NHS England

Scrutiny Report on Childhood Immunisations in Merton

PURPOSE OF THE REPORT

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

- Roles and responsibilities of organisations in improving coverage of childhood immunisations across London since April 1st 2013
- The local picture of childhood immunisations in Sutton & Merton
- Vaccine Preventable Diseases in Merton
- NHS England's plans to improve reported rates of childhood immunisations across London
- NHS England's Action Plan for Sutton & Merton 2013/14

INTRODUCTION

- Since April 1st 2013, a number of public health functions are the responsibility of NHS England (NHSE) under Section 7a of the Health & Social Care Act 2012. These comprise of screening, immunisations, Health in the Justice System (i.e. prisons, Sexual Assault Centres, places of detention) and military health.

- In London, the NHS England (London) Public Health, Health in the Justice System and Military Health team is responsible for commissioning immunisation programmes. This team comprises of a central team who work closely with immunisation commissioners situated within the 3 patch teams: North East London, North West London and South London.

- The central team consists of the Head of Early Years, Immunisations & Military Health, Dr Kenny Gibson and he is supported by two Public Health England embedded staff – Dr Catherine Heffernan (Principal Advisor for Early Years Commissioning, Immunisation & Vaccinations) and Ms Thara Raj (Immunisation Manager for London). These personnel provide accountability and leadership for the commissioning of the programmes and system leadership. The team also have responsibility for the quality assurance of training of immunisers and oversight of serious incident and incident investigations involving vaccinations. The borough of Merton falls under South London patch area which is headed by Johan Van Wijgerden and his team of screening and immunisation commissioners.

- The new emphasis on commissioning immunisations and vaccinations provides new opportunities to improve uptake of immunisations which were not previously available in the old world of public health immunisation co-ordinators in Primary Care Trusts. NHSE plans to utilise these opportunities will be discussed below. The paper will also outline the roles and responsibilities of different organisations in improving uptake of immunisations. It can be seen that improving uptake incorporates partnership work across a number of different bodies.

- This report focuses on the immunisation uptake in 0-5s age group. Apart from the over 65s, this group are the most vulnerable to communicable diseases and the National Routine Childhood

Immunisation Schedule is timed to give the vaccinations at optimal times to protect them and to protect others by reducing the spread of communicable diseases within the wider population.

ROLES AND RESPONSIBILITIES OF ORGANISATIONS IN IMPROVING COVERAGE OF CHILDHOOD IMMUNISATIONS ACROSS LONDON SINCE APRIL 1ST 2013

NHS England (NHSE)

- Commissioning of all national immunisation and screening programmes described in Section 7A of the Mandate
- Commission immunisation and vaccination services from primary care, community providers (e.g. school nursing teams) and other providers which are specified to national standards
- Monitoring providers' performance and for supporting providers in delivering improvements in quality and changes in the programmes when required
- Accountable for ensuring those local providers of services will deliver against the national service specifications and meet agreed population uptake and coverage levels as specified in Public Health Outcome Indicators and KPIs
- Work with Department of Health and Public Health England in national planning and implementation of immunisation programmes and in quality assurance
- Emergency Planning Response and Resilience (EPRR) where this involves vaccine preventable diseases

Public Health England (PHE)

- Lead the response to outbreaks of vaccine preventable disease and provide expert advice to NHS England in cases of immunisation incidents. They will provide access to national expertise on vaccination and immunisation queries.
- Professional support to the PHE staff embedded in the NHSE Area Teams including access to continuing professional appraisal and revalidation system
- Provide information to support the monitoring of immunisation programmes
- Publishes Cohort of Vaccination Evaluated Rapidly (COVER) data

Clinical Commissioning Groups (CCGs)

- Have a duty of quality improvement (including immunisation services delivered in GP practices)
- Commission maternity services (which are providers of neonatal BCG and infant Hepatitis B)

Local Authorities

- Provide information and advice to relevant bodies within its areas to protect the population's health (whilst not explicitly stated in the regulations, this can reasonably be assumed to include immunisation)
- Provide local intelligence information on population health requirements e.g. JSNA
- Independent scrutiny and challenge of the arrangements of NHSE, PHE and providers.
- Local authorities will need to work closely with Area Teams including arrangements for the NHS response to the need for surge capacity in the cases of outbreaks.

