# Oral Health Needs Assessment

LONDON BOROUGH OF HARROW

**August 2025**

## 1. Contents

## 2. Summary

- Good oral health is essential to leading a longer, happier and healthier life. However, oral health has historically been poor in Harrow. Over recent years, partners across the borough have endeavoured to tackle this issue and we are now seeing significant improvements in oral health outcomes – tooth decay rates, hospital admissions and tooth extractions are falling.
- However, unmet oral health need remains prevalent. Our findings also suggest that local oral health inequalities exist, for which we have a moral and statutory duty to address, affecting residents from more deprived areas. Our survey findings also indicate there may be considerable need amongst people with Special Educational Needs and Disabilities (SEND), Children Looked After, rough sleepers, refugees and asylum seekers and older adults in care homes.
- The reasons for poor oral health in Harrow are multi-faceted. There is variation in how residents engage with both beneficial practices such as toothbrushing and breastfeeding, and harmful behaviours like certain dietary habits and risk factors for oral cancer such as tobacco use.
- These behaviours are determined by the socio-economic, cultural and physical environment in which people live. Healthy foods are less accessible and affordable, and language barriers are common, which particularly affect the most vulnerable in society.
- Inconsistent messaging from across the health and care system in Harrow makes it difficult for individuals and families to know what behaviours they should be engaging with to improve their oral health. In addition, the carers and frontline personnel working with residents in key settings are inadequately supported and trained to provide oral care or advice.
- Compounding this, accessing NHS dental services can be challenging. Dental access rates differ significantly within Harrow by location and age, being particularly low in children under 5-years-old – similar to the national level in England.
- The ease of arranging NHS dentist appointments varies and those from vulnerable groups frequently find it hard to access care which risks widening inequalities. Many residents have good experiences of receiving dental care, however this also varies substantially especially when additional or complex needs are not accommodated.
- To truly address the array of factors that lead to poor oral health, a collaborative whole-system approach must be taken. This must apply the principle of proportionate universalism, providing interventions that give all Harrow residents the capability and opportunity to improve their oral health while also reducing inequalities. The recommendations from this Needs Assessment align with the following themes, details of which are found in the relevant section of this report:
    - Enhance integration and collaboration
    - Extend the Harrow Oral Health Promotion offer
    - Address and overcome risk factors and the wider determinants of oral health
    - Improve NHS Dentistry access
    - Optimise delivery of NHS Dentistry
    - Advance intelligence and research
    - Advocate for change beyond the scope of this Needs Assessment

# 3. Acknowledgments

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We would also like to thank all the people and organisations who supported the dissemination of the oral health survey that formed a key part of this work.

# 4. Aims and objectives

This Oral Health Needs Assessment benefitted substantially from a report on 0-5-year-old oral health in Harrow procured by Queen Mary University of London (QMUL). This enabled us to build on their findings and undertake a comprehensive Needs Assessment that covers the entire population of Harrow, following National Institution for Health and Care Excellence (NICE) guidance in doing so.[1] The aims and objectives of this work are outlined below.

Aims:

- To assess the current state of oral health in Harrow and the needs of the population, including identifying inequalities faced by certain subgroups of the population
- To provide an overview of current oral health services in Harrow and identify gaps in current work, highlight opportunities for improvement and make evidence-based recommendations for services to improve the oral health of the Harrow population

Objectives:

- Describe the demographic characteristics of the Harrow population
- Outline the state of oral health in Harrow, describing the prevalence and incidence of dental disease and its impact, and highlighting inequalities faced by subgroups of the population
- Outline the current oral health services provided in Harrow
- Identify gaps in oral health strategies and services
- Make evidence-based recommendations to improve oral health in Harrow

# 5. Introduction

The World Health Organisation (WHO) defines oral health as “the state of the mouth, teeth and orofacial structures that enables individuals to perform essential functions such as eating, breathing and speaking, and encompasses psychosocial dimensions such as self-confidence, well-being and the ability to socialise and work without pain, discomfort and embarrassment”.[2] This definition clearly illustrates how oral health underpins our ability to lead a longer, happier and healthier life. Poor oral health can impact on individuals’ physical, emotional, mental, social and economic wellbeing, which collectively lead to wider societal, educational and economic consequences and places pressure on an already stretched NHS.[3,4] In the UK, oral health is the most common cause of hospital admissions for 6-10 year olds, with billions spend on all dental care as a whole.[4]

Oral diseases are wide ranging, with key conditions including dental caries (tooth decay), periodontal (gum) disease, tooth loss and oral cancer.[2] Dental decay in the UK is common in both children and adults. The latest data shows that 22.4% of 5-year-olds[5] and 27% of adults[6] have tooth decay. Mouth cancer is on the rise, with 10,825 cases in the UK last year, a figure that has increased by 28% in the last decade. Last year, 3,637 people lost their lives to mouth cancer.[7]

Oral diseases are almost entirely preventable. They also share risk factors with other non-communicable diseases that represent significant public health challenges: Tooth decay is heavily linked to diets high in free sugars, which is associated with an increased risk of obesity, cardiovascular disease and diabetes. Tobacco use is a leading cause of oral and other cancers, as well as chronic respiratory disease.[2] Tackling these risk factors would therefore help to improve oral health in addition to these other diseases.

However, these individual risk factors cannot be successfully addressed without simultaneously overcoming the wider determinants of oral health. Cultural and educational factors influence awareness, knowledge and attitudes towards good oral health behaviours and how people access dental services. Economic, environmental and commercial determinants dictate the availability and accessibility of affordable healthy foods, fluoride toothpaste and toothbrushes.[8] For instance, families with limited financial resources may struggle to afford healthy foods and have little choice but to turn to cheaper, more accessible and extensively advertised unhealthy products high in sugar.

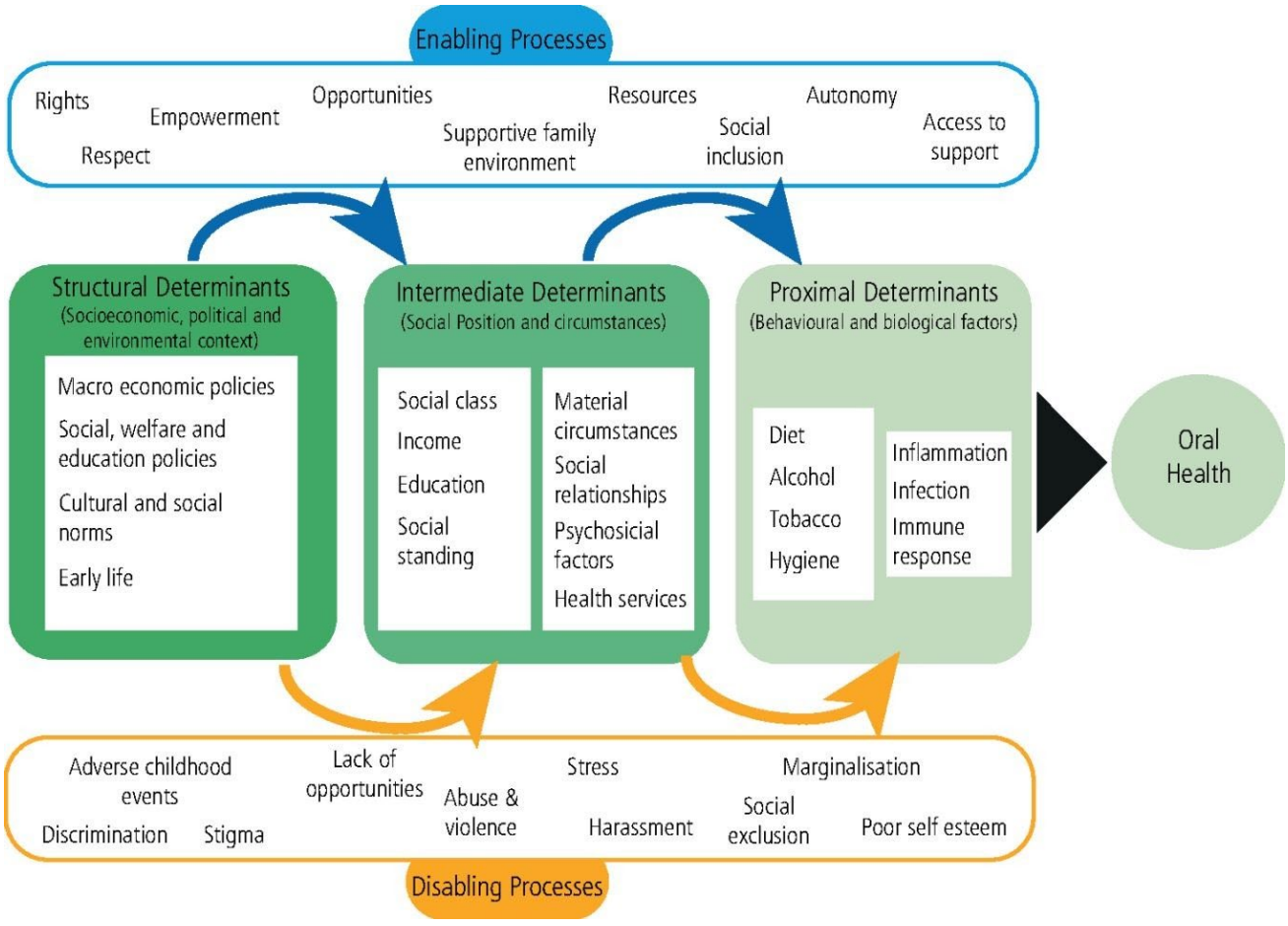
Furthermore, accessing quality dental care is vitally important to good oral health and is influenced by the “5 As of Access”: availability, accessibility, acceptability, affordability and accommodation of services.[9] However, people in England have faced increasing difficulty with accessing NHS Dentistry, which is reflected in the most recent British Social Attitudes survey. National data revealed record high levels of public dissatisfaction (55% very or quite dissatisfied) – this was also the highest level of dissatisfaction of any NHS service.[10] Consequently, an increasing number of people are turning to costly private care as highlighted by a recent Healthwatch report.[11]

Barriers to accessing dental care have arisen at individual, societal and policy levels affecting all “5 As of Access” and resulting in services that do not meet local needs. This in combination with the influences of wider socioeconomic and environmental determinants of health play a fundamental role in the development of oral health inequalities that exist throughout all stages of life and across clinical outcomes. Certain populations are disproportionately affected, particularly when these factors congregate.[4,8] Those from more deprived backgrounds are particularly at risk, alongside certain ethnicities and vulnerable groups such as people experiencing homelessness, adults in care

homes, Children Looked After (CLA), people with Special Education Needs and Disabilities (SEND) and refugees and asylum seekers.[3,4] These population groups face greater difficulty with accessing dental care and improving oral health behaviours, leaving them with unmet oral health needs that have been further exacerbated by the COVID-19 pandemic.[12]

Altogether, this array of factors culminates in a system that fails to promote good oral health to our diverse population. People are not enabled, supported and empowered to engage with healthy behaviours, nor can they access dental care with ease.[8,10,11,13] Understanding and addressing inequalities and these wider determinants is fundamental to designing effective interventions to improve oral health.[13]

**Figure 1: The Determinants of oral health[13]**




Oral diseases are largely preventable and therefore avoidable. Taking action to improve oral health in Harrow will benefit general health and wellbeing, reduce pressure and financial costs experienced by public services and boost educational and economic productivity at an individual and societal scale. Evidence shows us that prevention and early intervention are critical to achieving this.[4] Reducing inequalities is a statutory duty of Local Authorities as stipulated by the Equality Act 2010 and Health and Social Care Act 2012,[14,15] but in actual fact improving oral health should be everyone's business in Harrow.

## 6. Definitions and abbreviations

**CLA** – Children Looked After

**CQC** – Care Quality Commission

**D3mft** – Decayed, missing or filled teeth

**Dental caries** – the technical term for tooth decay, which also may be referred to as dental decay. All of these terms describe the disease process whereby teeth (specifically enamel and dentine) are damaged and broken down[16]

**Edentulism** – condition of having no remaining natural teeth[17]

**EHC plan** – Education, Health and Care plan

**FCE** – Finished Consultant Episode, used to describe an episode of hospital activity completed under a named consultant

**FP17** – FP17s are forms used by dentists to document and claim for dental activity. They are submitted to NHS BSA by practices and contain information on what treatment band the care belongs to, the patient charge collected and the number of UDAs performed[18]

**GDP** – General Dental Practice

**GDS** – General Dental Services

**Health inequalities –** unfair and avoidable differences in health across the population, and between different groups within society[19]

**HPV** – Human Papillomavirus

**ICB** – Integrated Care Board

**KPI** – Key Performance Indicator

**LDC** – Local Dental Committee

**MECC** – Making Every Contact Count

**MECSH** – Maternal Early Childhood Sustained Home-visiting

**NDEP** – National Dental Epidemiology Programme

**NHS BSA** – NHS Business Service Authority

**NICE** – National Institute for Health and Care Excellence

**OHID** – Office for Health Improvement and Disparities

**OHP –** Oral Health Promotion

**PDS** – Personal Dental Services

**PEH** – People Experiencing Homelessness

**PUFA** – An index used to assess the presence of oral conditions resulting from untreated caries[20]

**QMUL** – Queen Mary University of London

**ROI** – Return on Investment

**SEND** – Special Educational Needs and Disabilities, a term used to describe learning difficulties or disabilities that make it harder for someone to learn[21]

**UDA** – Unit of Dental Activity

**VCS** – Voluntary and Community Sector

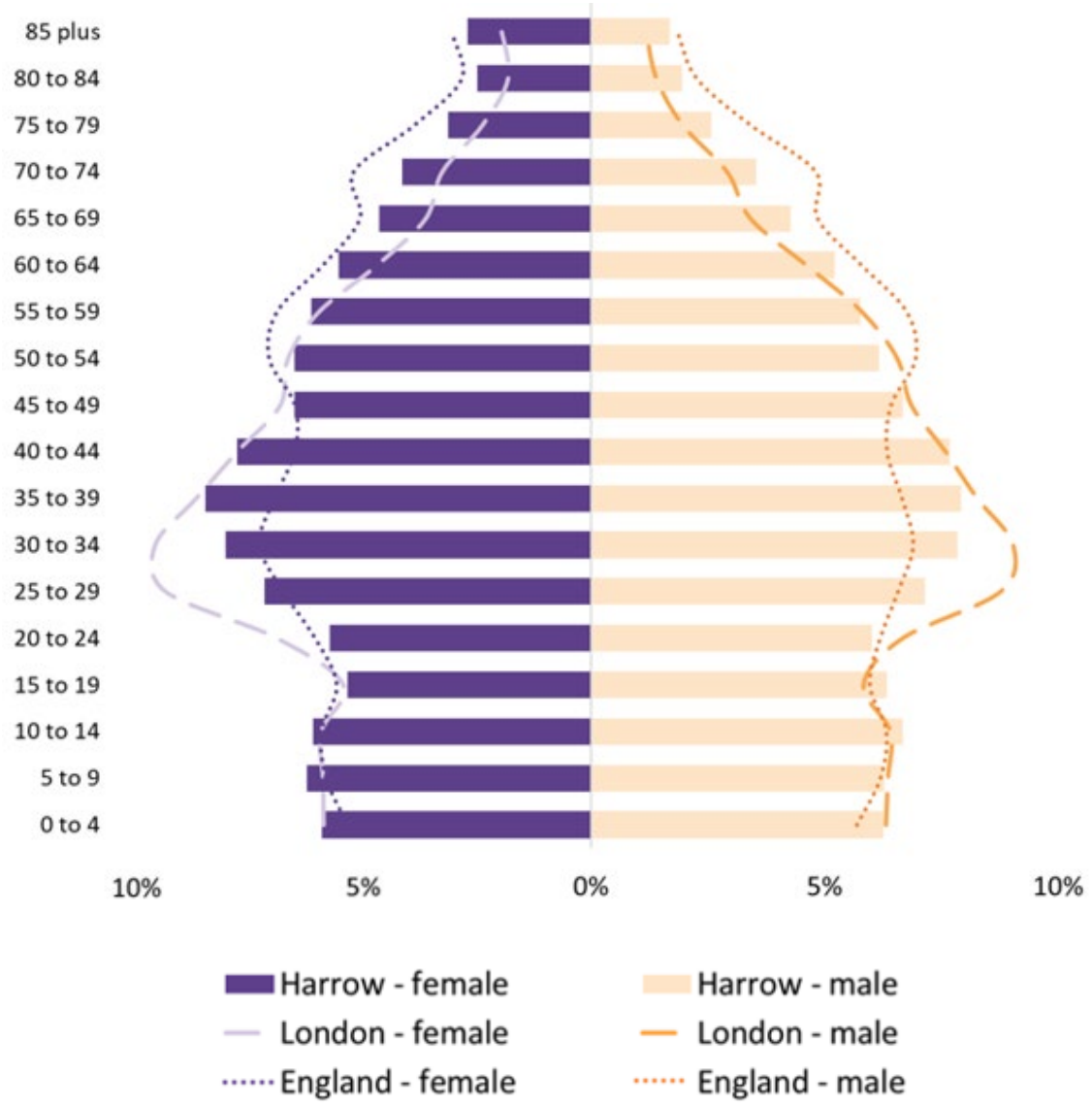
**WHO** – World Health Organisation

# 7. Harrow Population profile

## 7.1. Population Overview

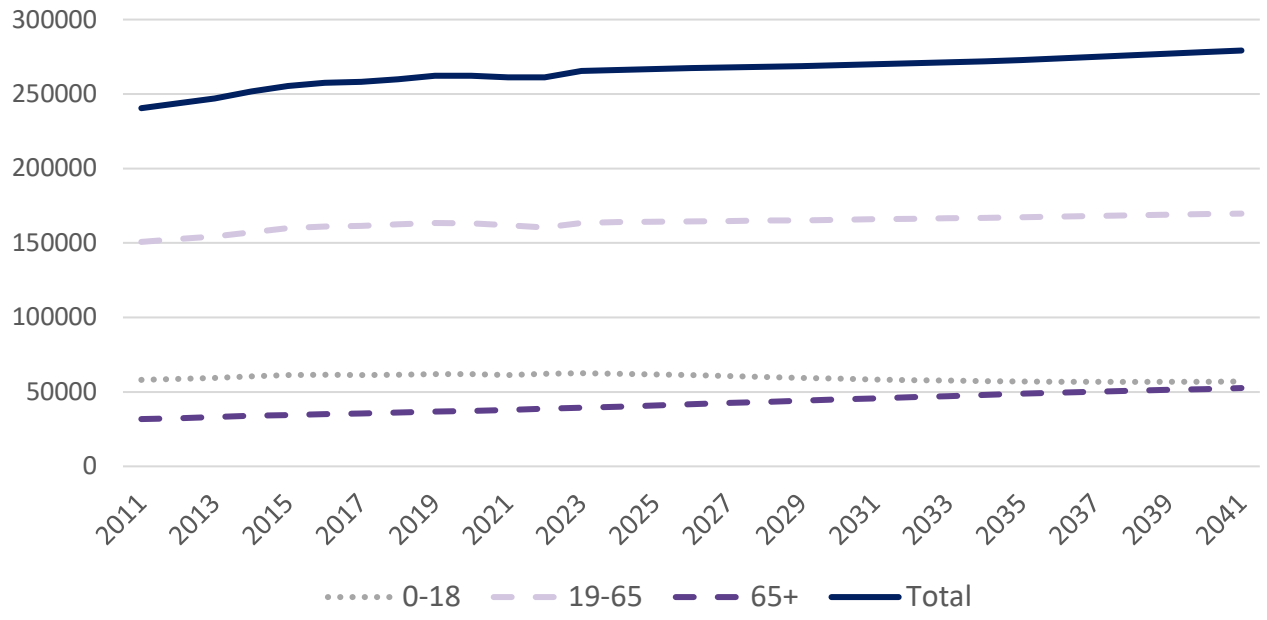
The 2021 Census estimated the population of Harrow to be 261,200 people. Most of the population fall within the 20-64 age group, and compared to the rest of London, Harrow has an older age profile. Just over half of Harrow's residents are female which reflects London and national patterns. At older ages, the proportion of the population that are females increases due to their higher life expectancy.[22] Figure 2 is Harrow's population pyramid, showing the distribution of the population according to age and sex.

