

CHILDREN AND YOUNG PEOPLE OVERVIEW AND SCRUTINY COMMITTEE

5 OCTOBER 2017

CHILDHOOD IMMUNISATION SERVICE UPDATE

Report from: James Williams, Director of Public Health

Author: Dr John Rodriguez, Consultant in Public Health, Kent and Medway Screening and Immunisation Lead, Public Health England South East and NHS England South East; James Williams, Director of Public Health

Summary

The aim of this report is to provide the Overview and Scrutiny Committee with information on:

- The roles and responsibilities of partners around childhood immunisations;
- The local picture of childhood immunisations in Medway; and
- Current and future actions planned by NHS England to improve childhood immunisation rates.

The report is presented at Appendix 1.

1. Budget and Policy Framework

1.1 Achieving a good rate of childhood immunisations contributes to local priorities including:

- Medway Joint Health and Wellbeing Strategy priority: Giving every child a good start; and
- Medway Council plan priority: Supporting Medway's people to realise their potential, Healthy and active communities.

2. Background

2.1 On 1 August 2017 Children and Young People Overview and Scrutiny Committee agreed an update report to be brought to 5 October 2017 Committee.

- 2.2 NHS England are responsible for commissioning immunisation programmes, child health information systems, performance managing providers and working with partners to improve immunisation rates.
- 2.3 Medway Council (through Public Health) have a role to ensure there are effective systems and processes in place to protect the health of the population.
- 2.4 Increasing the uptake of immunisation in the population is essential to ensure 'herd immunity' from infectious disease. Herd immunity occurs when a large percentage of a population has become immune to an infection, thereby providing a measure of protection for individuals who are not able to be vaccinated. The Council provides scrutiny and challenge to those responsible for facilitating or commissioning immunisations services.
- 2.5 The update report is appended at Appendix 1.

3. Advice and analysis

- 3.1 Medway's child immunisation coverage is poor for some immunisations in comparison to England. Poor immunisation coverage is not solely an issue in Medway. There are a number of local authorities across the South East of England, with coverage well below the national required standard of 95%. One example is for children aged 5. Data suggests since 2013, there has been a downward trend in children being fully vaccinated against measles, mumps and rubella.
- 3.2 There is a further confounding factor (related to data quality) that impacts on the ability of the Council and its partners to support NHS England to improve the uptake of immunisation amongst children in Medway. Working with NHS England, The Medway Public Health team have identified discrepancy in the data being reported. This review suggests immunisation coverage in Medway is much higher than current published data and nearly in line with the 95% England standard. This finding means action needs to be taken to improve the information systems used to record and report on immunisation coverage in Medway. There is also a need to address the performance of vaccination providers who are not meeting required quality standards.
- 3.3 NHS England has put in a number of measures to improve data quality and immunisation uptake. These include:
 - Creation of a Medway Childhood Immunisations Plan. This plan focuses on: a) improving actual immunisation rates; and b) improving the accuracy of data on childhood immunisation;
 - Working with Medway Council's Public Health team to undertake more detailed analysis of immunisations data and coverage; and
 - Development of a Service Development Improvement Plan to improve the data collected by the child health information system and improve the service performance.

- 3.4 There have also been several targeted initiatives in Medway, for example:
- Sending information and reminders to practices and working with Medway Clinical Commissioning Group to highlight practices that have high numbers of unvaccinated children and taken action to address these issues; and
 - A local measles, mumps and rubella campaign that halved the numbers recorded as unimmunised and substantially reduced inequalities (i.e. practices with lower rates improved more).
- 3.5 There are plans to establish a Medway Immunisations Board to oversee and promote good practice.
- 3.6 NHS England South East is also currently re-procuring immunisation services for school age children which will include the provision of catch up sessions for pre-school children who have not attended general practice. This new service will be in place from September 2018.

4. Risk management

- 4.1 NHS England maintains risk registers relating to the commissioning of childhood immunisation programmes, further details may be found under roles and responsibilities at Appendix 1.

5. Implications for Looked After Children

- 5.1 All children, including looked after children are included in the routine childhood vaccination programme.

6. Financial implications

- 6.1 There are no financial implications arising directly from this report.

7. Legal implications

- 7.1 There are no legal implications arising directly from this report

8. Recommendations

- 8.1 It is recommended that the committee note the report at Appendix 1 from Dr John Rodriguez, Consultant in Public Health, Kent and Medway Screening and Immunisation Lead which provides an update on children's immunisations.

