–64 eligible groups, uptake ranged from 45.4% (London) to 52.4% (Greater Manchester).<sup>45</sup>

42. Professor Cosford highlighted the contributing factors to the variation in the school-based programme. These included religious objections<sup>46</sup> and reduced uptake in inner city populations.<sup>47</sup> Professor Pollard highlighted media reports that claimed that the vaccination did not work and the effect that had on individuals offered the vaccination.<sup>48</sup>

43. Public Health England produces a wide range of materials promoting flu vaccination to all eligible groups prior to and during the flu vaccination season. This includes leaflets and posters for parents setting out the benefits of the flu vaccination, as well as advice for healthcare professionals. GPs may also send personalised invitations and reminders to eligible patients before the start of the flu season.<sup>49</sup> In August 2018, the National Institute for Health and Care Excellence published guidance for commissioners, healthcare workers and others on increasing the uptake of flu vaccination in all eligible groups.<sup>50</sup>

44. Other actions to increase uptake, especially in GP practices, were highlighted by Professor Cosford, including:

general practitioners [putting] on special clinics on Saturday mornings to get to their specific at-risk groups, or use asthma and antenatal clinics, or whatever, to encourage vaccination. All that is working very hard, and of course there are incentive schemes in the system as well to help improve uptake.<sup>51</sup>

**45. We heard that vaccine uptake rates were increasing year-on-year but there remains high geographical and demographic variation in uptake in some groups. We are reassured to hear about communication campaigns and other actions being taken to improve vaccine uptake in eligible groups. We recommend that the Government ensures that research into better understanding of the causes of unacceptable variation in vaccine uptake takes place. We call on the Government to continue to look at what actions work to increase flu uptake. Further, we call on the Government to invest in campaigns that are proven to be successful.**

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44 Public Health England, [Surveillance of influenza and other respiratory viruses in the UK: Winter 2017 to 2018](#), May 2018

45 Public Health England, [Seasonal influenza vaccine uptake in GP patients: winter season 2017 to 2018, Final data for 1 September 2017 to 31 January 2018](#), May 2018

46 For example, some religious groups have concerns in relation to the porcine gelatine within the nasal spray flu vaccine.

47 [Q93](#)

48 [Q95](#)

49 Public Health England, [Annual flu programme](#), accessed 16 October 2018

50 NICE, [Flu vaccination: increasing uptake](#), August 2018

51 [Q96](#)

## Healthcare workers

46. NHS organisations are expected to offer flu vaccination to all healthcare workers with direct patient contact.<sup>52</sup> The Flu Plan for England states that immunisation against flu should be part of the NHS organisation’s policy for the prevention of infectious diseases.<sup>53</sup> This is not an NHS programme but an occupational health responsibility for NHS organisations. Under the Health and Social Care Act 2008 and related regulations, both health and social care settings have obligations to provide effective prevention and control of infection.<sup>54</sup>

47. The Care Quality Commission is responsible for the monitoring and inspection of health and social care services in order to make sure they meet quality and safety standards. As part of this work, it looks at how a provider meets its obligations in relation to “assessing the risk of, and preventing, detecting and controlling the spread of, infections, including those that are health care associated.”<sup>55,56</sup> Department of Health and Social Care guidance, issued in 2015, on meeting these obligations states that occupational health services include “arrangements for provision of influenza vaccination for healthcare workers where appropriate”.<sup>57</sup>

48. Professional bodies, such as the General Medical Council<sup>58</sup> and the Royal College of Nursing,<sup>59</sup> also require healthcare professionals to ensure that they are immunised against common infectious diseases. Resources to support and advise on the provision of the flu vaccination to healthcare workers is provided by the Flu Fighter annual communications campaign run by NHS Employers.<sup>60</sup>

49. Witnesses agreed that it was a professional duty and obligation for healthcare workers to ensure that they were vaccinated to protect themselves and their patients from flu. Professor Cosford set out why vaccination was important for this group:

It protects them, it reduces sickness absence, so it helps the NHS to operate through the winter, but, importantly, because 30% to 50% of cases of flu, as we understand it, are subclinical, there is a risk, even when you are not showing clinical symptoms of flu, of passing that on to patients. Therefore, from where I sit, it is a patient protection issue.<sup>61</sup>