Commissioning Support Units (CSUs)

- Although not statutory, CSUs have a role to play in supporting CCG member practices in enabling them to carry out their immunisation work, e.g. IT support to help with call/recall

General Practitioners (GPs)

- General practices are contracted by NHSE to delivery the Childhood Routine Immunisation Schedule to their registered child population. They are the main mode of delivery in England.

Community Services Providers

- Child Health Information System (CHIS) is housed within community service providers and incorporates the child health records department which holds clinical records on all children and young people. COVER data is submitted from CHIS to PHE.
- The community provider may have an immunisation team that provides outreach or 'catch-up' for childhood immunisations (e.g. for unregistered populations) and for BCG.
- Health visitors have a role to play in promoting the importance of vaccinations to parents.
- Many community services providers have immunisation clinical leads or co-ordinators who provide clinical advice and input into immunisation services locally.

THE LOCAL PICTURE OF CHILDHOOD IMMUNISATIONS IN SUTTON & MERTON

- Immunisation rates for children aged 0-5 years are reported by Primary Care Trust (PCT) areas. This means that for Merton, the immunisation rates are combined with Sutton. As of March 2014, no public announcement has been made on whether this will change in the near future.

- Figures 1-6 illustrate the uptake of vaccinations in 0-5 year olds as recorded by Cohort of Vaccination Evaluated Rapidly (COVER). The figures are grouped into the Age 1 primaries, Age 2 (boosters and first dose of MMR) and Age 5 vaccinations (2nd dose of MMR and the preschool booster).

- COVER monitors immunisation coverage data for children in UK who reach their first, second or fifth birthday during each evaluation quarter – e.g. 1st January 2012 to 31st March 2012, 1st April 2012 – 30th June 2012. Children having their first birthday in the quarter should have been vaccinated at 2, 3 and 4 months, those turning 2 should have been vaccinated at 12/13 months and those who are having their 5th birthday should have been vaccinated before 5 years, ideally 3 years 3 months to 4 years.

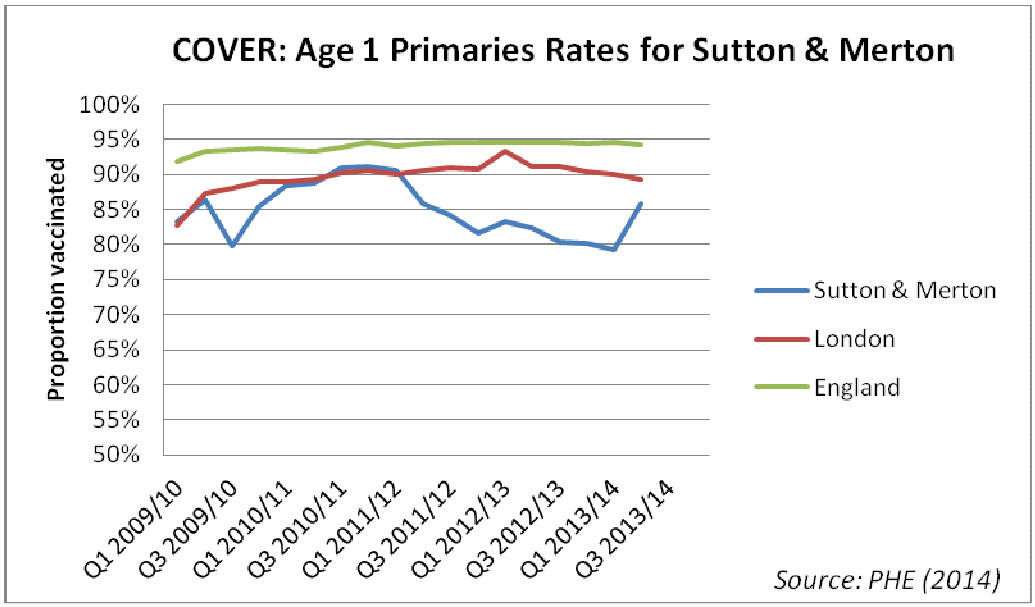
- London has in recent years delivered significantly poorer uptake than the remainder of the country. Reasons provided for the low coverage include the increasing birth rate in London which results in a growing 0-5 population and puts pressure on existing resources such as GP practices, London's high population mobility, difficulties in data collection particularly as there is no real incentive for GPs to submit data for COVER statistics and large numbers of deprived or vulnerable groups. In addition, there is a 20-40% annual turnover on GP patient lists which affects the accuracy of the denominator for COVER submissions, which in Sutton & Merton's case inflates the denominator (i.e. number of children requiring immunisation) resulting in a lower uptake percentage. Like many other London boroughs, Sutton & Merton has not achieved the required 95% herd immunity (i.e. the proportion of people that need to be vaccinated in order to stop a disease spreading in the population).