Lead officer contact

James Williams, Director of Public Health, james.williams@medway.gov.uk

Dr John Rodriguez, Consultant in Public Health, Kent and Medway Screening and Immunisation Lead, Public Health England South East and NHS England South East, john.rodriguez@nhs.net

Appendices

Appendix 1: Report for Medway Council Children's Overview and Scrutiny Committee on Childhood Immunisations from NHS England

Background papers

None

Appendix 1: Report for Medway Council Children's Overview and Scrutiny Committee on Childhood Immunisations.

October 2017

Dr John Rodriguez

Consultant in Public Health, Kent and Medway Screening and Immunisation Lead Public Health England South East and NHS England South East.

Purpose of the Report

The aim of this report is to provide the Overview and Scrutiny Committee with information on:

- Roles and responsibilities of partners around childhood immunisations;
- The local picture of childhood immunisations in Medway; and
- Current and future actions planned by NHS England to improve childhood immunisation rates.

Background: Childhood Immunisations and the UK Programme

Childhood immunisation is one of the greatest contributors to health and wellbeing that medical technology has produced. It has been so effective that epidemics and high childhood mortality are distant memories. However, should immunisation rates fall, these diseases can return e.g. the measles epidemics in South Wales.

The UK has, through the NHS, a National Childhood Immunisation Programme. Vaccines work because human immune systems have a memory system. Once primed by vaccination, the individual is far less likely to get the disease and so unlikely to pass it on to others. The aim is get enough people vaccinated so that the 'chain of transmission' is broken – so called "herd immunity". Our national target is to have 95% of children vaccinated. Childhood vaccination rates in the UK are very good – vaccination is not compulsory but parents are generally very keen to protect their children through vaccination.

The childhood vaccination programme has a schedule i.e. which vaccines should be given at what age (Appendix A). Vaccinations are given in general practice, usually by Practice Nurses. To support general practices and the system locally, within NHS England each area has a Screening and Immunisation Team (for Medway the team also covers Kent).

Roles and Responsibilities for Immunisation

Key responsibilities of partners include:

NHS England

- Commissioning of all immunisations programmes, child health information system and performance managing providers (under section 7A mandate).

- Working with partners to improve immunisation rates.

Medway Council (Public Health)

- Oversight of population health including assurance (independent challenge and scrutiny) of immunisations arrangements and supporting partnership working in this area.

Primary Care

- GPs are commissioned by NHS England to deliver the routine childhood vaccination programme (as part of nationally agreed contracts).

Medway Clinical Commissioning Group

- Role in quality improvement (including childhood immunisations delivered in GP practices).

Members of the local population

- Responsibilities for individuals and parents around taking up immunisation offer.

Childhood Immunisations in Medway: The Current Picture

The tables in Appendix B illustrate the latest reported situation for Medway. It includes other parts of South East England and also England as a whole for comparison. This report shows that standards are usually not being met and that Medway's rates are poor for some immunisations in comparison to England, though other South Eastern areas' rates also vary considerably. The national standard of 95% is usually not met, including for England.

Over the past year there are trends in both directions in Medway, depending on the immunisation and the age range. COVER statistics for Medway used to be good and have fallen over the past 5 years (Appendix C). The fall varies according to specific immunisation or age group. One example is for children aged 5, data suggests an approximate overall downwards trend for children fully vaccinated against measles, mumps and rubella since 2013, although this has fluctuated. Data collected from other sources suggests a discrepancy in the data about immunisation uptake (i.e. some data sets suggest that actual immunisation coverage in Medway is higher than other data sets suggest and that true immunisation rates may be about 1% higher than the England average. This could suggest that reporting through CHIS is a weak link for Medway. With the expertise of the Medway Council Public Health Department, further much more detailed analyses using this direct data from local general practice systems is underway. Further details about how immunisations statistics are calculated are included in Appendix D.

There have been no outbreaks of infection related to low immunisations rates in Medway.

Childhood Immunisation Improvement Plan

There is a South-East wide Childhood Immunisation Improvement Plan and a localised version for Medway.