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52 Public Health England, [Annual flu programme](#), accessed 16 October 2018

53 Public Health England, [Annual flu programme](#), accessed 16 October 2018

54 [Health and Social Care Act 2008 \(Regulated Activities\) Regulations 2014](#)

55 [Health and Social Care Act 2008 \(Regulated Activities\) Regulations 2014](#)

56 Care Quality Commission, [Regulation 12: Safe care and treatment](#), accessed 16 October 2018

57 Department of Health, [The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance](#), July 2015

58 General Medical Council, [Good medical practice](#), 2014

59 Nursing and Midwifery Council, [The Code: Professional standards of practice and behaviour for nurses, midwives and nursing associates](#), 2015

60 NHS Employers, [Flu Fighter](#), accessed 16 October 2018

61 [Q113](#)

50. There is mandatory collection of data on flu vaccine uptake amongst frontline healthcare workers.<sup>62</sup> NHS Hospital Trusts, GP Practices and independent sector healthcare providers must submit data to their local NHS England teams. NHS payments are made to NHS organisations based on the vaccine uptake achieved and data submitted to NHS England.<sup>63</sup>

51. Vaccination rates in healthcare workers were the highest ever in the 2017/18 season at over 68% compared to 63% in the 2016/17 season.<sup>64</sup> However, we heard from that significant variation remained with poorly performing trusts only achieving 30–40% uptake.<sup>65</sup>

### ***A mandated vaccination programme for healthcare workers***

52. The Chief Medical Officer, Professor Dame Sally Davies and the former medical director of NHS England, Bruce Keogh, have called for discussion on whether there should be a mandatory flu vaccination for healthcare workers.<sup>66</sup> However, most of our witnesses were not in favour of a move to a mandated programme for healthcare worker vaccination at present. Professor Powis said that he thought that introducing a mandated system would “not [ ... ] be a simple thing to do operationally”. He said that there was more that could be done before this should be introduced, such as making it easier for staff to get vaccinated and introducing local incentive schemes.<sup>67</sup>

53. Professor Cosford argued that the position should be that all healthcare workers should be vaccinated unless there were contraindications, and said that there should be further discussion on whether vaccination should be mandatory in this group:

I would want to have a clear discussion with professional leaders about it, because, equally, we have a long tradition in this country of vaccination without mandation, and we get very high rates as a result. The psychological and cultural aspects of a move to mandation are important. We could end up with some groups of people being even more suspicious of vaccination than they are already, which could be counterproductive. It is a complicated area. It is a brilliant issue to discuss and we must get to a better place on it.<sup>68</sup>

54. In September 2018, as the flu vaccination season was starting again, there have been further calls from senior NHS figures regarding the importance of healthcare worker vaccination against flu. In early September, clinical leaders from NHS England and NHS Improvement sent a letter to all hospital trusts stressing the importance of flu vaccination for healthcare workers.<sup>69</sup> This set out an ambition for 100% of healthcare workers with direct patient contact to be vaccinated and asked trusts to provide information on how they aimed to achieve this. The letter advised that trusts should ensure that ‘high risk’

62 Public Health England, [Seasonal Influenza Frontline Healthcare Workers Vaccine Uptake Survey 2018/19 Guidance ImmForm User Guide for Survey Data Providers](#), September 2018

63 Public Health England, [Seasonal Influenza Frontline Healthcare Workers Vaccine Uptake Survey 2018/19 Guidance ImmForm User Guide for Survey Data Providers](#), September 2018

64 Public Health England, [Seasonal influenza vaccine uptake in healthcare workers \(HCWs\) in England: winter season 2017 to 2018 Final data for 1 September 2017 to 28 February 2018](#), May 2018

65 [Q101](#)

66 The Telegraph, [Mandatory flu jabs for all NHS workers must be considered in wake of crisis, medical director says](#), 7 January 2018

67 [Q101](#)

68 [Q115](#)

69 Letter dated 7 September 2018 from NHS England and others to Chief Executives of NHS Trusts and Foundation Trusts regarding [Health care worker flu vaccination](#)

clinical environments, such as haematology, oncology and special care baby units had 100% staff vaccination uptakes as soon as possible.<sup>70</sup> It advised that trusts should consider changing the staff in certain clinical departments to maintain the safety of the service. The Royal College of General Practitioners has also called on all those working in the NHS to ensure that they have been vaccinated against flu this season.<sup>71</sup>