- Figure 1 illustrates the quarterly COVER statistics for the uptake of primaries for the age 1 cohort. Quarterly rates vary considerably more than annual rates but are used here so that Quarter 2 data from 2013/14 could be included.

- Similar to other London boroughs, Sutton & Merton has consistently been lower than England averages since April 2009. Looking at Figure 1, rates dipped between Q1 2011/12 and Q1 2012/13. Since then there has been one quarter of recovery. It is likely that the recovery is due to the implementation of the data extraction methodology and improvements in reporting mechanisms and so is a data quality issue rather than any real increase in uptake of vaccination

in the age 1 age-group. It is projected that Sutton & Merton will achieve the 95% level in the next 18 months.

Figure 1



- Figures 2 and 3 depict the COVER rates for the two boosters – PCV and Hib/MenC – for the age 2 cohorts. Again rates are lower in Sutton & Merton when compared to England averages but there appears to have been a recovery over the last six quarters and the rates are now similar though slightly lower compared to the overall London rates.

Figure 2

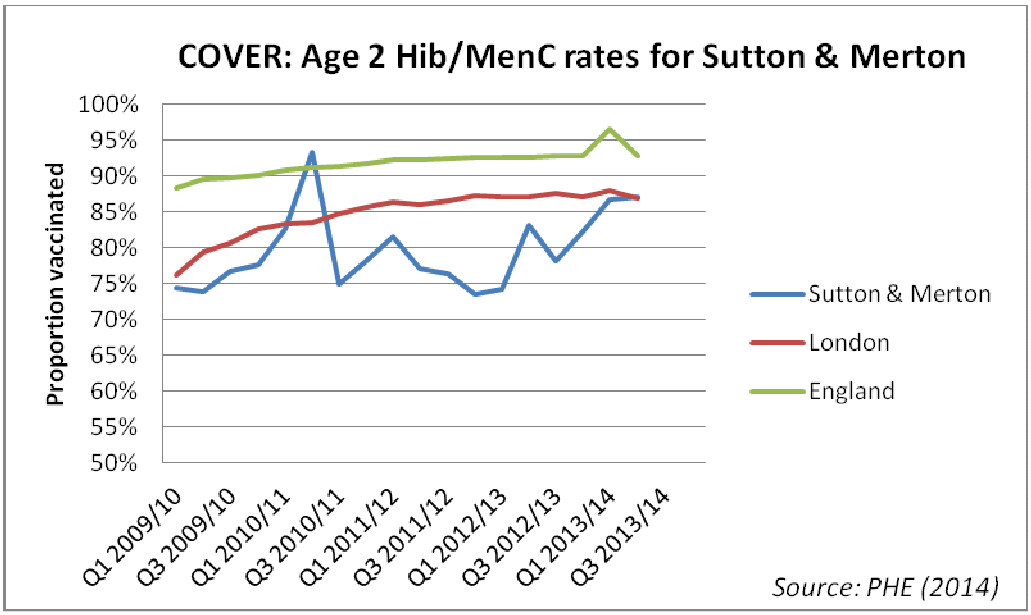
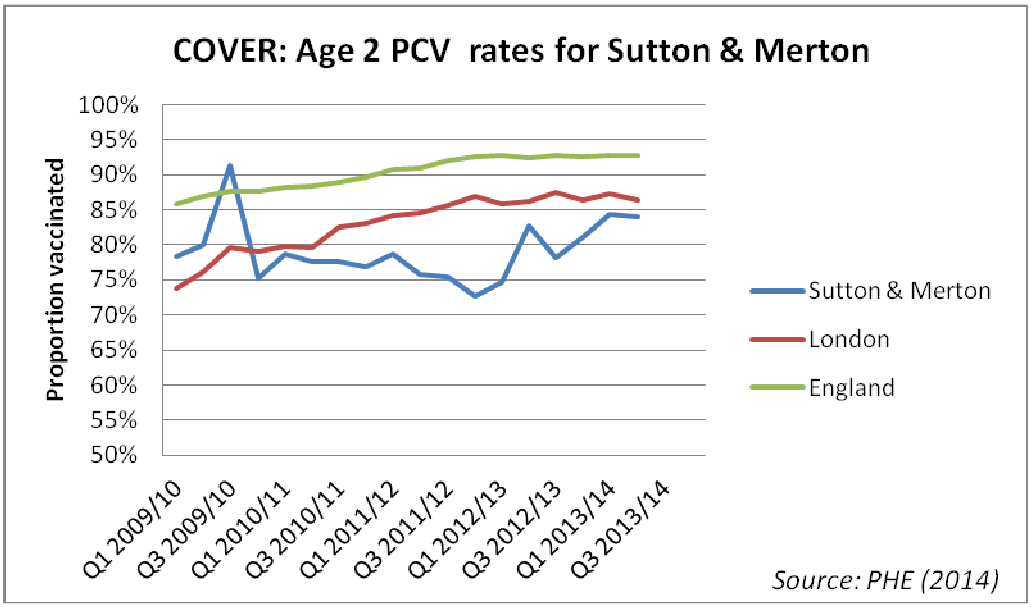


Figure 3



- Figures 4 and 5 demonstrate the uptake for 1st dose of MMR and 2nd dose of MMR for the age 2 and age 5 cohorts in Sutton & Merton. Proportion of children vaccinated with the first MMR is around 5% higher compared to similar to that of the 2nd MMR at age 5. Again there has been a marked improvement over the last six quarters. It should also be pointed out that if the true rate of uptake of MMR is as the figures suggest (e.g. 77.1% of age 5 children for 2nd dose in Quarter 2 2013/14), we would be seeing more measles, mumps and rubella cases than are actually seen for Sutton & Merton. This suggests coverage rates are affected more by data management issues than poor uptake of immunisations.

