

## Measles Mumps and Rubella Vaccination in Westminster

### 1.0 SUMMARY

This paper was requested by the health and wellbeing board to provide an update on the position of measles mumps and rubella vaccination (MMR) in Westminster. The paper provides a background to the childhood immunisations programmes, with a focus on MMR; outlines roles and responsibilities of organisations in relation to the section 7a immunisations programmes; provides the local context and data for Westminster; sets out NHS England's work streams and what partner organisations should be doing in order to support an improvement in uptake of immunisations programmes. Whilst this paper remains focussed on MMR it should be noted that the NHS England approach and commitment required from other organisations remains relevant to the wider childhood immunisations programmes.

#### Risks and mitigations to immunisations:

1. COMMISSIONING FOR WESTMINSTER POPULATION	
RISKS	MITIGATION
Lack of information flow across the newly formed organisations	<p>A variety of meetings (with robust governance structures) have been organised to ensure that the different sectors of the health economy are engaged in the immunisation programme.</p> <p>These meetings include the NWL Quality Board Immunisation meeting and the London Immunisation Improvement Board. At these meetings immunisation assurance is provided to Directors of Public Health.</p> <p>There is also the local Tri –borough ( Westminster and K&amp;C and H&amp;F) meeting which take place between NHS England, Tri-borough LA and the local CCGs.</p>
2. UPTAKE & COVERAGE	
RISKS	MITIGATION
Immunisation uptake rates remain static	<p><b>Trajectory setting:</b> NHS England, the Local Authority and local CCG are working together to ensure that reasoned and upward trajectories are set for the COVER indicators.</p>
Increasing unregistered cohort	<p>There has been a steady increase in the unregistered cohort (community data) which has negatively impacted on COVER uptake.</p> <p>NHS England &amp; the local CCG are working together to understand the root causes for this increase. An action plan</p>

	will be developed that will include what primary care and the provider need to undertake.
<b>3. DATA / DATA FLOWS</b>	
<b>RISKS</b>	<b>MITIGATION</b>
Community Provider Clinical System change	The community provider is changing from Rio to System One. Though this would ensure there is greater compatibility between the GP practices & the community provider- there is still potential for data error whilst the changeover is taking place.  Currently implementation of this is on hold until assurance has been provided to NHS England that information data flows will not be adversely affected.
COVER not submitted accurately as a new role for the CHIS.	NHS England has commissioned a Data Linkage project to ensure that data continues to flow from GP practices to the local CHIS. The CHIS will then send this data onto PHE for COVER submission.
Potential interrupted data flows due to Westminster GP Clinical system change	As practices in Westminster change to System One, work between NHS England, CCG and community provider is being undertaken to ensure that there is no impact of data quality.  For example this includes, developing and implementing a standard template that will limit data quality errors.

## 2.0 INTRODUCTION

**2.1** Immunisation is described by the [World Health Organisation](#) as one of the most effective things we can do to protect individuals and the community from serious diseases.

Immunisation against infectious disease (known as 'The Green Book'), a UK document, issued by Public Health England, provides guidance and the main evidence base for all immunisation programmes (link in appendix 1).

The aim of vaccination programmes is to provide immunity for individuals and the population from a disease, interrupt the spread of the diseases and reduce the associated morbidity and mortality.

As uptake of an immunisation increases there are fewer individuals left susceptible and once a critical proportion is reached the reduction in onward transmission is greatly reduced as is the potential for outbreaks. This is referred to as community resilience against vaccine preventable diseases. The proportion of the population to be immunised to reach community resilience varies by disease but in the childhood vaccinations schedule usually sits around 95%.

The aim of vaccination programmes in England is to achieve community resilience. The effectiveness of our national childhood routine immunisation programme is carefully monitored by the Department of Health (DH) through COVER (Cover of Vaccination Evaluated Rapidly) information e.g. the percentage of the population who has received vaccination by age 1, age 2 and age 5 within specific timeframes (i.e. quarter and annual). COVER also includes the proportion of 12-13 year old girls who receive the 3 doses of HPV by year.

## **2.2 MMR Vaccine**

Measles, mumps and rubella vaccine is a combined live attenuated vaccine that protects against measles, mumps and rubella, all highly infectious viral infections. MMR vaccine was introduced as a single dose schedule in 1988 and a two-dose schedule in 1996 with the aim of eliminating measles and rubella (and congenital rubella) from the UK population. Between 5 and 10% of children are not fully immune after the first dose. The second dose provides a further opportunity to protect children who did not respond to the first dose of MMR, with less than 1% of children remaining susceptible after receiving the two recommended dose. Further information about the diseases is provided in in Appendix 2.

