

OVERVIEW AND SCRUTINY COMMITTEE
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TITLE OF AGENDA ITEM INFLUENZA(FLU) VACCINATION 2016-17
REPORT OF HEAD OF DEMOCRATIC SERVICES



20 July 2017

NHS England North Midlands Screening and Immunisation Team

Review of Seasonal Influenza (Flu) Immunisation Programme 2016-2017

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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 in 2016/17 and plans to increase uptake in 2017/18.

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 Team 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.

Groups eligible for flu vaccination are based on the advice of the Joint Committee on Vaccination and Immunisation (JCVI). The national flu immunisation programme aims to provide direct protection to those who are at higher risk of flu associated morbidity and mortality.

In 2016/17 the following were eligible for flu vaccination:

- all children aged two to eight (but not nine years or older) on 31 August 2017 (with LAIV)
- all primary school-aged children in former primary school pilot areas (with LAIV) Non in Nottingham City
- those aged six months to under 65 years in clinical risk groups
- pregnant women
- those aged 65 years and over

- those in long-stay residential care homes
- carers
- Note: morbidly obese patients will be entitled to receive Flu vaccination in 2017/18

Frontline health and social care workers should be provided with flu vaccination by their employer. This should form part of the organisations' policy for the prevention of transmission of infection (flu) to help protect patients, residents, and service users.

A Flu Plan⁵ 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 NHS public health functions agreement 2016-17² and NHS public health functions agreement 2017-18³

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

Service Provider	Cohort
GP Practices	<ul style="list-style-type: none"> • Healthy Children aged 2, 3 and 4 years • Those in an 'at risk' category (long term condition) aged 6 months - 65 years • Over 65's • Pregnant women
School Aged Providers	<ul style="list-style-type: none"> • Children in school years 1, 2 and 3 (5-8 years of age) <p>Note: the vaccination of 4 year olds will move from GPs to School Aged Providers in 2017/18</p>
Pharmacies	<ul style="list-style-type: none"> • Over 18's in an 'at risk' category (long term condition) • Over 65's

5. National Context and Influenza Vaccination Uptake

Moderate levels of influenza activity were seen in the community in the UK in 2016 to 2017, with influenza A(H3N2) the dominant circulating virus for the majority of the season peaking in January 2017.

The impact of influenza A(H3N2) was predominantly seen in older adults, with a consistent pattern of outbreaks in care homes noted. In addition, admissions to hospital and ICU/HDU particularly amongst older adults were observed, although the impact on general practice was variable.

Influenza vaccine uptake in 2016 to 2017 in England was higher than the 2015 to 2016 season in under 65 year olds in a pre-defined clinical risk group (48.6%) in pregnant women (44.9%) and similar in the over 65 year olds (70.5%). It was also higher in healthcare workers (63.2%), where it is the employer's responsibility to offer vaccination.

In 2016 to 2017, the universal childhood influenza vaccine programme with live attenuated influenza vaccine (LAIV) was again offered to all healthy two, three and four year olds across the UK, uptake achieved in these groups was 38.9%, 41.5%, 33.9% in children two, three and four years of age.

Plus to all children of school age Year 1, 2 and 3 in England and Wales where uptake was 57.6%, 55.4%, 53.3% respectively in England and 67.7%, 66.4% and 65.7% respectively in Wales⁴.

6. Local Context and Influenza Vaccination Uptake in Nottingham City in 2016/17

Based on the national Annual Flu Plan for 2016/17 and previous year uptake rates, the Screening and Immunisation Team developed a local Derbyshire and Nottinghamshire Flu Assurance plan, which aimed to increase uptake rates amongst children 2, 3 and 4 year olds; pregnant women and patients with underlying health conditions.

Table 2: Flu vaccination uptake rates in Nottingham City between 1st September 2016 and 31st January 2017 (2015/16 data are in brackets).

