Report to Brent Health and Wellbeing Board on Section 7A

Child Immunisation Programmes in Brent 2018-2022

Report on Section 7A Immunisation Programmes in the London Borough of Brent

Prepared by: NHSE (London) Immunisation Commissioning Team

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Contents

1. Aim

- The purpose of this paper is to provide an overview of section 7A, childhood and school age immunisation programmes in the London Borough of Brent for 2022. The paper covers the vaccine coverage and uptake for each programme along with an account of what NHS England and Improvement (NHSE&I) London Region are doing to improve uptake and coverage.

- Section 7A immunisation programmes are immunisation programmes provided by the NHS that cover the life-course and for the purposes of this report include:

  Routine Childhood Immunisation Programme for 0-5 years
  The routine childhood immunisation programme protects against:
    - Diphtheria, Tetanus, Pertussis (whooping cough), Polio, Haemophilus influenza type b (given as the '6 in 1' DTaP/IPV/Hib/HepB vaccine)
    - Pneumococcal disease, (PCV)
    - Meningococcal group C disease (Men C)
    - Meningococcal group B disease
    - Measles, mumps and rubella (MMR)

  School age Vaccinations
    - HPV vaccine for 12–13-year-olds– (since September 2019 boys receive the vaccine as well as girls).
    - Tetanus, diphtheria, polio booster (teenage booster) age 14/15
    - Meningitis ACWY at age 14/15.

- Members of the Brent Health and Wellbeing Board are also asked to note and support the work that system partners across London, including NHSE (London) the local authority and the ICB are doing to increase vaccination coverage and immunisation uptake in Brent.

2. Roles and Responsibilities

- *The Immunisation & Screening National Delivery Framework & Local Operating Model* (2013) sets out the roles and responsibilities of different partners and organisations in the delivery of immunisations.

- Under this guidance, NHS England through its 7A Regional Team is responsible for the routine commissioning of all National Immunisation Programmes under the terms of the section 7A agreement. In this capacity, NHS England is accountable for ensuring that local providers of services deliver against the national service specifications and meet agreed population uptake & coverage levels. NHS England is also responsible for monitoring providers' performance and for supporting providers in delivering improvements in quality and changes in the programmes when required.

- The UK Health Security Agency (UKHSA) Health Protection Teams lead the response to outbreaks of vaccine preventable disease and provide expert advice to NHSE screening and immunisation teams in cases of immunisation incidents. They also provide access to national expertise on vaccination and immunisation queries. In Brent this function is provided by the UKHSA North West London Health Protection Team.

- Integrated Care Boards (ICBs) have a duty of quality improvement, and this extends to primary medical care services delivered by GP practices, including delivery of childhood immunisation services. ICBs provide opportunities for improved partnership working across NHSE (London), local authorities, voluntary and community sector partners to improve immunisation uptake and reach underserved areas and populations. NHSE (London), alongside ICBs, local authorities and others, will work to progress delegated commissioning for vaccination and screening. The national aim would be for the first wave of delegation of the commissioning of immunisation services to happen in Spring 2024.

- Across the UK, the main providers of adult and childhood immunisation are GP practices. In Brent, all general practices are contracted to deliver childhood immunisations for children aged 0-5 through their primary care contract.

- Central North West London NHS Foundation Trust (CNWL) are contracted by NHSE (London) to provide the school age immunisations and neonatal BCG in Brent.

- Immunisation data is captured on Child Health Information System (CHIS) for Brent as part of the NWL CHIS Hub (provided by InHealth Intelligence). Data is uploaded into CHIS from GP practice records via a data linkage system

provided by In-Health Intelligence. The CHIS provides quarterly and annual submissions to UKHSA for their publication of statistics on 0-5s childhood immunisation programmes. This is known as Cohort of Vaccination Evaluated Rapidly (COVER) and these are the official statistics.

- Local Authority Public Health Teams (LAs) are responsible for providing independent scrutiny and challenge of the arrangements of NHS England and Improvement, UKHSA and providers.