## **3.0 ROLES AND RESPONSIBILITIES IN THE NEW SYSTEM**

Prior to transition and the new structure of the health system, immunisations were commissioned by Primary Care Trusts (PCTs) and delivered by local providers to local populations. PCTs often had a role in their structure known as an immunisation coordinator. This role usually had oversight of the locally commissioned vaccinations services. In addition, these post holders were often public health professionals whose skill set enabled them to understand the factors affecting uptake in the local population, and ensure service provision or projects were commissioned to improve uptake.

As of the 1<sup>st</sup> April 2013 and the introduction of the new health service landscape, roles and responsibilities related to immunisations programmes changed. This has not only changed the way services are commissioned and monitored but has also created various new opportunities. These opportunities will be discussed in further detail later in the report.

The service specification document “NHS public health functions agreement 2014-15: Public health functions to be exercised by NHS England” (see Appendix 3 for link) is the service specification for the public health programmes that forms part of the agreement made under the section 7a of the National Health Service Act 2008. It sets out requirements for evidence underpinning a service to be commissioned by NHS England. The document describes the shared vision between Department of Health (DH), NHS England and Public Health England (PHE) of working in partnership to achieve the benefits of this agreement for the people of England. In line with the Government’s strategies for the NHS and the public health system, the aim is to:

- improve public health outcomes and reduce health inequalities, and
- contribute to a more sustainable public health, health and care system

The roles and responsibilities of the different organisations associated with the section 7a immunisations programs are summarised in table 1 below.

**Table 1: Roles & Responsibilities of organisations in the New Health Economy**

Organisation	Responsibility in relation immunisations programmes
Department of Health (DH)	DH is responsible for national strategic oversight, policy and finance for the national screening and immunisation programmes which includes overall system stewardship, based in part on information provided by PHE, and for holding NHS England and PHE to account through their respective framework agreements, the Mandate and the Section 7A agreement.
Public Health England (PHE)	<p>An executive agency of the DH.</p> <p>PHE is responsible for supporting both DH and NHS England, with system leadership, national planning and implementation of immunisation programmes (including the procurement of vaccines and immunoglobulins) and specialist advice and information to ensure consistency in efficacy and safety across the country. PHE undertakes the purchase, storage and distribution of vaccines at a national level. It holds the coverage and surveillance data and has the public health expertise for analysing the coverage of, and other aspects of, immunisation services. PHE will also support the Directors of Public Health in local authorities in their role as leaders of health locally provides clinical advice and works with NHS England at national and regional levels in outbreak management.</p>
NHS England (London region)	NHS England is responsible for commissioning the local provision of immunisation services and the implementation of new programmes through general practice and all other providers. It is accountable to the Secretary of State for Health for delivery of those services. Other bodies in the new comprehensive health system also have key roles to play and are vital to ensuring strong working relationships.
Directors of Public Health (DsPH) - Local Authority	<p>Local government has responsibility for taking steps to improve the public's health, supported by the independent expertise of PHE.</p> <p>DsPH based in local authorities play a key role in providing independent scrutiny and challenge and will publish reports on the health of the population in their areas, which could include information on local immunisation services and views on how immunisation services might be improved.</p> <p>In addition, provide local leadership and liaise with local councillors and children &amp; young people's services to ensure</p>

	support to improve uptake. DsPH and their local authorities will support community and schools engagement with the programme, providing advice to the CCGs and encouraging primary care participation.
Clinical commissioning groups (CCGs)	Clinical Commissioning Groups are groups of General Practices that work together to plan and design local health services in England. Clinical Commissioning Groups work with patients and health and social care partners (e.g. local hospitals, local authorities, local community groups etc.) to commission services that meet local needs. CCGs have a duty to put and keep in place arrangements for the purpose of monitoring and improving the quality of health care provided by and for that body.
Commissioning Support Units (CSUs)	CSUs provide a variety of support functions to CCGs. NWL CSU provide a range of high quality IT services to general practice that cost effectively address their core needs for clinical and management IT systems.

Within NHS England, the commissioning of immunisations programmes sits in the Public Health, Health in the Justice System and Military Health team. The structure of the team incorporates roles that have a pan London remit and those located within patch teams that have a locally facing remit. Within the patch teams there are commissioning managers who are aligned to specific boroughs.

## 4.0 THE LOCAL PICTURE IN WESTMINSTER

### 4.1 Local population profile

Children and young people under the age of 20 years make up 19.2% of the population of Westminster. Of great significance is the population churn, that is the number of people moving in and out of the borough each year: whilst it is some 10% in London overall, it is as high as 30% in Westminster. And whilst all London boroughs have a mixture of people living in deprived areas and others in affluent areas (which influences attitudes to childhood immunisation), Westminster, has some of the most affluent areas in the country. A further influence on attitudes to immunisation is ethnicity and thus culture, values and beliefs. Again, Westminster is different, with about half of the population being born abroad, with between a quarter and a third of the population not having English as a first language; this also influences the impact of promotion of, and information about, immunisation.