**Figure 2: A breakdown of the population in Harrow – population per ward and population pyramid[22,23]**



Harrow's population grew by 9.3% since 2011, higher than the 7.7% average in London.[22] As shown in Figure 3, Harrow's population is projected to continue growing up to nearly 280,000 in 2041.[23] This is driven by relatively higher birth rates and people moving into the borough, mostly from other parts of the UK but also from abroad. This population growth is unevenly distributed across age groups, with a continued shift towards a higher number and proportion of older residents, while the number of children remains consistent.

**Figure 3: Population size projections in Harrow according to year, showing total population projection and divided by 0-18 year olds, 19-65 year olds and over 65 year olds[23]**



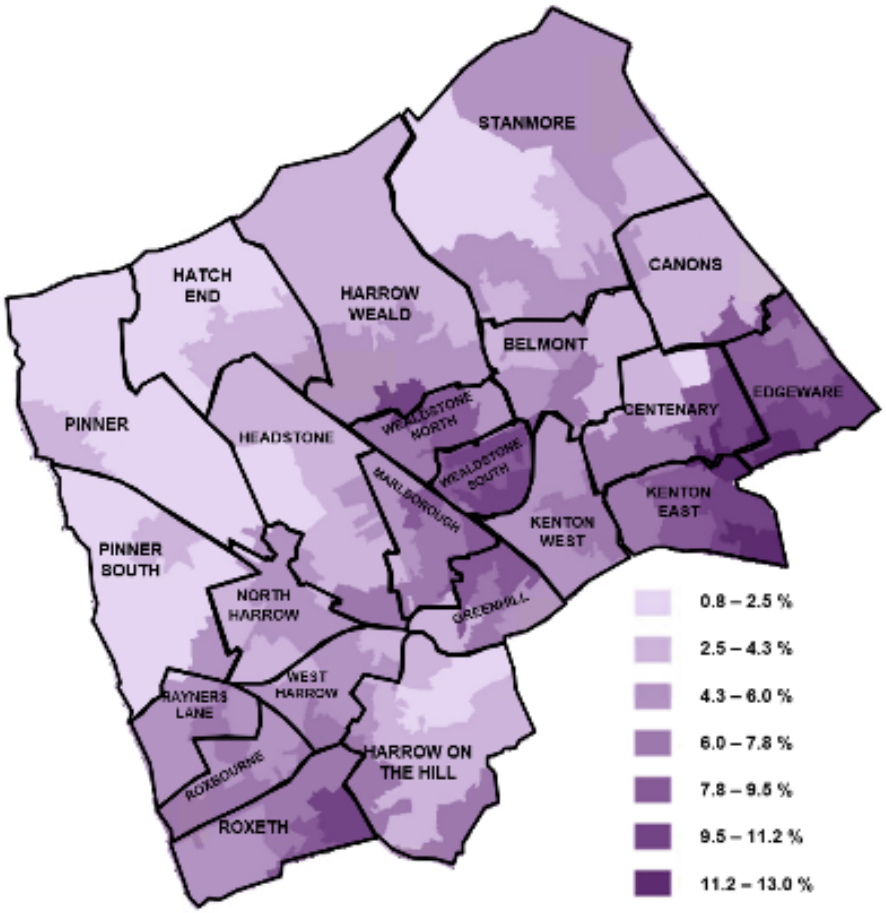

## 7.2. Ethnicity

Harrow is an incredibly diverse borough. 285 ethnic identities were reported in the 2021 Census, with 45% identifying as Asian, 37% White, 7% Black and 11% either Mixed or Other ethnic group.[22]

Harrow's diversity is also reflected in the languages spoken. At least 86 different main languages were spoken in the borough according to the 2021 Census. Harrow also has the highest percentage of Romanian speakers in England. Figure 4 shows the percentage of the population who cannot speak English either well or at all.[22]

National data shows that substantial oral health inequalities exist by ethnicity. Ethnic minority groups experience higher rates of child tooth decay and some also have a higher risk of oral cancer. Data and scientific literature also suggest that ethnic minority groups may also experience greater difficulty accessing dental care. Meanwhile, evidence of oral health behaviours according to ethnicity is mixed and is a complex picture often driven by socioeconomic factors.[4]

**Figure 4: The percentage of Harrow's population who cannot speak English well or at all[22]**




## 7.3. Vulnerable population groups

Evidence demonstrates that certain population groups experience oral health inequalities. They are often some of the most vulnerable in society and suffer the effects of the wider determinants of health.[3,4] It is important to understand their own local population profiles in order to design and implement effective strategies to improve their health. This Needs Assessment was able to perform a deeper dive into the oral health of some of these groups, largely through our own survey which is covered in more detail later in this report. The following sections provide an overview of their local presence and evidence of the oral health inequalities they experience. A full list of populations that experience oral health inequalities, according to evidence from national data and/or scientific literature,[3,4,13] are:

- Vulnerable older adults – those in care or nursing homes, as well as those who are receiving support at home
- Rough sleepers and people experiencing homelessness
- People with Special Educational Needs and Disabilities (SEND)
- Children Looked After
- Refugees and Asylum Seekers
- Ethnic minority groups

- Gypsy, Roma and Traveller communities
- People with severe and complex mental and physical health conditions
- People with severe alcohol or drug dependence
- Prisoners
- Sex workers

### *7.3.1. Older adults in care homes*

There are 55 care homes in Harrow, with 42 of these being residential homes and 13 nursing homes. Overall, the latest count of residents was 1,131 people. Of these, 458 were older adults aged over 65-years-old, with 209 in Nursing Homes and 249 in Residential Homes. The latest data shows that permanent admissions to residential and nursing homes in Harrow remain relatively consistent, with 485 per 100,000 people aged over 65 years.[24]

Maintaining good oral health into older age is a vital element of general health and wellbeing, and plays an important role in helping people remain independent.[25] Data shows that older adults in care homes experience worse oral health than the general population. They are more likely to have caries and be edentulous, while also being less likely to have functional dentition.[26] Oral cancer is also on the rise and more common in older adults.[27] Alongside this, care home professionals report greater difficulty accessing dental care for their residents which is further complicated by older adults having increasingly complex dental care needs due to considerable medical comorbidity.[26]

In 2019 the Care Quality Commission (CQC) Smiling Matters report found that a significant number of people in care homes were not being adequately supported to maintain and improve their oral health,[28] with improvements noted in the progress report in 2022.[29] Recommendations included the need for providers having policies to promote and protect oral health and improvements to staff practices, as well as highlighting examples of how care homes have successfully implemented strategies to improve the oral health of their residents. These findings were on a national basis, with no local level data.

### *7.3.2. Rough sleepers*

Homelessness occurs when a person has no home in the UK or anywhere else in the world available and reasonable to occupy.[30] People experiencing homelessness (PEH) is a broad term including rough sleepers, sofa surfers and people living in temporary accommodation. In 2023/24 there were 128 verified rough sleepers in Harrow. This is a rise from 45 in 2019/20.[31]

The available evidence for this population shows a high level of need. PEH have higher rates of tooth decay and periodontal disease as well as worse oral health related quality of life. Evidence also suggests they are more likely to develop oral cancer. PEH will largely only attend a dentist if they have symptoms, such as dental pain, and often do not attend follow-up. Barriers to regular attendance include cost, fear and stigmatisation, oral health not being a priority for them, a lack of perceived need, fatalism and limited awareness of their entitlement to NHS treatment. Evidence also suggests that PEH are less likely to brush their teeth as recommended, and have higher sugar intakes.[4] This is reinforced by findings from a recent Oral Health Needs Assessment for PEH in London.[32]

### 7.3.3. People with Special Educational Needs and Disabilities (SEND)

A person has SEND if they have a learning difficulty and/or disability that means they need special health and education support. It encompasses a variety of conditions, including but not limited to ADHD, Autism, and physical disabilities such as Cerebral Palsy. There is a wide spectrum of how SEND manifests and affects.[21,33]

Latest figures show that there are 1,403 people with Learning Disabilities living in Harrow, representing 0.5% of the population.[24] There are four specialist schools for SEND pupils in the borough and in 2023/24, 1765 children (4.1%) in all schools had an Education, Health and Care (EHC) plan while 4587 children had SEN support/SEN without an EHC plan (10.6%). This is a rise of 75% and 29% respectively since 2015/16.[34]

National data and wider scientific literature consistently show that people with SEND have worse oral health, including higher levels of gum disease, greater numbers of missing teeth and edentulism and higher rates of untreated tooth decay. The treatment of tooth decay in people with SEND is also more likely to lead to tooth extraction. Many people with SEND are more reliant on others, such as their carers, to help them to clean their teeth. These carers are often inadequately trained to provide dental care, particularly considering the greater needs such as reduced dexterity that can impair toothbrushing and sensory sensitivity that can make it challenging to cooperate with oral care. Furthermore, people with SEND face an increased risk of poor oral health due to high sugar intake, medications that reduce saliva flow and acid reflux. In addition to this unmet oral health need, people with SEND experience poorer access to dental services and less preventative dentistry.[35]

### 7.3.4. Children Looked After

In March 2025, Harrow had 176 CLA with 87 placed within Harrow and 89 placed outside the borough. Since the previous year, 106 CLA had ceased to be looked after and 104 started to be looked after. The number of CLA in Harrow has been steady, with 186 in 2020.[36]

Evidence on the oral health of Children Looked After (CLA) is limited. The existing evidence does show that CLA have higher rates of dental caries, gum disease and experience more dental pain. They attend dental care less frequently, and when they do are more likely to need urgent treatment and require tooth extraction. CLA are likely to enter care with little experience of tooth brushing, with inconsistent meal patterns and diets higher in sugar. Some may have also experienced dental neglect. Furthermore, CLA often change placements regularly and therefore may struggle to receive good continuity of care.[4,37]

### 7.3.5. Refugees and Asylum Seekers

In Harrow there are a total of 284 supported Asylum Seekers. In addition, the UK has resettlement Schemes in place for people fleeing specific countries, namely the Homes for Ukraine scheme and Afghan Resettlement Programme. There are 478 people in Harrow under the Homes for Ukraine scheme, and 157 under the Afghan Resettlement Programme.[38]

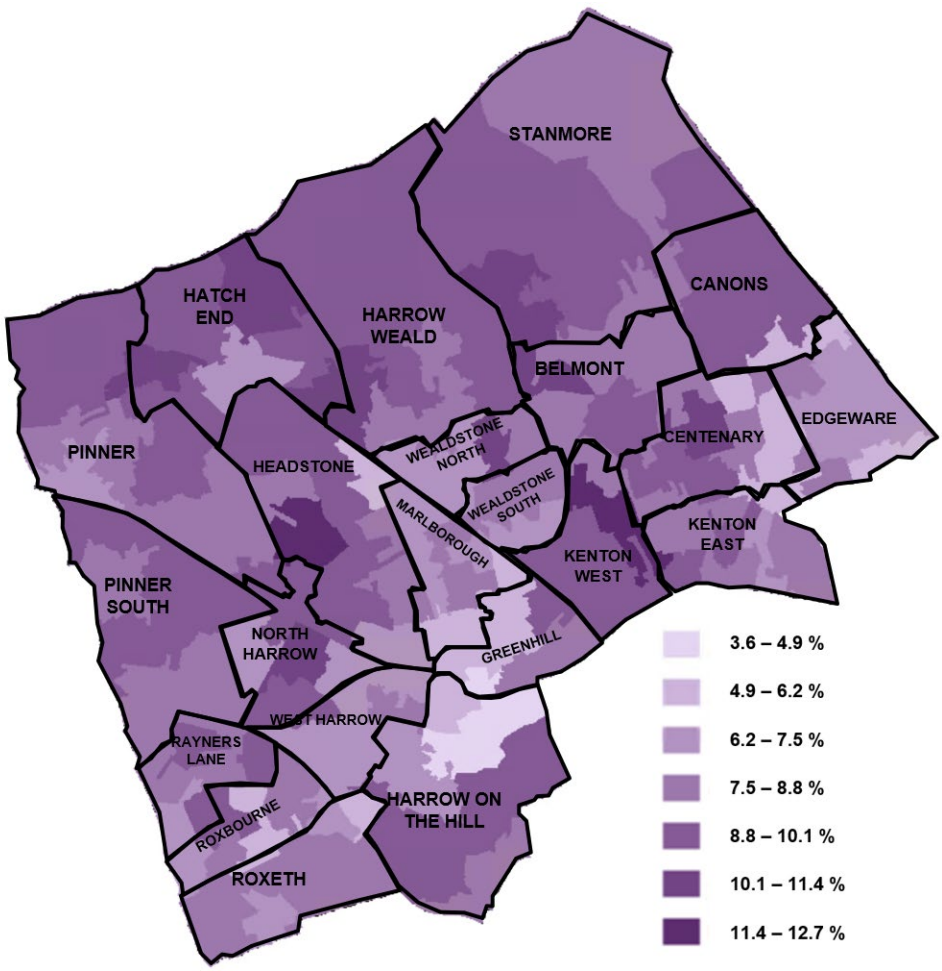
Refugees and asylum seekers are a vulnerable population group who are known to experience substantial barriers to accessing care. Data on oral health outcomes in the UK is very limited, although scientific literature shows a high burden of oral disease, including dental caries and gum disease.[39] Refugees and asylum seekers are at a high risk of arriving into a host country with poor oral health due to underdeveloped dental care systems in their source country and poor oral

hygiene knowledge and practices. Once in a host country, refugees and asylum seekers utilise dental care less. This is due to a combination of access barriers, such as healthcare policies and language limitations, and personal understanding of the importance of accessing dental care routinely.[39,40]

## 7.4. Carers

Carers are a vital support mechanism for many people in Harrow, particularly those who belong to vulnerable population groups who are often experience oral health inequalities. This includes professional, paid and informal (unpaid) carers. In the 2021 Census, just over 20,000 people reported being informal carers – 10,000 provided less than 20 hours of unpaid care each week, almost 5,000 provided 20-49 hours per week, and just over 5,000 provided more than 50 hours per week. Most carers are older working age adults and are more likely to be female than male. Figure 5 shows where informal carers live in Harrow.