Figure 4

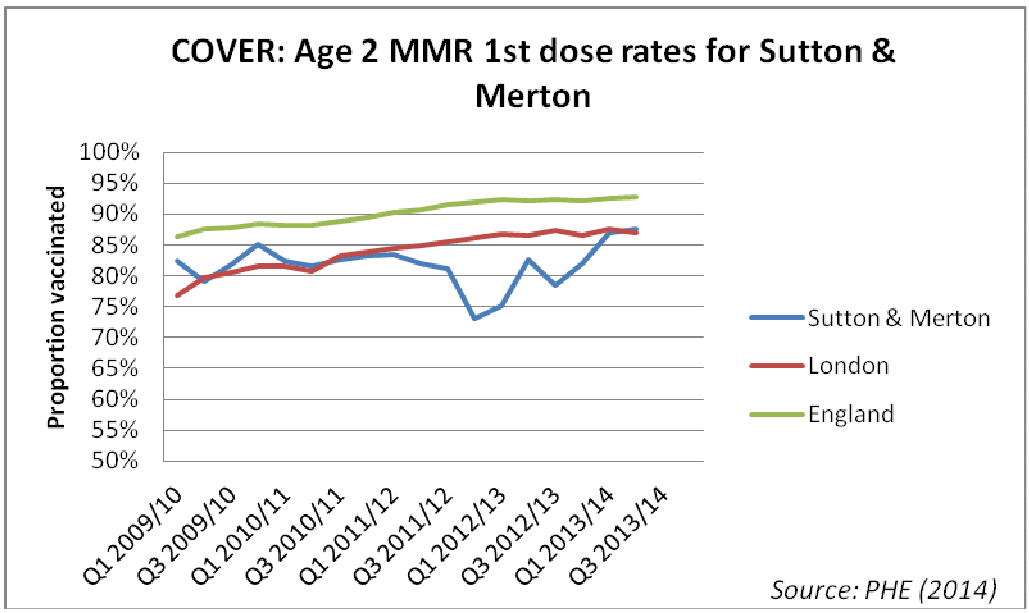