### 4.2 Uptake rates in Westminster

In Westminster uptake of childhood vaccinations is lower than the London average. Rates are roughly comparable with other inner north west London boroughs, but, do not reach levels required for community resilience. The picture has remained relatively static during the transition from PCTs to the new commissioning arrangements. Details of immunisations programmes service provision can be found in Appendix 4.

Table 2 below provides a breakdown of uptake rates of MMR in Westminster by quarter during 2013/14, with a comparison to 2012/13 annual data. Data is provided for the same period for the other routine childhood vaccinations in Appendix 5.

**Table 2.** Westminster MMR1 & MMR2 Uptake – 2013/14

Indicator	Quarter 1 2013/14*	Quarter 2 2013/14	Quarter 3 2013/14	Quarter 4 2013/14	Annual 2013/14	Annual 2012/13
2 yr – 1 <sup>st</sup> dose MMR	-	76.7%	77.4%	78.3%	<i>Available end September 2014</i>	75.1%
5 yr- 2 <sup>nd</sup> dose MMR	-	59.3%	58.2%	61.9%		75.4%

\* Quarter 1 data not published due to data quality issues

#### 4.3 Data trends- MMR 1 (dose 1, age 12-13months)

Quarter 1 data for 2013/14 was not published due to data quality issues. Quarter 2, Quarter 3 & Quarter 4 figures show similar uptake and are slightly higher than the previous annual uptake of 2012/13.

#### 4.4 Data trends- MM2 (dose 2, age 3 years four months or soon after)

Quarter 1 data for 2013/14 was not published due to data quality issues. Quarter 2 and Quarter 3 figures (2013/14) show similar uptake as quarter on quarter trend.

#### 4.5 Population characteristics that impact on immunisation uptake

The following factors contribute to the apparent gap between reported uptake and that required to reach community resilience in the MMR programme (95% uptake).

Certain populations' characteristics are known to be associated with variation in uptake of vaccinations. The following factors are known to impact on the level of uptake of vaccinations in the borough of Westminster:

- International and local migration - there are high levels of families moving in and out of the borough from international countries (see table 3 below). These issues make it more challenging to keep an accurate record of the true eligible population (denominator), and to hold correct contact information to able successful invitation and therefore immunisation of these children.

**Table 3.** Internal and international migration comparison in North West London

Migration Indicator	Rate per 1,000	
	INWL (Hammersmith & Fulham, Kensington & Chelsea, Westminster)	Outer NWL (Ealing, Hillingdon, Hounslow)
Internal Migration - In	82	65
Internal Migration - Out	86	69
International Migration - In	38	24
International Migration - Out	38	14

- European schedule – children who spend a proportion of the year in another country or families that have strong links with their country of origin may follow the immunisation schedule of that country. Schedules (timings of immunisations) often differ from country to country, thus creating challenges for providers to monitor vaccination status or timeliness of vaccinations to provide community resilience.
- Private vaccinations – a proportion of parents in this borough opt to vaccinate their children privately. This information is not always shared with the GP to enable accurate measurement of the vaccinated population (coverage).
- Data quality – ensuring vaccination histories are accurate and consistency of reporting and recording by providers has been challenging in Westminster. Clinical system change in Westminster GP practices has also had an impact on how data has been reported to COVER.
- Local population variations – as referred to above in the population profile, particular populations characteristics are associated with variation in uptake of vaccinations. In addition, media coverage has impacted the MMR uptake in the Wakefield cohort (MMR catch up campaign described in further detail below).
- Unregistered Cohort- the unregistered cohort in Westminster that is reported to COVER data has been steadily increasing. This has an impact on uptake rates.
- Child Health Information Systems (CHIS) – as of 1<sup>st</sup> April 2013, CHIS's gained a statutory responsibility to submit COVER data to PHE. This is a new role for many of the London CHIS's including the CHIS covering Westminster. Though this has required changes to the way the CHIS team has worked NHS England is reassured that that this responsibility is being enacted.

