

<b>HEALTH SCRUTINY COMMITTEE</b>
<b>DATE OF MEETING 20.10.16</b>
<b>INFLUENZA(FLU) VACCINATION 2015-16</b>



**20 October 2016**

**NHS England North Midlands Screening and Immunisation Team**

**Review of Seasonal Influenza (Flu) Immunisation Programme 2015-2016**

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## **1. Purpose**

This paper describes the performance of the seasonal influenza (flu) immunisation programme in Nottingham City which falls under NHS England North Midlands footprint. The paper outlines the strategies implemented to improve quality and performance and plans to increase uptake in 2016/17.

## **2. Action required**

The Committee is asked to scrutinize the local strategic approach to flu vaccination in Nottingham and recommend ways to increase uptake in target groups.

The Screening and Immunisation Manager and colleagues will outline how partners across Nottingham City are working together to increase uptake in order to inform discussion.

## **3. Background information**

Flu is a common infectious viral illness spread by droplets from coughs and sneezes. Whilst it can be very unpleasant most individuals begin to feel better within about a week. Conversely older people, those with long-term conditions such as heart and lung disease, pregnant women and young children can develop more serious symptoms requiring hospitalisation and can, in some instances, lead to death. For example, 1 in 11 maternal deaths in 2009-12 was due to influenza.

Thus the groups that are most vulnerable to flu are the focus of the seasonal immunisation programme. Whilst vaccination is the best possible protection against flu, regular hand washing and using disposable tissues can help reduce transmission.

Healthy children have the highest hospital admission rates for flu infection and an admission rate that is 5 times higher than the rate of admission in those aged 65 and over.<sup>3</sup> Hospital admissions due to flu are an unpredictable annually recurring pressure that the NHS faces each winter. It is estimated about 400 children and young people aged 15 years or younger in England were admitted to ICU/HDU with complications of flu. Local figures are not available.

A Flu Plan<sup>4</sup> is developed each year which sets out a coordinated and evidence-based approach to planning for, and responding to, the demands of flu across England.

#### 4. Commissioning Arrangements and Responsibilities

NHS England is responsible for commissioning all of the national immunisation programmes. Details of the national commissioning arrangements for immunisation programmes are described in *Public Health Commissioning in the NHS 2015-2016*<sup>1</sup> and *Public Health Commissioning in the NHS 2016-2017*<sup>2</sup>

The flu programme is commissioned and delivered via various providers and is described in table 1.

Service Provider	Cohort
GP Practices	<ul style="list-style-type: none"> <li>• Healthy Children aged 2, 3 and 4 years</li> <li>• Those in an 'at risk' category (long term condition) aged 2-65 years</li> <li>• Over 65's</li> <li>• Pregnant women</li> </ul>
School Aged Providers	<ul style="list-style-type: none"> <li>• Children in school years 1, 2 and 3 (5-8 years of age)</li> </ul>
Pharmacies	<ul style="list-style-type: none"> <li>• Over 18's in an 'at risk' category (long term condition)</li> <li>• Over 65's</li> </ul>

**Table 1: Flu vaccination service providers**

#### 5. National context and influenza vaccination uptake

During winter 2015/16 more people than ever received a vaccination against flu as part of the national flu immunisation programme. In addition, children in the first two years of primary school education were offered flu vaccination for the first time<sup>1</sup>. This increase in the proportion of the population vaccinated will contribute significantly to reducing illness and deaths caused by the influenza virus.<sup>5</sup>

The Annual Flu Report<sup>4</sup> for 15-16 highlights that the level of influenza seen in the UK in 2015/2016, was similar to those seen elsewhere in Europe with younger adults most commonly affected. Whilst overall, excess deaths<sup>2</sup> from all-causes were significantly lower than last season some excess was seen in younger adults<sup>4</sup>.

<sup>1</sup> There were pilots in some areas; Nottingham was not one of these areas.

<sup>2</sup> More deaths than would be anticipated from flu, or complications of flu, during a year

Peak admissions to hospital and ICU were higher than seen in the previous few years, but lower than when this flu strain dominated in 2010/11. The numbers of children admitted to ICU/HDU were not given explicitly in the report but it is estimated about 400 children and young people aged 15 years or younger were admitted to ICU/HDU<sup>4</sup>. Local figures are not available.