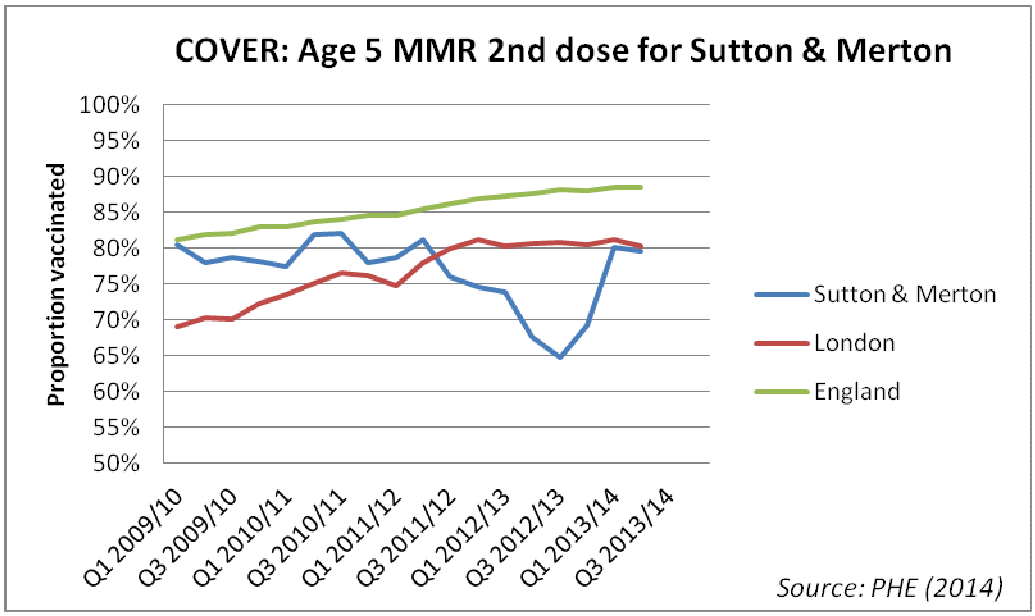
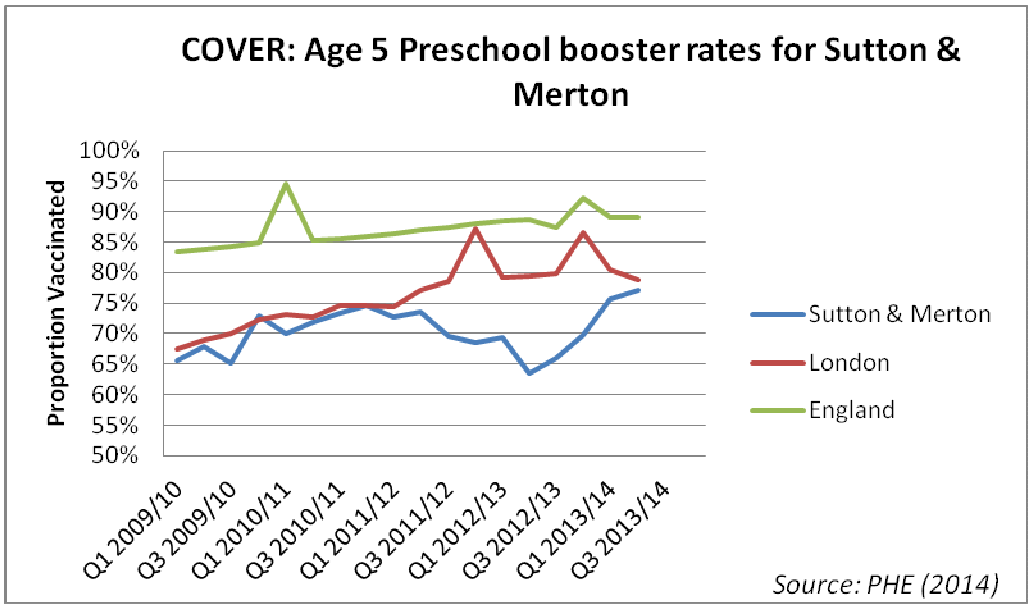