**Figure 5: Location of where informal carers live in Harrow[22]**



# 8. Wider determinants

## 8.1. Deprivation

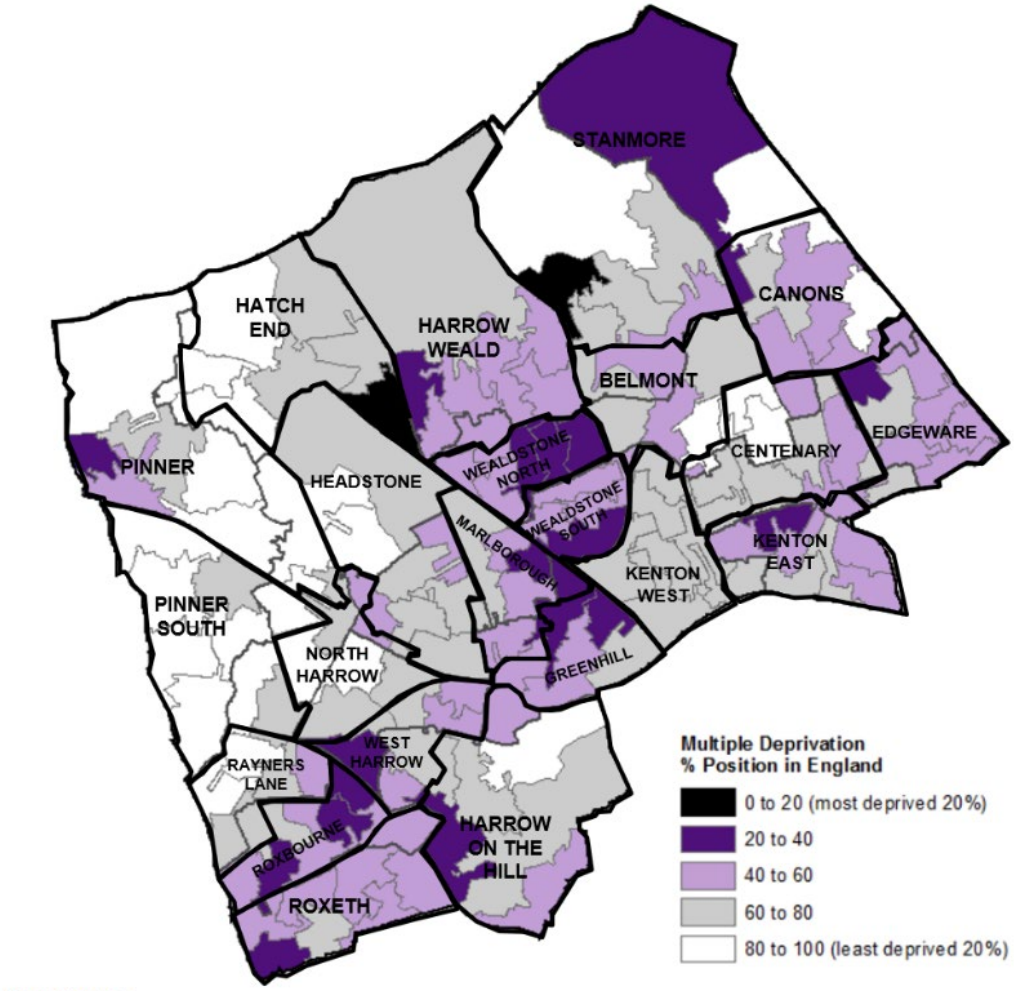
Deprivation is a major risk factor for poor oral health and a clear social gradient exists in outcomes. National data demonstrates that 5-year-old children living in the most deprived areas are 3.4 times more likely to experience dental decay as those living in the least deprived areas.[5] National data has also shown that deprivation explains 38% of the variation in prevalence of dental caries and 42% of the variation in severity of dental caries among 5-year-olds.[4] As a result, children from more deprived backgrounds are more likely to require tooth extractions. In addition to dental cares rates, the incidence and mortality of oral cancer increases with deprivation in adults.[4] These worse oral health outcomes exist across different domains of deprivation, including income, education and employment. Of note, adults in manual occupations have higher rates of tooth decay and gum disease and consequently experience greater impacts on their oral health-related quality of life. Those who are unemployed similarly experience worse oral health outcomes.[4]

Significant inequalities exist in oral health behaviours too. Both children and adults from more deprived backgrounds are less likely to brush their teeth twice a day and have higher sugary food and drink intake.[4] Data also consistently shows that people living in more deprived areas are more likely to smoke.[41] Again, these inequalities are seen across domains – education, income and employment. Adults in manual occupations are less likely to brush their teeth twice a day and visit the dentist less regularly.[4]

To compound this, national evidence shows that children and adults from more deprived backgrounds experience inequalities in accessing dental care. They are less likely to regularly access a dentist and are more likely to visit when symptomatic, with evidence subsequently showing that higher proportions of children from more deprived areas use Community and Emergency dental services, and are more likely to be admitted to hospital for dental care.[4]

Deprivation level is calculated using Index of Multiple Deprivation (IMD). This combines seven domains to formulate an overall score: income, employment, education, health, crime, barriers to housing and services and living environment. The higher the score, the more deprived an area. Harrow's IMD score (15.0) is lower than the London (21.3) and England (19.6) averages, placing Harrow within the top 30% of least deprived areas of England.[42] However, this only describes the whole borough and there are several pockets of higher deprivation within Harrow, two of which are amongst the top 20% most deprived in England. Figure 6 shows deprivation rates in Harrow relative to the rest of the country.[43]

**Figure 6: Deprivation level in Harrow relative to England[43]**




Crown Copyright
London Borough of Harrow LA. 100019206
Source: MHCLG English Indices of Deprivation 2019

## 8.2. Food environment

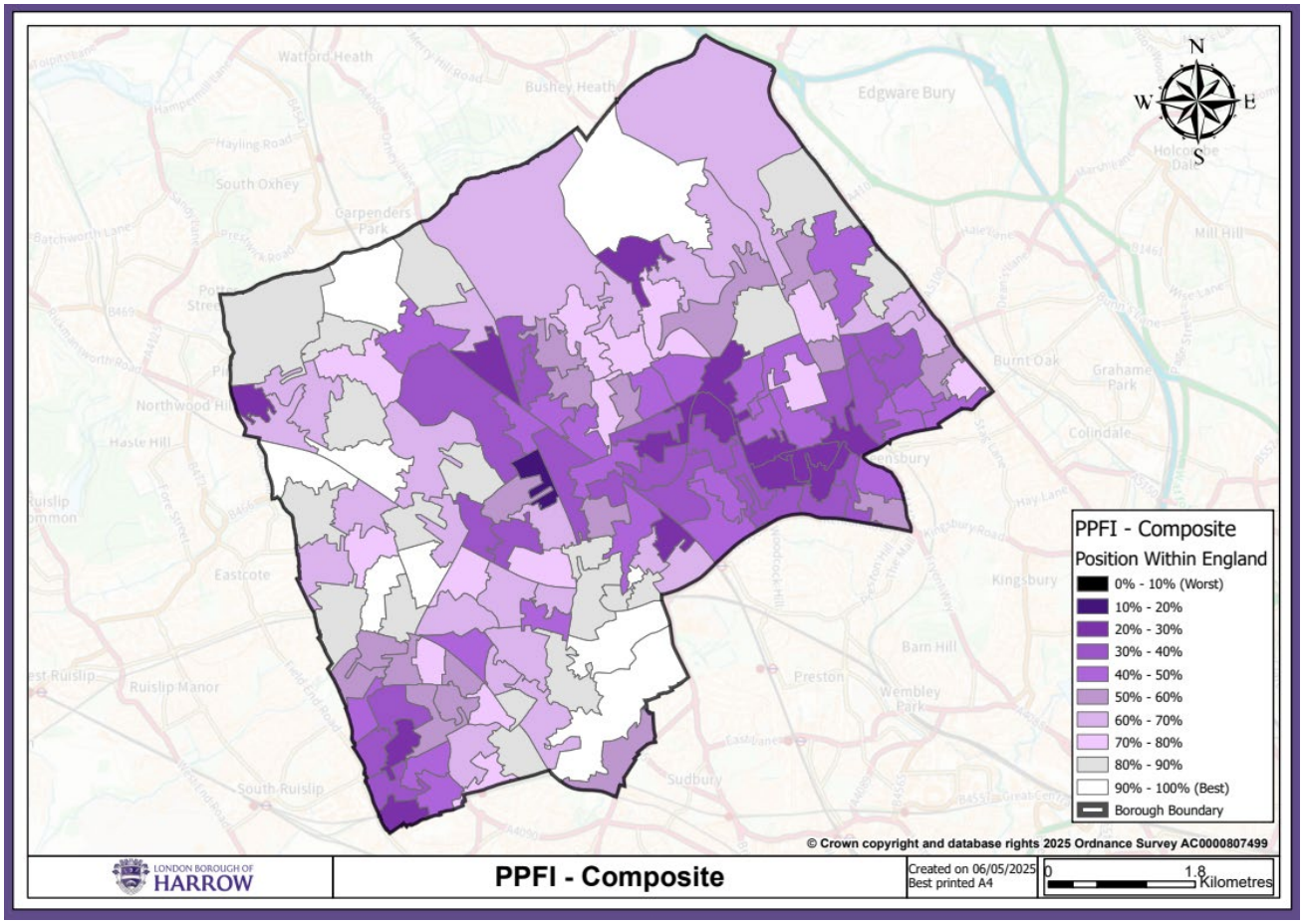
Unhealthy food environments are characterized by the prevalence of high-calorie, low-nutrient foods often with a higher density of fast-food outlets.[44] It is well established that the environment in which we are born, grow, live, work and age determine our health, and that differing social and economic conditions leads to health inequalities.[45]

Unhealthy foods are usually more accessible, affordable and advertised than healthier options. It would therefore come as no surprise that more deprived areas are more likely to have unhealthier food environments, limiting access to fresh and nutritious food. The established link between unhealthy food environments and worse health outcomes, including obesity, diabetes and heart disease, highlights a vicious cycle where poor diet and health further entrench inequality and poverty.[46] Oral health shares this causality with these other diseases. Evidence demonstrates that unhealthy food environments are a significant contributor to poor oral health outcomes, particularly tooth decay.[47]

Mapping the food environment of Harrow is challenging. It is a diverse and dynamic place, and modelling sources are limited. For our analysis we used several different modelling methods, each revealing different elements of the food environment in Harrow.

The first method we used was the Priority Places for Food Index (PPFI).[48] The PPFI combines data from seven domains to create a composite index of food insecurity, including socio-demographic barriers, need for family food support as well as accessibility and proximity to supermarket and non-supermarket food options. Food insecurity describes the inability to acquire nutritious food and is associated with unhealthy dietary patterns and poor health outcomes as those affected obtain their food from more affordable and accessible, and ultimately unhealthier, sources.[49] Figure 7 shows how areas in Harrow rank amongst national PPFI deciles. Although nowhere in Harrow falls into the worst affected 10%, some are within the worst 20% and many areas rank amongst the worse 20-40% nationally.

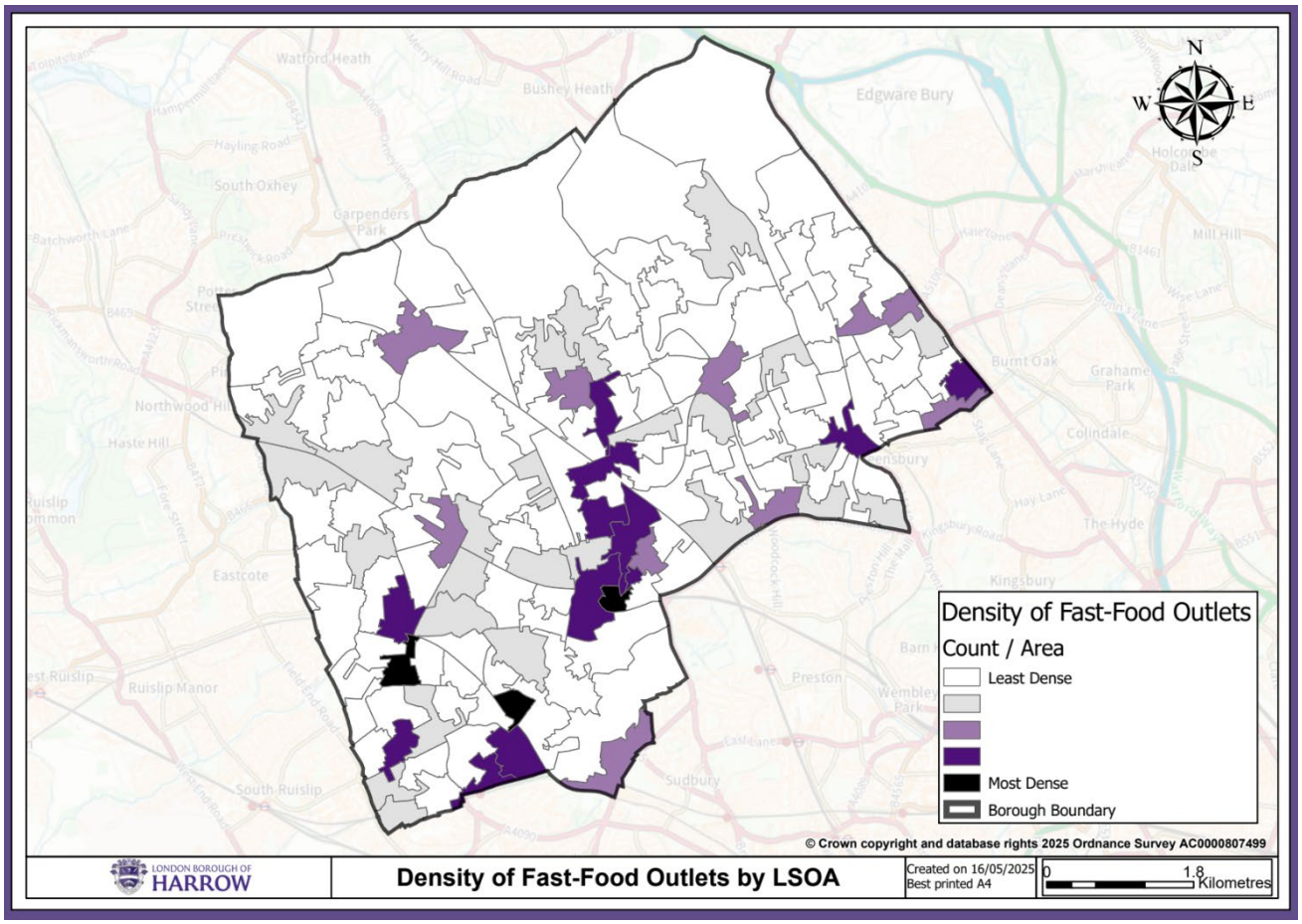
**Figure 7: National deciles for PPFI index in Harrow**[48]




Another important insight is the density of fast-food outlets as significant contributors to unhealthy food environments. There is no agreed definition of fast-food outlets or how to categorise them, which is an important factor in accurate mapping. In particular, outlets may be defined as “restaurants” despite also acting as takeaways and offering high-calorie, low-nutrient foods. For this work it was vital to capture such outlets due to the implications such food intake has on oral health

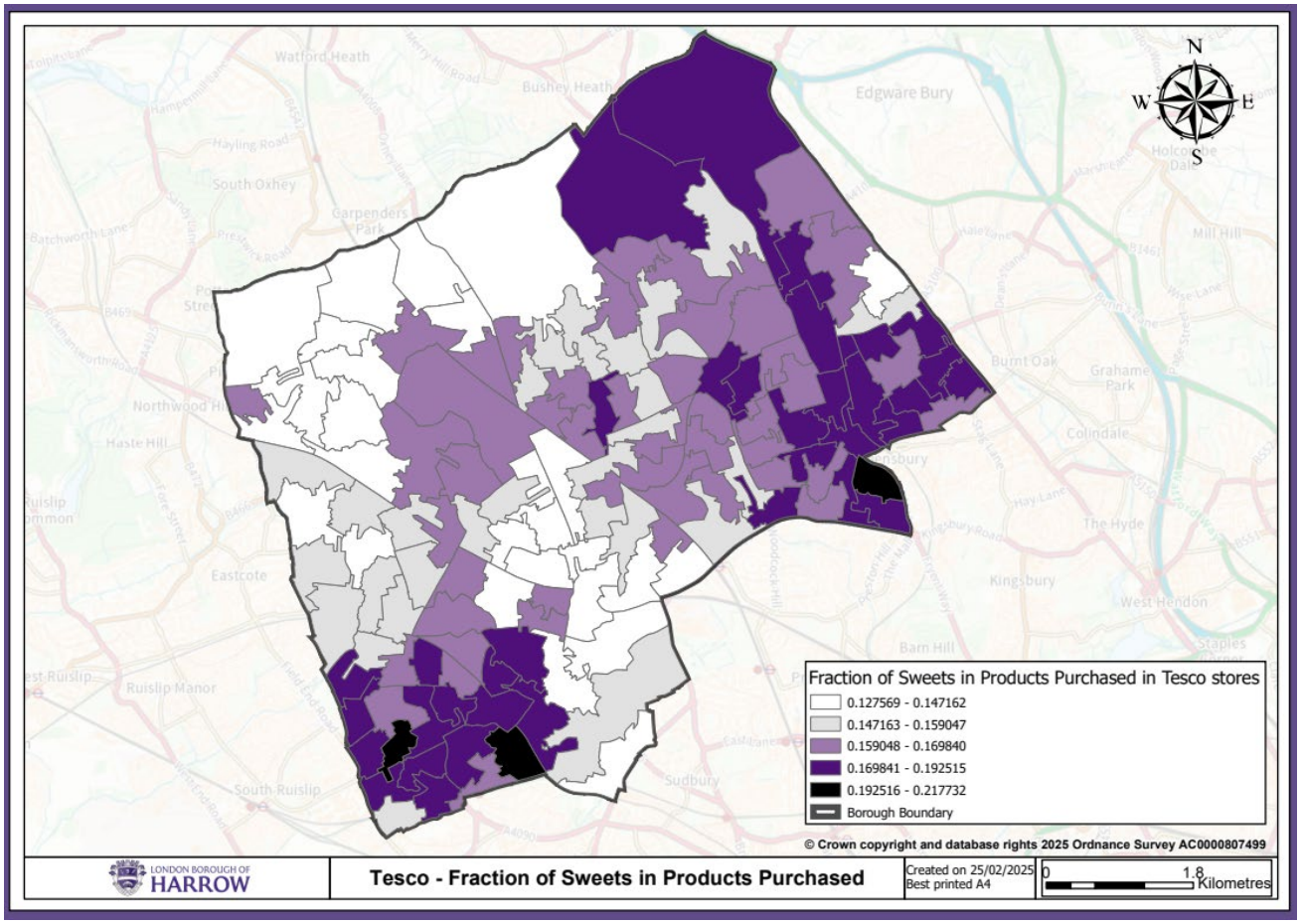
outcomes. We therefore decided to use Public Health Wales's definition of fast food outlets for this mapping, as it is an established methodology that provides the best overview of fast food outlets relevant for oral health.[50]

**Figure 8: Density of fast-food outlets by LSOA[50]**




The final method used to explore how the food environment in Harrow is related to oral health was purchases of sugary products, sweets and soft drinks. Dietary intake of such products is a critical factor in the development of tooth decay.[51] There are limitations to using this methodology though, namely that the modelling source only explored one supermarket chain (Tesco) and that this was conducted 10 years ago.[52] Figure 9 is an example of one of these maps showing consumption of sweets – all three (sugary products, sweets and soft drinks) can be found in Appendix 1.