**55. Despite the 2017/18 season having the highest flu vaccination uptake ever in healthcare workers, significant variation remains. Some hospital trusts only achieved 30 to 40% uptake, whereas others achieved over 90%. All hospital trusts should give the same level of priority to vaccination programmes for staff. We recommend that the Care Quality Commission should continue to assess how well trusts have performed this role and take action where fundamental standards relating to infection prevention and control have not been met.**

**56. It is a professional duty for healthcare workers in hospitals to be vaccinated each year. We welcome recent advice to hospital trusts from NHS England and NHS Improvement on healthcare worker vaccination. The Government should undertake and conclude a review by the end of February 2019 to establish whether flu vaccination should be mandatory for certain categories of healthcare workers.**

### **Social Care workers**

57. We heard that the case for vaccination in staff working in social care settings was just as strong if not stronger than those working in hospitals.<sup>72</sup> As noted above, there is an established system for all healthcare providers to submit information on healthcare worker flu vaccination uptake to NHS England. However, Professor Cosford told us that routine information on social care worker vaccination rates was not collected because of the “complexity of care homes”.<sup>73</sup> However, in Northern Ireland, for example, health and social care is integrated and data is collected by the Public Health Agency on social care worker vaccine uptake.

58. Professor Cosford revealed that ad hoc surveys of care homes by PHE showed “huge variability, with the best [uptake] at around 25%”.<sup>74</sup> Public Health England later explained that due to the low number of respondents to this survey, the results should be treated with caution. As such the results have not been published.<sup>75</sup>

59. In October 2017, NHS England announced that it would add care home workers to the eligible groups for NHS flu vaccination through GP practices and community pharmacies.<sup>76</sup> This has continued for the 2018/19 season.<sup>77</sup> However, NHS England stressed that this scheme was intended to “complement, not replace, any established occupational health schemes that employers have in place to offer the flu vaccination to their workforce”.<sup>78</sup>

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70 *ibid.*

71 RCGP, [RCGP encourages all primary care professionals to get their flu jab this winter](#), 7 September 2018

72 [Q105](#)

73 [Q103](#)

74 [Q103](#)

75 Public Health England and NHS England ([FVP0003](#)) section 4

76 NHS England, [NHS leaders unveil action to boost flu vaccination and manage winter pressures](#), 11 October 2017

77 NHS England, [Extension of NHS seasonal influenza vaccination](#), 10 September 2018

78 NHS England, [Extension of NHS seasonal influenza vaccination](#), 10 September 2018

60. We believe it is as much a professional duty for staff working in social care to be vaccinated as it is for frontline healthcare workers. We were surprised that no effective system of monitoring uptake of flu vaccination rates amongst staff working in social care settings has been established in England. *While we accept there may be challenges in relation to information collection, we recommend that the Government should review this and determine how vaccination uptake data can be collected from care homes. An effective system of data collection should be established by the 2019/20 flu season. In its role regulating within the social care sector, the Care Quality Commission should take action where poor immunisation rates (or poor recording of uptake) could impact on standards of infection prevention and control. There should be an expectation of full coverage amongst staff working with individuals who are most at risk from serious illness from flu.*

61. We were shocked by survey results from Public Health England which showed that the best flu vaccination uptake in social care settings was around 25%. The poor response rate was also disappointing. We welcome the extension of the NHS programme to frontline social care workers. *We call on the Government to look at ways in which uptake among social care staff could be improved and establish the same principle as now exists in the NHS—the aim of 100% coverage.*

## 4 Vaccine procurement in England

62. We heard that parts of the flu vaccination programme were procured and provided in different ways. All vaccinations for the children’s programme in England are purchased centrally by Public Health England and provided by GPs to 2–3 year olds and in schools for older children.<sup>79</sup> Professor Cosford set out the benefits of central procurement for the children’s vaccination programme. He said that the programme was delivered in schools and central procurement of the nasal spray vaccine through local NHS England teams was easier.<sup>80</sup> However, GPs and community Pharmacists are responsible for the purchasing and provision of vaccination for all other eligible groups in the NHS vaccination programme.

