NICE National Institute for Health and Care Excellence

Implementing NICE guidelines to improve children and young people's asthma care

Case studies

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Overview

Organisation: Brent Integrated Care Partnership

Organisation type: North-West London integrated care system

Brent is one of 8 boroughs in North-West London (NWL) integrated care system. Whole Systems Integrated Care Data for NWL (July 2024) revealed that only 2.3% (1,969) of Brent's children and young people have a diagnosis of asthma, with 29% of those diagnosed living in highly deprived neighbourhoods. Brent also has one of the highest hospital admission rates for asthma among children under 9 in London, with 302.2 admissions per 100,000 children. Brent accounted for over 20% of NWL admissions in the first 2 months of 2025. Brent has high levels of health inequalities with over 149 languages spoken; 37% of residents do not have English as their first language, and an estimated 71.57% of adults are below health literacy and numeracy thresholds.

The recent GIRFT (getting it right first time) review for asthma in Brent uncovered the following key issues:

- **Low diagnosis rate.** Across NWL, the asthma diagnosis rate is 4.1% compared with a national average of 6.8%. Brent is below the NWL diagnosis rate.
- **High-risk prescribing** (high use of short-acting beta-2 agonist relievers compared with low use of inhaled corticosteroid preventers). Brent has the lowest percentage of children prescribed inhaled corticosteroids across NWL. The borough is above the integrated care board average for the number of children with 6 or more SABA prescriptions within a year.
- **Low number of asthma reviews.** Brent has low levels of children and young people having their inhaler technique reviewed in primary care relative to the NWL average, suggesting many asthma reviews in Brent are currently conducted by telephone.
- **High rate of asthma-related emergency care activities**. Brent has the highest hospital admissions for children with asthma among all NWL integrated care system boroughs.

The timing of the GIRFT review coincided with the release of the new BTS, NICE and SIGN guideline on asthma, and the National Child Mortality Database asthma and anaphylaxis

report, which together reinforced health inequalities as key drivers for change. Local intelligence by the Brent Health Matters (BHM) health inequalities team also identified inconsistencies in coding, gaps in data flow between hospital and primary care, and missed 48-hour post-A&E reviews. This prompted the borough leadership to prioritise asthma care as part of their Locally Enhanced Services (LES) programme. These are additional primary care services commissioned locally to address specific community health priorities beyond the core GP contract.

The borough team subsequently developed 2 LES initiatives aimed at accelerating the adoption of the BTS, NICE and SIGN asthma guideline, with a specific focus on improving the diagnosis and management of asthma in children aged 5 to 17 years.

The primary objectives of the LES were:

- **Improved identification and diagnosis**: to assess children with suspected asthma, review them to decide if objective testing is appropriate, refer for objective diagnostic testing and review the child following testing with a view to confirming a diagnosis. The aim is to improve the asthma diagnosis rate and ensure that children benefit from the long-term condition management frameworks available in primary care. The following case-finding searches were used to identify suspected asthmatics, and 1,877 children in Brent were identified.
  - suspected asthma coded in the last 5 years
  - wheeze coded in the last 2 years
  - 2 or more SABA inhalers issued in the last 1 year
  - 2 or more corticosteroid inhalers issued in the last 2 years, or 1 or more corticosteroid inhalers issued in the last 1 year
  - oral prednisolone in the last 1 year and no associated condition requiring prednisolone
  - asthma review coded in the last 5 years, despite no asthma diagnosis
- **Improved management of children and young people with high-risk asthma**: to identify children with high-risk asthma and provide an extended face-to-face asthma review, ensuring their treatment aligns with NICE guidelines. The following search criteria was used:

- asthma and an EpiPen prescribed
- oral steroids prescribed in the last year
- 4 or more SABA prescriptions issued in the last year
- SABA-only regime (2 or more SABA prescriptions in 12 months with no integrated care system).

The high-risk asthmatic search has identified 922 children eligible for this review. Crucially, this also involves addressing contributing socioeconomic factors, such as mould, poor housing conditions and household smoking by offering appropriate signposting, support or intervention to manage these risks effectively.

There is also a complementary paediatric Core20 health check LES, which includes mandatory asthma symptom screening and household smoker screening.

The EMIS templates developed for the LES schemes embed direct links to the relevant NICE guidance, including the full asthma diagnostic investigation sequence. By integrating the guidance within the clinical workflow, the templates prompt clinicians in real time and encourage adherence to NICE guidelines by actively supporting this during consultations.

The schemes were commissioned at a primary care network (PCN) level rather than as a practice-based LES to promote a population health approach, strengthen collaboration between practices and secure PCN-wide engagement. This design creates shared accountability which, in turn, drives mutual support and collective responsibility for delivering the scheme.