Influenza admissions	2015/2016	2014/2015
Hospital admissions (participating Trusts only)	2745	1652
Under 17 years admissions	654	No data
ICU/HDU admissions (all NHS Acute Trusts)	2190	1396
ICU/HDU deaths	165	142
Severe respiratory failure centre admissions	73	14

**Table 2: Influenza admissions in England<sup>4</sup>**

In previous years there was concern that the flu vaccination and circulating strains of flu were not well-matched. The 2016/17 flu report states that a strain of Influenza A "(H1N1)pdm09" was the predominant circulating virus for the majority of the 2015/16 flu season and the vaccine was well matched.

## 6. Local context and influenza vaccination uptake in Nottingham City

In line with the national trend, more people were vaccinated in Nottingham City than in previous years. However, this is not reflected in the uptake figures as there has been an increase in the number of people eligible for the flu vaccination, such as children aged 5-7 years.

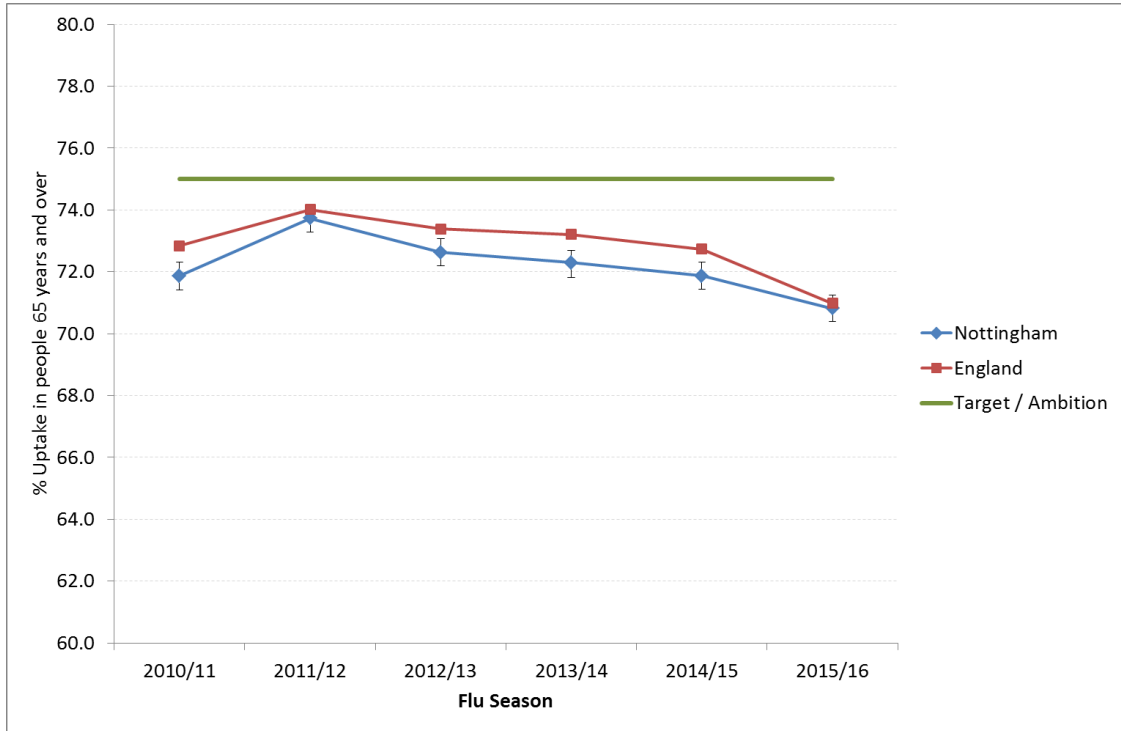
	2014/15	2015/16
Numbers of people vaccinated in Nottingham City	52,223	57,428 (3,762 children aged 5-7 years)

The following figures compare Nottingham's flu vaccination uptake in comparison to England and the national target/ambition for each of the vaccination cohorts where comparators are available:

- Adults aged 65 years and older
- At risk groups excluding pregnant women
- Pregnant women
- Children aged 2-4 years