## **5.0 WHAT IS CURRENTLY BEING DONE TO ADDRESS ISSUES IN MMR UPTAKE IN WESTMINSTER?**

As mentioned above, the new configuration of the health system has created various opportunities to improve the quality of commissioning, service provision and the uptake of vaccination programmes. Opportunities fall into two broad categories:

- Systems & levers
- interventions & projects

### **5.1 Systems & levers**

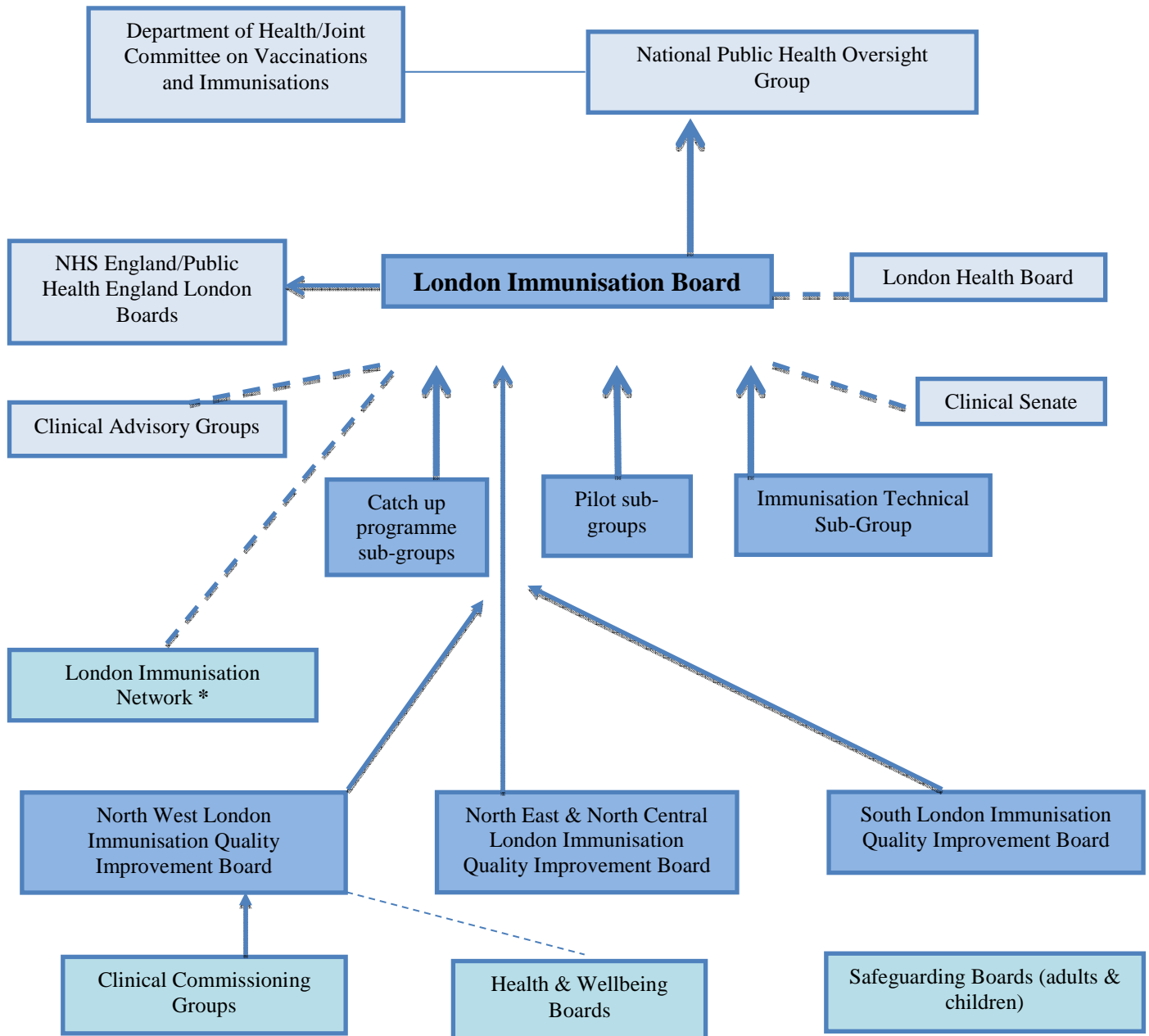
In London, NHS England has a single commissioning team for immunisations. This has enabled the development of robust processes for contracting, commissioning and monitoring providers of immunisations. This in turn supports a consistent approach to driving up the quality of immunisation provision and improve uptake. By utilising a consistent approach to contracting it allows NHS England to identify and hold providers to account where the performance and quality is sub-optimal. Contract levers can then be utilised to support improvement in performance and quality and ultimately increase uptake.

In addition to robust contracting, NHS England has developed strong governance arrangements that have clear lines of accountability through to the national oversight group (see diagram 1).



**Diagram 1: Local & National Immunisation Governance Structure.**

The boxes in dark blue represent NHS England groups, the remaining boxes represent external groups or boards. Some have direct reporting mechanisms for accountability, depicted by arrows. Dotted lines indicate information exchange/stakeholder input.