### GP procurement for the flu vaccination programme

63. GPs and pharmacies are responsible for purchasing flu vaccinations, Professor Powis provided information on how this process worked:

It has always been the case that GPs are asked to procure eight, nine or 10 months ahead the vaccines that they believe are most appropriate for their populations of patients. In doing so, they will take into account the guidance that is issued through the annual flu letter, which comes out in March, and the chapter in the Green Book that refers to influenza.

64. We heard that there had been geographical variation in vaccine purchasing for eligible adults in the 2017/18 season. Witnesses agreed that this was a recent development and reflected different vaccinations being available for eligible groups.<sup>81</sup> Professor Powis explained that the guidance had now been updated:

This year we have tightened the guidance. Why have we done that? First, because of the evidence base. The costeffectiveness analysis that Public Health England published last year, which was published after the ordering for the current season, would not have been relevant for this winter. Secondly, because of the licensing of the adjuvanted trivalent vaccine in the over-65s. That is an important bit of the guidance that we issued in February, because [ ... ] the potential for benefit is very substantial. Thirdly, because we are aware of the possibility of variation in guidance and, as the choice of vaccines becomes more complex, our view, based on advice from PHE, was that it would be preferable to issue stronger, more directed guidance, which is why I said earlier that we are probably in the best of all possible positions for next year, in that we should absolutely see less variation in ordering between trivalent and quadrivalent.<sup>82</sup>

He went on to say that NHS England had “acted to ensure that next year procurement mirrors the best possible clinical safety and cost-effectiveness advice that we have been given by PHE and JCVI”.

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79 [Q4](#). [In Scotland and Northern Ireland, the flu vaccines are procured centrally].

80 [Q4](#)

81 [Q5](#)

82 [Q70](#)

65. One issue reported in response to the changing advice to GPs was that many GP practices had already ordered the vaccinations for the following flu season at the time of our evidence session in March 2018.<sup>83</sup> However, Professor Van-Tam reassured us that the Department's discussions with pharmaceutical companies had ensured that it would be easy for GPs to change their orders:

I feel assured enough to assure you that the manufacturers are making it easy, to the extent that that is possible, for general practitioners who may already have ordered trivalent vaccines to switch to quadrivalent. They are also making it easy for general practitioners to switch to the adjuvanted vaccine in the elderly. This year, we have one supplier for the adjuvanted vaccine. We are working on a weekly basis with that company to monitor how ordering is going, to give us quite a degree of assurance that, by and large, the changes that we require are beginning to happen.<sup>84</sup>

66. In August 2018, a letter from NHS England to GPs, CCGs and community pharmacists reported that NHS England and the Department of Health and Social Care had been working closely with the manufacturer of the attenuated vaccine to ensure that adequate supplies of the vaccine were available and that these would be supplied in phases from September to November. However, in September, there were reports of vaccine supply shortages in a small number of GP surgeries in London.<sup>85</sup> The Medicines and Healthcare Products Regulatory Agency have also advised that where GP practices/pharmacies did not meet the deadline for ordering the vaccines, or where demand exceeds supplies, vaccine stocks can be shared amongst local surgeries and pharmacies.<sup>86</sup>

### ***Should all flu vaccinations be centrally procured?***

67. Flu vaccinations are the only vaccinations to be procured by GPs directly. This issue has come under scrutiny in the past following localised vaccine shortages in the 2010/11 flu season.<sup>87</sup> In May 2011, the Coalition Government launched a public consultation asking for views on the procurement of flu vaccination<sup>88</sup> but no changes were made to flu vaccine procurement as a result of this.<sup>89</sup>

68. We heard that while there had been some variation in the past with regards to procurement, there was no need at present to consider changing the procurement system for the flu vaccination programme. Professor Cosford set out the benefits of GPs leading the eligible adults programme, and that it was important for national bodies to ensure they were supported in this:

[...] GPs do a brilliant job in getting high rates of vaccination. Part of that of course is due to the fact they are also within the system of procuring the vaccine. We are looking to make sure that we can provide every

83 [GPs told to order two different types of flu vaccines amid efficacy fears](#), Pulse, 5 January 2018

84 [Q37](#)