CCG	65 and over	Under 65 (at-risk only)	All Pregnant Women	All Aged 2	All Aged 3	All Aged 4
Nottingham City	70.6(70.9)	46.5(42.9)	37.7(34.8)	35.2(34.9)	37.5(36.2)	29.8(29.7)
All Derby/Notts CCGS	73.3(73.6)	47.4(44.8)	45.3(41.4)	44.1(43.7)	46.9(53.9)	38.1(37.6)
England Average	70.5(71)	48.6(45.1)	44.9(42.3)	38.9(35.4)	41.5(45)	33.9 (30)

Source: Seasonal Flu Vaccine Uptake in GP patients: Final data from 1st September 2016 – 31st January 2017

<https://www.gov.uk/government/statistics/seasonal-flu-vaccine-uptake-in-gp-patients-in-england-winter-season-2016-to-2017>

In Nottingham, the Flu vaccination uptake during the 2016/17 programme **increased** in all groups apart from the over 65 age group. A very slight reduction in uptake was observed in this age group but the uptake rate of this cohort was above the national figure for the first time since 2011/12.

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 2016/17 in line with the England average. An additional 1844 citizens aged 65 years and over in Nottingham would require vaccination in order to reach the 75% target. It is worth noting that the decrease for Nottingham City was less than it was for the England average and the uptake rate of this cohort has been above the national figure for the first time since 2011/12. Closing the gap with the national uptake is a big achievement for Nottingham City.

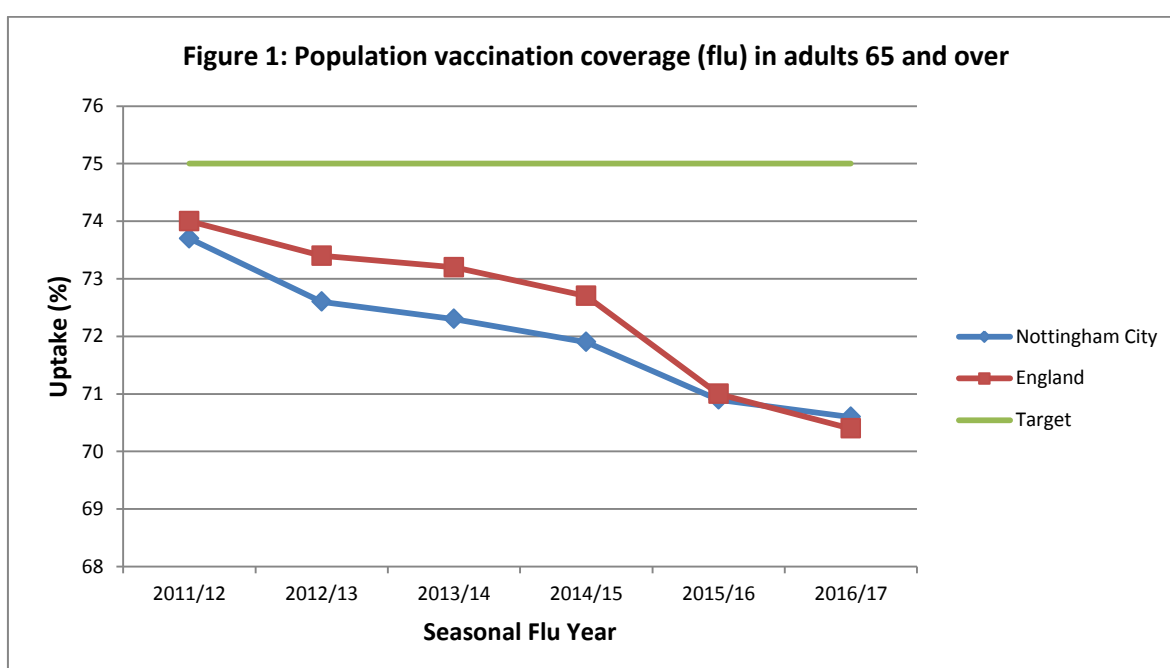


Figure 2 illustrates that the proportion of at risk individuals aged 6 months to 65 years (excluding pregnant women) receiving the flu vaccination in Nottingham increased in 2016/17 in line with the England average. An additional 3,349 ‘at risk’ citizens in Nottingham would require vaccination in order to reach the 55% ambition/target.