\*Professional networks are an important mechanism for disease management through sharing of good practice and links between existing networks and proposed governance structures have been included.

The London Immunisation Board is the key mechanism by which NHS England (London region) will provide assurance on delivery of the immunisation programmes in the section 7a mandate.

The table in Appendix 6 describes the various NHS England boards/groups and their functions.

Through strong governance structures and consistent application of the NHS standard contract with all providers the system in London is set up to have robust oversight and management of the services provided across London. It enables timely identification of issues/concerns/outliers. It supports a consistent contract management approach to address underperformance and utilises an evidence based approach to identifying and commissioning interventions.

NHS England's vision for immunisations programmes is illustrated using a single slide (Appendix 7). This incorporates both the system mechanisms and provides an indication of some of the work streams that will be taken forward.

## **5.2 Interventions & projects**

NHS England has a number of projects/actions in place across London that contributes to realising the vision. These are and will have an impact within Westminster:

- Primary care – Project to map & review all GMS / PMS and APMS contracts including the key performance indicators (KPI's) across London identifying problems with consistency / accuracy and the impact of new immunisation programmes.
- CHIS –
  - Data linkage between GPs and CHIS. This project aims to improve the data flows between primary care and the CHIS to ensure high quality data reporting for the COVER reports. Progress is reported to the NWL Immunisations Quality Improvement Board.
  - A protocol has been put into place across London for earlier scrutiny of immunisation rates prior to submission to COVER by the patch and central immunisation commissioning teams in NHSE. This is helped by the new minimum child health dataset (implemented 1<sup>st</sup> September 2013) which enables monthly reports on immunisations to the NHSE immunisation teams.
  - Regular meetings with CHIS providers to address data quality issues.
  - NHS England CHIS community of practice created to drive service development and ensure services are fit for purpose, now and in the future.
- System wide –
  - Ambition plans are being developed by NHS England via the technical subgroup. These plans will provide indicative trajectories that will be influenced by interventions. Once signed off, these will be monitored via the NWL Quality Improvement Board.
  - An incident protocol is currently being developed and tested before formal roll out. Once embedded this will assist in ensuring stakeholders understand their roles and responsibilities in relation to immunisations incidents. This will enable good oversight and sharing of learning from incidents therefore reducing the likelihood of repetition.

The work programmes/projects etc. listed above have a specific impact on MMR vaccination uptake. It should be noted that there are other work programmes/projects

not listed that impact on the other immunisations programmes. Information on these is available on request.

It is also important to recognise that since the establishment of NHS England on 1st April 2013, there is evidence of various success stories:

- Successful response to the national outbreak of MMR
  - Based on evidence gathered by auditing 10 years' worth of child records. Partner organisations including NHS England, PHE, CCGs and LA's worked together to provide a response to a national outbreak. The response enabled assurance to be provided that the onward spread and continued outbreak was brought under control.
- Successful introduction of rotavirus vaccination
  - NHS England commissioned a new national programme in its first year, which has already brought about a measurable reduction in A&E admissions in infants across London.

### **5.3 What this means for Westminster**

NHS England has a solid work programme aimed at commissioning high quality immunisation services. Where these services are of sub-optimal quality and/performance, mechanisms are being put in place to address these issues.

The programmes/projects and structures described above describe how NHS England is working to drive up performance and quality of immunisations services in Westminster.

However, it is widely acknowledged that partnership working across multiple agencies is the only way in which sustainable improvements can be achieved.

## **6.0 HOW DO PARTNER AGENCIES WORK TOGETHER TO MAKE SUSTAINABLE IMPROVEMENTS IN UPTAKE RATES?**

There are various opportunities for NHS England, CCGs and Local Authority Public Health (plus other departments) to collaborate to ensure sustainable improvements in uptake rates.

Below is a description of what NHS England will be doing, followed by a description of what CCGs and Public health in the Local Authority are doing and suggestions of further opportunities to work together.

### **6.1 NHS England**

- Use appropriate commissioning arrangements to ensure immunisation services that are accessible and of high quality
- Recognise the potential impact of interventions including system interventions e.g. data linkage from primary care to CHIS via the technical subgroup of the London immunisations board
- Where possible co-commission or use other appropriate mechanisms to introduce evidence based interventions – such as data linkage project,
- contract manage providers and hold them to account where sub optimal performance/variation is evidenced

## 6.2 Central London CCG

As part of the section 7a agreement CCGs are required to drive up quality of primary care. This should be done by using best practice evidence to change behaviour.