85 [Flu jab supply problem leaves GP practices facing loss of thousands of pounds](#), GPonline, 11 September 2018

86 NHS England, [LOCAL ACTIONS TO ENSURE aTIV IS OFFERED TO INDIVIDUALS AGED 65 YEARS AND OVER](#), 24 September 2018

87 The National Archives, Department of Health, [The seasonal influenza immunisation programme. Consultation: a review of the procurement of seasonal vaccine](#), accessed 16 October 2018

88 The National Archives, Department of Health, [The seasonal influenza immunisation programme. Consultation: a review of the procurement of seasonal vaccine](#), accessed 16 October 2018

89 [HC Deb 17 June 2014 c562W](#)

possible support to help them to know which are the best vaccines for their population, and to know that without having to go through very detailed processes of understanding the detail of the evidence, which is best looked at a national level. We would have to think carefully about any changes in the system of procurement, because the last thing we want to do is to remove the incentives that get our programmes to the best possible level. If we were to change the procurement system, we would have to be very cautious about making sure that was done with the complete engagement and support of GPs and that the systems to value their input were absolutely there.

69. Professor Powis agreed that GP procurement of flu vaccination had its advantages and reported that the vaccination programme was very successful internationally. However, he said that if there was any evidence of variation in provision in the future, the procurement of vaccines could be reviewed.<sup>90</sup>

**70. There are different procurement processes for flu vaccination programmes in the UK. We see no reason why this arrangement should change. There has been geographical variation in previous flu seasons with regards to vaccine purchasing but we were reassured that action had been taken to address this variation in vaccine provision in the 2018/19 season. We welcome that GP practices were able to change their orders following a change in advice on flu vaccination. *Co-operation in this way between GPs, Public Health England, NHS England and flu vaccination manufacturers should continue.***

## 5 Future developments in flu vaccination

71. We heard about the activity of the JCVI, providing advice to UK departments of health on the emerging evidence on vaccination. Professor Pollard reported that the UK was a global leader with regards to vaccine decision-making and responding to evidence.<sup>91</sup> He also told us that the JCVI “is looking all the time at the new available evidence on trials of vaccines, to see what may be most appropriate for our population”.<sup>92</sup>

### A universal flu vaccine?

72. We heard that there was a lot of work going on internationally looking at the development of a universal flu vaccine, but witnesses reported that this work was a long way from producing a clinical product. Professor Van-Tam set out the multiple questions which remained in relation to a universal vaccine:

There are many scientific questions remaining, for example, whether universal really means universal in terms of the very wide coverage of influenza viruses. Also, how long would a universal influenza vaccine last for? Would it still need to be given annually or once every two years or once every five years? That is also not known. Certain of the immunological approaches mean that some of the vaccines may prevent severe illness but may not prevent infection, and that would need to be looked at carefully in the round in terms of what the supposed universal influenza vaccine actually did. There are a number of these big, key scientific questions, but I do not think there is enough clarity in the answers to give us an adequate steer at this stage as to how close we are to a real live product that we could employ usefully in clinical practice.<sup>93</sup>

73. SEEK group, a company involved with research and development into medicinal products,<sup>94</sup> told us about its development of a universal flu vaccine candidate. It explained that the vaccine “is currently close to readiness for Phase III [trials] in Europe and the US”.<sup>95</sup> The company called on the Government “to support the work taking place in the UK on finding a solution to delivering the first Universal Flu Vaccine to the world”.<sup>96</sup>

### Leaving the European Union

74. Witnesses told the Committee that they were confident that information sharing on flu would not be significantly affected by the UK leaving the European Union. This work was undertaken through international World Health Organization networks which took little account of EU or other international borders.<sup>97</sup>

91 [Q83](#)

92 [Q14](#)

93 [Q80](#)

94 Seek, [About us](#), accessed 16 October 2018

95 Seek ([FVP0002](#)) para 2.4

96 Seek ([FVP0002](#)) para 2.5

97 [Q121](#)

75. However, Professor Pollard raised concerns regarding medicines and vaccination regulation after the UK leaves the European Union:

The one worry I have is around the European Medicines Agency. Our regulator's role in that agency has been incredibly important. I do not know what that is going to look like after Brexit, but if we were isolated from European regulation, and the huge resource there is across Europe to support the licensure of vaccines—not just for flu but across all of them—and we had to do it all ourselves, I think that would be a real problem for the UK.