This plan has two main themes which are interconnected as work in one area usually spills over into the other:

- Improving actual immunisation rates
- Improving the accuracy of data on childhood immunisation

To make plans work, there has been engagement of practices, CCGs and Local Authorities, making improvements to CHIS and close scrutiny of the opportunities to offer immunisation. The Screening and Immunisation Team is changing the way it is working - to help Medway Council, Medway CCG and primary care services in Medway. In particular, there will be a Medway Immunisation Board to oversee and promote good practice.

There have been several initiatives in Medway which have achieved the following:

- Consistently shown higher immunisation rates on general practice systems than on CHIS
- improved reporting to CHIS temporarily
- improved true childhood vaccination rates eg by sending information and reminders to practices and highlighting practices that have high numbers of unvaccinated children and which may need support to Medway CCG
- a local MMR campaign halved the numbers recorded as unimmunised and substantially reduced inequalities (i.e. practices with lower rates improved more)
- a more automated electronic data transfer to CHIS from general practice.

NHS England South East has agreed and resourced, from April 2017, a Service Development Improvement Plan with CHIS in recognition that this service needs to improve. It has also used contractual incentives to help prioritise points 2 and 3 below.

Sustainable initiatives to improve reporting to CHIS and to use CHIS data to improve immunisation rates:

	Comments
1. 2015 onwards replaced paper and email notifications from general practice to CHIS with an electronic system	This does not seem to be as slick and effective as hoped – alternative systems are being pursued
2. July 2016 onwards regular checks of CHIS data by general practice with feedback to CHIS.	Extremely effective but shows step 1 is not working well. Also prompts some practices to invite again for immunisation. A minority of practices do not respond and so some poor quality data is bringing down the average. Medway CCG has been asked to

	assist practices which are struggling to respond.
3. Writing directly to patients. Currently a pilot in Ashford and Canterbury – but at the time of writing this report we intend to include Medway around October 2017	Reports so far are that the system has been acceptable. Its effect is yet to be evaluated.

In addition to the initiatives described, the role of Health Visitor services in the immunisation system has already been outlined and is being explored with Medway Council as the commissioner of that service. For example, they might help allay concerns and facilitate children getting immunised by helping them to access general practice. The role of Health Visitors and School Nurses in promoting imms including actively asking about immunisation, has been emphasised in the new integrated Child Health Services tender (but does not cover formal delivery of immunisations). Meanwhile work is planned this year with Medway Children’s services to raise the profile and awareness on immunisation and to hold “Red Book” checking sessions.

NHS England South East is also currently re-procuring, from September 2018, immunisation services for school age children but also will for the first time include the provision of catch up sessions for pre-school children who, for whatever reasons, have not attended general practice. This will be a separate service from the Medway Integrated Child Health Service but will need to work closely with it.

Appendix A

National Childhood Immunisation Schedule, as from September 2017

8 weeks

6-in-1 vaccine, given as a single jab containing vaccines to protect against six separate diseases: diphtheria; tetanus; whooping cough (pertussis); polio; Haemophilus influenzae type b, known as Hib, a bacterial infection that can cause severe pneumonia or meningitis in young children; and hepatitis B

Pneumococcal (PCV) vaccine

Rotavirus vaccine

Men B vaccine

12 weeks

6-in-1 vaccine, second dose

Rotavirus vaccine, second dose

16 weeks

6-in-1 vaccine, third dose

Pneumococcal (PCV) vaccine, second dose

Men B vaccine second dose

One year

Hib/Men C vaccine, given as a single jab containing vaccines against meningitis C (first dose) and Hib (fourth dose)

Measles, mumps and rubella (MMR) vaccine, given as a single jab

Pneumococcal (PCV) vaccine, third dose

Men B vaccine, third dose

3 years and 4 months

Measles, mumps and rubella (MMR) vaccine, second dose

4-in-1 pre-school booster, given as a single jab containing vaccines against: diphtheria, tetanus, whooping cough (pertussis) and polio

Appendix B



Kent Surrey Sussex Childhood Immunisation for 12 month cohort

Coverage: 2016/17 Quarter 1 to 4: Quarterly uptake by stated vaccines for Kent Surrey Sussex LAs, NHS England South East and England