Partnership working between NHS England and Central London CCG should be based on best practice evidence ([NICE 2009](#)). Roles that the CCG should enact fall under the following themes:

- IT - Endorsing systems and robust data flows such as the data linkage from primary care to CHIS, and systematic coding
- CPD - Advocating commitment to CPD within primary care
- Communication - Facilitate communication between NHS England and general practice particularly around profiling policy and schedule amendments
- Addressing local issues - Collaborate with NHS England to understand/address specific issues with practice delivery of immunisations

Good relationships have been developed between NHS England and Central London CCG. Listed below are various projects underway as part of a partnership between NHS England and Central London CCG during 2013/14 and 2014/15.

- Central London CCG meet regularly with their CHIS provider
- Central London CCG has a commitment to CPD – via Health Education England & Nursing Forums
- A ‘Good practice guidance’ on immunisations was developed and sent out to Member practices last year
- Regular vaccine updates and newsletters are circulated to practices via GP Bulletins and updated on the CCG extranet
- Central London CCG provides representation at NWL Immunisation Quality Board meetings.
- As well as attending the technical sub-group to set up immunisation
- Improvement ambition plans and trajectories for the next 5 years and at performance boards.
- The CCG has been part of ‘Celebrate and Protect’ immunisations birthday cards initiative for the last 2 years and continue to use this initiative (CCG funded from April 2014 for 12 months).

NHS England is also working with the CCG and CHIS provider to seek assurance on development of robust data flows for immunisation programmes.

### **6.3 Local Authority Public Health Team**

The DPH has a local health system leadership role. In relation to immunisations this can be enacted by:

- Facilitating development of relationships between commissioners of NHS and local authority services e.g. children's services to support engagement of underserved population cohorts
- Supporting information sharing about immunisations through other local authority commissioned services. One example may be leaflets in libraries or housing offices.
- Sharing public health intelligence with NHS England and CCGs to understand how to reach underserved population cohorts.
- Signpost/raise awareness using PHE national immunisations resources

NHS England has developed good relationships with the local authority public health team. This has resulted in partnership working in the following areas:

- DPH (or deputy) attendance at NWL Immunisations Quality Improvement Board – for assurance of immunisations programmes
- Triborough CCGs public health steering group – operational group to facilitate delivery of local actions from NWL quality improvement board

## **7.0 CONCLUSION**

On 1<sup>st</sup> April 2013 roles and responsibilities for commissioning and oversight of immunisations programmes changed considerably. Various organisations are required to work in partnership to ensure sustainable improvements in the quality and performance of immunisations programmes.

In the lead up to and post transition, the position in Westminster has remained relatively static. Uptake for MMR remains lower than the London and national average. However structures, processes have been developed to enable partners to work together. Noting the population's characteristics that provide challenges to the achievement of community resilience in Westminster, NHS England would like to assure the board that plans are in place and being enacted that will see a measurable improvement in the position for Westminster.

The board is asked to note the partnership working between the three organisations to date. In addition, the board is asked to support the continuation of an evidenced based approach to joint working in the future to ensure sustainable improvements in MMR (and the remaining childhood vaccinations) uptake can be realised for Westminster.

# Appendices

## APPENDIX 1 – The green book

The green book - <https://www.gov.uk/government/organisations/public-health-england/series/immunisation-against-infectious-disease-the-green-book>

## APPENDIX 2 – Information about measles, mumps and rubella

**Measles** - A highly infectious viral illness that is characterised by coryza, cough, conjunctivitis and fever. Koplik spots (small bluish white spots on the buccal mucosa) are present about one to three days before the onset of the rash and although characteristic of measles are not found in all cases. After a few days a maculo-papular (red-brown spotty) rash will appear. Measles can be extremely unpleasant and can lead to complications such as meningitis and pneumonia, in rare cases people can die from measles. Statutory reporting of measles began in England and Wales in 1940. Before the introduction of a measles vaccine in 1968, annual notifications varied between 160,000 and 800,000, with peaks every two years, and around 100 deaths from acute measles occurred each year.

**Mumps** - Mumps is a viral infection that causes an acute illness with swelling of the parotid glands. Mumps is spread in the same way as colds and flu, by infected drops of saliva that can be inhaled or picked up from surfaces and passed into the mouth or nose. Serious complications are rare but it can lead to viral meningitis, orchitis and pancreatitis.

**Rubella** - Rubella (also known as German measles) is a viral infection that was a common childhood infection prior to the introduction of routine immunisation. Rubella is generally a mild infection in children characterised by a maculo-papular rash and lymphadenopathy. Complications can occur and these include thrombocytopenia and rarely, post infectious encephalitis. In adults, rubella infection can (rarely) result in arthralgia.