- Directors of Public Health across London also receive quarterly reports from the Association of Directors of Public Health (ADPHs)

3. What is COVER and how is it produced?

- 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 2020 to 31st March 2021, 1st April 2020 – 30th June 2021. 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. It is an important point to note COVER data are published 6-18 months later and short-term planning is used to address the improvement of uptake, utilising local data sources and IT systems.

- There are known complexities in collecting data on childhood immunisations. Indeed, since 2013, London's COVER data is usually published with caveats and drops in reported rates are always due to data collection or collation issues for that quarter. Production of COVER statistics in London involves a range of individuals and organisations with different roles and responsibilities.

3.1 Role of Child Health Information Service (CHIS)

- London has three CHIS Providers covering 5 ICB's – North East London ICB and North Central London ICB (provider is North East London Foundation Trust, NELFT), South East London ICB and North West London ICB (provider is In-Health Intelligence), South West London ICB (provider is Your Healthcare CIC). The CHIS are commissioned by NHSE to produce and report London's quarterly and annual childhood vaccination submissions to UKHSA for COVER.

- A 'script' or algorithm is utilized to electronically extract anonymous data from the relevant data fields to compile the reports for COVER within the caveats specified.

- CHIS Hubs are commissioned to check and refresh the COVER reports before final submission to UKHSA.

- CHIS Hubs are also commissioned to ensure the denominator is as up to date as possible, with the children currently resident in London by routinely undertaking 'movers in and movers out' reports and other activities. The data set also includes children who are not registered with a GP but are resident in London.

3.2 Role of Data Linkage Systems

- Immunisation data is extracted from London's general practices' IT systems and uploaded onto the CHIS systems. This is currently undertaken by data linkage systems interfacing between GP IT systems and CHIS systems.

- Since the primary purpose of CHIS is to hold health information on individual children, the immunisation data extracted from general practices is patient identifiable data (PID). As a result, data sharing agreements are in place between each general practice and CHIS.

- NHSE (London) Immunisation Commissioning Team supports both GP practices and CHIS hubs in the submission of the most accurate data possible for the purposes of COVER data and GP payments.

3.3 Role of General Practice

- GPs are responsible for immunising patients, maintaining patient records and providing call and recall for patients. Vaccines remain an "evergreen" offer that is always available to eligible people.

- While data linkage systems provide an automated solution to manual contact between CHIS and general practices, data linkage does not extract raw data. General practices are responsible for preparing the data for extraction every month.

4. Headlines for London

- Historically and currently, London performs lower than national (England) averages across all the immunisation programmes.

- The COVID-19 pandemic in 2020 onwards impacted upon the delivery of section 7A immunisation programmes, pausing some programmes and reducing delivery on others due to non-pharmaceutical interventions, re-deployment of workforce onto COVID-19 pandemic and the introduction of the COVID-19 vaccination programmes.

- Recent changes to health service policy have resulted in the formation of ICBs. Governance processes are still evolving, and system partnerships working across ICBs is key moving forward. NHSE will work closely with local authority and ICB partners to support the new delegated commissioning process for immunisations which is likely to take effect from April 2024.

- The London Immunisation Board paused in 2020 but has recently re-launched. In 2023, the governance arrangements and terms of reference for the Board will be updated to reflect the new structures and partnerships across health and immunisation.

- London faces challenges in attaining high uptake and coverage of vaccinations due to high population mobility, increasing population, increasing fiscal pressures and demands on health services and a decreasing vaccinating workforce.

- From 1 April 2021, the GP contract agreement has been updated to include new standards for vaccination and immunisation services.

- The provision of vaccination and immunisation services has become an essential service for all routine NHS-funded vaccinations with two exceptions: childhood & adult seasonal influenza and COVID-19 vaccination

- Five core GP contractual standards have been introduced to underpin the delivery of immunisation services. These are:

    - A named lead for vaccination service.
    - Provision of sufficient convenient appointments.
    - Standards for call/recall programmes and opportunistic vaccination offers
    - Participation in national agreed catch-up campaigns.
    - Standards for record keeping and reporting.