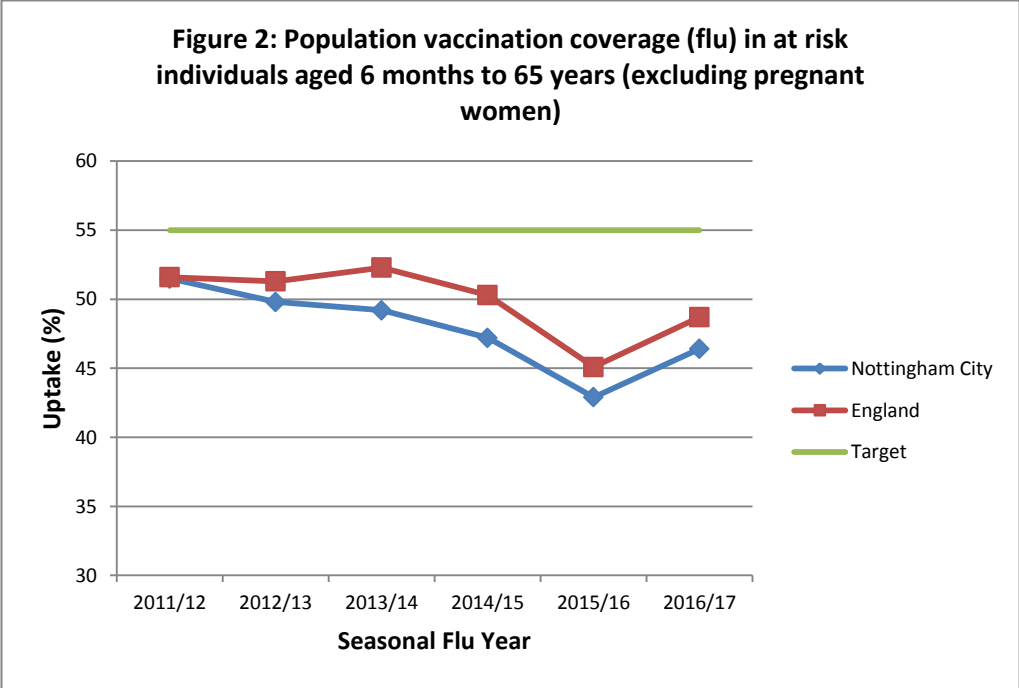


Figure 3 illustrates that the uptake for pregnant women rose by 2.4 percent points (pp) from last year and is 7.3 pp below the national average. An additional 839 pregnant women in Nottingham would require vaccination in order to reach the 55% ambition/target.

