

**UPDATE ON SCREENING AND CHILDHOOD IMMUNISATIONS**

*To:* **Health Committee**

*Meeting Date:* **15 January 2015**

*From:* **Director of Public Health**

*Electoral division(s):* **All**

*Forward Plan ref:* **Key decision: No**

*Purpose:* **The purpose of this report is to update the Committee on the latest uptake figures for screening and childhood immunisation programmes in Cambridgeshire. An update later in the year was requested by Health Committee following presentation of the Annual Public Health Report in May 2014, which showed that uptake of some screening and childhood immunisation programmes was below the national average.**

*Recommendation:* **The Committee is asked to:**

- a) Note this report; and**
- b) Identify any issues on which the Committee would like further feedback or information in future**

<b><i>Officer contact:</i></b>	
<b>Name:</b>	<b>Dr Linda Sheridan</b>
<b>Post:</b>	<b>Consultant in Public Health (Interim)</b>
<b>Email:</b>	<b>Linda.sheridan@cambridgeshire.gov.uk</b>
<b>Tel:</b>	<b>01223 708136</b>

## **1. BACKGROUND**

- 1.1 The Annual Public Health Report (APHR) for Cambridgeshire 2013/14 highlighted the fact that ‘the majority of childhood vaccination rates are below the national average for Cambridgeshire, which is of considerable concern.’ The APHR also described a number of possible reasons for this, including administrative issues such as failure to update records when children move in or out of the county, which needed further investigation. The APHR stated that ‘The latest screening coverage figures for breast cancer are worse than the England average in Cambridgeshire, having previously been better than average’ and that ‘Cervical cancer screening coverage is also notably lower than average in Cambridge (City) at 64% compared with 74% nationally, the lowest of all local authorities in the region.
- 1.2 The Public Health Outcomes Framework (PHOF) for England sets out the Government’s overarching vision for public health, the desired outcomes, and the indicators that will be used to measure improvements to and protection of health. PHOF indicators for public health interventions enable progress to be tracked. The APHR for Cambridgeshire (2013/14) used the PHOF indicators which were available in May 2014, which compared outcomes in Cambridgeshire with national and regional averages. This report will provide an update with the most recently available comparative figures.

### **Responsibility for screening and immunisation programmes**

- 1.3 Since implementation of the Health and Social Care Act (2012), responsibility for commissioning national immunisation and screening programmes sits with NHS England, working closely with screening and immunisation teams from Public Health England. A variety of providers deliver these programmes locally including GP practices, NHS acute trusts and NHS Community Trusts.
- 1.4 Although the County Council is not directly responsible for commissioning immunisation and screening programmes, the ‘section 6C’ regulations (2013) introduced following the Health and Social Care Act give the County Council responsibility for providing advice to organisations delivering health protection services within its local area, to promote the preparation of appropriate local health protection arrangements. The 6C Regulations serve as a key lever for local authorities to improve the quality of health protection arrangements in their local areas, including delivery of immunisation and screening programmes, through the effective escalation of issues.
- 1.5 The County Council also has an overall duty to take such steps as it considers appropriate to improve the health of people in its area, and this may include using Council resources to promote the uptake of screening and immunisation programmes, where this is of concern.

### **Local arrangements**

- 1.6 To assist the County Council to fulfil its health protection responsibilities, through the Director of Public Health, a multi-agency Cambridgeshire Health Protection Steering Group (HPSG) was set up in 2013, chaired by the DPH and supported by a Health Protection Memorandum of Understanding (MOU) with partner organisations. The HSPG meets quarterly and membership

includes senior officers from the County Council, Public Health England, NHS England, Cambs & Peterborough Clinical Commissioning Group, and a District Council Environmental Health representative. It takes an overview of a range of local health protection issues, including immunisation and screening.

1.7 The main roles of the HPSG are to:

- provide a forum for information sharing and planning between public agencies that have responsibilities for health protection in Cambridgeshire
- review and seek assurance that appropriate mechanisms are in place to protect public health
- receive reports from member agencies that enable monitoring of these arrangements and reporting of any issues or incidents.
- act as a local forum for escalation and resolution of cross-organisational issues
- prepare an annual Health Protection Report for the Cambridgeshire Health and Wellbeing Board

1.8 The Cambridgeshire and Peterborough Immunisation Steering Group, which discusses all aspects of local immunisation programmes including the operational detail, is convened by NHS England. It brings together local commissioners and providers of immunisation services, including representatives of the GP Practice Managers and Practice Nurses networks, and includes representation from County Council public health.