A number of support services and additional resources were mobilised to support the LES schemes. These included:

- The launch of a children and young people asthma diagnostic service which provides FeNO, spirometry and blood testing as per the BTS, NICE and SIGN guideline, which support objective testing for asthma diagnosis.
- Local GPs and clinicians received tier 3 asthma training, a programme aimed at healthcare professionals directly involved in diagnosing and managing asthma. The training focused on advanced aspects of asthma care, including updates on the latest NICE guidelines, to support consistent, evidence-based management across primary care. BHM identified and targeted attendees delivering care in the most deprived

communities. Following its success in Brent, the training model was adopted and rolled out by the NWL integrated care board.

- Promoting GP attendance at a multi-borough children and young people asthma monthly learning meeting where tricky cases could be discussed with a paediatric consultant.
- The borough's approach further supports the BTS, NICE and SIGN asthma guideline by improving rapid post-discharge follow-up with multilingual resources and community asthma champions, distribution of spacer packs, strengthening self-management through a healthy child leaflet, VCSE links, digital tools and guidance on damp and mould, widening access to specialist care through an expanded community nurse role with a new self-referral pathway. Brent adopted an integrated approach to asthma across the borough monthly meetings with attendance from school nursing, health inequalities teams, primary care, and others. Initiatives as a result of this included rolling out the asthma-friendly schools scheme and running an asthma community fair.

Outcomes and learning

Outcomes

The new BTS, NICE and SIGN guideline, together with the local GIRFT review, provided a catalyst to reconsider and restructure asthma services for children and young people in Brent. This led to an increased focus on asthma and the development of 2 LES schemes, launched in May 2025. The case-finding search has identified 1,877 children in Brent with suspected asthma, and the high-risk asthmatic children search has identified 922 children. Although still in the early stages, within 5 months, 236 children and young people with suspected asthma and 187 children with high-risk asthma have been reviewed. In parallel, the complementary paediatric Core20 health check identified asthma symptoms in 11.2% of Core20 children screened compared with 6.6% in non-Core20 children, and household smoking in 22.6% of Core20 families compared with 11.7% in non-Core20. This provides early evidence of the higher burden of respiratory risk among the most disadvantaged children and supports targeted intervention in line with NICE guidance.

Although the LES reviews are ongoing, initial population health data suggest a 31% average borough-wide reduction in A&E attendances, with a 36% average decrease in the Core20plus5 target population and a 10% reduction in non-elective hospital admissions for asthma in the borough. The BHM team has also been shortlisted for an HSJ award for their work in promoting community asthma management.

Learning

This case study demonstrates that NICE guidelines, while traditionally used for individual patient care, can also be leveraged to reshape services at a place-based level. Critically, this demonstrates how the NICE guidelines are truly adaptable to the unique needs of vulnerable communities when applied appropriately to reduce barriers to care. It also showcases whole-system integration, with coordinated work across primary care, school nursing, community nursing, and community organisations to improve outcomes for children and young people with asthma.

Supporting information

See the appendix for LES specification.

See also the recommendations on children aged 5 to 16 in the BTS, NICE, and SIGN guideline on asthma, as well as algorithm B.

Quotes

"As the Borough Medical Director for Brent, I have witnessed first-hand how the new [BTS, NICE and SIGN] guidelines on asthma diagnosis and management have driven transformative change in our local healthcare services. By using these guidelines, we have developed targeted Locally Enhanced Services that improve diagnostic accuracy, optimise treatment and adherence, and foster a collaborative, community-driven approach to asthma care. This case study demonstrates how national guidance can be translated into local action to reduce health inequalities, enhance patient outcomes, and help prevent avoidable deaths from asthma."

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Appendix

Paediatric asthma service requirements

Asthma case finding

The PCNs are requested to consider the following areas in managing children and young people with asthma:

- Identify children who may have undiagnosed asthma for review using the asthma case-finding search ASTCF00, which identifies children aged 5 to 17 with no known diagnosis of asthma with:
  - suspected asthma coded in the last 5 years
  - wheeze coded in the last 2 years
  - 2 or more SABA inhalers issued in the last 1 year
  - 2 or more corticosteroid inhalers issued in the last 2 years, or 1 or more corticosteroid inhalers issued in the last 1 year
  - oral prednisolone in the last 1 year and no associated condition requiring prednisolone
  - asthma review coded in the last 5 years, despite no asthma diagnosis.
- Conduct a clinical review, which may be face to face or telephone, to consider the likelihood of asthma (based on a suggestive history, family history and triggers) and arrange appropriate objective diagnostic testing if asthma is suspected. This should involve NICE-compliant diagnostic testing, including FeNO, spirometry with reversibility, peak flow variability, skin prick testing, or total IgE plus eosinophils (see the BTS, NICE and SIGN guideline on asthma). Spirometry, FeNO and skin prick testing will soon be available at the Children's Respiratory Diagnostic Hub (CDC) or another appropriate local service (for example, practice-based phlebotomy).
- Peak expiratory flow rate (PEFR) reversibility is an option if FeNO or spirometry are not available or delayed (measure PEFR twice daily for 2 weeks. Diagnose asthma if PEFR

variability [expressed as amplitude percentage mean] is 20% or more).