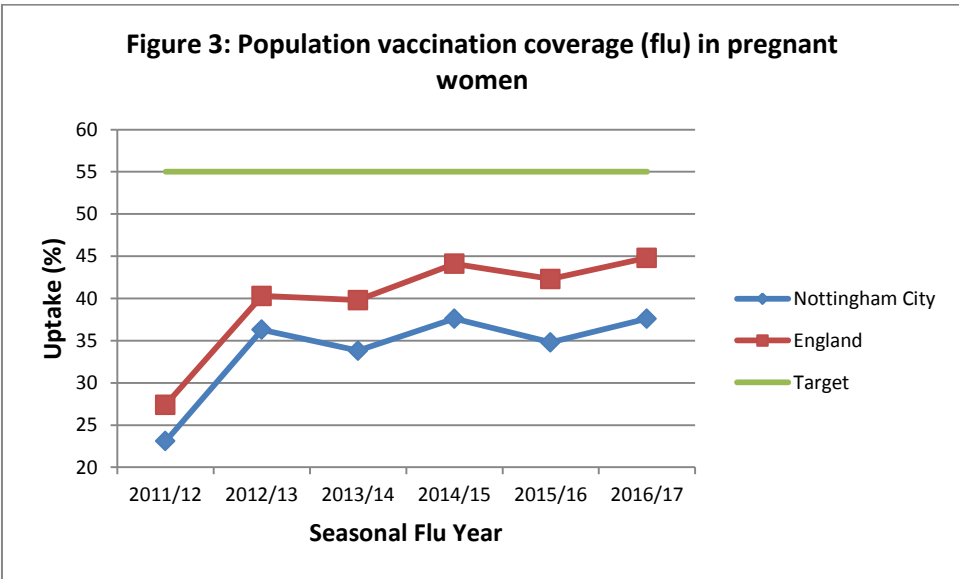
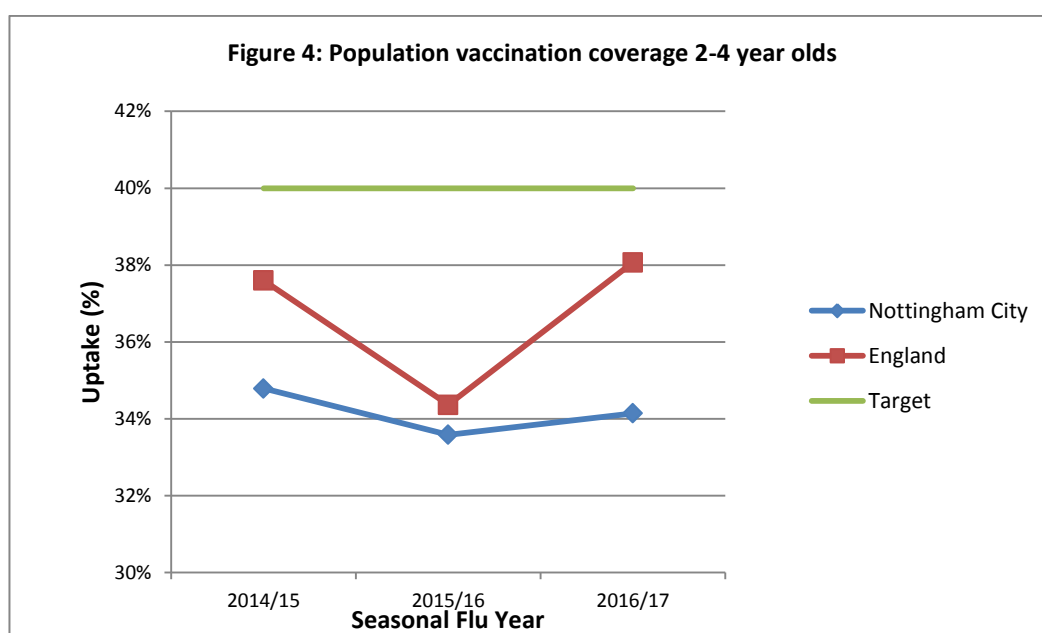


Figure 4 illustrates that although the overall uptake rate for two to four year olds in Nottingham City slightly increased from 2015/16; this still was below the 2014/15 performance. The increase was more remarkable for England than it was for Nottingham City in 2016/17.

An additional 788 two to four year olds in Nottingham would require vaccination in order to reach the 40% 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.



Pharmacy Flu Provision

Pharmacies were commissioned at a national level last year and continue to deliver the seasonal flu vaccination to those eligible, over the age of 18 years. National data is still not available but locally we know that in Derby/Notts 33, 429 vaccines were administered via pharmacies. This equates to 5% of the total number of flu vaccinations given in Derby/Notts. Anecdotally, we are being informed by the Local Pharmacy Council that most of these vaccines were given to people who had not accessed the seasonal flu programme before.

Core Cities

Comparison with core cities, rather than the England average, is arguably a better comparison of Nottingham's performance.

Liverpool, City of Bristol and Sheffield local authorities are co-terminus with CCGs which is the reporting format for 2016/17; consequently they may allow a more sensible comparison. As table 3 illustrates Nottingham City has a lower proportion of the population vaccinated than these core cities. For example, flu vaccination uptake in pregnant women is 6.1% lower than Liverpool. The only exception is the two to four year old patient group, where Nottingham City performance is better than it is in Liverpool.