## 2. MAIN ISSUES

### Immunisation

- 2.1 Immunisation is a long-established public health intervention aimed at preventing a number of serious infectious diseases. Over time, a greater number of vaccines have been developed and it is now possible to prevent a larger number of diseases that formerly caused very serious illness and death. A complex programme of immunisation is commissioned by the NHS starting in infancy and continuing into old age.
- 2.2 For all immunisation programmes the greater the uptake by the targeted population, the more effective the programme. For the childhood programme a level of uptake that confers 'herd immunity' is the aim, which requires uptake levels of 85 – 90% or higher. Children easily transmit infection from one to another, and the greater the number of children immunised, the lower is the likelihood of outbreaks of vaccine-preventable diseases occurring. Herd immunity is particularly important in protecting people who can't get vaccinated because illness or treatment has affected their immune system.

### Latest immunisation data

- 2.3 The data quoted in the Annual Public Health Report for Cambridgeshire was taken from the most recently published PHOF data, for the year 2012/13 (see Table 1). The next PHOF indicator data, for the year 2013/14, will be published in February 2015. However PHE provides interim data for each quarter, usually some months after quarter end, and the latest COVER data (Cover of vaccination evaluated rapidly (COVER) programme) are shown at

Table 2. The current childhood immunisation schedule is attached as Appendix A.

**Table 1: PHOF data 2012/13**

	<b>East of England 12/13</b>	<b>England</b>	<b>Cambridgeshire 12/13</b>
<b>Dtap/IPV/Hib Age 1 year</b>	96.10	94.70	94.10
<b>Dtap/IPV/Hib Age 2 years</b>	96.90	96.30	95.80
<b>Men C</b>	95.30	93.90	92.90
<b>PCV</b>	95.70	94.40	93.90
<b>Hib / MenC Booster age 2</b>	94.70	92.70	92.20
<b>Hib / MenC Booster age 5</b>	93.60	91.50	93.30
<b>PCV Booster Age 2</b>	93.80	92.50	91.60
<b>MMR - 1 Dose - age 2 years</b>	92.80	92.30	90.90
<b>MMR - 1 Dose - age 5 years</b>	93.20	93.90	92.50
<b>MMR - 2 doses - age 5 years</b>	89.00	87.70	87.00

**Table 2: COVER data, 2014/15 Quarter 1 and 2**

	<b>Cambridgeshire Q1 Apr – June 2014</b>	<b>Cambridgeshire Q2 July – Sept 2014</b>
<b>Dtap/IPV/Hib age 1 year</b>	95.3	93.3
<b>Dtap/IPV/Hib age 2 years</b>	94.5	94.5
<b>Dtap/IPV/Hib age 5 years</b>	88.7	85.1
<b>PCV</b>	95.1	92.9
<b>Hib / MenC Booster age 2</b>	91.9	91.5
<b>Hib / MenC Booster age 5</b>	90.6	90.7
<b>PCV Booster age 2</b>	92.2	91.3
<b>MMR - 1 Dose - age 2 years</b>	90.8	90.6
<b>MMR - 1 Dose - age 5 years</b>	91.3	90.7
<b>MMR - 2 doses - age 5 years</b>	85.7	84.1

2.4 While the data cannot be directly compared due to differences in the way the data are presented, these data show that for Cambridgeshire, there appears to have been no improvement in uptake rates for most of the major childhood

immunisations and some deterioration in uptake for the MMR vaccination at age 5 years, although uptake for MMR at age 2 years is being maintained, and, in time, should be reflected in the 5 year data. For most vaccinations the Cambridgeshire rates remain below the national and regional averages, but above the desired level to provide herd immunity for the majority of vaccine preventable illness that are covered in the childhood programme.