Received by 1st birthday																				
LA	DTaP/IPV/Hib				Men C				PCV Dose 2				Rotavirus				Men B			
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
KENT	86.7%	79.2%	92.8%	90.2%	92.2%	88.3%	82.8%	78.4%	87.5%	81.6%	92.6%	90.3%	83.8%	79.6%	86.6%	79.9%		76.7%	91.7%	88.9%
MEDWAY	88.0%	84.4%	86.6%	91.0%	92.5%	89.3%	86.5%	76.5%	87.9%	85.3%	86.6%	89.7%	81.3%	80.0%	83.9%	78.6%		80.7%	85.0%	88.2%
BRIGHTON & HOVE	89.2%	87.1%	89.7%	92.2%	92.7%	92.1%	91.4%	86.3%	89.1%	88.6%	90.3%	92.2%	85.3%	85.0%	88.2%	90.8%		87.7%	90.0%	91.6%
EAST SUSSEX	93.5%	93.8%	94.5%	93.3%	96.0%	95.5%	94.3%	83.2%	93.5%	93.9%	94.5%	93.0%	87.6%	88.3%	89.3%	90.3%		92.7%	93.8%	92.9%
SURREY	87.1%	88.1%	88.2%	88.2%	91.3%	92.4%	92.4%	88.5%	88.2%	89.1%	88.6%	89.1%	86.2%	86.7%	87.7%	87.1%		84.2%	87.3%	90.4%
WEST SUSSEX	93.0%	93.9%	93.2%	95.8%	96.5%	95.9%	95.2%	87.4%	93.7%	94.2%	93.4%	96.0%	90.3%	89.3%	91.0%	92.6%		93.0%	92.7%	95.1%
NH E SOUTH EAST	88.8%	86.3%	91.2%	91.1%	93.1%	91.7%	89.4%	83.4%	89.5%	87.6%	91.3%	91.3%	85.9%	84.3%	87.8%	85.5%		83.9%	90.3%	90.9%
ENGLAND	93.0%	92.9%	93.4%	93.0%	95.2%	94.7%	93.6%	84.7%	93.1%	93.1%	93.6%	93.3%	89.5%	89.3%	90.1%	90.1%		91.6%	92.2%	92.6%

Data Source: www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2016-to-2017-quarterly-data

No-data
less than 80
80 or more but less than 90
90 or more but less than 95
95 or more

Kent Surrey Sussex Childhood Immunisation for 24 month cohort

Coverage: 2016/17 Quarter 1 to 4: Quarterly uptake by stated vaccines for Kent Surrey Sussex LAs, NHS England South East and England

Received by 2nd birthday																
LA	DTaP/IPV/Hib				MMR Dose 1				Hib / Men C				PCV Booster			
	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17	Q1 2016/17	Q2 2016/17	Q3 2016/17	Q4 2016/17
KENT	92.0%	90.7%	95.6%	95.1%	87.2%	83.2%	90.0%	90.5%	88.0%	85.1%	90.1%	90.8%	88.6%	85.3%	90.5%	90.6%
MEDWAY	88.1%	88.6%	92.0%	92.2%	84.1%	82.1%	87.1%	86.4%	84.7%	85.5%	87.1%	85.8%	84.4%	85.4%	87.0%	86.1%
BRIGHTON & HOVE	90.3%	91.0%	89.4%	90.7%	87.7%	88.4%	88.1%	89.6%	87.8%	88.7%	89.0%	90.0%	87.7%	88.4%	88.2%	89.5%
EAST SUSSEX	95.6%	94.6%	96.1%	95.2%	93.7%	91.0%	92.4%	92.4%	93.9%	91.5%	93.0%	92.8%	94.0%	91.5%	93.2%	92.9%
SURREY	87.7%	87.6%	87.8%	91.1%	86.5%	85.9%	87.3%	88.6%	86.0%	85.2%	86.5%	88.2%	85.9%	85.8%	87.0%	88.6%
WEST SUSSEX	91.5%	90.2%	92.5%	94.3%	90.8%	91.4%	93.0%	93.4%	90.9%	91.9%	93.2%	93.9%	90.4%	91.4%	92.8%	93.3%
NHSE SOUTH EAST	90.7%	90.1%	92.4%	93.5%	88.0%	86.4%	89.7%	90.4%	88.3%	87.2%	89.7%	90.5%	88.3%	87.3%	89.8%	90.4%
ENGLAND	95.1%	94.9%	95.3%	95.1%	91.4%	91.2%	91.6%	91.2%	91.5%	91.2%	91.6%	91.3%	91.4%	91.4%	91.5%	91.3%