Table 3: 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 2016 to 31 January 2017 (2015/16 in brackets)

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	71.4(71.0)	48.7(45.1)	44.8 (42.3)	38.9 (35.4)	41.5 (37.7)	33.9 (30.0)
Newcastle upon Tyne	74.6 (74.3)	50.1 (46.5)	46.8 (NA)	36.6 (NA)	40.6 (NA)	30.3 (NA)
Liverpool ^{1*}	73.0 (73.4)	51.7 (48.7)	43.7 (43.6)	29.8 (27.8)	35.5 (29.6)	24.9 (23.9)
Manchester	63.8 (70.1)	50.1 (47.9)	41.9 (NA)	33.5 (NA)	36.8 (NA)	25.7 (NA)
Leeds	73.9 (75.6)	41.9 (47.7)	53.8 (NA)	41.9 (NA)	45.7 (NA)	34.1 (NA)
Nottingham	70.6 (70.9)	46.4 (42.9)	37.6 (34.8)	35.2 (34.9)	37.4 (36.2)	29.8 (29.7)
Birmingham	67.3 (69.2)	45.3 (44.9)	39.8 (NA)	37.8 (NA)	39.4 (NA)	31.5 (NA)
Bristol, City of*	72.2 (72.4)	49.4 (46.9)	45.3 (45.5)	38.6 (40.6)	41.9 (39.0)	34.2 (30.3)
Sheffield*	74.1 (74.2)	50.3 (46.3)	56.1 (51.3)	42.1 (38.6)	42.8 (43.1)	35.1 (33.6)

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

Table 4 shows that the proportion of children vaccinated against flu in Nottingham City in 2016/17 has increased by 5.9% in school year one and by 4.6% in school year two since 2015/16. This is a great achievement for the School Age Immunisation Service and shows their hard work and dedication to the programme.

* Newcastle, Liverpool, City of Bristol and Sheffield local authorities are co-terminus with CCGs which is the reporting format for 2016/17

Table 4: Uptake of influenza vaccine for children of school years 1, 2 and 3 for Nottingham Local authority and 'core cities' and England for seasonal flu period 1 September 2016 to 31 January 2017 (2015/16 uptake in brackets)

Country & Local Authority	Cohort Y1 (5-6years)	Cohort Y2 (6-7 years)	Cohort Y3 (7-8 years)
England	57.6	55.3	53.3
Newcastle upon Tyne	47.3	44.3	42.7
Liverpool	56.8	55.8	54.1
Manchester	39.6	36.6	34.4
Leeds	52.8	53.1	50.0
Nottingham	51.3 (45.4)	48.1 (44.7)	48.7 (NA)
Birmingham	47.3	44.3	42.7
Bristol, City of	46.3	38.7	38.0
Sheffield	63.6	57.7	54.5

Source Public Health England National childhood influenza vaccine programme coverage in England 2016-17

7. Current Challenges in Increasing Flu Vaccination Uptake and Planned Activity

7.1 Annual Activity and Initiatives

- 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 support the local flu training.
- School Age Immunisation Programme will continue to vaccinate in schools to school years reception to year 4. Flu messages will be promoted nationally by Public Health England (PHE) and NHS England.
- Nationally commissioned pharmacy flu service. This means that individuals 18 to over 65 can opportunistically obtain their vaccination in their local pharmacy without having to make an appointment at their GP practice.

- Nottingham University Hospitals NHS Trust, Nottinghamshire Healthcare NHS Foundation Trust and Nottingham City Council are responsible for ensuring vaccination uptake in front line staff. Each organisation organises a different programme of activity annually in order to maximise uptake.