**APPENDIX 3** – Link to document “NHS public health functions agreement 2014-15: Public health functions to be exercised by NHS England”

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/256502/nhs\\_public\\_health\\_functions\\_agreement\\_2014-15.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256502/nhs_public_health_functions_agreement_2014-15.pdf)

**APPENDIX 4** – The table below shows the complete routine immunisation schedule for England from the summer of 2014:



**The complete routine immunisation schedule from summer 2014**

When to immunise	Diseases protected against	Vaccine given	Immunisation site <sup>1</sup>
Two months old	Diphtheria, tetanus, pertussis (whooping cough), polio and <i>Haemophilus influenzae</i> type b (Hib)	DTaP/IPV/Hib (Pediactel or Infanrix IPV Hib) <sup>2</sup>	Thigh
	Pneumococcal disease	PCV (Prevenar 13)	Thigh
	Rotavirus	Rotavirus (Rotarix)	By mouth
Three months old	Diphtheria, tetanus, pertussis, polio and Hib	DTaP/IPV/Hib (Pediactel or Infanrix IPV Hib)	Thigh
	Meningococcal group C disease (MenC)	Men C (NeisVac-C or Menjugate) <sup>3</sup>	Thigh
	Rotavirus	Rotavirus (Rotarix)	By mouth
Four months old	Diphtheria, tetanus, pertussis, polio and Hib	DTaP/IPV/Hib (Pediactel or Infanrix IPV Hib)	Thigh
	Pneumococcal disease	PCV (Prevenar 13)	Thigh
Between 12 and 13 months old – within a month of the first birthday	Hib/MenC	Hib/MenC (Menitorix)	Upper arm/thigh
	Pneumococcal disease	PCV (Prevenar 13)	Upper arm/thigh
	Measles, mumps and rubella (German measles)	MMR (Priorix or MMR VaxPRO) <sup>2</sup>	Upper arm/thigh
Two, three and four years old <sup>4</sup>	Influenza <sup>4</sup> (from September)	Flu nasal spray (Fluenz Tetra) (annual) (if Fluenz unsuitable, use inactivated flu vaccine)	Nostrils Upper arm
Three years four months old or soon after	Diphtheria, tetanus, pertussis and polio	DTaP/IPV (Infanrix IPV or Repevax) <sup>2</sup>	Upper arm
	Measles, mumps and rubella	MMR (Priorix or MMR VaxPRO) (check first dose has been given) <sup>2</sup>	Upper arm
Girls aged 12 to 13 years old	Cervical cancer caused by human papillomavirus types 16 and 18 (and genital warts caused by types 6 and 11)	HPV (Gardasil)	Upper arm
Around 14 years old	Tetanus, diphtheria and polio	Td/IPV (Revaxis), and check MMR status	Upper arm
	MenC <sup>5</sup>	MenC (Meningitec, Menjugate or NeisVac-C) <sup>5</sup>	Upper arm
65 years old	Pneumococcal disease	PPV Pneumococcal polysaccharide vaccine (Pneumovax II)	Upper arm
65 years of age and older	Influenza <sup>4</sup>	Flu injection (annual)	Upper arm
70 years old	Shingles (from September)	Shingles (Zostavax)	Upper arm (subcutaneous)

**Immunisations for those at risk<sup>6</sup>**

At birth, 1 month old, 2 months old and 12 months old	Hepatitis B	Hep B	Thigh
At birth	Tuberculosis	BCG	Upper arm (intradermal)
Six months up to two years	Influenza <sup>4</sup>	Inactivated flu vaccine (annual)	Upper arm/thigh
Two years up to under 65 years	Pneumococcal disease	PPV Pneumococcal polysaccharide vaccine (Pneumovax II)	Upper arm
Over two up to less than 18 years	Influenza <sup>4</sup> (from September)	Flu nasal spray (Fluenz Tetra) (annual) (if Fluenz unsuitable, use inactivated flu vaccine)	Nostrils Upper arm
18 up to under 65 years	Influenza <sup>4</sup>	Inactivated flu vaccine (annual)	Upper arm
From 28 weeks of pregnancy <sup>7</sup>	Pertussis	dTaMPV (Boostrix-IPV) <sup>8</sup>	Upper arm

<sup>1</sup> Where two or more injections are required at once, these should ideally be given in different limbs. Where this is not possible, injections in the same limb should be given 2.5cm apart. For more details see Chapters 4 and 11 in the Green Book. All vaccines are given intramuscularly unless stated otherwise.

<sup>2</sup> Where two or more products to protect against the same disease are available, it may, on occasion be necessary to substitute an alternative brand.

<sup>3</sup> This is defined as children aged two, three or four year (but not five years) on 1 September 2014.

<sup>4</sup> The vaccine is given prior to the flu season – usually in September and October.

<sup>5</sup> Meningitec and Menjugate are currently not available to order through ImmForm – only NeisVac-C is available at the moment.