**Figure 9: Purchasing patterns of sweets, soft drinks and sugary products in Tesco 2015[52]**




These analyses paint an overall picture of the food environment in Harrow. Together they demonstrate areas vulnerable to being pushed or influenced to buy more affordable and accessible unhealthy food, and display this in residents' supermarket spending habits. Deprivation is a well-established factor in this picture, as more disadvantaged families turn to cheaper and unhealthier food options. This can be seen in the national connection between fast-food outlets being more common in more deprived areas,[53] and in people's food purchases.[54]

We conducted regression analysis to explore this relationship locally. We found that there was no clear correlation between deprivation and fast-food outlets ($R^2 = 0.0174$) however there were weak relationships between deprivation and supermarket purchasing patterns. Specifically, the relationship to purchases of soft drinks was slightly stronger ($R^2 = 0.1588$) compared to sweets ($R^2 = 0.1457$) and sugar content ($R^2 = 0.1303$). Full analysis of these relationships can be found in Appendix 1.

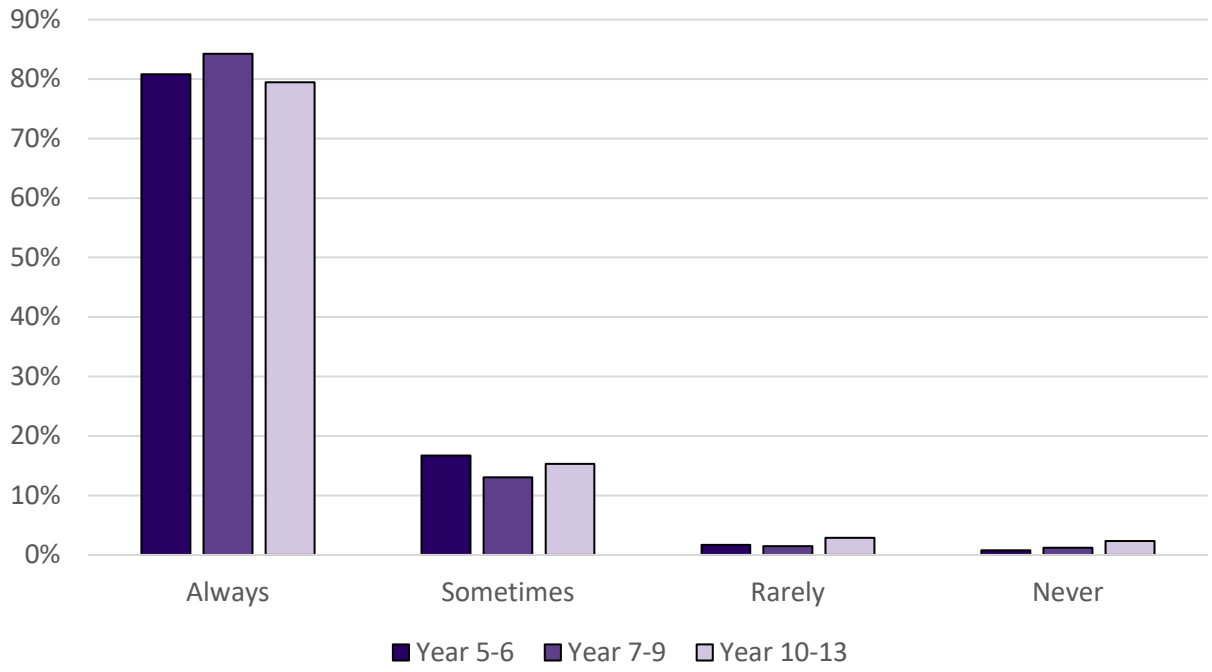
# 9. Lifestyles and behaviour

## 9.1. Toothbrushing

Brushing teeth twice a day with fluoride toothpaste is a key factor in protecting good oral health. Toothbrushing prevents build-up of plaque – a film of bacteria that coats teeth and leads to tooth decay and gum disease.[55]

The Harrow Public Health team commissions a regular school survey, HAY Harrow, which provides significant insight into the lives and behaviours of school children in the borough. The latest results are from 2025 and cover school years 5 to 13. The survey asked how often children brush their teeth twice a day with toothpaste. The results showed that around 80% of children always brush their teeth twice a day, which is consistent across all year groups as shown in Figure 10. Although this is largely positive, it does still show that a fifth of school children aged 9-18 years do not always brush their teeth as recommended.

**Figure 10: How often do you brush your teeth twice a day with toothpaste? (total n for Key Stage 2 to college = 6892, HAY Harrow, 2025)**




The HAY Harrow survey results can be further stratified into different population groups, specifically by ethnicity, whether someone's first language is English, if they have Special Educational Needs or Disabilities, or are Asylum Seekers. Graphs visualising these findings can be found in Appendix 2, but in summary these show that Asylum Seeker children and children with SEND are less likely to regularly brush their teeth twice a day. Results by English as a first language and ethnicity were relatively similar.

## 9.2. Diet

As already noted in this report, diet plays a crucial role in oral health. Frequent free sugar consumption significantly increases the risk of tooth decay – bacteria metabolise sugars and produce acid which attacks and destroys enamel.[56] The main sources of free sugars consumed are soft and fruit drinks, cereal and cereal products, and confectionary.[57] In addition, acidic food and drink also erodes teeth over time.[26]

There is limited evidence to suggest diet has any association with oral cancer, although an unhealthy diet does increase the risk of other cancers.[57] In summary, maintaining a healthy balanced diet low in sugars and acids is essential for preserving good oral health and preventing dental disease. It is also important to bear in mind that oral health shares these risk factors with other non-communicable diseases that represent public health challenges, such as cardiovascular disease, diabetes and obesity.[2] Tackling these risk factors would therefore help to improve health more generally.

The HAY Harrow survey also provides significant insight into the dietary habits of school children in the borough. The findings from 2025 were mixed: Only half of school children in Years 5-13 eat vegetables every day, however most only had fizzy drinks or fast-food once a week or less. Nevertheless, there were still a reasonable proportion of children who had fizzy drinks several times a week (17%) or daily (5%), as well as those who had fast-food or takeaways several times a week (11%) or even daily (3%). Graphs of these results are shown in Appendix 2, which is also divided into different school Key Stages.

It was also possible to stratify this HAY Harrow data on dietary habits by ethnicity, whether someone's first language is English, if they have Special Educational Needs or Disabilities, or are Asylum Seekers. Appendix 2 contains graphs which visualise these results. In summary, children with SEND and asylum seekers were more likely to have fizzy drinks on a daily basis. Asylum seeker children were also more likely to have fast-food or takeaways every day. There was some variation by ethnicity, while results by English as a first language were similar.

Additional eating and obesity data is also useful to explore as part of the greater dietary picture in Harrow, and it is representative of unhealthy eating behaviours related to oral health. Obesity and overweight rates in Harrow rise with age. 17.3% of children in reception are overweight or obese, with this climbing to 37.5% of Year 6 children and 52.8% of adults. Obesity and overweight rates in Harrow are lower than the London average in Reception children, however rise to be in line with the London average amongst Year 6 children and adults.[24]

## 9.3. Breastfeeding

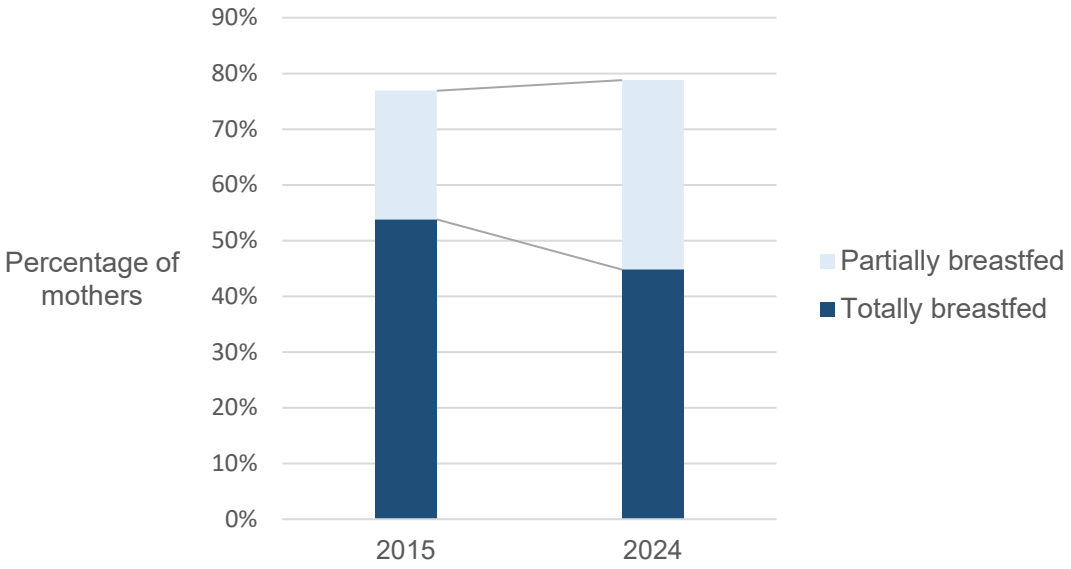
Breastfeeding plays an important role in the development of healthy teeth in childhood. It promotes the proper development of oral and facial structures, including the jaw, teeth and palate. It does so through the physical act of breastfeeding, with breast milk also providing essential nutrients for the development of healthy teeth and gums.[58]

It is recommended that infants are exclusively breastfed for the first 6 months of life, with evidence also indicating that breastfeeding up to 12 months is beneficial. Breastfeeding in this way has been shown to reduce the risk of childhood tooth decay and malocclusions.[57] Thus, breastfeeding not only provides essential nourishment to an infant, but also lays a foundation for good oral health.

The latest local data shows that 78.8% of children are breastfed at 6-8 weeks in Harrow. 44.8% of these are totally breastfed, while 34.0% are partially breastfed. The overall percentage of children

being breastfed in Harrow is unchanged since 2015, however a greater proportion are only partially breastfed as demonstrated in Figure 11.

**Figure 11: The percentage of mothers totally and partially breastfeeding at 6-8 weeks in 2015 and 2024**




## 9.4. Mouth and oropharyngeal cancer risk factors

Mouth and oropharyngeal cancers are commonly considered together. Mouth cancer arises in any part of the mouth (lips, gums or front of the tongue) while oropharyngeal cancer affects the part of the throat just behind the mouth (tonsils and the back part of the tongue). The main risk factors for these cancers are:[59]

- Tobacco – including smoking, chewing tobacco and betel quid (gutkha or paan) with or without tobacco
- Alcohol
- Human papillomavirus (HPV) infection
- Older age
- Weakened immune systems (either due to a medical condition or medication)
- Mouth conditions (such as erythroplakia and leukoplakia)
- Family history of mouth cancer
- Personal history of other cancers

Evidence also shows that men and some ethnic minority groups also have a higher risk of oral cancer.[4]

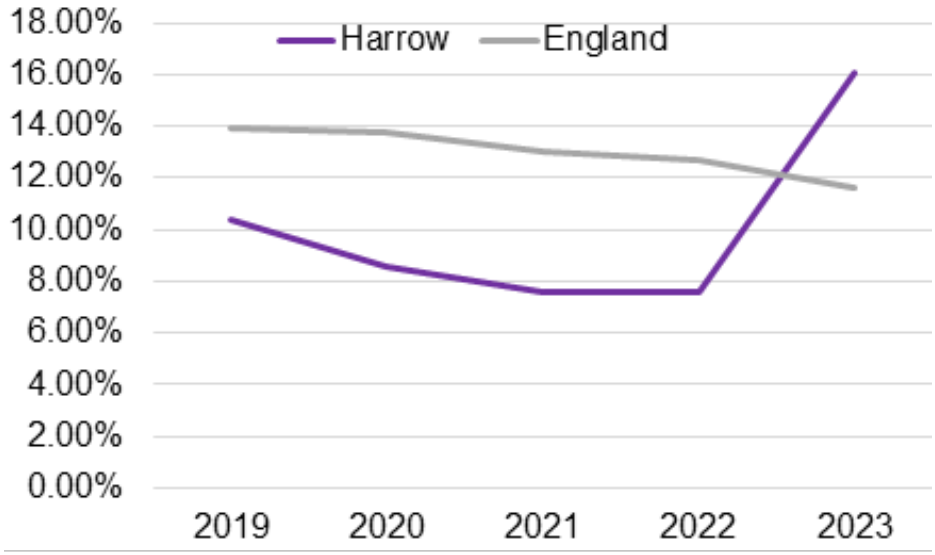
## 9.5. Tobacco

Tobacco use is a significant risk factor for mouth and oropharyngeal cancer. This includes smoking tobacco in cigarettes, cigars waterpipes/shisha as well as chewing tobacco and betel quid (with or without tobacco). Considerable exposure to environmental tobacco via passive smoking is also associated with a small increased risk of mouth and oropharyngeal cancer.[59]

Tobacco use is also linked to other dental diseases such as gum disease and tooth decay.[60] The 2021 Adult Oral Health Survey showed that 24% of current smokers and 23% of previous smokers had gum disease compared to 16% of those who had never smoked. Current smokers were also more likely to report that their gums bled.[61]

16.1% of adults in Harrow smoke, which is one of the highest rates in North-west London and well above the England average of 11.6% as shown in Figure 12. Smoking is more prevalent amongst men and in middle-age groups, and a clear link to higher deprivation is seen. The Harrow Public Health team recently produced a Tobacco Health Needs Assessment which contains further details on tobacco use in the borough.[62] It is important to note that Figure 12 shows a sudden rise in smoking prevalence from 2022 to 2023. This is due to the methodology used to gather this data, with the 2023 figure likely to be more representative of true smoking prevalence in Harrow.

**Figure 12: Smoking prevalence in Harrow compared to England[24]**



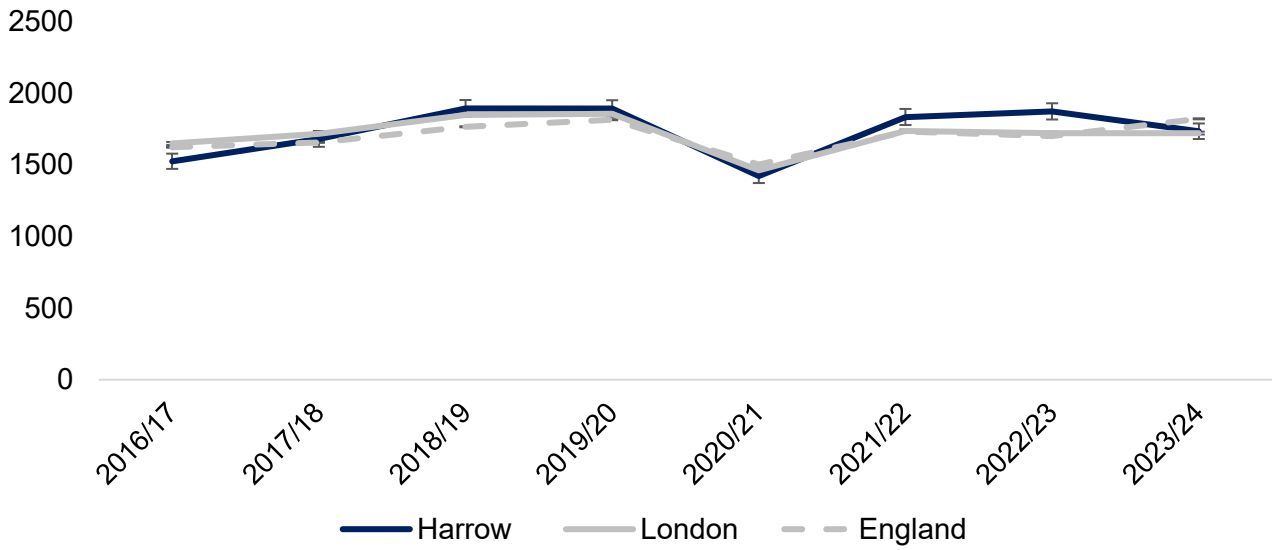

## 9.6. Alcohol

Alcohol is also a significant risk factor for mouth and oropharyngeal cancer, responsible for 35% of cases in the UK.[59] Like tobacco, it is also associated with gum disease and tooth decay as it dries out protective saliva, in addition to drinks often being sugary and acidic.[63] The 2021 Adult Oral Health Survey found that fillings and gum disease were more common as frequency of alcohol consumption increased.[61]

The harmful effects of alcohol caused by excessive intake can be demonstrated by admissions to hospital due to alcohol-related conditions. In 2023-24 Harrow had 1737 admissions per 100,000 people, which is similar to the London average but slightly lower than the England average. Figure

13 shows the trend in alcohol related hospital admissions in Harrow over time. This reveals that although admissions in 2023-24 were a down a little from 2022-23, overall admissions are up from 1527 per 100,000 people in 2016-17, indicating greater harm from alcohol intake in Harrow over time.