7.2 Nottingham Based Challenges and Planned Activity

- **Low uptake of flu vaccination for pregnant women.** Although there was an increase in the number of pregnant women receiving the flu vaccination in 2016-17, Nottingham City is still below the regional and national average. The Screening and Immunisation Team has been successful in commissioning Nottingham University Hospitals to deliver the seasonal flu programme to pregnant women. The vaccine will be offered when the women attend for their routine hospital appointments, as an alternative to accessing their GP practice. A dedicated nurse will be employed to deliver this service and will also be available to offer flu vaccinations to staff and other vulnerable groups. We hope that this will increase the uptake of flu vaccinations in pregnant women.
- **Low uptake of flu vaccinations to children aged 2 and 3 years.** NHS England North Midlands are exploring funding to support reminder letters to parents of children aged 2 and 3 years in Nottingham City, in addition to the letter sent by their general practitioner, to highlight the importance of the childhood flu vaccination programme and to remind them to contact their general practitioner to make an appointment to get their child vaccinated. Other areas of the country have seen an increase in the numbers of children being vaccinated after the implementation of this initiative.
- **Low uptake of flu vaccinations to children aged 4 years.** Reception Year (children aged 4-5 years): These children will now be offered flu vaccination (LAIV) in reception class, rather than through general practice. This is a national decision based on the low uptake of the flu vaccination programme via general practice and how well the programme has been received via the schools immunisation programme.
- **Low uptake of flu vaccinations to children in special schools.** NHS England North Midlands commissioning intention for 2017/19 aims that all children (rather than the designated cohorts) in Nottingham special schools will be offered the flu vaccination via the school age vaccination programme by the 2018/19 Flu season. NHS England will work with Nottingham City Council to ensure the promotion of this programme.

- **Low uptake of flu vaccinations in 'at risk' groups.** NHS England North Midlands are planning to commission Nottingham University Hospitals to offer flu vaccinations via their liver and kidney out-patients clinics. This will ensure that our lowest uptake 'at risk' groups are given a second opportunity (the first being the invite from their general practitioner) to obtain their flu vaccination.
- **Many flu outbreaks in 2016/17 were in care homes but the responsibility for vaccinating staff and residents bridges more than one organisation which makes monitoring performance challenging.** In 2017/18 Care Homes will be targeted directly by the SIT and Nottingham City Council to ensure that their residents and staff are offered the flu vaccination and that all vaccines that are administered are documented in care records. CityCare will support this initiative. Nottingham City Council will explore the opportunity to amend any local authority contracts to include the specification to offer and promote flu vaccinations to their patients and staff.
- **Flu vaccination uptake by GP practice varies considerably in Nottingham in 2016/17.** For example in the at-risk group the variance was 31.3% – 67.7% and 1.4%-54% 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. This activity did prove difficult in 2016/17 as data issues meant that GP level data was not available until late in to the programme.

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

A successful annual flu programme was observed in 2016/17 with more vaccines being delivered nationally than in any other European country. Nottingham City saw an increase in flu vaccinations in five out of six cohorts. These included the 'at risk' group, pregnant women, children aged 2, 3 & 4 years and the school based flu programme.

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

The initiatives reported in this paper hope to improve uptake even further in 2017/18 to keep the circulation of influenza at a minimum, which in turn will reduce the pressure on our NHS services through the busy winter season.

Ongoing support of the annual flu vaccination programme, by all stakeholders, is vital to ensure its success.

9. Additional Information

Influenza and the importance of vaccination is well described at:

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

10. Contributors

Sarah Mayfield-Screening and Immunisation Manager, NHS England North Midlands,
sarahmayfield@nhs.net

Agnes Belencsak – Screening and Immunisation Lead, NHS England North Midlands,
a.belensak@nhs.net

Paul Kalinda – Screening and Immunisation Coordinator, NHS England North Midlands,
paul.kalinda@nhs.net

Helene Denness – Consultant Public Health, Nottingham City Local Authority,
Helene.Denness@nottinghamcity.gov.uk

Louise Lester - Public Health Registrar, Louise.Lester@nottinghamcity.gov.uk

Eka Famodile – Public Health Analyst, Nottingham City Local Authority,
Eka.Famodile@nottinghamcity.gov.uk

Shade Agboola – Consultant Public Health, Nottingham City Local Authority,
Shade.Agboola@nottinghamcity.gov.uk

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