**76. We note the important role of the Joint Committee on Vaccination and Immunisation in keeping emerging evidence on vaccines under review and in providing advice. We urge the Government to take account of the future relationship with the European Medicines Agency and the impact this could have on flu vaccination in the UK as part of preparations for the UK leaving the European Union. The Government should set out in response to this Report how this relationship might be maintained in various outcomes of the Brexit negotiations.**

**77. We call on the Government to ensure that it continues to support and invest in the development of important new medical products, including new and more effective vaccines.**

## Conclusions and recommendations

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### Flu vaccination programme 2017–18

1. We are concerned about the impact that higher levels of flu had on frontline NHS hospital staff in the 2017/18 season, and reports that this could have been reduced by changes to the vaccination recommendations. However, we heard that the evidence available did not support the use of the quadrivalent vaccine in all eligible groups and we are convinced by arguments made to us that whilst the B-Yamagata strain was responsible for a significant burden of disease in the 2017/18 season, use of the quadrivalent vaccine in all individuals would not have made a huge difference to the additional burden placed on frontline staff in the NHS. (Paragraph 36)
2. We have heard that flu vaccine effectiveness varies from year to year and is dependent on how well the strains within the vaccine match those circulating in the flu season. In the 2017/18 season the vaccine was less effective than it had been in previous seasons. Nevertheless, we agree with health professionals that the flu vaccine is still the most effective protection available against the serious effects of flu and it is critical for eligible groups to be vaccinated. (Paragraph 37)
3. We welcome changes introduced to flu vaccines in response to new evidence which seek to further improve effectiveness in future seasons. We were reassured by the response of Joint Committee on Vaccination and Immunisation (JCVI) and Public Health England (PHE) to this new evidence and welcome the specific guidance on use of both the quadrivalent vaccine for eligible individuals under 65 and the new adjuvanted vaccine for the over 65s. (Paragraph 38)

### Vaccine uptake

4. We heard that vaccine uptake rates were increasing year-on-year but there remains high geographical and demographic variation in uptake in some groups. We are reassured to hear about communication campaigns and other actions being taken to improve vaccine uptake in eligible groups. *We recommend that the Government ensures that research into better understanding of the causes of unacceptable variation in vaccine uptake takes place. We call on the Government to continue to look at what actions work to increase flu uptake. Further, we call on the Government to invest in campaigns that are proven to be successful.* (Paragraph 45)
5. Despite the 2017/18 season having the highest flu vaccination uptake ever in healthcare workers, significant variation remains. Some hospital trusts only achieved 30 to 40% uptake, whereas others achieved over 90%. *All hospital trusts should give the same level of priority to vaccination programmes for staff. We recommend that the Care Quality Commission should continue to assess how well trusts have performed this role and take action where fundamental standards relating to infection prevention and control have not been met.* (Paragraph 55)
6. It is a professional duty for healthcare workers in hospitals to be vaccinated each year. We welcome recent advice to hospital trusts from NHS England and NHS

Improvement on healthcare worker vaccination. *The Government should undertake and conclude a review by the end of February 2019 to establish whether flu vaccination should be mandatory for certain categories of healthcare workers.* (Paragraph 56)

7. We believe it is as much a professional duty for staff working in social care to be vaccinated as it is for frontline healthcare workers. We were surprised that no effective system of monitoring uptake of flu vaccination rates amongst staff working in social care settings has been established in England. *While we accept there may be challenges in relation to information collection, we recommend that the Government should review this and determine how vaccination uptake data can be collected from care homes. An effective system of data collection should be established by the 2019/20 flu season. In its role regulating within the social care sector, the Care Quality Commission should take action where poor immunisation rates (or poor recording of uptake) could impact on standards of infection prevention and control. There should be an expectation of full coverage amongst staff working with individuals who are most at risk from serious illness from flu* (Paragraph 60)
8. We were shocked by survey results from Public Health England which showed that the best flu vaccination uptake in social care settings was around 25%. The poor response rate was also disappointing. We welcome the extension of the NHS programme to frontline social care workers. *We call on the Government to look at ways in which uptake among social care staff could be improved and establish the same principle as now exists in the NHS—the aim of 100% coverage.* (Paragraph 61)