Figure 5



- Figure 6 depicts the preschool booster for age 5 – which can be used as an indicator of the number of children with completed immunisation schedules. Sutton & Merton is slightly lower than London average. As previously explained, reported rates of uptake drop as age group increases in London. Since Q1 2012/13, Sutton & Merton rates have improved to 79.5%. There are fluctuations between quarters which is indicative of data quality issues such as data flow between GP systems, population mobility and lack of adequate call-recall procedures.

Figure 6



- Overall, the current rates in Sutton & Merton are similar to its neighbouring South West London boroughs and similarly are affected by quality of data flows. Data flows and information management has the biggest impact upon COVER rate. Production of COVER rates are the

responsibility of the Child Health Information system (CHIS) provider and the rates reflect how good the information is on the CHIS. Accurate and complete data are dependent upon good flows of data between GP systems and CHIS and ensuring that CHIS is regularly updated with movers in and transfers out (i.e. population mobility). Immunisation statistics depend on accurate assessment of the numerator (children immunised) and denominator (population of children requiring immunisation). The CHIS in Sutton & Merton previously used Informatica to facilitate data extraction from GP systems but this has been replaced by the Practice Focus data extract tool, giving standardised extraction across London. Work is on-going to gain acceptance from all users involved.

- The drop between age 1 and age 2 cohorts and the age 5 cohort indicates a need for better call-recall systems (i.e. calling parents/guardians for appointments and chasing those who do not attend). This is not unique to Sutton & Merton and is common across London boroughs. There is also some anecdotal evidence from practice managers that it is difficult to get parents to return after 12 months as there has been a considerable gap since the last vaccination and many parents feel that these 'boosters' are not important.

VACCINE PREVENTABLE DISEASES IN MERTON

- There have not been any major outbreaks of vaccine preventable diseases in Merton between 2010 and 2012. Most of the infections have been single sporadic cases.

- There were 10 cases of confirmed measles in Merton between 2010 and 2012, ranking fifth of the six Local Authorities (LAs) in the South West London (SWL) sector[1]. The highest number of confirmed cases in this period was during 2010 when there were five[1]. The rate of confirmed measles per 100,000 population in 2012 was 1.0 (n=<5), ranking fourth of the six LAs in SWL[1]. Provisional data indicates that there were <5 cases of confirmed measles in Merton during 2013[1].

- South West London is not a measles 'hot-spot'. Over the past 10 years, Lambeth, Southwark & Lewisham, East London and City of London have consistently had clusters. These were contained outbreaks in their gypsy/traveller communities or in their Orthodox Jewish communities. In 2012, South London's rate was 0.91 per 100,000 person years, lower than North West London's 1.21 and North East London's 2.77.