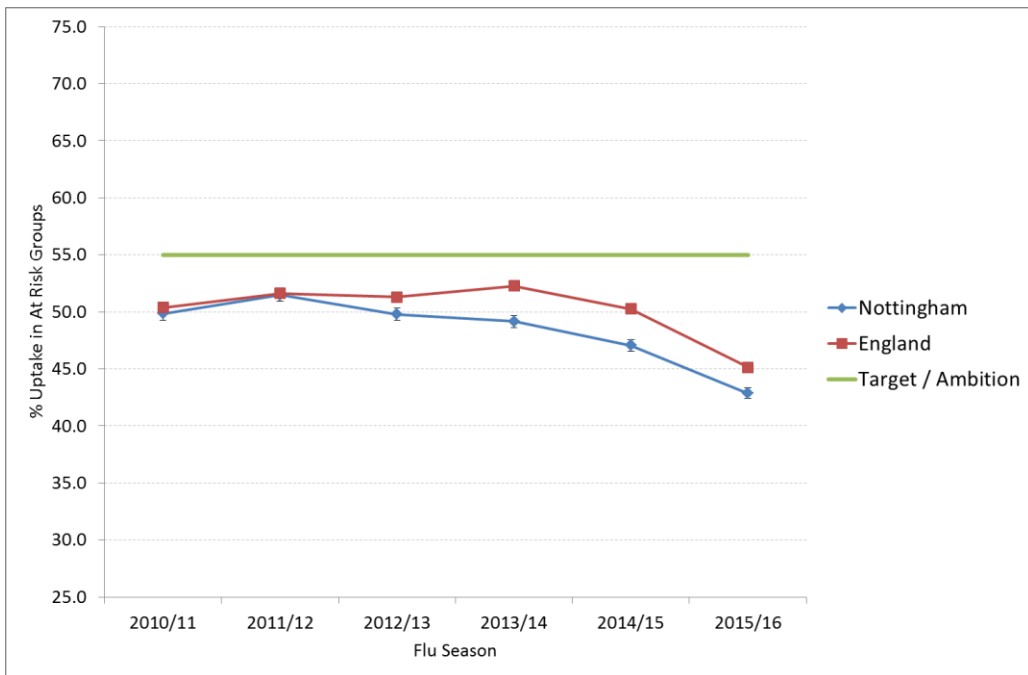
Figure 1 illustrates that the proportion of adults aged 65 years and older receiving the flu vaccination in Nottingham decreased in 2015/16 in line with the England average. An additional 1800 citizens

aged 65 years and over in Nottingham would require vaccination in order to reach the 75% ambition/target.