<sup>6</sup> See individual chapters of the Green Book for clinical risk groups.

<sup>7</sup> See CMO letter of October 2012.

<sup>8</sup> Repevax should continue to be used until 1 July 2014.

**APPENDIX 5 – Westminster COVER Uptake by Quarter (2013/14):**

<b>Indicator</b>	<b>Quarter 1 2013/14*</b>	<b>Quarter 2 2013/14</b>	<b>Quarter 3 2013/14</b>	<b>Quarter 4 2013/14</b>	<b>Annual 2013/14</b>	<b>Annual 2012/13</b>
	(01 Apr '13- 30 Jun '13)	(01 Jul '13- 30 Sep '13)	(01 Oct '13- 31 Dec '13)	(01 Jan- 31 Mar '14)		
<b>1 yr – 3 doses DTAP/IPV/HIB</b>	-	77.6%	79.8%	78.1%	<b>Available end September 2014</b>	79.0%
<b>2 yr – PCV Booster</b>	-	76.2%	76.0%	75.7%		75.1%
<b>2 yr – HiB/MenC Booster</b>	-	76.7%	75.8%	76.8%		77.0%
<b>2 yr – 1<sup>st</sup> dose MMR</b>	-	76.7%	77.4%	78.3%		77.4%
<b>5 yr – DTAP/IPV Booster</b>	-	61.2%	59.6%	63.5%		70.0%
<b>5 yr- 2<sup>nd</sup> dose MMR</b>	-	79.3%	58.2%	61.9%		75.4%

\* Quarter 1 data not published due to data quality issues.



## APPENDIX 6 - Local Immunisation Groups & their Functions

Meeting/group	Function	What this means for Westminster	Decision making/ advisory/ operational
London Immunisation Board	Sets the strategic direction for immunisations commissioning in London. maintains oversight for quality and performance of immunisations provision	Reviews performance, noting, underperformance and seeking assurance those robust plans are in place to address issues, seeks support from partners.	Decision making
Technical subgroup of the London Immunisation Board	establish and quality check a technical methodology that supports the development of uptake improvement plans, assesses the robustness of plans and evaluates the outcome of those plans	Supports the development of robust plans to improve uptake in Westminster, using evidence based methodology, and assists in evaluation of plans.	advisory
NWL Quality and Performance Group	Deliver measurable improvements in quality and performance for NHS commissioned immunisation	<ul style="list-style-type: none"> <li>• Strengthens relationships between stakeholders and commissioning partners to understand population need</li> <li>• Local intelligence is shared to inform decision making relating to providers and/or programmes</li> <li>• Reviews local data quality and data reporting systems and makes recommendations on how these can be enhanced</li> <li>• Benchmark quality and performance of services in Westminster</li> <li>• Provides operational</li> </ul>	• Decision making

		assurance to commissioning partners such as CCGs and Local authorities	
INWL CCG/LA (Public health) & NHS England Group	<p>This meeting looks at a range of Public Health issues affecting INWL of which immunisation is an aspect of it.</p> <p>Issues requiring an operational stance are discussed here.</p>	The group takes oversight of implementation of local operational issues that come out of the NWL Immunisations Quality Board meeting or local action plans	Operational
CHIS contract monitoring meetings	To hold providers to account for performance against their contract	<p>NHS standard contract has been used with all CHIS providers.</p> <p>Providers are performance monitored against a national service specification within the contract. In addition there are London requirements that contracted such as the minimum data set that provides borough level surveillance.</p>	Decision making

# NHS England Immunisation Plan on a page

## Vision

*Empowering Londoners to eliminate vaccine-preventable diseases from London*

### Objective One

To improve uptake and coverage

#### Improving the information systems

- Data cleansing
- Data linkage

#### Improving coverage through provider recovery plans

- People registered with GP
- People who struggle to access mainstream

### Objective Two

To reduce inequalities

#### Contributing to the management of vaccine-preventable outbreaks

#### Targeting specific communities

#### Introducing new immunisation programmes with new technologies

- Roll out children's flu programme

### Objective Three

To improve patient choice and access

#### Improving patient choice and widening access Embedding immunisations in the maternity and neonatal care pathway

#### Overseen through the following governance arrangements

- Overseen by the London Immunisation Board
- National Public Health Senior Oversight Group
- Three patch Immunisation Quality Improvement Boards
- Ongoing engagement with Health and Wellbeing Boards

#### Measured using the following success criteria

- Nationally published vaccine uptake data
- Increased range of access points
- Reduced outbreaks and incidents
- Clinical audit of pathways

#### High level risks to be mitigated

- Information governance and systems
- Stakeholder and user engagement
- Inadequately trained immunisation workforce
- Vaccine supply