### Vaccine procurement in England

9. There are different procurement processes for flu vaccination programmes in the UK. We see no reason why this arrangement should change. There has been geographical variation in previous flu seasons with regards to vaccine purchasing but we were reassured that action had been taken to address this variation in vaccine provision in the 2018/19 season. We welcome that GP practices were able to change their orders following a change in advice on flu vaccination. *Co-operation in this way between GPs, Public Health England, NHS England and flu vaccination manufacturers should continue.* (Paragraph 70)

### Future developments in flu vaccination

10. We note the important role of the Joint Committee on Vaccination and Immunisation in keeping emerging evidence on vaccines under review and in providing advice. *We urge the Government to take account of the future relationship with the European Medicines Agency and the impact this could have on flu vaccination in the UK as part of preparations for the UK leaving the European Union. The Government should set out in response to this Report how this relationship might be maintained in various outcomes of the Brexit negotiations.* (Paragraph 76)
11. *We call on the Government to ensure that it continues to support and invest in the development of important new medical products, including new and more effective vaccines.* (Paragraph 77)

## Formal minutes

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**Tuesday 16 October 2018**

Members present

Norman Lamb in the Chair

Vicky Ford	Liz Kendall
Bill Grant	Damien Moore
Darren Jones	Graham Stringer

Draft Report (*Flu vaccination programme in England*), proposed by the Chair, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 77 read and agreed to.

Summary agreed to.

*Resolved*, That the Report be the Ninth Report of the Committee to the House.

*Ordered*, That the Chair make the Report to the House.

*Ordered*, That embargoed copies of the Report be made available (Standing Order No. 134).

[Adjourned till Tuesday 23 October at 9.00am.]

# Witnesses

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The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

## Wednesday 7 March 2018

*Question number*

**Professor Paul Cosford**, Director for Health Protection and Medical Director, Public Health England; **Professor Stephen Powis**, National Medical Director, NHS England; **Professor Jonathan Van-Tam**, Deputy Chief Medical Officer for England; **Professor Andrew Pollard**, Chair, Joint Committee on Vaccination and Immunisation; and **Dr Sue Crossland**, Vice-President, Society for Acute Medicine

[Q1–121](#)

## Published written evidence

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The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

FVP numbers are generated by the evidence processing system and so may not be complete.

- 1 British Medical Association ([FVP0001](#))
- 2 Public Health England and NHS England ([FVP0003](#))
- 3 SEEK Group ([FVP0002](#))

## List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the [publications page](#) of the Committee's website. The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

### Session 2017–19

First Report	Pre-appointment hearing: chair of UK Research & Innovation and executive chair of the Medical Research Council	HC 747
Second Report	Brexit, science and innovation	HC 705
Third Report	Genomics and genome editing in the NHS	HC 349
Fourth Report	Algorithms in decision-making	HC 351
Fifth Report	Biometrics strategy and forensic services	HC 800
Sixth Report	Research integrity	HC 350
Seventh Report	E-cigarettes	HC 505
Eighth Report	An immigration system that works for science and innovation	HC 1061
First Special Report	Science communication and engagement: Government Response to the Committee's Eleventh Report of Session 2016–17	HC 319
Second Special Report	Managing intellectual property and technology transfer: Government Response to the Committee's Tenth Report of Session 2016–17	HC 318
Third Special Report	Industrial Strategy: science and STEM skills: Government Response to the Committee's Thirteenth Report of Session 2016–17	HC 335
Fourth Special Report	Science in emergencies: chemical, biological, radiological or nuclear incidents: Government Response to the Committee's Twelfth Report of Session 2016–17	HC 561
Fifth Special Report	Brexit, science and innovation: Government Response to the Committee's Second Report	HC 1008
Sixth Special Report	Algorithms in decision-making: Government Response to the Committee's Fourth Report	HC 1544
Seventh Special Report	Research integrity: Government and UK Research and Innovation Responses to the Committee's Sixth Report	HC 1563
Eight Special Report	Biometrics strategy and forensic services: Government's Response to the Committee's Fifth Report	HC 1613
Ninth Special Report	An immigration system that works for science and innovation: Government's Response to the Committee's Eighth Report	HC 1661