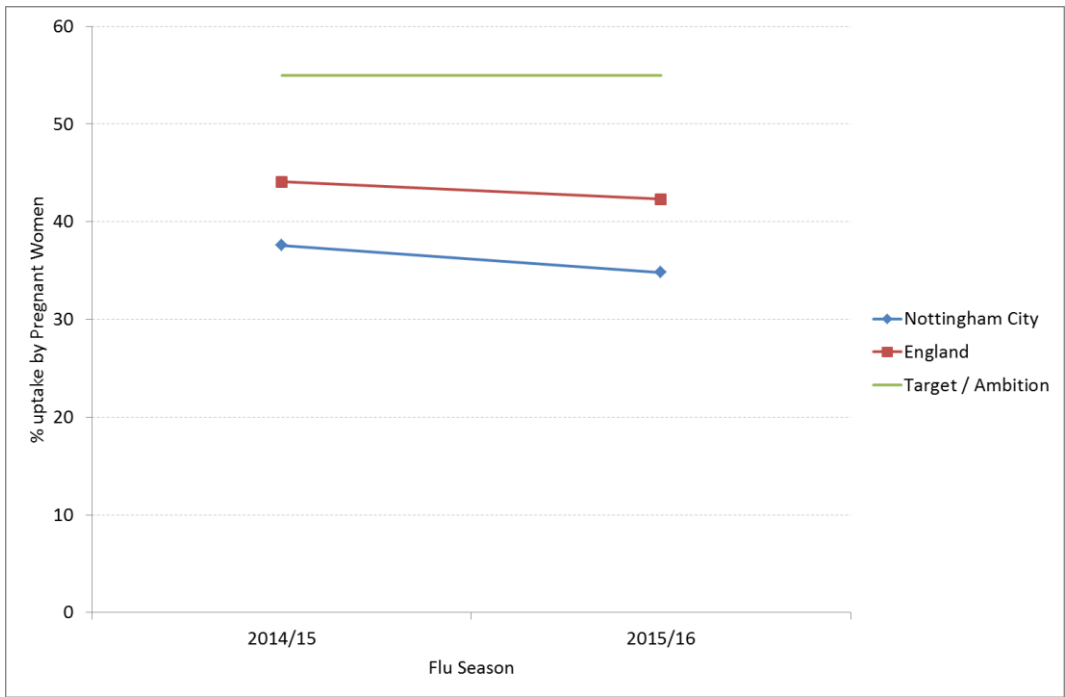


**Figure 1 Population vaccination coverage (flu) in adults 65 and over**

Figure 2 illustrates that the proportion of at risk individuals aged 6 months to 65 years (excluding pregnant women) receiving the flu vaccination in Nottingham decreased in 2015/16 in line with the England average. An additional 5500 'at risk' citizens in Nottingham would require vaccination in order to reach the 55% ambition/target.

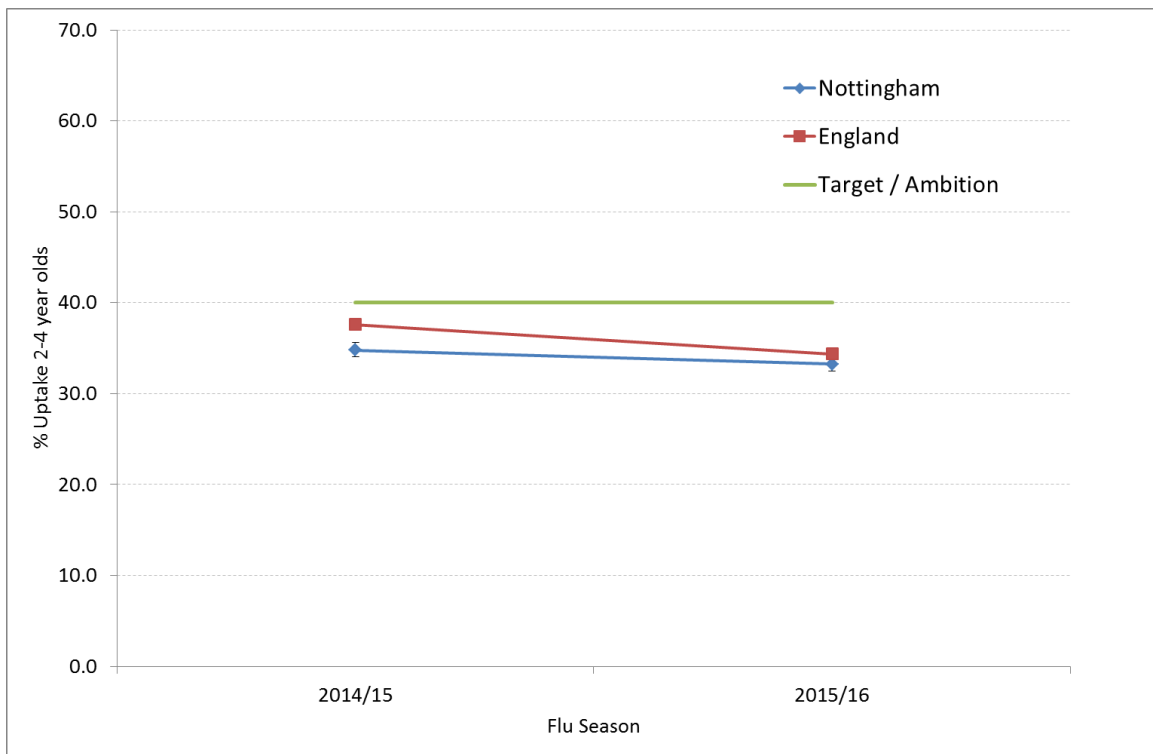


**Figure 2 Population vaccination coverage (flu) in at risk individuals aged 6 months to 65 years (excluding pregnant women)**