**Figure 13: Trend of admission episodes for alcohol-related conditions per 100,000 people in Harrow, London and England[24]**




## 9.7. HPV vaccination

HPV infection can be a significant concern for oral health due to its association with mouth and oropharyngeal cancers. In the UK, HPV is responsible for 50% of oropharyngeal cancer cases.[59]

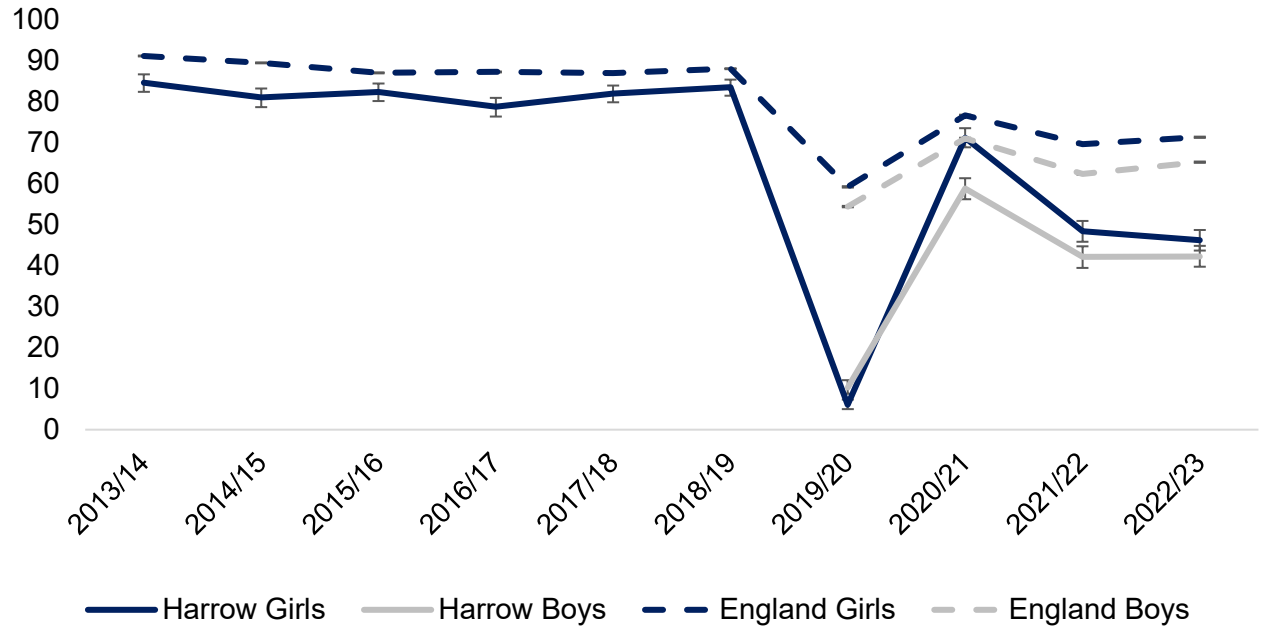
HPV is transmitted through intimate contact and infects the mouth and throat. HPV is common, infecting around 80% of people at some point in their life. For most people it causes no harm and resolves on its own, however for some people the virus can cause cancerous changes in the cells of the mouth and oropharynx. This is usually caused by one of the many types of HPV called HPV 16. There has been an increase in oropharyngeal cancers associated with HPV in recent years, usually affecting younger people. HPV positive oropharyngeal cancer usually has a better prognosis compared to those that are HPV negative.[59]

Vaccinating against HPV is crucial to preventing infection and reducing the incidence of HPV-related cancers, both via individual protection and contributing to herd immunity.[64] National data has shown a concerning drop in HPV vaccination uptake since the Covid-19 pandemic, with a quarter of eligible children missing out (compared to the 90% uptake pre-pandemic).[65] This not only compromises individual protection, but places public health at risk due to the reduced effectiveness of herd immunity.

The most recent local data on HPV vaccine uptake in Harrow is from 2022/23, which shows that vaccination rates are very low at 46% for females and 42% for males, both well below the national average although similar to many other North-west London.[24] HPV vaccination followed a similar

pattern to the rest of England with reduced uptake during the Covid-19 pandemic, which has since not recovered, as shown in Figure 14.

**Figure 14: Percentage uptake of HPV vaccine in 12-13 year old females and males in Harrow and England.[24]**



# 10. Health outcomes

It is the statutory duty of local authorities to undertake or commission oral health surveys.[15] This is largely conducted via the National Dental Epidemiology Programme (NDEP) – a series of annual oral health surveys coordinated by the Office for Health Improvement and Disparities (OHID). These surveys form a significant and important proportion of the health outcome findings of this Needs Assessment, alongside other publicly available sources and locally gathered data.

Another vital source of oral health outcome data for this Needs Assessment was the North-West London ICB's data software Whole Systems Integrated Care (WSIC). This provided key insight into hospital-related oral health outcomes, enabling us to provide a more comprehensive overview. We have also included valuable analysis from the 2024 QMUL report on 0-5-year-old children.

## 10.1. Children

### *10.1.1. Tooth decay (NDEP 2024)*

The latest NDEP survey was conducted on 5-year-old schoolchildren in 2024, with the results published in early 2025. This provides us with very recent and up-to-date data on the oral health of 5-year-old children in Harrow. It showed that 27.6% of 5-year-old children in Harrow had experience of tooth decay. This was similar to the London average, lower than some North-west London boroughs and a significant decrease from the peak of 42.4% in 2019.[5,66] This is visualised in Figures 15 and 16.

**Figure 15: The percentage of 5-year-old children with experience of tooth decay 2024[5]**

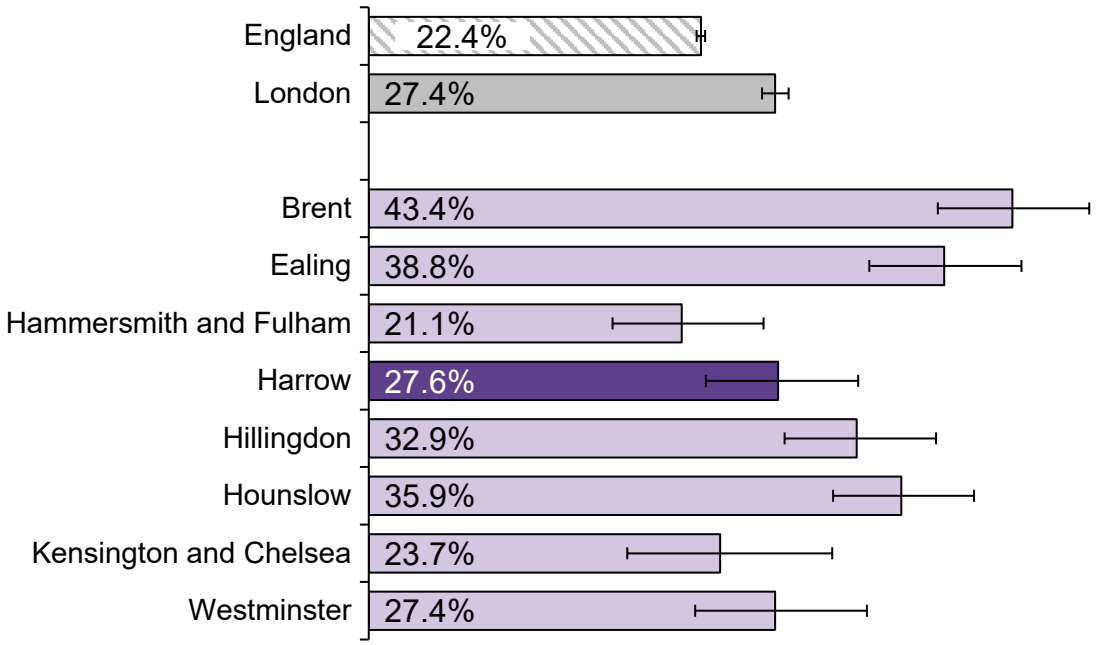
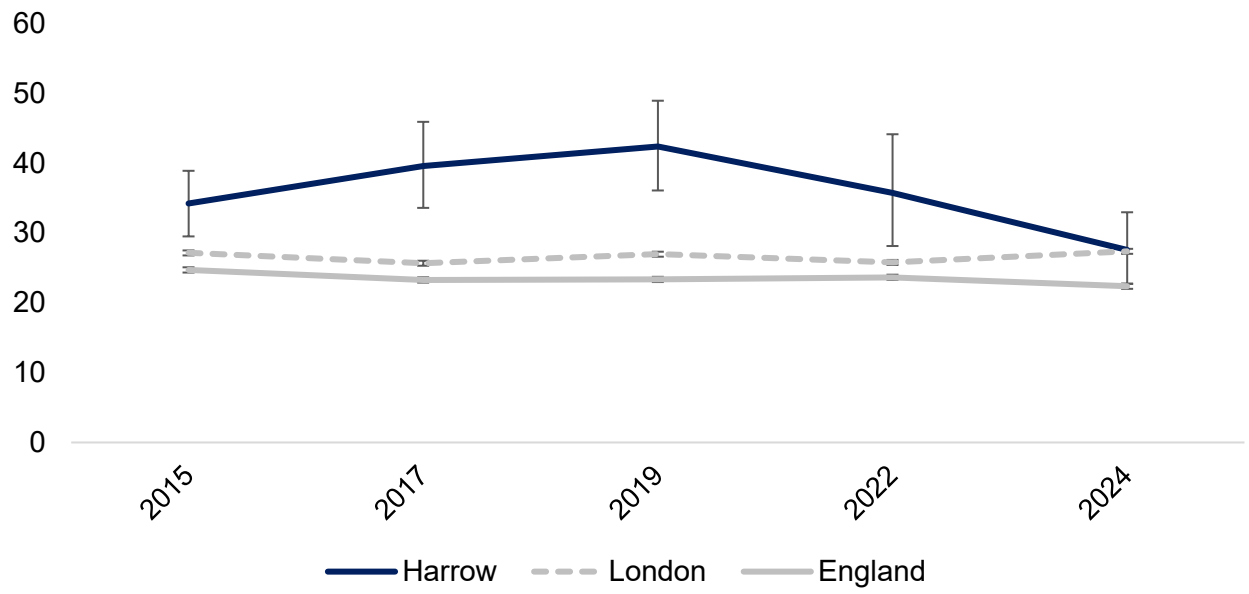
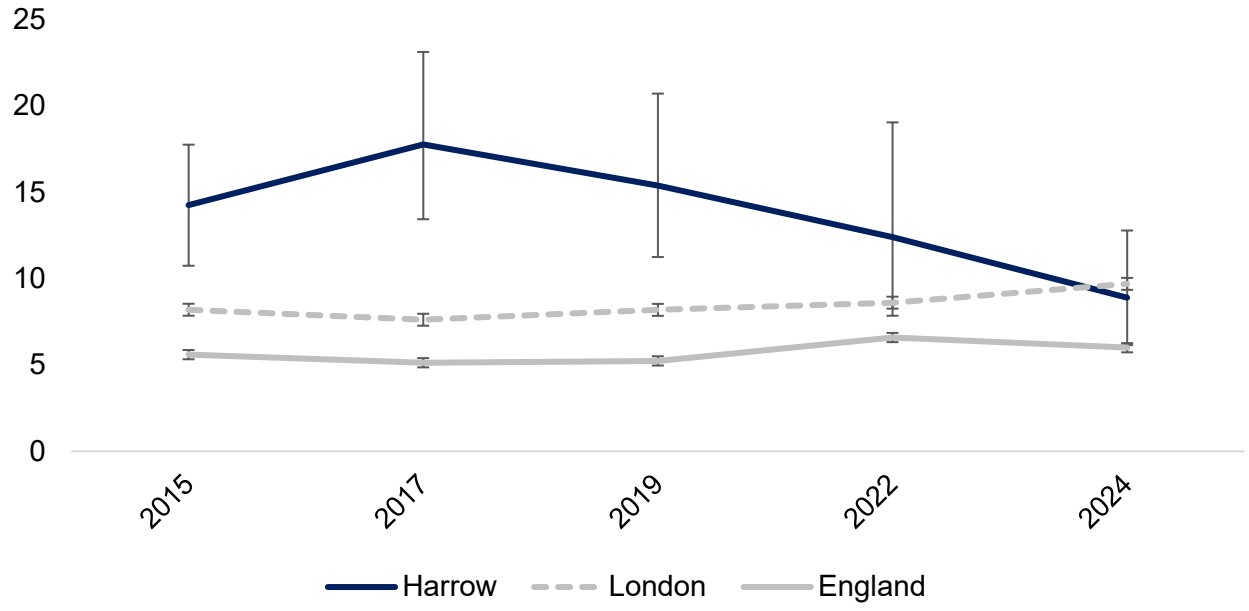


**Figure 16: The trend of tooth decay in 5-year-old children in Harrow, London and England over time[5]**




The NDEP surveys in children also specifically assess incisor decay, as this is associated with long-term bottle use with sugar-sweetened drinks or feeding practices.[67] In 2024, 8.9% of 5-year-old children in Harrow had incisor decay. This was similar to the London average of 9.7%, but higher than the national average of 6.0%. The rate of incisor decay in Harrow has also appeared to be decreasing since 2017, although this is not a statistically significant difference as shown in Figure 17.[5]

**Figure 17: Percentage of 5-year-old children with incisor decay over time in Harrow, London and England[5]**



The 2024 NDEP survey on 5-year-old children assessed a number of other outcomes related to tooth decay. A full table of these results can be found in Appendix 3. In summary, the number of affected teeth amongst those with experience of or untreated dental decay was higher in Harrow compared to London and national averages. Nearly a quarter of children in Harrow had untreated decayed teeth, and 2.4% had had teeth extracted due to decay – both of which were in line with London and national averages.[5]

### *10.1.2. Tooth decay (other NDEP surveys)*

The borough-level results for other recent NDEP surveys in children should be interpreted with caution as they did not meet the minimum threshold of participants in Harrow to enable results to be reliably generalised to the whole borough. This includes both the 2020 and 2023 surveys, with the former being particularly affected by the Covid-19 pandemic.

The NDEP surveys in 2013 and 2020 were focussed on 3-year-old children. These showed that in 2013, 18.3% of 3-year-old children in Harrow had experience of tooth decay,[68] which reduced to 12.4% in 2020.[69] However, this was not a statistically significant difference.

The NDEP survey for 2023 explored the oral health of children in Year 6. These results suggested that experience of tooth decay in Year 6 children was significantly higher in Harrow than London and England averages, with 24.2% affected. 11.9% of Year 6 children in Harrow had untreated decayed teeth.[70] As already mentioned above, it is important to note that these findings are very limited and should be interpreted with caution.

### *10.1.3. Experience living with poor oral health*

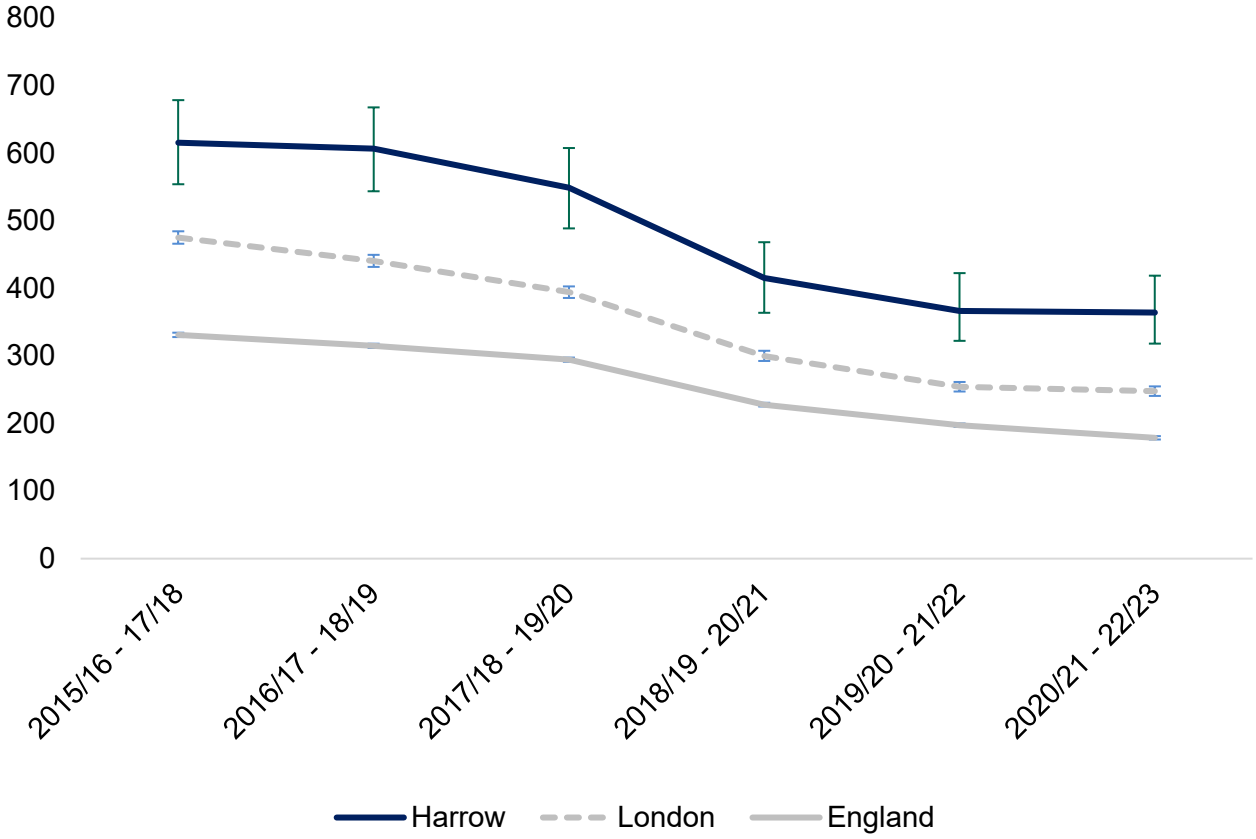
Some NDEP surveys assessed outcomes related to children's experiences living with poor oral health. Although interpretation of these results is limited as outlined previously, the 2023 survey on Year 6 children showed that 5.7% of participants in Harrow had pain in their teeth or mouth often or very often, with 5.8% upset with their teeth or mouth. Both of these were higher than the London and national averages. In addition, 3.8% of Year 6 children in Harrow had difficulty biting or chewing, and 1.4% did not want to talk because of their teeth or mouth.[70]

### *10.1.4. Hospital admissions*

For this Needs Assessment we have included data on hospital admissions from a variety of sources. Altogether though they provide insight into how Harrow compares to national and other regional rates, how admissions vary by borough-ward and how they vary by age and deprivation at a Harrow-level.