### **The Child Health Information system (CHIS)**

- 2.5 Successful vaccination programmes requires collaboration across a number of organisations and a robust administrative process that can:
- Identify the target population e.g. all babies in a geographical area
  - Maintain an accurate register of this target population
  - Have a delivery programme that can meet the likely demand from this population
  - Schedule all necessary vaccinations at the right time
  - Deal with unscheduled vaccinations e.g. when a baby is unwell and must be brought back for vaccination
  - Have a system that can call all of the target population to attend at the appropriate time
  - Have a system that can record all vaccinations given in a timely manner
  - Have a system that can recall someone who has failed to attend
- 2.6 The Child Health Information System (CHIS), run by Cambridgeshire Community Services NHS Trust (CCS) provides this administrative function and a previous review found that some children had not been registered on the system. This has been the focus of work in the past year to ensure that children, not born locally but moved in to the area in childhood, are registered and receive invitation for immunisations and other aspects of the Healthy Child Programme.
- 2.7 More detailed review of local immunisation uptake showed that Cambridge City had a lower uptake than other districts. This has been a concern and a case note review found that only a very small number of children had not been immunised, but, for a variety of reasons, the CHIS did not have a record of their immunisations. As an academic renowned bio-science centre, Cambridge attracts many families from within the UK and from overseas to work or study, sometimes for short periods. Their children may have been fully immunised before coming to Cambridge but not recorded on CHIS.
- 2.8 A further issue with data entry was identified and work is on-going to address this. Data on immunisations given is sent by GP practices either electronically or in hard copy to the CHIS. The GP systems have a number of templates for immunisation and it is possible to enter incomplete data on these templates such as when a child has received more than one vaccine, and only one is entered. Having identified this problem, work is under way to simplify the templates to ensure complete data entry, which should further improve the reported immunisation uptake in Cambridgeshire.

## Cancer Screening

- 2.9 Screening is a process that involves identifying population groups that at risk of certain conditions or diseases, using criteria such as gender and age, and testing for this condition. The aim is to reduce the risk of an adverse outcome through early identification of the condition, and to give further information about risk. There are important criteria to be met when determining what conditions can be screened for, such as that there is an acceptable and effective treatment available that can alter the outcome of the disease if detected early.
- 2.10 The main cancer screening programmes are for Breast, Cervical and Bowel cancer. The Bowel Cancer programme was introduced in 2006 and has been well received by the target population. Breast and Cervical cancer screening are well established programmes which have seen reductions in uptake in recent years. The early detection of breast cancer and prevention of cervical cancer are effective health interventions.
- 2.11 The national Public Health Outcomes Framework (PHOF) includes the percentage of the eligible population who have attended for screening for both breast and cervical cancer. The most recent PHOF data shows that at county level, uptake for the two screening programmes was:  
 Cervical screening – 73.5%  
 Breast Screening – 73.2%  
 However this masks considerable variation across the county and a downward trend as shown in the tables below.

**Table 3: Cancer screening uptake at district level in 2014**

Local authority	Breast Screening uptake %	Cervical Screening uptake %
Cambridge City	65.2%	61.6%
East Cambridgeshire	72.1%	79.1%
Fenland	74.8%	73.1%
Huntingdonshire	78.1%	77.1%
South Cambridgeshire	71.6%	77.3%

Note: Definitions:

Breast screening coverage % = the % of eligible women screened adequately within the previous 3 years as of 31<sup>st</sup> March each year

Cervical screening coverage % = the % of eligible women screened adequately within the previous 3.5 or 5.5 years (according to age) on 31<sup>st</sup> March each year.

**Table 4: Breast Cancer screening coverage % from 2010 to 2014**

Period	Cambridge	East Cambs	Fenland	Hunts	South Cambs	England
2010	71.5	80.5	79.8	81.3	81.1	76.9
2011	71.1	80.7	79.4	80.1	79.7	77.1
2012	70.3	81.3	78.4	80.4	79.1	76.9
2013	67.1	76.4	77.3	78.8	72.1	76.3
2014	65.2	72.1	74.8	78.1	71.6	75.9

**Table 5: Cervical Cancer screening coverage % from 2010 to 2014**

Period	Cambridge	East Cambs	Fenland	Hunts	South Cambs	England
<b>2010</b>	69.3	82.5	76.4	81.3	81.7	75.5
<b>2011</b>	68.3	81.5	75.4	80.4	80.6	75.7
<b>2012</b>	66.8	81.1	75.3	79.4	79.8	75.4
<b>2013</b>	63.8	79.3	73.7	77.6	78	73.9
<b>2014</b>	61.6	79.1	73.1	77.1	77.3	74.2