**Figure 3: Population vaccination coverage (flu) in pregnant women**

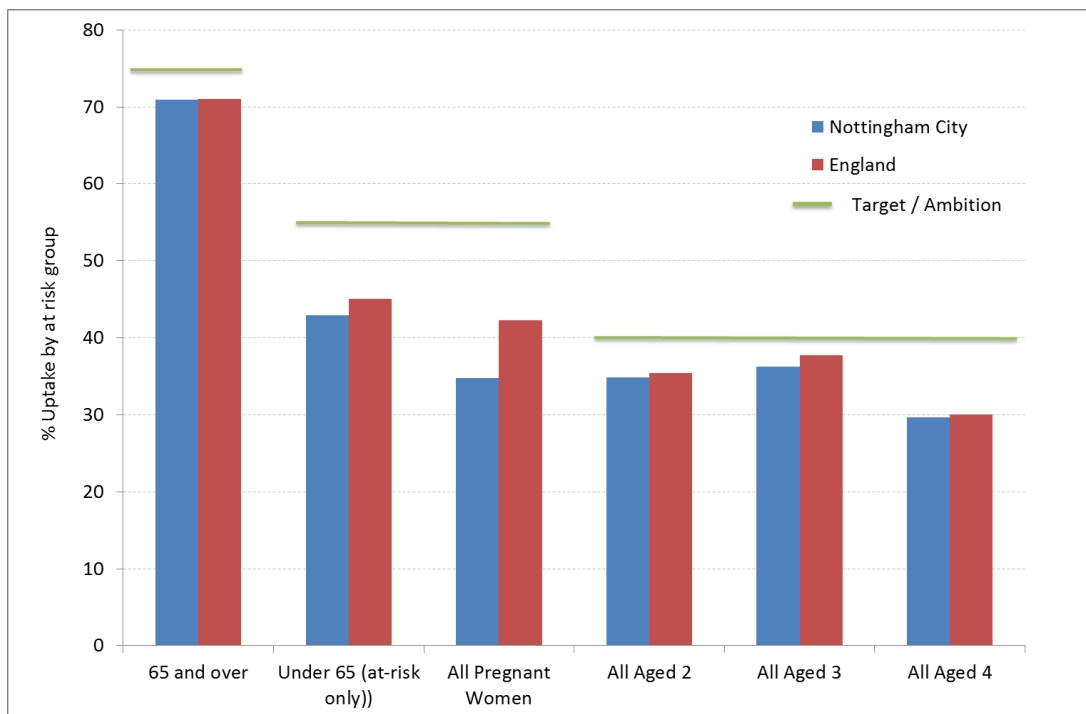
Figure 3 illustrates that the uptake for pregnant women fell 2.8% from last year and is 7.5% below the national average. An additional 965 pregnant women in Nottingham would require vaccination in order to reach the 55% ambition/target.



**Figure 4: Population vaccination coverage 2-4 year olds**

Nottingham City GP Practices continued to provide the healthy children’s flu programme, and data shows that uptake was comparable with the England average. However, this was lower than the national expectation of 40%. Although evidence shows that GP practices called in their cohort of children for their vaccinations, few actually presented. Many parents fed back that they would have preferred their children to have been vaccinated in school, especially if they had other siblings in school, as this would have been easier. This has been fed back to the national team as to change the location of vaccination is outside of the scope of local commissioning.

An additional 965 2-4 year olds in Nottingham would require vaccination in order to reach the 40% ambition/target. The national target is set at 40-60%. This may seem low but vaccinating over 30% of children will provide the community with a high level of herd immunity.



**Figure 5: Population vaccination coverage (flu) all groups**

Comparison with core cities, rather than the England average, is arguably a better comparison of Nottingham’s performance. As table 1 illustrates Nottingham City performed has a lower proportion of the population vaccinated than other core cities. For example, flu vaccination uptake in pregnant women is 8.8% lower than Liverpool.