Data Source: www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2016-to-2017-quarterly-data

No-data
less than 80
80 or more but less than 90
90 or more but less than 95
95 or more

Kent Surrey Sussex Childhood Immunisation for 5 year cohort

Coverage: 2016/17 Quarter 1 to 4: Quarterly uptake by stated vaccines for Kent Surrey Sussex LAs, NHS England South East and England

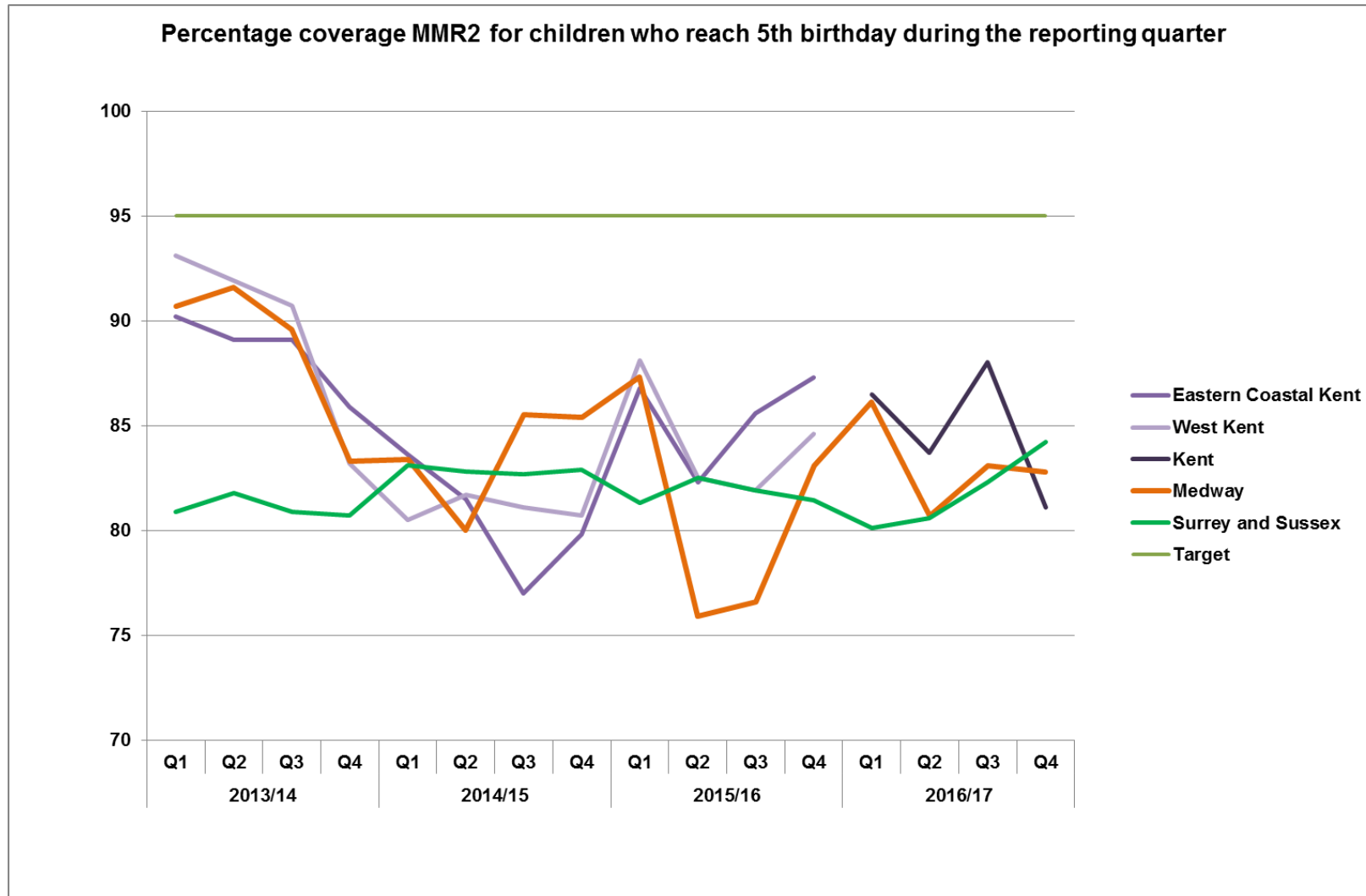
Received by 5th birthday	DTaP/IPV Booster				Hib / Men C				DTaP/IPV/Hib			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17
KENT	83.7%	81.8%	84.9%	79.7%	92.7%	91.7%	92.7%	92.6%	95.2%	95.1%	95.7%	95.4%
MEDWAY	79.9%	76.7%	77.8%	77.7%	92.4%	94.4%	90.1%	93.3%	95.3%	94.4%	94.5%	94.5%
BRIGHTON & HOVE	67.1%	73.0%	83.0%	81.4%	87.7%	85.8%	83.0%	89.0%	94.1%	93.1%	92.4%	93.1%
EAST SUSSEX	85.9%	87.6%	89.2%	91.0%	91.2%	90.2%	92.0%	93.5%	94.2%	94.1%	95.8%	96.1%
SURREY	72.8%	73.4%	75.8%	79.4%	82.9%	83.5%	82.6%	83.6%	94.4%	85.9%	87.1%	88.4%
WEST SUSSEX	80.7%	78.1%	86.4%	87.3%	90.9%	91.6%	92.5%	91.3%	96.3%	95.8%	96.4%	95.7%
NHSE SOUTH EAST	79.2%	78.6%	82.5%	81.9%	89.2%	89.1%	89.1%	89.9%	95.0%	92.3%	93.2%	93.4%
ENGLAND	85.9%	85.9%	86.5%	86.3%	92.6%	92.9%	92.7%	92.8%	96.0%	95.7%	95.8%	95.6%