Data from OHID shows us that in the period 2020-2023, hospital admissions for dental caries among 0-5-year-olds in Harrow were higher than London and national averages at 364 per 100,000 people, which is as demonstrated in Figure 18. However, Figure 18 also shows this rate has significantly reduced in Harrow since 2015, although as this data is aggregated over several years it is unclear to what extent this is due to reduced need or the impact of the Covid-19 pandemic.[24]

**Figure 18: Hospital admissions for dental caries in 0-5-year-olds per 100,000 people over time.[24]**

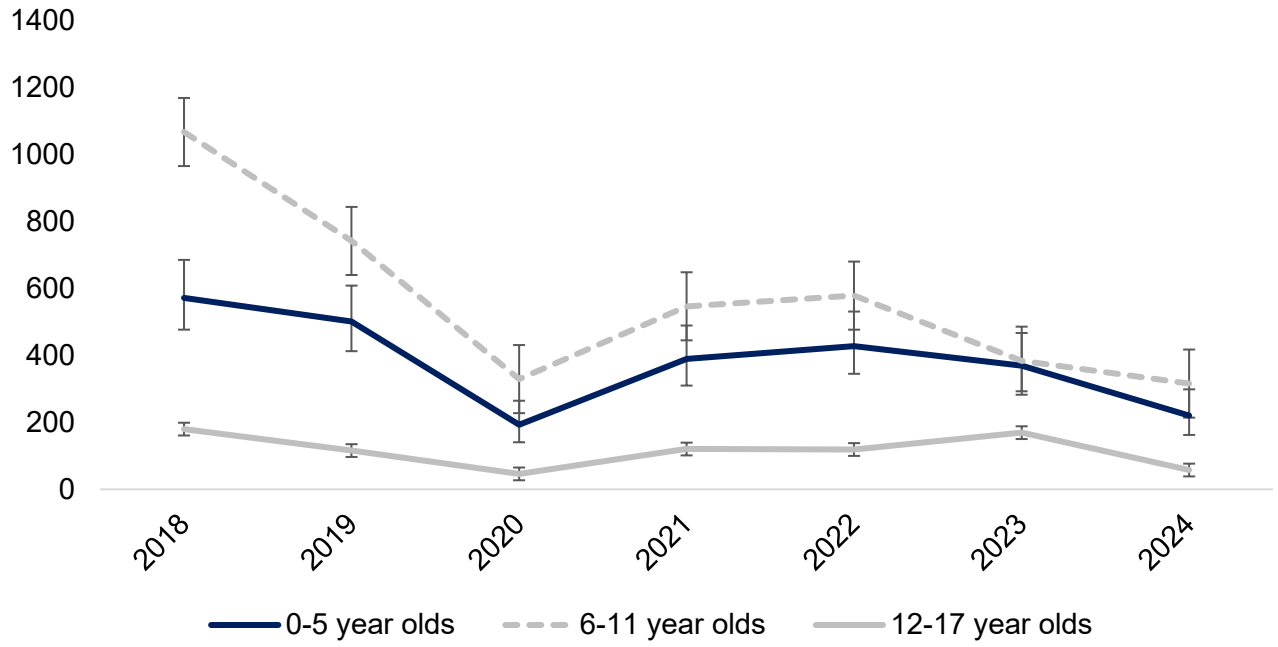



These findings are supported by data extracted from WSIC, displayed in Figure 19. This shows that although there was a significant drop in the rate of hospital admissions due to tooth decay because of the Covid-19 pandemic in 2020, this was followed by a period of recovery and has since continued a downward trajectory with fewer hospital admissions across all ages over time. Figure 19 also shows that hospital admissions due to tooth decay are most common amongst the 6-11 year old age group. In 2024, rates of hospital admission due to tooth decay were 220, 316 and 58 per 100,000 for 0-5 year olds, 6-11 year olds and 12-17 year olds respectively, at an average of 194 admissions per 100,000.

It was only possible to further stratify this data by sex. This showed no significant difference in the rate of hospital admissions for dental caries between males and females, with 392 and 336 admissions per 100,000 people respectively.[24]

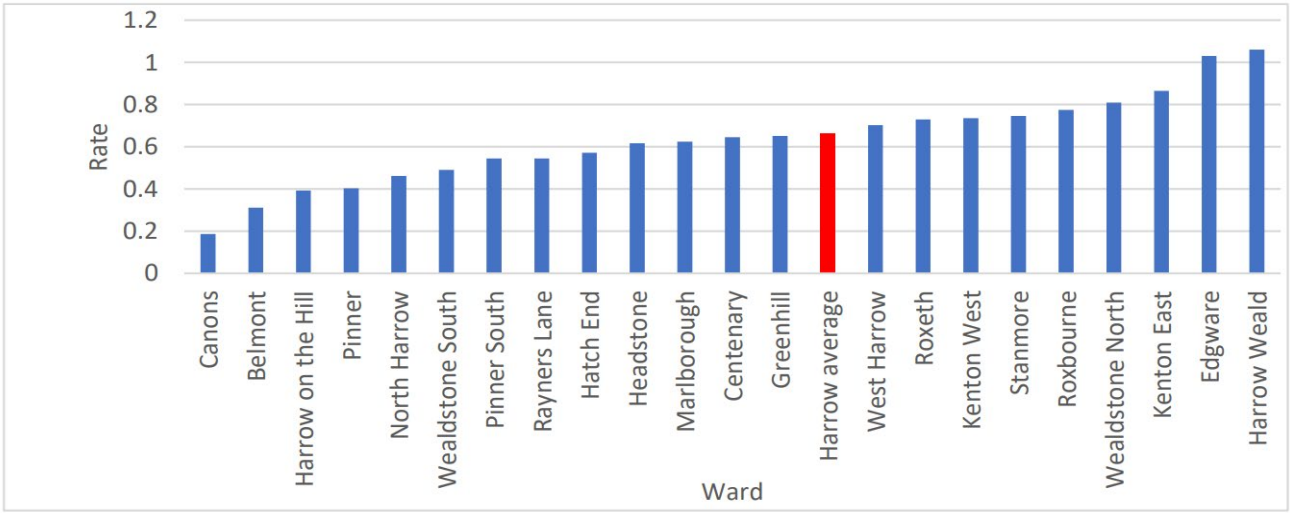
Although it is positive to see a fall in hospital admissions related to tooth decay in Harrow, it is important to caveat these findings – over recent years in London there has been an increase in community-based capacity for procedures such as tooth extractions, for example via inhalation sedation. This therefore provides an alternative pathway to reduce hospital admission and treatment under general anaesthesia. A cross-London analysis showed that although this has contributed to the fall in hospital admissions, it can also be partly explained by declining tooth decay rates, which we have observed in Harrow.[71]

**Figure 19: Rate of hospital admissions due to tooth decay in children per 100,000 population in Harrow by age and over (WSIC)**




The QMUL report on 0-5-year-old oral health also explored hospital admissions in Harrow by ward. Admissions between 2015-2024 were grouped together as the number of admissions by individual ward would otherwise be too low to analyse. The results are shown in Figure 20, indicating that hospital admission rates were highest in wards with higher levels of deprivation: Harrow Weald, Kenton East, Wealdstone and Roxbourne with the exception of Edgeware.

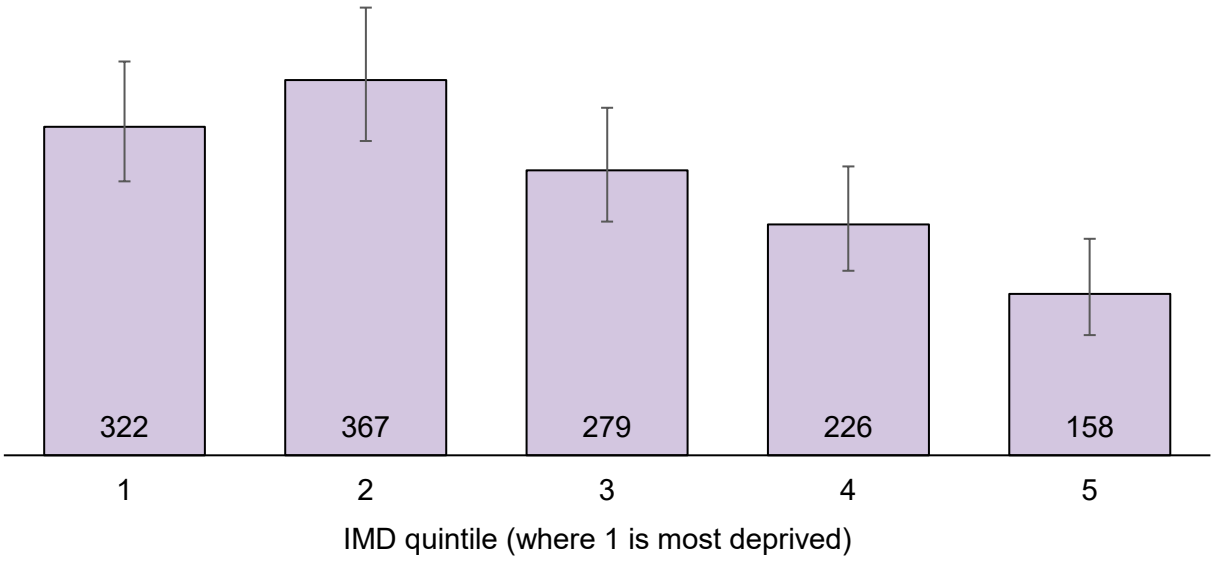
**Figure 20: The average hospital admission rate of 0-5-year old children in Harrow wards 2015-2024**



We were also able to assess the relationship between hospital admissions due to tooth decay and deprivation using data from WSIC. There was a clear social gradient, with children in more deprived quintiles more likely to be admitted than those in less deprived quintiles as shown in Figure 21. In particular there was a statistically significant difference between IMD 1 and 2 (most deprived) and IMD 5 (least deprived). This social gradient existed in both 0-5 and 6-17-year-olds, and separate graphs for these age groups can be found in Appendix 4.

This analysis was conducted using local deprivation quintiles, meaning the IMD scores are relative to Harrow's location population rather than the population of England as a whole. This approach is used as there are many pockets of deprivation in Harrow that may be averaged out if compared to national data.

**Figure 21: Hospital admissions (per 100,000 people) related to tooth decay by deprivation among those aged 0-5 in Harrow (2022-2024) (WSIC)**

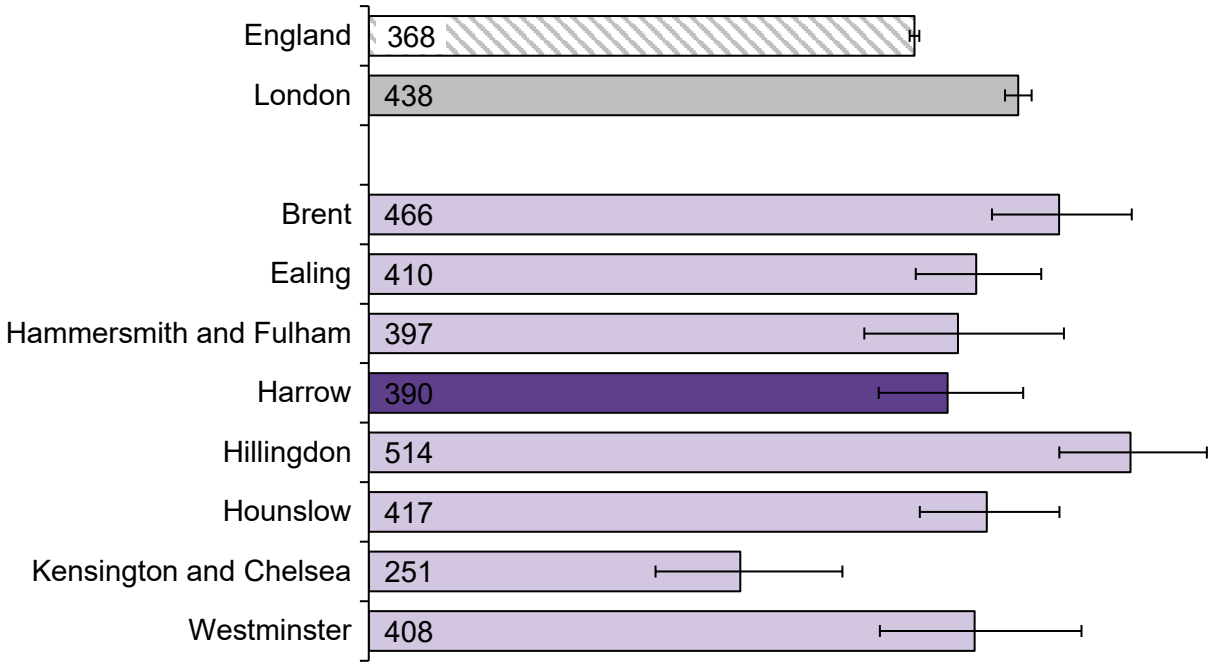



### *10.1.5. Hospital tooth extractions*

Hospital tooth extractions are calculated using Finished Consultant Episodes (FCEs). An FCE is a term used to indicate a period of care that has been completed in hospital records, and thus can be used to assess the number of tooth extractions conducted in hospitals.[72] The data for FCEs is only available for people aged 0-19-years-old, with the latest available data from 2023-24. This shows that in Harrow there were 390 tooth extractions per 100,000 people, slightly below the London average but above the national rate as shown in Figure 22, although these were not significant differences.

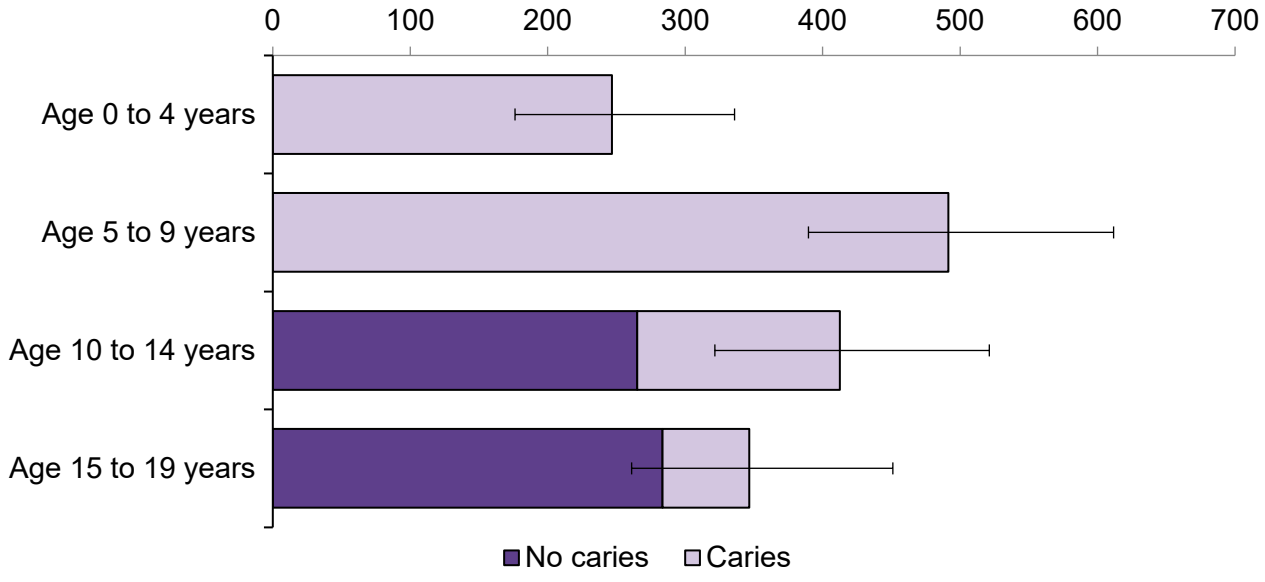
More specifically, 61% of tooth extractions in Harrow were due to dental caries at a rate of 237 per 100,000 – this rate was significantly lower than the London average of 291 and similar to the national average of 229 per 100,000. The Harrow tooth extraction rate unrelated to caries was 153 per 100,000 people, which was in line with both London and national rates.[73]

**Figure 22: FCEs for tooth extraction – all diagnoses per 100,000 people in 2022-23[73]**



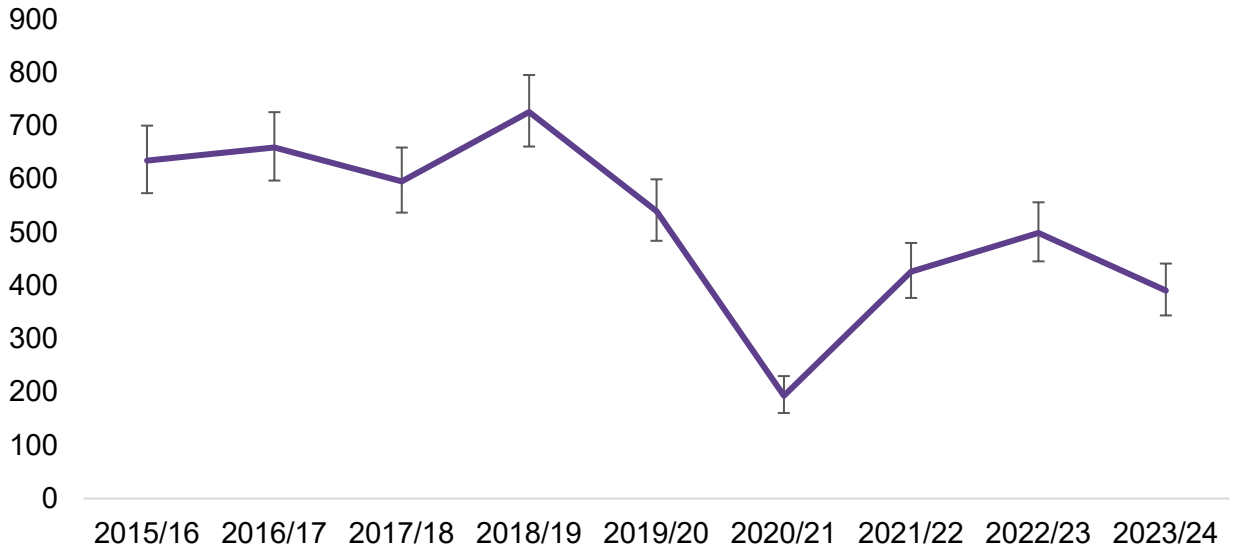

When stratified by age, this data shows that in Harrow the rate of tooth extractions in 5-9-year-olds is higher than in other age groups, but not significantly so. For tooth extractions related to caries the pattern of distribution by age groups is highest amongst those aged 5-9 years old, however for tooth extractions not related to caries this distribution shifts to older age groups.[73] These findings are shown in Figure 23.