Country & Local Authority	% over 65 years	Under 65 (at risk only)	Pregnant women	All 2 year olds	All 3 year olds	All 4 year olds
England	71.0	45.1	42.3	35.4	37.7	30.0
Newcastle upon Tyne	74.3	46.5	Not available as not CCGs not co-terminus with LAs			
Liverpool <sup>3*</sup>	73.4	48.7	43.6	27.8	29.6	23.9
Manchester	70.1	47.9	Not available as not CCGs not co-terminus with LAs			
Leeds	75.6	47.7	Not available as not CCGs not co-terminus with LAs			
Nottingham	<b>70.9</b>	<b>42.9</b>	<b>34.8</b>	<b>34.9</b>	<b>36.2</b>	<b>29.7</b>
Birmingham	69.2	44.9	Not available as not CCGs not co-terminus with LAs			
Bristol, City of*	72.4	46.9	45.5	40.6	39.0	30.3
Sheffield*	74.2	46.3	51.3	38.6	43.1	33.6

**Table 1: Uptake of influenza vaccine for the over 65s, under 65s at risk, pregnant women and children aged 2,3 and 4 years for Nottingham Local authority and 'core cities' and England for seasonal flu period 1 September 2015 to 31 January 2016.**

Source: Public Health England Seasonal influenza vaccine uptake amongst GP Patients

Table 2 shows that the proportion of children vaccinated against flu in Nottingham in 2015/16 is lower than the core cities average.

Uptake by school in Nottingham varies considerably from 13.8 - 94.1% of eligible children vaccinated.

Country & Local Authority	Cohort Y1 (5-6years)	Cohort Y2 (6-7 years)
England	<b>54.4</b>	<b>52.9</b>
Newcastle upon Tyne	57.5	58.2
Liverpool	53.2	51.8
Manchester	47.1	43.6
Leeds	54.4	52.4
<b>Nottingham</b>	<b>45.4</b>	<b>44.7</b>
Birmingham	42.8	42.4
Bristol, City of	15.3	13.4
Sheffield	57.1	57.6

**Table 2: Uptake of influenza vaccine for children of school years 1 and 2 for Nottingham Local authority and 'core cities' and England for seasonal flu period 1 September 2015 to 31 January 2016**

Source Public Health England National childhood influenza vaccine programme coverage in England 2015-16

Pharmacies were commissioned at a national level last year to provide the seasonal flu vaccination to those eligible, over the age of 18 years. We are still waiting for national data but locally we know that in Derby/Notts over 19,000 vaccines were administered via pharmacies. Evidence is showing that most of these vaccines were given to people who had not accessed the seasonal flu programme before.

<sup>3</sup> Liverpool, City of Bristol and Sheffield local authorities are co-terminus with CCGs which is the reporting format for 2015/16

## 7. Current challenges in increasing flu vaccination uptake and planned activity

### 7.1 Regional activity

- Flu planning meetings will be chaired and convened by NHS England to bring providers and stakeholders together to plan for the forthcoming flu season.
- A local flu assurance plan will be shared with providers and stakeholders and they will be asked to contribute to achieving actions and targets. Each stakeholder, including the LA will be asked to complete 3 local actions and feedback to the flu group their achievements.
- Flu uptake data will be reviewed on a monthly basis at GP level and CCGs will be notified of any poor performing practices and asked to take action. The Screening and Immunisation Team will provide support and guidance.
- The SIT will continue to work with midwifery Trusts to try and engage them with the flu programme. CCGs and Local Authorities have been asked to support with this process.
- The SIT will support the local flu training programmes, especially in local midwifery units.
- The Children's School Age Immunisation programme will be extended to children in school year 3 (6 and 7 year old) and the SIT will continue to commission, support and monitor this programme.
- Flu messages will be promoted nationally by Public Health England (PHE) and NHS England. Locally, the PHE East Midlands and Nottingham City Council are working together to provide a local communications plan.
- NHS England has, for the second year, commissioned a pharmacy flu service. This means that individuals 18 to over 65 can get their vaccination in their local pharmacy without having to make an appointment at their GP practice.

### 7.2 Nottingham based challenges and planned activity

- **Low uptake of flu vaccination for pregnant women.** In Nottingham, NUH have stated that they are unable to offer flu vaccination as part of routine care due to a lack of midwife capacity and a lack of funding from NHS England to employ extra midwives. NUH were offered the same amount per vaccine that GP's and pharmacy providers are paid. The offer of flu vaccination training was not accepted. Nationally, maternity units are not required to deliver this service.