- A single item of service fee has been fully implemented for all doses delivered in vaccination programmes funded through the GMS contract

- The Childhood Immunisation Target DES was retired on 31 March 2021 and a new vaccination and immunisation domain in the Quality and Outcomes Framework (QOF) introduced for 2021/22. The objective of the Quality and Outcomes Framework (QOF) is to improve the quality-of-care patients are given by rewarding practices for the quality of care they provide to their patients, based on several indicators across a range of key areas of clinical care and public health. QOF indicators are currently in place for primary childhood immunisations, for MMR and for the pre-school booster.

5. Routine Childhood Immunisation Programme (0-5 years)

- The routine childhood immunisation programme protects against:
    - Diphtheria, Tetanus, Pertussis (whooping cough), Polio, Haemophilus influenza type b (given as the '6 in 1' DTaP/IPV/Hib/HepB vaccine)
    - Pneumococcal disease, (PCV)
    - Meningococcal group C disease (Men C)
    - Meningococcal group B disease
    - Measles, mumps and rubella (MMR)

- Children aged 1 year should have received 3 doses of 6 in 1 (called the primaries) and 2 doses of Men B. If eligible, they may also be offered the targeted BCG and Hep B.

- At 12 months, they are offered first dose of MMR and the boosters of PCV, Hib/Men C and Men B.

- At 2 years and again at 3 years, children are offered annual child influenza vaccine.

- From 3 years 4 months to 5 years, children are offered 2nd dose of MMR and preschool booster (which is the fourth dose of the diphtheria/tetanus/pertussis/polio course).

6. Brent and the challenges

- Brent is affected by the same challenges that face the London region. London has in recent years delivered significantly poorer uptake than the remainder of the country. Reasons for the low coverage include:
    - Complexities in data collection for COVER statistics.
    - London's high population mobility which affects data collection and accuracy.
    - Coding errors in general practice (including missing data for patients vaccinated abroad or elsewhere).
    - Inconsistent patient invite/reminder (call-recall) systems across London.
    - Declining vaccinating workforce.
    - Decreasing and ageing GP workforce dealing with increasing work priorities and patient lists, resulting in shortages of vaccinators and appointments.
    - Difficulties accessing appointments.
    - Large numbers of underserved populations who are associated with lower uptake of vaccinations than the wider population (i.e. delayed vaccinations).
    - Growing vaccine hesitancy and apathy (i.e. confidence in vaccine, lack of convenience, complacency and saturation of vaccine offer post the COVID-19 pandemic and vaccination programme).

- London's high population turnover is a big factor. There is a 20-40% annual turnover on GP patient lists which affects the accuracy of the denominator for COVER submissions, which in Westminster's case inflates the denominator (i.e. number of children requiring immunisation) resulting in a lower uptake percentage. A 2017 audit by London's CHIS providers showed that by the age of 12 months, 33% of infants moved address at least once.

- Using annual rates for London – which are less prone to natural fluctuations than the quarterly rates - there are small decreases in annual MMR1 rates from 82.4% in 2020/21 to 79.9% in 2021/22 and 75.1% to 74.2% for MMR2. In comparison, England averages were over 89% for MMR1 and 85% for MMR2 (91.7% and 85% in 2021/22). London is the lowest of all the regions –The North East had the highest coverage (94.5%). No region met the National target of 95%.

- As discussed in Section 3, there are several challenges with COVER data capture, accuracy and timeliness. COVER data is dependent on having an accurate estimate for the eligible population (denominator). It should be triangulated with other data sources and community-based qualitative information for a more holistic population-based picture of immunisation coverage in Brent.