- There were 28 cases of confirmed mumps in Merton between 2010 and 2012, ranking lowest of the six LAs in SWL[1]. The highest number of confirmed cases in this period was during 2010 when there were 14[1]. The rate of confirmed mumps per 100,000 population in 2012 was 3.5 (n=7), ranking second of the six LAs in SWL[1]. Provisional data indicates that there were eight cases of confirmed mumps in Merton during 2013[1]. The rise in mumps has been ongoing in England and Wales for five years relating to lack of immunity in the teenage/young adolescent population who were given measles and rubella (MR) vaccine in 1994 when there was a threatened measles outbreak.

- There were six cases of acute hepatitis B in Merton between 2010 and 2012, ranking fourth of the six LAs in SWL[1]. In 2012 there were 0.5 cases of acute hepatitis B per 100,000 population in Merton, (n=<5) ranking fifth of the six LAs in SWL[1]. Provisional data indicates that there were <5 cases of acute hepatitis B in Merton during 2013[1].

- There were six cases of hepatitis A in Merton from 2010 to 2012, ranking third of the six LAs in SWL[1]. In 2012 there were 0.1 cases of hepatitis A per 100,000 population in Merton (n=<5)

ranking fifth of the six LAs in SWL[1]. Provisional data indicates that there were <5 cases of hepatitis A in Merton during 2013[1]

- There were 17 cases of probable or confirmed meningococcal disease in Merton from 2010 to 2012, ranking second of the six LAs in SWL[1]. In 2012 there were seven cases, a rate of 3.5 cases per 100,000 population, ranking highest of the six LAs in SWL[3]. Provisional data indicates that there were <5 cases of probable or confirmed meningococcal disease in Merton during 2013[1]

- There were 50 cases of confirmed whooping cough in Merton between 2010 and 2012, ranking third of the six LAs in SWL[1]. In 2012 there were 22.3 cases of whooping cough per 100,000 population in Merton, (n=45) ranking third of the six LAs in SWL[1]. Provisional data indicates that there were 23 cases of confirmed whooping cough in Merton during 2013[1].

- The rankings are based on descending order, a ranking of first for rate or number of cases of disease indicates an undesirable higher burden of illness.

Data Source
[1]South West London Health Protection Team, Enhanced Surveillance (2014)

NHS ENGLAND'S IMMUNISATION PLAN FOR LONDON

- Across London there are 5 areas that need to be improved in order to achieve the World Health Organisation's recommended herd immunity level of 95%:
    - Active information management
    - Active performance management
    - Active patient management
    - Competency of staff in delivering vaccinations (training)
    - Public education and acceptability

  These issues are relevant to Sutton & Merton and resolving them will consist of regional and local efforts.

- For 2013/14, NHSE's central team are working to:
    - Introduce an immunisation strategy for London on attaining 95% herd immunity for routine childhood immunisations including trajectories and interventions to improve borough level outcomes
    - Develop and implement an immunisation action plan for London 2013 – 2015 – this focuses on improving data management, targeting specific communities (i.e. known groups of poor uptake) and widening access to immunisation services by commissioning a range of alternative providers to complement existing GP practice and community health service delivered immunisations
    - Produce and implement action plans for the new regimes e.g. rotavirus, child 'flu for 2-3 year olds and pilots of child flu programmes in primary schools
    - Develop a London-wide model for the delivery of school age immunisations for 2014 onwards
    - Develop London-wide models for BCG & Hepatitis B vaccination in infants and 'at risk' children for 2014 onwards

- Commission integrated health information strategy for Public Health (e.g. improving Child Health Information Systems across London, introduction of minimum child health dataset on 1st September 2013, data linkage systems between GP practices and CHIS)
- Develop more detailed immunisation reports that show variation in immunisation uptake by GP practice and illustrate geographical differences and other inequalities in uptake of immunisations. This collection commenced in September 2013 and it will be at least six months before the data will be meaningful to depict trends and patterns across practices.