Locally we intend to work with Nottingham City CCG to explore whether flu vaccination can be commissioned as part of the maternity services contract.

- **Health Visitors are not promoting flu vaccination to all pregnant women and to the parents of young children.** This is reflected in the low uptake.

NHS England has arranged for all of Nottingham City Health Visitor service to receive immunisation training, commencing in October 2016, which will include the seasonal flu programme. This will ensure that health visitors are promoting the flu vaccine to parents and pregnant women.

- **The provider of flu vaccination for school aged children doesn't know Nottingham schools.**

The schools based programme was delivered for the first time by Nottinghamshire Healthcare NHS Foundation Trust. The aspiration of 40% of children vaccinated was achieved but this is still lower than other areas.

NHS England will work with Nottingham City Council to facilitate engagement with schools and also to help with issues that cause uptake to be lower in certain schools with parents such as recent objections from parents due to 'shedding' issues (that the spray will shed in school and offer protection to those who do not want it).

- **The vaccination for school-aged children is a nasal spray which has porcine DNA present.** This is a barrier for Nottingham's Muslim community.

It is unclear how to overcome this obstacle as nationally the Muslim Council of Britain has not made a statement either in support or against the vaccination.

- **Flu vaccination for children and pregnant women is still relatively new and some citizens are still unaware of the importance of vaccination.**

Public Health England is working closely with Nottingham City Local Authority to develop a communication initiative to increase uptake. They are ensuring that the correct messages are shared about flu in a variety of ways e.g. through the use of social media.

- **Many flu outbreaks in 2015/16 were in care homes but the responsibility for vaccinating staff and residents bridges more than one organisation which makes monitoring performance challenging.**

In 2016/17 Care Homes will be targeted directly to ensure that their residents and staff are offered vaccination. NCC will support distribution to key contacts.

- **Flu vaccination uptake by GP practice varies considerably in Nottingham.** For example in the at-risk group the variance is 29.2% – 67.8% and 1.4%-75% for 3 year olds.

Practice uptake will be reviewed on a monthly basis by NHS England and poor performing practices will be referred to the CCG to be targeted. A 'best practice' guide has been developed by the SIT and shared with all practices to help them with all aspects of their flu campaign.

PHE will send a letter will be sent to all GP practices reminding them of their responsibility to provide flu vaccinations for children and monitor those who don't attend for vaccination.

The CCG monitor flu vaccination uptake rates and where uptake is low it is discussed during practice visits and can lead to an action for the practice to increase rates. The primary care quality and performance steering group meets monthly and considers indicators for practices; flu vaccination uptake is on the forward plan and a 'deep dive' takes place once a year.

## 8. Conclusion

The latest flu season highlights the importance of flu vaccination, particularly for eligible children, but also for healthcare workers and adults in-at risk groups, including people aged 65 and over, pregnant women and those with health conditions. The extension of the programme to children, when rolled out, provides protection for both children themselves and by reducing spread the general population so it's important that parents take up the offer of this free, painless nasal spray vaccine when offered to eligible children from Autumn 2016 through GPs and schools. Not only will it help protect their children, it will also help protect family members and others in the local community who could be more vulnerable to the effects of this unpredictable virus.

In 2015/16 more flu vaccinations than ever were administered by healthcare workers as the programme successfully extended to 3 million children between the ages of 2 and 6 years. However, percentage levels of vaccine uptake decreased across individual patient groups, and for healthcare workers, when compared to the previous year. It's important that in 2016 we reverse this decline,

both to protect our families and communities, but also reduce the impact of the virus on our health services at a time of year we need them the most<sup>3</sup>.

Through joint working, NHS England and Nottingham City Council, in conjunction with other stakeholders such as the CCG, will aim to ensure that all citizens that are eligible for the flu vaccination receive their offer of vaccination.

## 9. Additional information

Influenza and the importance of vaccination is well described at:

<http://www.nhs.uk/conditions/flu/Pages/Introduction.aspx>

## 10. Contributors

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