6.1 Brent's uptake and coverage rates

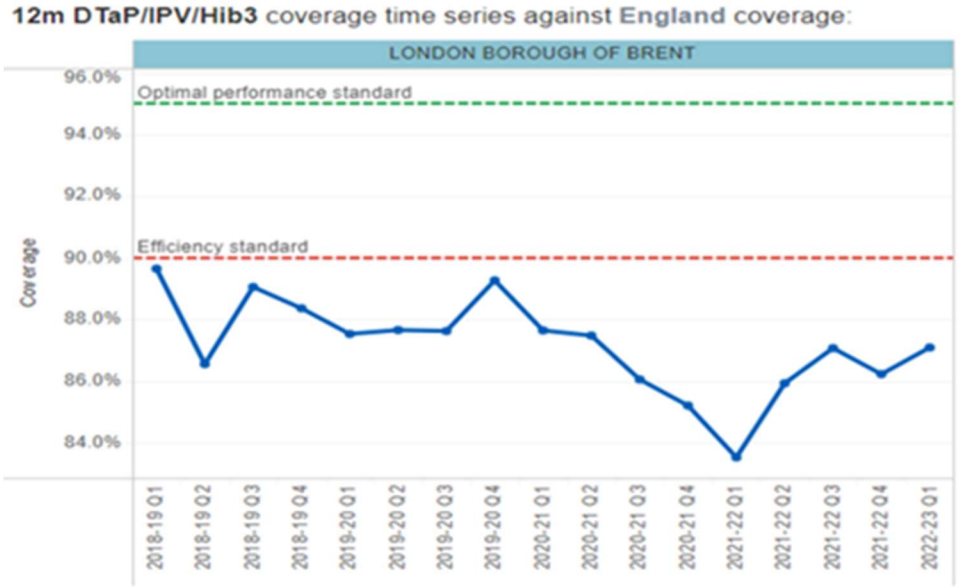
- Like many other London boroughs, Brent has not achieved the World Health Organisation recommended 95% coverage for the primaries and MMR to provide herd immunity (i.e., the proportion of people that need to be vaccinated to stop a disease spreading in the population).

- Figures 1-5 illustrate the Trend Data from the period 2018 - 2022 using quarterly COVER statistics for the uptake of the six main COVER indicators for uptake. These are:
    - The primaries (i.e. completed three doses of DTaP/IPV/Hib/HepB) used to indicate completion of age one immunisations.
    - PCV and Hib/MenC boosters and first dose of MMR for immunisations by age 2.
    - Preschool booster and second dose of MMR for age 5.

- The full childhood immunisation schedule can be found in the Green Book and any relevant changes to that schedule are reviewed and recommendations made at the UK Joint Committee on Vaccination and Immunisation (JCVI).

- Quarterly rates vary considerably more than annual rates but are used here so that Quarter 1 data from 2022/23 (the latest available data) could be included.

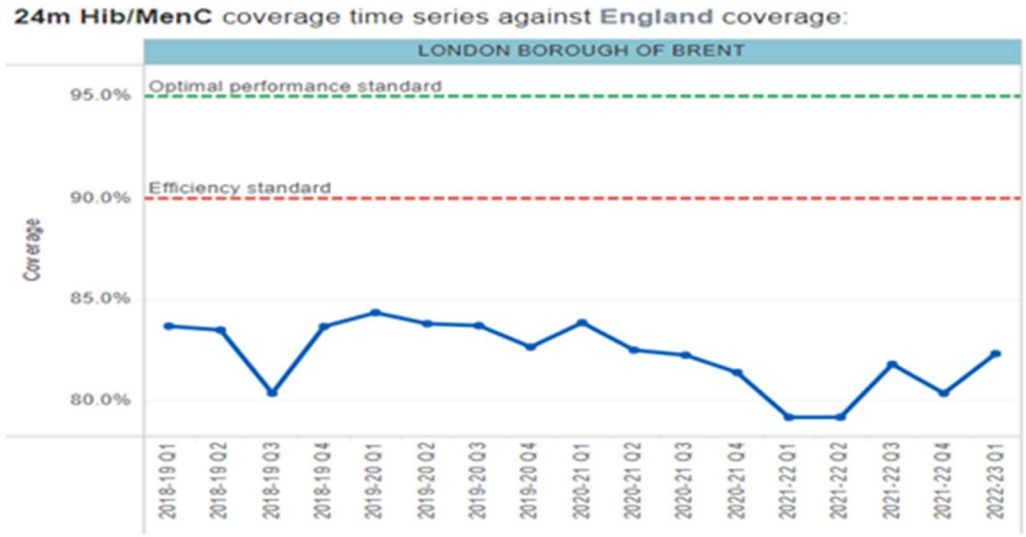
Figure 1: Brent – 12 Month Primary Course (12m DTaP/IPV/Hib3), 2018-2022



Source: UKHSA (2022)

Alongside other London Boroughs, Brent falls below the 90% coverage target. Time trend data shows a further percentage decline in coverage during the Covid pandemic with a sharper increase in Q2 2022 approaching 2018 levels.