- Post-diagnostic testing review: if the diagnosis of asthma is confirmed, record the basis for this in the person's medical records, alongside the coded diagnostic entry, and undertake an asthma annual review including the provision of a personalised asthma action plan.

Enhanced high-risk child asthma review

- Identify those with high risk for asthma review using the AST00 search, which identifies asthmatic children aged 5 to 17 with:
  - asthma and an EpiPen prescribed
  - oral steroids prescribed in the last year
  - 4 or more SABA prescriptions issued in the last year
  - SABA-only regime (2 or more SABA prescriptions in 12 months with no integrated care system)
- Our initial searches identify approximately 950 Brent patients in this category.
- Provide each child with an extended 30-minute face-to-face consultation with a GP, pharmacist or nurse to ensure a comprehensive asthma assessment.
- Review to ensure child is on updated NICE guidelines for treatment.
- Review inhaler technique face to face (this cannot be done through video or by sending an inhaler technique video link).
- Assess the smoking status of child and parents, provide information and promote smoking cessation by signposting to Stop Smoking London for support and resources. Referral to Brent smoking cessation team is available for eligible families (for example, shisha smoking, known mental health difficulties or pregnancy).
- Enquire about the presence of mould in the home. If mould is reported, refer to a Social Prescribing Link Worker (SPLW) for further support or to Brent Health Matters and Brent housing team. Resources for support here include the Royal College of Paediatrics and Child health (RCPCH) template for housing, green doctors, London mould and damp checklist.

- Referral to Brent Community Asthma Nurse as necessary for any children and families who require further support, who may be underserved, who may need more support and education around asthma, who may have safeguarding concerns impacting asthma management or to prevent unnecessary re-attendance at A&E or urgent treatment centre.
- Referral to secondary care as appropriate to prevent unplanned hospital admission.
- Provide a Healthy Child signposting leaflet to each family. The leaflet will be supplied by the Borough team to ensure accessibility.
- After clinical assessment, provide the child or carer with a written personalised asthma action plan (PAAP), detailing asthma control, modifiable risk factors for poor outcomes and optimise management strategies.
- If asthma control is suboptimal or any medication changes are made, then please follow-up the patient within 8 to 12 weeks as per usual NICE guidelines.
- The service will work in collaboration with Child Health Hubs to ensure a seamless pathway if children and young people need to be referred into a preventative service or further specialist review for their care.
- Work cooperatively and constructively with partners, particularly regarding vulnerable clients to ensure effective communication processes are in place.
- Provision of educational resources material and written/SMS safety netting advice to parents.

The NWL respiratory service specification has been reviewed and the new KPIs cover:

- Face-to-face (or video) inhaler technique checks with mandated face-to-face training attendance (this will be the children and young people tier 3 asthma course plus adult inhaler teaching).
- Maintenance and reliever therapy (MART) initiation for any new asthma diagnosis over 12 years.
- Rising risk chronic obstructive pulmonary disease reviews.

The Brent childhood asthma LES differs from the NWL specification in the following ways:

- A focus on identification and diagnosis of suspected asthma.

- Enhanced reviews for high-risk asthmatic children.
- Lower review thresholds than the NWL specification to ensure a broader reach.
- High-risk criteria as outlined.

The enhanced review itself also differs from and builds on the NWL specification in the following ways:

- 30-minute, mandated face-to-face appointments.
- Smoking status check (both children and young people and household contacts) with stop smoking referral.
- Focus on inequalities with active questioning on housing and mould with clear signposting pathways within the borough for support, including to the Brent Health Matters team.
- Referral to our local asthma nurse if indicated. Brent has been trying to encourage more referrals in the local asthma nurse is underutilised.
- Brent Healthy Child leaflet linking families to wider health and social care support and increasing health literacy and engagement.

Acceptance criteria

- Children or adolescents aged 5 to 17 years of age who have been identified as possibly having undiagnosed asthma based on the case-finding search ASTCF00 as outlined.
- Children or adolescents aged 5 to 17 with a diagnosis of asthma and identified as having high-risk asthma based on the AST00 search as outlined.

Exclusion criteria

Those who are registered with a non-Brent GP practice.

Training, skills and experience

The Brent Health Matters team will provide tier 3 asthma training, which will be available to

primary care staff to support this LES. Free online tier 3 training is also available but is not mandated.

Equipment

- Access to soft or hard copies of asthma management plans.
- Access to soft or hard copies of brent health child leaflet.
- The Willesden CDC will have access to FeNO, spirometry, eosinophil, and reversibility testing.
- Placebo inhalers for inhaler technique demonstration.

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