**Figure 23: Tooth extractions in Harrow – all diagnoses by age per 100,000 people in 2023-24[73]**



Furthermore, Figure 24 shows how hospital tooth extractions have declined amongst children in Harrow over the last decade. There was a significant drop in extractions due to the Covid-19 pandemic in 2020/21, with a subsequent increase that has since fallen again in 2023/24. Similarly to the data on hospital admissions, it is unclear how much this decrease is due to increased community-capacity for procedures that would have previously been performed in hospital, or due to declining tooth decay rates.

**Figure 24: FCEs for tooth extraction in Harrow among children aged 0-19 over time[73]**




### *10.1.6. Summary*

Oral health outcomes in children have been improving in Harrow over recent years. This includes tooth decay prevalence and related outcomes such as hospital admissions and tooth extractions, although with some caveats to this data. Some outcome rates are now in line with London (tooth decay in 5-year-olds) or even national averages (tooth extractions), although others remain relatively high (hospital admissions due to tooth decay). Altogether these still represent a significant population level improvement in child oral health in the borough. There is evidence of local oral health inequality amongst children in Harrow, specifically that children from more deprived areas are more likely to be admitted to hospital due to tooth decay.

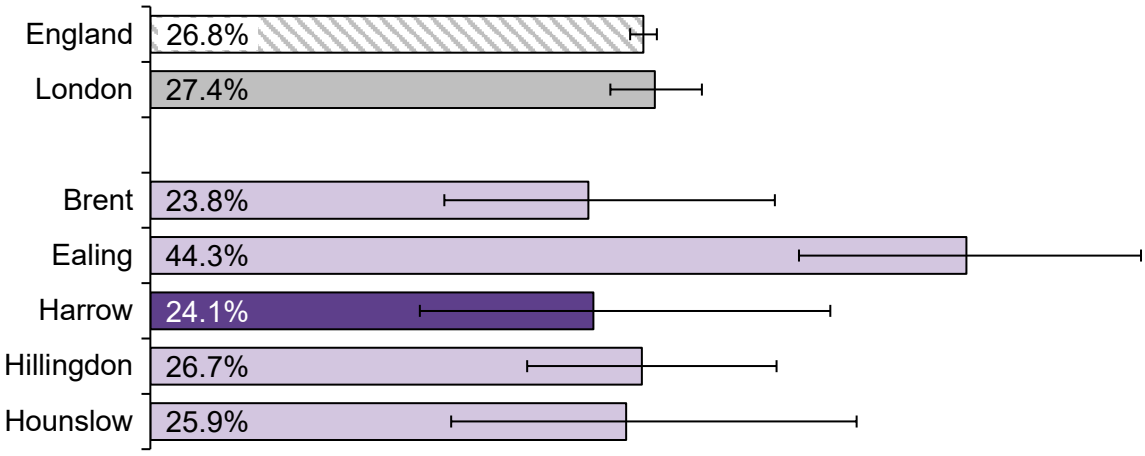
## 10.2. Adults

### *10.2.1. Tooth decay (NDEP surveys)*

There are two NDEP surveys looking at adult populations. These are the 2018 survey on adults attending dental practices[6], and the 2016 version focused on mildly dependent older people. Similarly to many of the children's NDEP surveys, the generalisability of results is limited by low participation numbers. Furthermore, the findings from the 2018 survey are constrained by the fact that participants were exclusively adults who visited dental practices, most of whom were regular attenders. It is unclear whether their regular attendance indicates underlying dental issues, or if they could have better oral health due to frequent dental support.[6]

The 2018 survey results showed that 24.1% of adults in Harrow had active tooth decay which was similar to London and national averages, as well as other North-west London boroughs, as visualised in Figure 25.[6] Those adults in Harrow with active tooth decay had an average of 2.9 decayed teeth. 7.8% of adults had PUFA (an index used to assess the presence of oral conditions resulting from untreated caries[20]) meanwhile 83.3% of adults had filled teeth. Again all of this data showed no statistically significant difference with London or England averages, largely due to wide overlapping confidence intervals.[6]

**Figure 25: The percentage of adults attending dental practices with active tooth decay (2018)[6]**




The 2016 NDEP survey on mildly dependent older people did not directly assess tooth decay prevalence. The most closely related outcome that was examined was the percentage of participants with PUFA, which was 23.5% in Harrow.[74]

### *10.2.2. Gum disease*

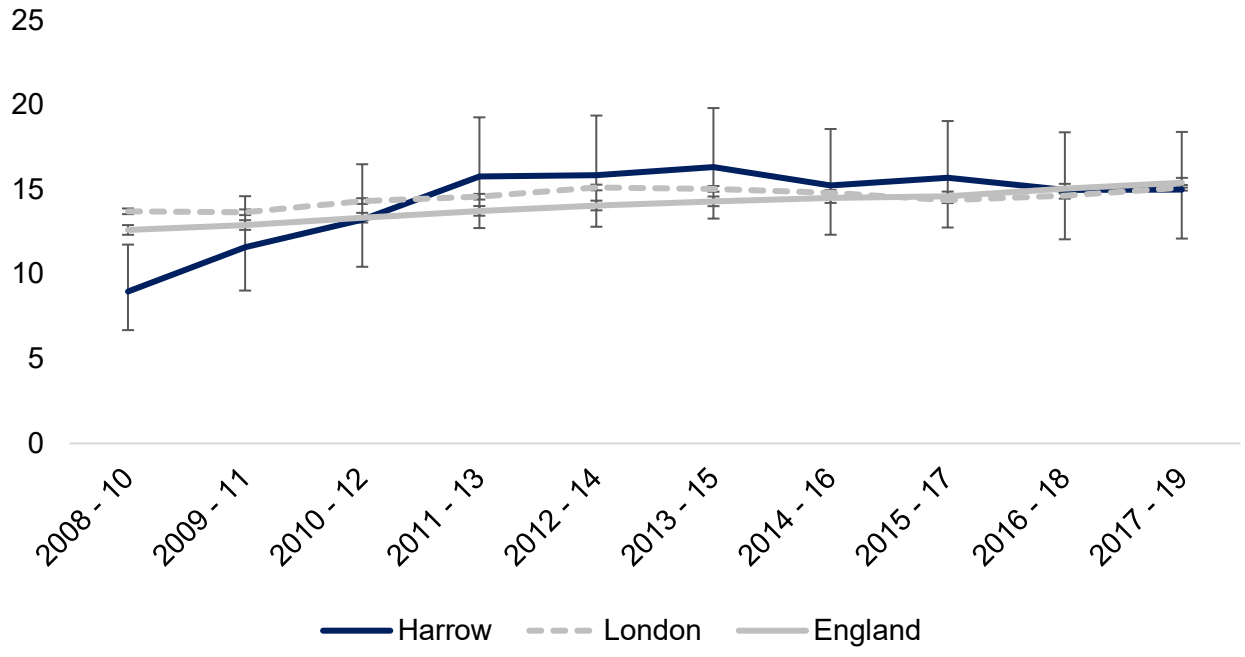
The NDEP surveys on adults covered some outcomes related to gum disease, although again it is worth noting that using this data is limited. In the NDEP 2018 survey, 48.1% of adults attending dental practices in Harrow had gum bleeding on probing. This was in line with London and national averages.[6]

The 2016 NDEP survey on mildly dependent older people did not directly assess gum disease prevalence, but did look at the percentage of participants with visible calculus. Dental calculus is a hard deposit formed from plaque and is a key contributor to gum disease.[75] 80% of mildly dependent older adults in Harrow had visible calculus, which was higher than the London and England averages.[74]

### *10.2.3. Oral cancer*

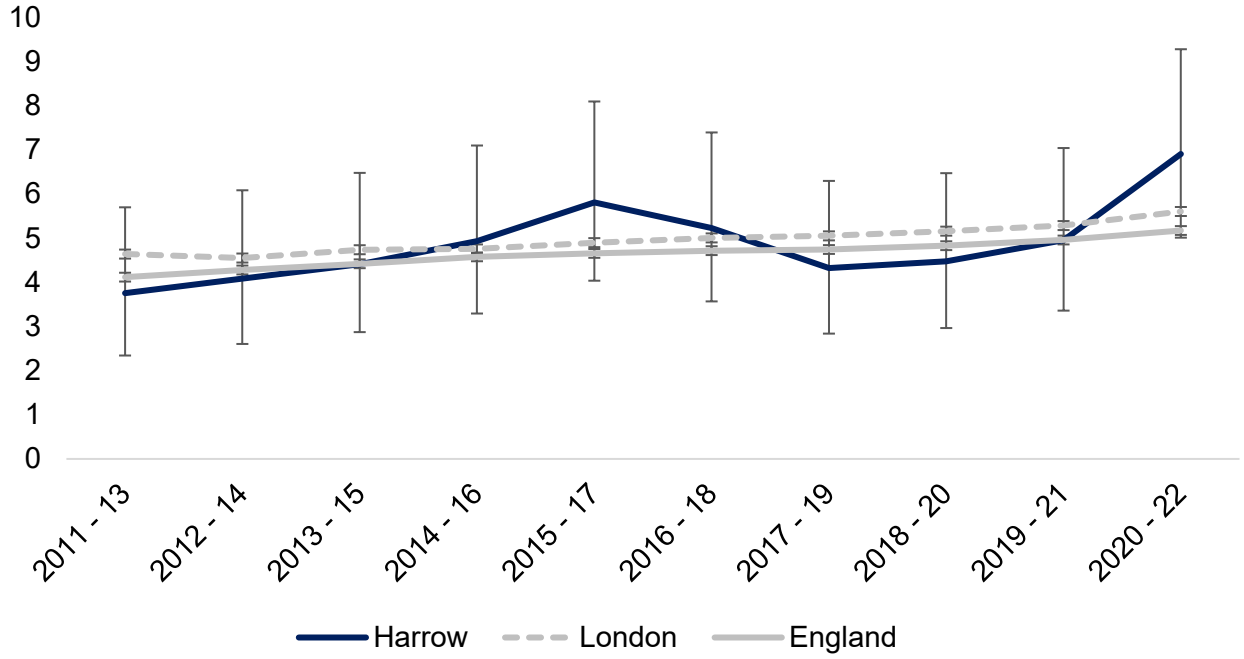
There is no borough-level data on oral cancer from the last few years. The latest data on diagnosis rates is from 2017-19, which showed that 15 per 100,000 people in Harrow had oral cancer. This was in line with London and England averages and was similar to other North-west London boroughs. Figure 26 shows the trend in oral cancer rates in Harrow over time. It reveals that rates have increased significantly since 2008-10, at which time they were 9 per 100,000, although rates have remained relatively consistent since 2010-12.[24]

**Figure 26: Oral cancer rates per 100,000 people over time in Harrow, London and England[24]**



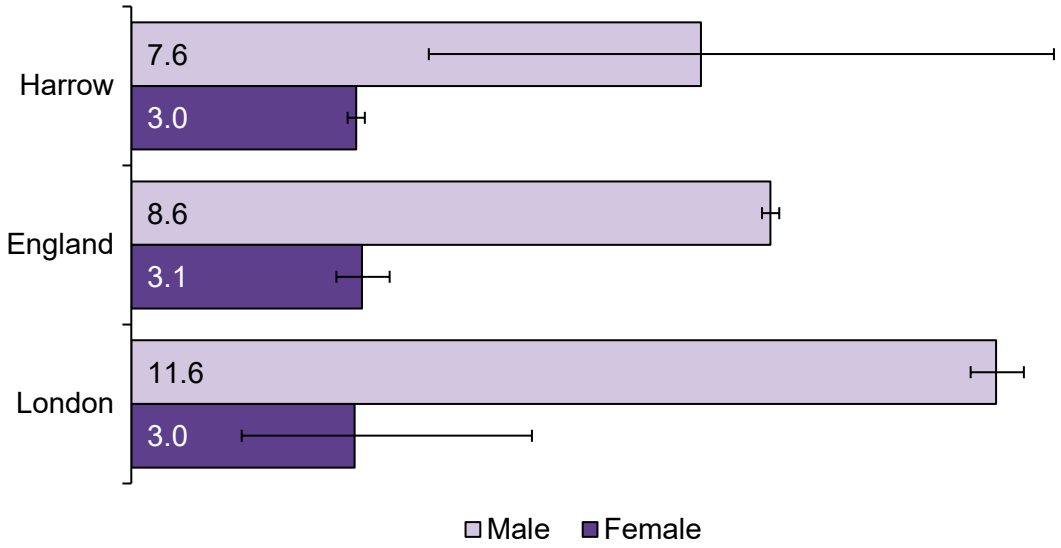

The latest data on oral cancer mortality rates is more recent. In Harrow, there were 7 deaths from oral cancer per 100,000 people in 2020-22, which was similar to London and national averages and other North-west London boroughs. The trend in oral cancer mortality since 2011-13 is shown in Figure 27. Although it may appear that there is an increase in oral cancer mortality, this is not a statistically significant change.[24]

**Figure 27: Oral cancer mortality rates per 100,000 people over time in Harrow, London and England[24]**




It was only possible to stratify the 2020-22 mortality rate data by sex, however this showed a statistically significant difference. In Harrow, males were 2.5 times more likely to die from oral cancer than females, which followed the London and national pattern. As visualised in Figure 28, 7.6 males per 100,000 people died from oral cancer compared to 3.0 per 100,000 females during the period 2020-22.[24]

**Figure 28: Oral cancer mortality rates per 100,000 people by sex[24]**



### *10.2.4. Living with poor oral health*

The NDEP survey in 2018 found that 18.5% of adults did not have functional dentition, which was similar to the London and national averages. In addition, 7.4% of adults in Harrow had dentures.[6] Meanwhile, 18.2% of adults in Harrow had frequent dental health issues, also in line with London and national averages.[6]

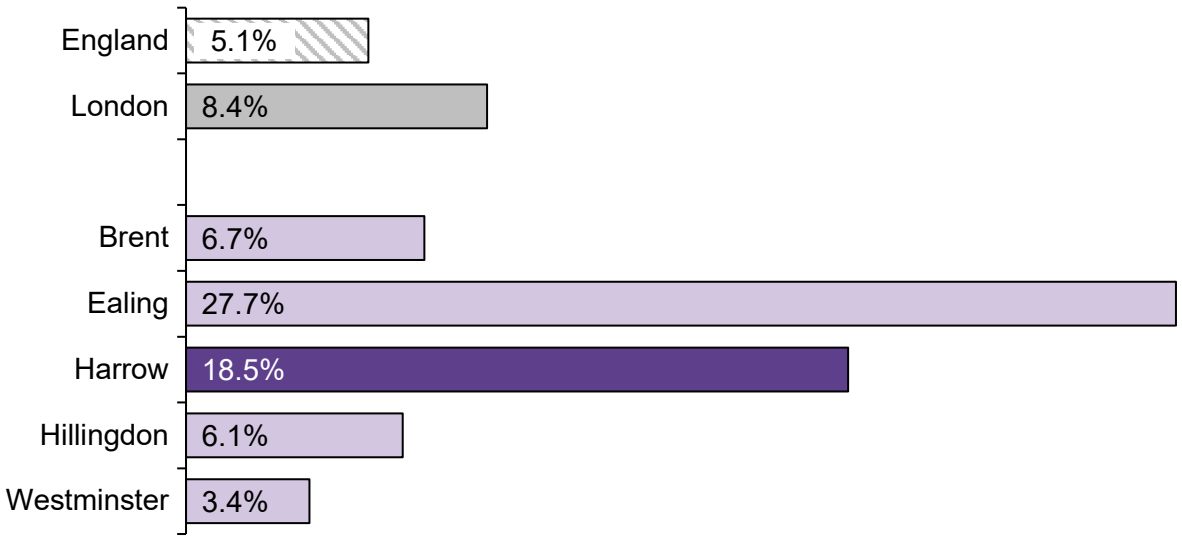
Similarly, the 2016 NDEP survey on mildly dependent older people examined the percentage of participants with any oral health impacts fairly or very often, with 12.7% affected.[74] The 2016 NDEP survey also explored dentition in greater detail than the 2018 edition. It showed that 36.4% of participants in Harrow were edentulous and 7.4% had no posterior functional contacts. 7.3% of mildly dependent older people in Harrow had a fixed tooth replacement and 47.3% a removable tooth replacement, with 11.1% having dentures in need of replacement.[74] The 2016 survey also explored the proportion of mildly dependent older people with pain in their mouth, which for Harrow was 17.1%.[74]

### *10.2.5. Treatment need*

The 2018 NDEP survey on adults attending dental practices explored the treatment need of participants. It showed that 46.3% of adults in Harrow had some kind of treatment need which was lower than the London and England averages. However, the number of adults in Harrow with an urgent treatment need was similar to the London and national rate at 7.7%.[6]

The 2016 NDEP survey looked specifically at domiciliary treatment need amongst mildly dependent older adults, a vitally important service to cater for the additional needs of this population. It showed that 18.5% of participants would require domiciliary treatment, higher than the London and national averages as shown in Figure 29. However, there were no confidence intervals to assess the statistical significance of this difference, and this data is limited by the small number of participants as outlined previously.[74]

**Figure 29: The percentage of mildly dependent older people who would require domiciliary treatment[74]**



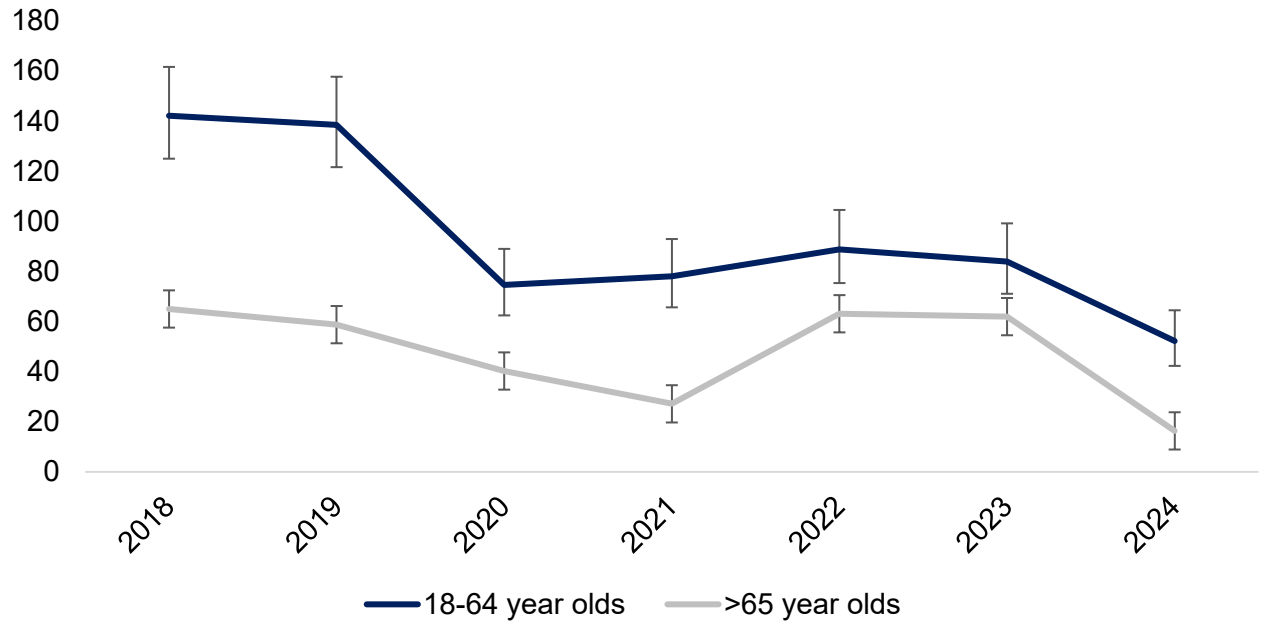
### *10.2.6. Hospital admissions*

Data on hospital admissions amongst adults was considerably more limited than for children. The only available source for this data was WSIC, which enabled us to explore the number of hospital admissions due to tooth decay. We were also able to assess the trend of hospital admissions and stratify this by age, as well as conduct analysis to explore the relationship with deprivation.