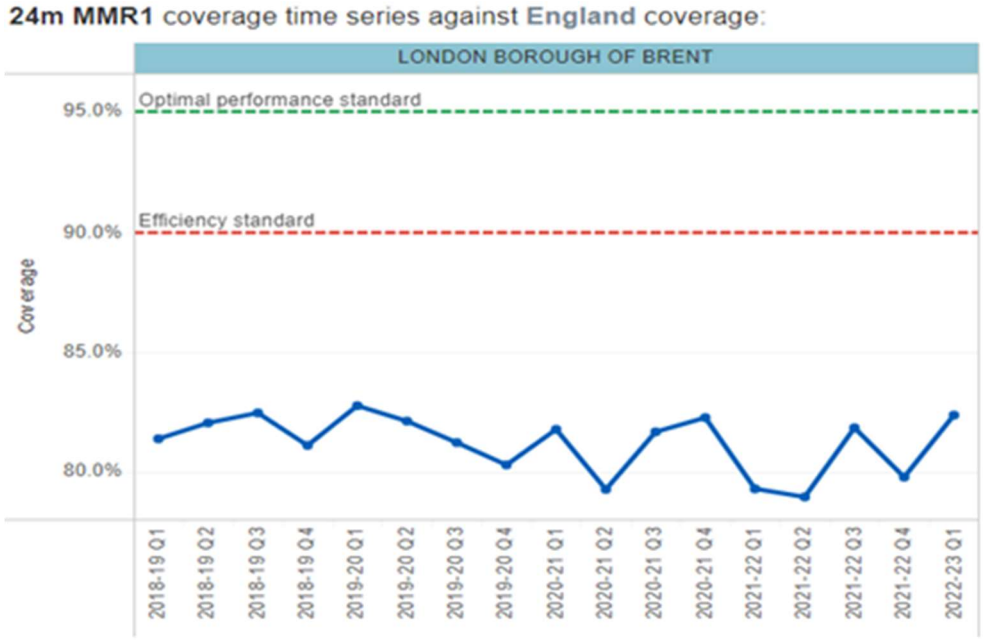
Figure 2: Brent – 24 month Hib/Men C, 2018-2022



Source: UKHSA (2022)

Hib/MenC coverage has remained between 80-85%. After an initial decline in 2020 and a drop below 80% during the Covid 19 pandemic period of Q1 and Q2, rates are showing signs of recovery in the 2022.

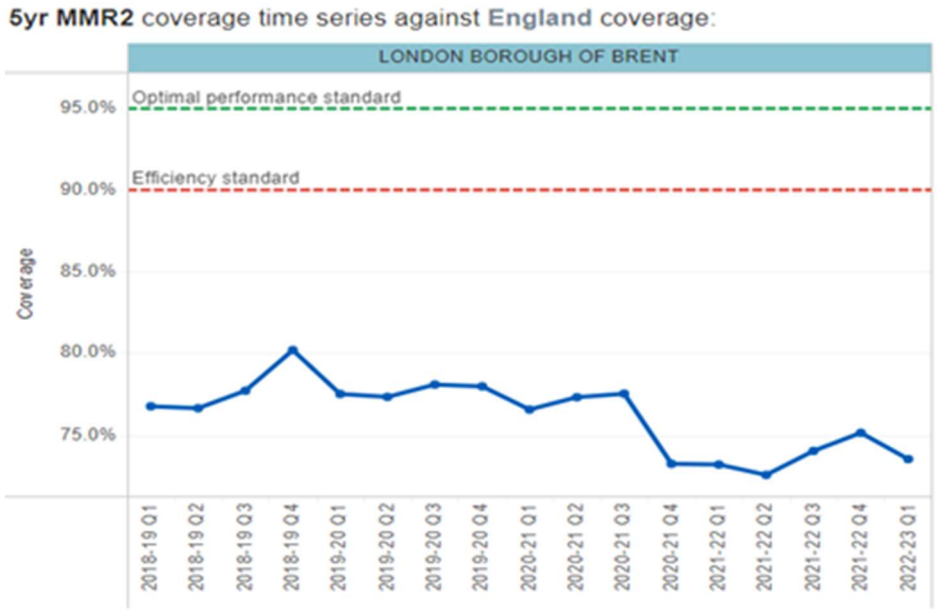
Figure 3: Brent – 24m (Post 1 year) MMR 1, 2018-2022