	MMR Dose 1				MMR Dose 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17
KENT	95.2%	94.8%	96.3%	95.6%	86.5%	83.7%	88.0%	81.1%
MEDWAY	95.9%	95.3%	94.8%	95.2%	86.1%	80.7%	83.1%	82.8%
BRIGHTON & HOVE	92.9%	92.8%	92.8%	92.2%	81.7%	81.9%	83.6%	83.1%
EAST SUSSEX	93.0%	94.0%	94.4%	95.7%	87.1%	88.1%	88.5%	90.7%
SURREY	84.2%	84.5%	84.0%	85.1%	75.4%	76.2%	77.4%	80.5%
WEST SUSSEX	95.5%	95.8%	95.8%	95.4%	84.0%	83.4%	86.2%	86.9%
NHSE SOUTH EAST	91.8%	91.8%	92.3%	92.5%	82.7%	81.6%	84.2%	83.0%
ENGLAND	95.0%	95.0%	95.2%	95.1%	87.5%	87.3%	87.8%	87.4%

No data
less than 80
80 or more but less than 90
90 or more but less than 95
95 or more

Data Source: www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2016-to-2017-quarterly-data

Appendix C



Source: Public Health England COVER data: www.gov.uk

Appendix D: Immunisations Statistics

Immunisation Statistics

National statistics for childhood immunisation rates are called “COVER Statistics” (Cover of Vaccination Evaluated Rapidly) and have been produced for many years. Vaccination rates are reported for an area as a whole i.e. Medway Council, and before that for NHS administrative areas i.e. Medway CCG.

Data for COVER is produced from each area’s Child Health Information System (CHIS). The Medway area used to have its own but this merged to form one for Kent and Medway about 5 years ago. The CHIS holds a record for each child which includes immunisations given. To get details of immunisations, the CHIS relies on general practices informing them. The general practices have their own computerized immunisation records and are the “gold standard.”

COVER statistics are reported quarterly and are described as quarters of the financial year e.g. Q1 2015/16 as three sets referring to children’s immunisations who were born in that same quarter except born one, two or five years earlier. There are also annual figures published e.g. for 2015/16 for children born one (i.e. financial year 2014/15), two or five years earlier.

The table and charts in Appendices B and C include the latest published data i.e. Q4 2016/17. The next data, Q1 2017/18 will be published at the end of September 2017.

To generate COVER statistics, GP practices provide data about child vaccinations completed to the Child Health Information System (CHIS), who hold a record of each child and which vaccinations are complete. This data is then used to produce COVER statistics (Cover of Vaccination Evaluated Rapidly), such as those shown in Appendix B.

Some childhood immunisation statistics are also collected nationally directly from general practice computers by a different national system called ImmForm. ImmForm reports (which are not published) show Medway immunisation rates to be good and suggest true immunisation rates may be about 1% higher than the England average – which would be very good.