- Improving uptake of childhood immunisations is driven through the following mechanisms:

<u>London Immunisation Programme Board</u>

- Responsible for the strategic direction for all immunisations in London including development of immunisation strategies
- The board is accountable to the Director of Operations and Delivery at NHS England (London) and to the National Public Health Oversight Group
- The board provides quarterly reports to the London's Health Board, directors of public health and Health and Well-Being Boards

<u>London Immunisation Business Meeting (Sub-group of the Immunisations Programme Board)</u>

- Consists of PHE and NHSE central and patch teams
- Leads the operational component of the Immunisation Programme Board - i.e. put strategies into action and work to improve coverage of immunisations across London

<u>Patch Quality and Performance Groups</u>

- Each patch (i.e. North West London, North East London and South London) will have a Quality and Performance Group
- Each group is responsible for quality assuring and monitoring of performance of immunisations in the respective patches
- Each group will derive and drive the patch's annual immunisation action plans from the London Immunisation Programme Board's strategies
- Membership consists of representatives from directors of public health and CCGs, patch commissioners and are chaired by NHS England's population health leads
- To date the North West London group is in operation and the other groups will be in place by end of March 2014

NHS ENGLAND'S ACTION PLAN FOR SUTTON & MERTON 2013/14

Outcome	Objective	Actions	Impact	Due Date	Risks to delivery	Mitigation
To stabilise immunisation reported rates in Sutton & Merton and increase reported rates through improvements in information management systems	To improve the recording of immunisation data in order to have as accurate a reflection as possible for COVER submissions	• Update and implement a standard data collection template in GP practices to reduce the risk of data entry errors.	More accurate data recording of vaccinations given in GP systems leading to increased vaccination rates	1st April 2014	Lack of GP engagement, poor implementation	Raise practice awareness of need for accurate data entry
		• Confirm Rio to Rio is switched on • Process map the flow of information for children who transfer in and out of the Borough in terms of keeping Rio records up to date • Process map data flow between practices, internal and external	Increased vaccination rates	1st April 2014 1st June 2014 1st June 2014	Poor practice understanding Capacity issues	NHSE CHIS events which offers CHIS to CHIS support and sharing of best practice
		• Develop clear actions to improve call-recall management in GP practices	Increased numbers of children vaccinated	1st May 2014	GP practices fail to commit to actions for improvement	Highlight the outcomes of engagement with improved recall process
		• Visit three high performing practices and three low performing practices to identify best practice and areas for improvement.	Improvements of call and recall in practices.	1st June 2014	Practices will not use the guidance.	NHS England to liaise with CCG and promote through CCG networks.

		• Disseminate learning to Sutton & Merton practices				
	Strengthening of governance arrangements between NHSE, providers and CCG	• Commencement of South London Quality and Performance Group	Higher quality and performance of the immunisation programme	1st April 2014	Refusal by providers and CCGs to attend	NHSE Immunisation Team communication and engagement with providers and CCGs

CONCLUSIONS

- Sutton & Merton's COVER rates have consistently been below the World Health Organisation (WHO) recommended herd immunity level of 95%.

- NHS England is responsible for the commissioning of all national immunisation programmes and has set about improving COVER rates in London through its governance framework of the London Immunisation Programme Board and patch level quality and performance groups. This includes partnership work with CCGs to improve quality of GP performance and local authorities to promote uptake in boroughs. Work by the groups will be guided by NHS England's 5 year strategy and 2 year action plan for immunisations and vaccinations in London.

- Given the low numbers of cases of communicable diseases amongst children in Sutton & Merton and the fluctuation of rates between quarters, Sutton & Merton's rates are affected by issues in information management such as data linkage between CHIS and GP systems. In addition, the drop between age 2 and age 5 rates illustrate that the rates are further affected by population mobility and lack of proactive reminding of parents/guardians to complete the immunisation schedule. These issues are not unique to Sutton & Merton and can be addressed through the new commissioning arrangements between NHS England and its providers – GPs and CHIS. This system of commissioning immunisations and vaccinations offers new opportunities to improve immunisation rates across London including the borough of Sutton & Merton.

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