Source: UKHSA (2022)

MMR1 rates for Brent are below the England average (92.9%) and northwest London average (87.2%)

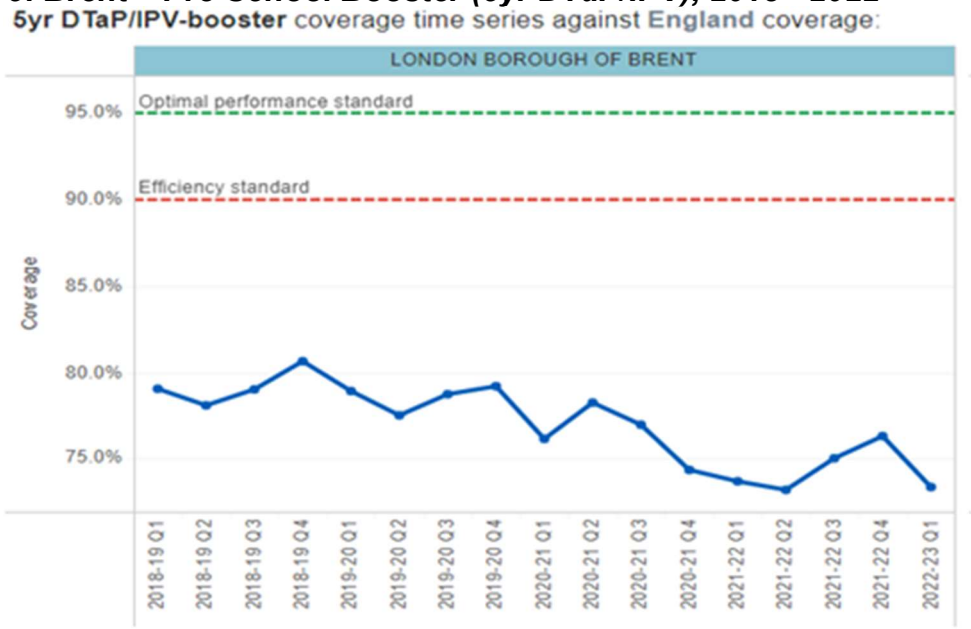
Figure 4: Brent – 5yr (given between 3yr4m and 5yr) MMR 2, 2018-2022



Source: UKHSA (2022)

MMR2 rates are lower overall than MMR. Following a further drop in Q4 2020 below 75%, rates have begun to recover but remain lower than historic trends from 2018.

Figure 5: Brent – Pre-School Booster (5yr DTaP/IPV), 2018 - 2022



Source: PHE 2022

With a similar pattern to MMR2, Brent coverage of the preschool booster showed a declining trend when was sharper during the pandemic but has shown some initial signs of recovery in Q3 and Q4 2021.

6.2 Poliovirus update

- In June 2022, as part of routine environmental surveillance, the virus that causes polio was detected in sewage samples in north-east London. In addition to the inactivated polio vaccine (IPV) which is used as part of the childhood routine schedule, all children aged 1 to 9+364 days, in London are being offered a campaign polio vaccine dose or booster.

- NHS London, local authorities and ICBs are working together on the IPV booster with a key emphasis on reaching under-vaccinated children and increasing uptake in communities with the lowest coverage. The polio booster response for children aged 1 to 9+364 will continue until late December with the aim to review the approach and make recommendations for 2023.

- Polio booster data is not included in COVER data analysis, as it is an outbreak campaign. As of 8 December 2022, NHS England data shows that 328,302 vaccinations have been provided across London. The data at local authority level is currently being monitored and reviewed but it is not yet published and therefore subject to change. As the situation evolves, further updates and analysis will be available.