- 2.12 While nationally screening coverage has declined, that decline is considerably less than the decline seen in Cambridgeshire, especially in Cambridge City, where uptake is low and declining markedly especially for cervical cancer screening. For South Cambridgeshire, the decline, from 2010 to 2014, of almost 10% in breast cancer screening uptake is of concern.
- 2.13 In Cambridge City, Breast cancer screening uptake has been falling for a number of years. There were issues resulting from the loss of a site for the mobile screening units and difficulties with electricity supply in July 2012. The service also lost key staff to retirement and struggled to recruit staff. As a result the length of time between screens, known as round length, grew to considerably more than the required 36 months and affected coverage figures. While recruitment issues have been addressed, it has taken time for the round length to recover. This has also affected South Cambridgeshire and East Cambridgeshire which are covered by the same breast screening service.
- 2.14 The screening service and the commissioning organisation, NHS England, East Anglia, have worked with the city and county councils to identify sites for the mobile screening unit that improve access. Most of the sites originally identified have, unfortunately, not been suitable. A more suitable site was found towards the end of last year and operations at the site have not yet commenced..

### **3. ALIGNMENT WITH CORPORATE PRIORITIES**

#### **3.1 Developing the local economy for the benefit of all**

There are no significant implications for this priority.

#### **3.2 Helping people live healthy and independent lives**

The report above sets out details of significant implications throughout the report, which is focussed on the prevention of vaccine preventable and screening detected illnesses for the whole population of Cambridgeshire.

#### **3.3 Supporting and protecting vulnerable people**

The following bullet points set out details of implications identified by officers:

- Immunisation and screening are universal services and considerable effort is made to ensure that there is good coverage for all of the at risk population.

- All GP practices offer immunisations and cervical screening services. Where any practice has low coverage levels for these services, it is reviewed by NHS England and discussed with the practice.
- The Public Health Traveller Health Team work closely with the Traveller population in Cambridgeshire to encourage and support uptake of preventative services. Immunisation rates for certain immunisation have been low among this population but the work of Traveller Health Team is helping to address this.
- It is the responsibility of NHS England and PHE to provide communications materials for these programmes and these are usually provided in a number of languages. Also NHS Choices provides a great deal of information for the public about these services

## **4. SIGNIFICANT IMPLICATIONS**

### **4.1 Resource Implications**

There are no significant implications within this category. Screening and immunisation services are NHS funded and are commissioned by NHS England.

### **4.2 Statutory, Risk and Legal Implications**

There are no significant implications within this category

### **4.3 Equality and Diversity Implications**

The report above sets out details of significant implications in paragraph 3.3, supporting and protecting vulnerable people.

### **4.4 Engagement and Consultation Implications**

There are no significant implications within this category

### **4.5 Localism and Local Member Involvement**

There are no significant implications within this category

### **4.6 Public Health Implications**

The report sets out details of significant public health implications, throughout the report, which is focussed on the prevention of vaccine preventable and screening detected illnesses for the whole population of Cambridgeshire. Immunisation and Screening are core public health services.



Source Documents	Location
Annual Public Health Report 2013-14, Cambridgeshire County Council	<a href="http://www.cambridgeshire.gov.uk/downloads/file/2944/annual_public_health_report">http://www.cambridgeshire.gov.uk/downloads/file/2944/annual_public_health_report</a>
Public Health Outcomes Framework	<a href="https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency">https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency</a>
PHOF updates	<a href="http://www.phoutcomes.info/">http://www.phoutcomes.info/</a>
COVER (Cover of vaccination evaluated rapidly (COVER) programme 2014 to 2015: quarterly data)	<a href="https://www.gov.uk/government/collections/vaccine-uptake">https://www.gov.uk/government/collections/vaccine-uptake</a>
NHS Choices – Childhood Immunisation Schedule	<a href="http://www.nhs.uk/Conditions/vaccinations/Pages/childhood-vaccination-schedule.aspx">http://www.nhs.uk/Conditions/vaccinations/Pages/childhood-vaccination-schedule.aspx</a>
Protecting the health of the local population: the new health protection duty of local authorities under the Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch representatives) regulations 2013.	<a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/199773/Health_Protection_in_Local_Authorities_Final.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/199773/Health_Protection_in_Local_Authorities_Final.pdf</a>
UK National Screening Committee, UK Screening Portal	<a href="http://www.screening.nhs.uk/screening">http://www.screening.nhs.uk/screening</a>