6.3 Hepatitis B and targeted BCG

- Children born to mothers who have Hepatitis B infection require unique actions to prevent them acquiring Hepatitis B from their mothers. The Hepatitis B Selective Immunisation Programme for these children consists of extra doses of Hepatitis B vaccine and a blood test at the age of 12 months to check for Hepatitis B infection.

- Brent Hepatitis B coverage for the period Apr-June 22 consisted of a denominator of 5 infants with 100% uptake.

- BCG Vaccine is given to those babies who are likely to be in contact with, or who have parents or grandparents born in a country with a high rate of Tuberculosis (TB). In London, the programme changed from a universal programme to a targeted programme in line with WHO guidance in September 2020. Then in September 2021 there was a further national change to the programme to accommodate the introduction of Severe Combined Immuno-deficiency Disease (SCID) screening as part of the newborn blood spot screening programme at 5 days of age. From September 2021, neonates eligible for a BCG vaccination must have the results of their SCID screening available before the BCG vaccination can be given, meaning that a BCG vaccination needs to be given by 28 days of age, rather than soon after birth. Maternity units are responsible for identifying eligible infants. This information is then sent to the CHIS and the BCG provider (CNWL) to ensure an offer and appointment are made.

- Brent Vaccine coverage for the period Apr-June 22 consisted of 3 month of age denominator totalling 732 infants with an uptake of 29.1%.

- The new national pathway has taken time to bed in. NHSE London is working with maternity units and BCG providers to make local pathways more robust and reduce DNA rates.

6.4 School Age Vaccinations

- School Age vaccinations consist of:
    - HPV vaccine for 12-13 year olds (since September 2019 boys receive the vaccine as well as girls).
    - Tetanus, diphtheria, polio booster (Teenage Booster) at age 14/15
    - Meningitis ACWY at age 14/15.

HPV vaccination

- Human papillomavirus (HPV) vaccination protects against viruses that are linked to the development of cervical cancer.

- HPV vaccination has been offered to 12–13-year-old girls (Year 8) since the academic year 2008/09, From September 2019 12–13-year-old males became eligible for HPV immunisation alongside females based on JVCI advice.

- By August 31st 2021, Brent's uptake for the number vaccinated with at least one dose for females (Year 8) is 44.9% which is above the London average of 33.7% and lower than the England average of 60.6%.

- By August 31st 2021 Brent's uptake for the number vaccinated with at least one dose for males (Year 8) was 39.1% which is above the London average of 32.2% and below the England average of 54.7%.

Source: UKHSA (2022)

Men ACWY

- This vaccination protects against four main meningococcal strains (A, C, W and Y) that cause invasive meningococcal disease, meningitis and septicaemia.

- The MenACWY programme in 2020 to 2021 was disrupted due to school closures in response to COVID-19.

- The uptake rate for Brent for year 9 was 37.7% which is below London (71.1%) and England (76.5%) average.

- The uptake rate in Brent for year 10 was 74.6% which is below the London (78.6%) and England (80.9%) average.

Source: UKHSA (2022)

Td/IPV

- The school leaver booster is the fifth dose of tetanus, diphtheria and polio (Td/IPV) vaccine in the routine immunisation schedule and completes the course, providing long-term protection against all three diseases.
- The uptake rate for Brent for year 9 was 37.7% which is below the London (71.7%) and England (76.4%) averages.
- The uptake rate for Brent for year 10 was 74.5% which is below the London (78.5%) and England (80.3%) averages.

Source: UKHSA (2022)

7. What are we doing to improve uptake in Brent?

- Locally in Brent, ICB, local authority and NHSE London partners and the community and voluntary sector are striving to improve uptake across all areas and there are many routes we use to support our local GP practices, communities and patients with the improvement in uptake, particularly in childhood immunisations.

- Effective partnerships are the cornerstone of improved vaccination uptake. NHSE London is working to improve partnerships, develop new and strengthened relationships at the hyperlocal, borough, and subregional level (North West London Integrated Care Board) to identify missed communities, improve uptake and reduce inequalities. Brent's community and voluntary sector plays a critical role through programmes like Family Wellbeing Centres and Brent Health Matters and more.

- Improving access to vaccinations is a key priority going forward. Building on the lessons of COVID-19 and the emerging findings from Mpox (monkeypox) and polio campaigns NHSE London will work closely with partners to expand access through more targeted outreach and locally available and accessible services through a range of providers and collaborations with community and voluntary groups, pharmacies and other non-traditional sites.

- NHSE London funds Immunisation Coordinators across the region (approximately one for every 2 London boroughs). The North West Immunisation Coordinator works closely with NW ICB leads, Local Authorities and across primary care teams and in partnership with key immunisation programme providers such as GP practices, Primary Care Networks, School Age Vaccinations Services, Health Visitors and Pharmacy) to share best practice, improve data flows and to establish and embed call and recall services.

- Brent's dedicated Immunisation Co-ordinator works across the borough with multiple stakeholders to increase immunisation uptake. A summary of the current work includes:
    - Working with practices to support their adherence to the GP Core Contractual Standards, ensuring effective call/recall standards using different methods and how to optimise it and addressing barriers to uptake with patients and supporting their overall delivery.
    - Encouraging all practice staff to feel confident discussing childhood immunisations with their patient population and understand the benefit of increasing uptake (clinically appropriate to the role). This can include safe clinical practice and safeguarding (as appropriate).

    - Supporting practices to support national and local agreed catch up campaigns, such as the London polio response and national MMR campaigns.
    - Ensuring practices have knowledge of available resources to support immunisation delivery and how to access them, including those in multiple languages.
    - Ensuring GP patient lists are updated periodically including data clearing and clearing any moved, non-existent or “ghost” patients.
    - Encouraging attendance for all at UKHSA/NHSE webinars around Childhood Vaccinations as well as any local webinars delivered by NWL ICB.
    - Ensuring practices are using the correct and most up to date IT templates to record vaccinations.
    - Re-establishing working relationships with 0-19 Team to support vaccination promotion within families.
    - Using targeted, local approach based on demographics and vaccine update to link with Community Champions to support outreach to the local population to disseminate appropriate vaccine information.
    - Advocating to establish strong working relationships across ICB, NHSE and G.P Practice/Primary Care to support opportunities as well as communicate the challenges with increasing vaccination uptake in Brent.

- Primary care and GP practices are ideally placed to help improving overall vaccination uptake. Some examples of local initiatives in Brent GP practices include:
    - Establishing a local dashboard to present practices with real-time data to support more efficient, accurate, targeted work.
    - The local team use the opportunity to share data, ideas and challenges with practices. This gives practices the opportunity to hear from how their colleagues in different parts of the borough have made improvements and overcome similar challenges.
    - The local immunisations working group, held at borough level, with representatives from each of the federations, nursing, NHS England and local ICB team provides the forum to discuss changes, challenges and discuss best practice. Representatives feed back to their relevant groups.

- Outreach and communications with the local communities is another important strand. Some examples include:
    - Local Radio: residents discuss their views and ideas on vaccination alongside providers (GPs, Nurses, Community Leaders).
    - Parent Workshops: held at a local GP practice where vaccine uptake is lower than other areas across Brent, parents were able to share concerns, ask questions and get their child vaccinated on site if they were able to do so. Further workshops are being explored.
    - Family Wellbeing Centres: These centres support families from pregnancy through to 18 years old. With 8 centres across Brent,

information sessions are being explored to offer sessions for parents around childhood immunisations.

- For school aged children, CNWL has rolled out the use of e-consent to improve the ease of authorisation and remove barriers. They also offer catch up clinics to ensure that missed children have additional opportunities to get vaccinated.

- The NHSE London Health Equity and Legacy Partnership (HELP) has developed a 2-year programme of work to close the equity gap in vaccinations. The programme will work with ICBs and local authorities to explore different hyper local approaches and models to improve uptake. This might include, for example, developing models for delivery for school aged populations or the housebound.

- In order to improve MMR1 and MMR2 uptake amongst under-vaccinated populations, a national NHS England initiative has been implemented, that sends letters and text messages to parents of children aged 1-6 who are eligible but have not yet taken up the offer of vaccination for their MMR dose 1 and or dose 2. The letter recommends parents to make an appointment with their GP to discuss vaccinations and take up the offer of vaccination.

8. Contacts

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