Figure 30 shows that the rate of adult hospital admissions due to tooth decay has followed a downward trend in recent years. There was a significant drop in 2020 due to the impact of the Covid-19 pandemic, with some increase in subsequent years, however admissions continued to fall in 2024. Figure 30 also shows that the rate of hospital admissions due to tooth decay is higher amongst the 18-64 age group, with the 2024 rates 52 per 100,000 for 18-64-year-olds and 16 per 100,000 in those aged 65 and older, an average of 45 per 100,000 people.

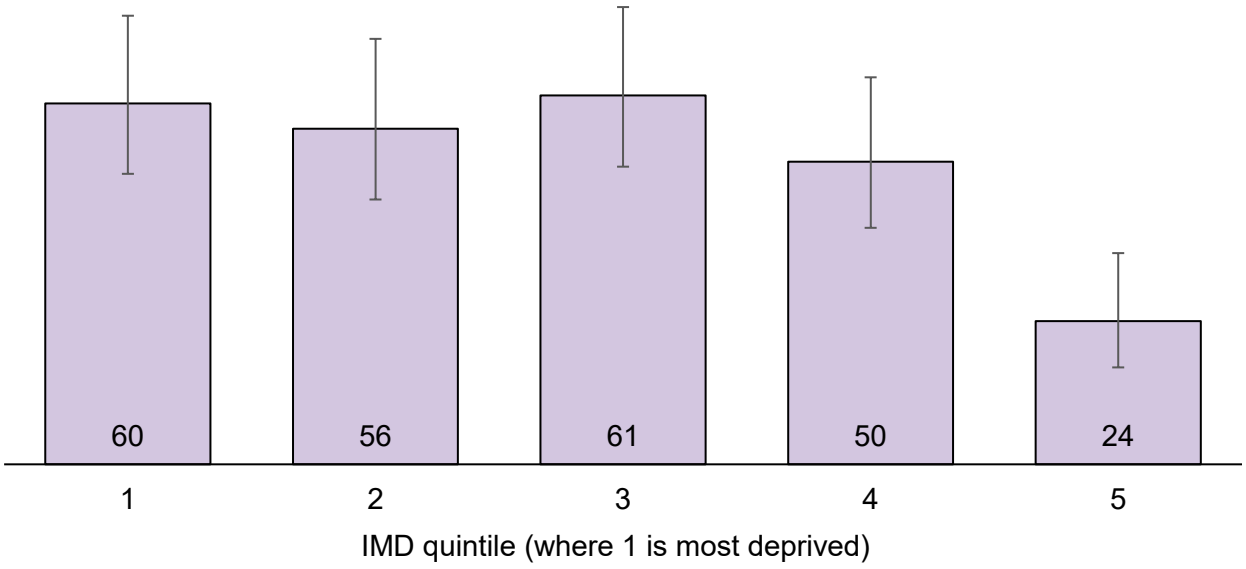
Similarly to the children's data on hospital admissions, it is important to caveat these findings. An increase in community-based capacity for procedures such as tooth extractions as provided an alternative pathway to hospital admission. However, it is unclear to what extent this has contributed to the fall in hospital admissions, versus this being the result of declining tooth decay rates.

**Figure 30: The rate of hospital admissions due to tooth decay per 100,000 people for adults by age and over time (WSIC)**




When looking at the relationship between hospital admissions due to tooth decay and deprivation, the social gradient in adults is less clear than in children, as shown in Figure 31. However, those in IMD quintiles 1 to 4 were significantly more likely to be admitted than those in quintile 5 (least deprived), demonstrating some local relationship between deprivation level and hospital admission due to tooth decay. When stratified further by age, this trend was seen in adults aged 18 to 64, but there was no statistically significant relationship between deprivation and admission in adults aged over 65. Graphs of these findings are in Appendix 4. Similarly to the children's data on hospital admissions, IMD is based on local deprivation quintiles.

**Figure 31: Hospital admissions (per 100,000 people) related to tooth decay by deprivation among those aged over 18 years in Harrow (2022-2024) (WSIC)**




### *10.2.7. Summary*

The oral health outcome data for adults is considerably more limited than for children, with the 2016 and 2018 NDEP surveys lacking enough participants to be generalisable to the whole Harrow population. Their findings still provide useful insight but should be interpreted with caution.

The available data suggests that adults in Harrow have a significant oral health need, with a quarter having active tooth decay. The only trend data related to tooth decay is hospital admissions, which show a downward trend over recent years. Meanwhile, oral cancer rates were stable between 2010 and 2019 despite a rise nationally. There is some evidence of local inequalities, with higher rates of oral cancer mortality amongst men and a very limited suggestion of higher rates of hospital admissions amongst those from more deprived areas (IMD 1-4).

Despite its limitations, another finding of note is the high treatment need amongst adults in Harrow, particularly the 18.5% of mildly dependent older adults who would require domiciliary treatment.

# 11. Findings from Queen Mary University of London report on 0-5-year-old oral health in Harrow

As previously referenced, the Harrow Public Health team commissioned QMUL to conduct research into the Determinants of Oral Health in Early Childhood in Harrow[76]. This Oral Health Needs Assessment has already included key findings that the QMUL team extracted on oral health outcomes, and in later section on accessing dental services. Another key part of their work involved conducting a survey and focus groups with parents, staff from Early Years, medical and dental services, schools, local VCS organisations and parents. This section provides a brief overview of their findings from the survey and focus groups.

## 11.1. Parental experiences and insights

Parental experiences and insights were gathered through a survey and focus groups. Families identified oral health as a priority and parents had positive attitudes towards maintaining the oral health of their child or children. Parents were generally aware of the causes of poor dental health and recognised the importance of brushing teeth twice a day with fluoride toothpaste, reducing sugar intake and visiting the dentist. Parents also reported that schools played an important role in health promotion and STB in schools had encouraged their children to incorporate toothbrushing behaviours into their daily routines. Most parents (almost two thirds) were able to access an NHS dentist, and the majority were satisfied with the quality of care they received. However, there were variable experiences and challenges with accessing dental care. This, and other areas for improvement that the QMUL report identified, are outlined here:

- Although parents were aware of sugar reduction almost a third of parents provided unhealthy snacks to their children
- Parents reported that food high in salt, fat and sugar were readily available in Harrow which can contribute to an obesogenic environment
- Healthy food is perceived to be more expensive than unhealthy food
- Parents reported being influenced by the immediate environment, social attitudes and norms towards sugary food and drinks and pester power
- Although parents knew about toothbrushing routines, there was a delay in starting to brush their children's teeth and a fifth of children did not brush their teeth twice a day
- Parents felt that health advice was inconsistent among health professionals, which was confusing
- Parents felt that oral health is not always prioritised by health visiting teams, GPs and schools and should be incorporated more into general health practice
- Some parents found it difficult to access an NHS dentist and had to make several attempts to finding one for their child.
- A significant proportion of parents did not take their child to the dentist regularly, and most children were taken to the dentist for the first time after their first birthday
- Some parents did not know how to find a dentist or that children could receive free NHS dental care.
- Language barriers and a lack of available interpreting services was a consistent theme. This impacted upon the quality of communication, and when family members had to act as informal interpreters this had significant knock on effects – for example, having to take time off work.

## 11.2. Early Years staff and health professionals

Focus groups and semi-structured interviews were conducted with Early Years staff and health professionals. They reported that oral health is a priority in Harrow, with some health professionals recognising the importance of and applying a more holistic approach that accounts for the wider determinants of oral health, while others focused on the medical model of health care provision. Early Years staff and health professionals attempted to provide preventive oral health advice at every opportunity, however there were limiting factors as outlined below, in addition to other areas for improvement:

- While attempting to offer preventive advice, frontline staff reported organisational, clinician and patient related factors that can hinder these interactions
- Oral health advice provided by different health professionals is inconsistent and results in confusion amongst parents.
- Language barriers frequently affect the quality of communication between families and healthcare providers
- Oral health promotion advice could start earlier in the antenatal period to intervene and help parents more promptly, but that training and support is needed to enable services such as Health Visiting to action this.

## 11.3. Summary

The QMUL report on the Determinants of Oral Health in Early Childhood in Harrow identified key target areas to improve the oral health of young children in the borough. Many of these align with the findings from our Oral Health Needs Assessment survey, demonstrating that these themes permeate throughout Harrow and particularly affect vulnerable population groups. The QMUL team also provided a number of recommendations, which can be found in their full report. These fed into the recommendations of this Needs Assessment as outlined at the end of this report.

# 12. Oral Health Needs Assessment survey

As part of this Oral Health Needs Assessment, we conducted an extensive engagement piece with our local community and dental professionals to obtain more detailed insights into oral health in Harrow. This was vital to painting a comprehensive overview and thus enabling more informed decision making on policy and practice.

Scientific literature and national data clearly demonstrate that certain groups experience worse oral health and face greater difficulties accessing dental care.[3,4] Despite these inequalities, there is a stark lack of localised data on oral health in these groups. As the Harrow Public Health team, it is our statutory duty to identify and address inequalities in our local population and NICE guidelines make it clear that there is an expectation that Oral Health Needs Assessments must consider how to explore such inequalities.[1,15] We identified specific populations to focus our survey on in Harrow for a combination of reasons, which were:

- Scientific literature and/or national data demonstrate they experience oral health inequalities
- There is little to no local data on their oral health
- They are present and living in Harrow
- They are a well-defined group – some evidence showed that certain population groups experience worse oral health (for example people with certain mental health conditions), however for the purposes of this survey it was challenging to define the extent of such a group with the available evidence. Given our limited capacity, it would have been unfeasible to define these groups more broadly.

The population groups our survey therefore focussed on were:

- Children and adults with Special Educational Needs and Disabilities (SEND)
- Children Looked After
- Rough sleepers
- Refugees and asylum seekers
- Older adults in care homes

Receiving direct input from people belonging to these groups would be fundamental to gaining an understanding of their experiences. To bolster this, we also wanted to hear from their carers, both paid and unpaid. Carers have considerable appreciation of the state of oral health in these groups and are often the ones seeking dental care access for them. In addition, they often play an essential role in providing mouth care to individuals and influence their oral health behaviours.

We also wanted to engage with and receive input from local dentists and dental care professionals (a dental care professional is a term covering a variety of roles qualified to practice certain aspects of dental care, such as dental nurses and hygienists)[77]. Their experience of providing NHS dentistry provides invaluable insight into the challenges that must be overcome to ensure they are enabled and empowered to give accessible and high-quality care. As front-line professionals in contact with the vulnerable population groups at greater risk of poor oral health, they are also in a vital position to inform this Needs Assessment about local circumstances.

These surveys aimed to obtain an overview of the state of oral health in Harrow, gather insight into the reasons why some people have poor oral health and how these can be addressed, explore the challenges facing NHS dental care and how these can be addressed, as well as a greater

understanding of the extent of carers' oral health training and awareness with a particular focus on the targeted vulnerable population groups.

This section contains a summary of the findings from our Needs Assessment survey. A full report is available separately with our methodology and detailed findings for each population group.

It is important to note that although our findings provide valuable insight into the experiences and needs of these vulnerable population groups, our results cannot be used to identify local oral health inequalities. In addition, these results cannot be generalised to the entirety of these population groups due to the relatively low response rates. Table 1 below outlines the number of respondents to our survey

**Table 1: The number of respondents to the Oral Health Needs Assessment survey**

| Survey target group | Respondents | Number of respondents |
|---|---|---|
| **General** | Dentists and dental professionals | 14 |
| **Children and adults with SEND** | Residents | 46 |
| | Carers | 15 |
| **Children Looked After** | Residents | 6 |
| | Carers | 16 |
| **Rough Sleepers** | Residents | 17 |
| | Carers | 0 |
| **Refugees and Asylum Seekers** | Residents | 13 |
| | Carers | 2 |
| **Older adults in Care Homes** | Carers | 5 |

## 12.1. Dentists and dental care professionals

It is clear that from a dental perspective, oral health in Harrow is poor and vulnerable population groups are particularly affected. Dentists expressed issues arising from limited awareness and engagement with good oral health behaviours, with many acknowledging that these are heavily influenced by wider determinants, including the affordability and accessibility of healthy food, toothbrushes and toothpaste, as well as cultural practices. Inconsistent messaging arising from across the health and care system was also identified as an issue which may create confusion around what behaviours are beneficial for oral health.

To address these issues, dentists and dental care professionals believe that an increased focus on prevention and oral health promotion is needed. Responses indicated that this should involve the delivery of consistent messages across all settings to change behaviours and ultimately improve oral health. This will also help to reduce pressure on dental services, however there was a strong theme that NHS Dentistry reform is needed to increase capacity in the system. Alongside this, dentists and dental care professional respondents believed that provision of NHS dental care can

be improved with greater access to interpreters and reducing the number of Failed To Attends (FTAs).

## 12.2. Children and adults with SEND

There were a reasonable number of responses to the resident's survey for children and adults with SEND, with a cross-section of ages and ethnicities. However, it is important to note that the findings should still be interpreted with caution due to limited generalisability.

Overall, there were variable perspectives on the state of oral health in children and adults and SEND in Harrow. Residents and carers responses were balanced between oral health being good or bad, however dentists believe that it is largely worse than the general population. In addition, the results from questions specifically relating to oral health outcomes were concerning. Many children and adults with SEND experienced regular pain, bleeding gums and had lost adult teeth, with many frequently worrying about their oral health. Overall, these findings suggest that people with SEND in Harrow have significant unmet oral health needs.

Challenges with sensory aversion and other manifestations of neurodiversity were identified as a key issue leading to poor oral health in people with SEND, affecting dietary and toothbrushing habits, and causing fear of seeking dental care. The effect of this is seen in the results of questions on oral health behaviours, with many people with SEND not engaging with good oral hygiene practices, although respondents did have a good understanding and recognition of their importance. The cost of healthy food as well as toothbrushes and toothpaste was noted as another barrier to engaging with good oral health behaviours, demonstrating the influence of the wider determinants of oral health.

Experiences accessing dental care were variable, with some residents finding it hard to arrange an NHS dentist appointment, while others did not report the same difficulties. An important point to note was that most children with SEND were first taken to the dentist aged 2 years or older, later than is recommended. Overall, residents reported positive experiences with the dental care they receive in Harrow, however again there is variation with some finding that dental practices and dentists do not accommodate for the complex needs of people with SEND. Residents and carers also reported significant inconsistency of oral health messages provided by dental and health professionals.

To overcome the issues people with SEND experience with their oral health, suggestions focussed on better accommodating for the complex needs many people with SEND have. This includes accessibility and delivery of dental care. Addressing the wider determinants by making healthy food and SEND-friendly toothbrushing equipment more available and affordable was also raised, as was the need to provide better training, education and support to people with SEND, their parents and carers. Although improving oral health was a priority for carers, most reported little support or training on the subject.

## 12.3. Children Looked After

Findings for CLA, particularly from the resident survey, should be interpreted with a considerable degree of caution due to a very low number of responses. Nonetheless, it still serves as a useful indicator. Overall, perspectives on the state of oral health in CLA were variable with residents generally believing CLA oral health is good, while dentists believe it largely worse than the general population and carers were more balanced. The resident survey had mostly positive oral health outcomes, although there were some concerning findings such as CLA with bleeding gums and weekly dental pain.

A lack of engagement with good oral health behaviours such as toothbrushing and a healthy diet were identified as key reasons for poor oral health in CLA. On the whole, foster carers and legal guardians demonstrated a solid understanding of good oral health behaviours, and findings suggested that some experience the influence of wider determinants which affect the affordability and accessibility of healthy foods, toothbrushes and toothpaste. To address these issues, there were calls for more education on good oral health behaviours for CLA, as well as better support, training and education for their carers.

CLA have variable experiences when accessing and receiving dental care. There was a strong theme of challenges arranging appointments, however experience of receiving care were generally good. However, there was still variability in the prioritisation of CLA in dental services, language and communication barriers, the advice provided and the consistency of this advice. Increasing the availability of dental care for CLA was highlighted as key to addressing the challenges with accessing dental care.

Improving oral health was seen as important for carers of CLA. Although most knew where to signpost CLA, many felt that they did not have sufficient support to look after CLA's oral health. They had the most difficulty when trying to access NHS dentists, as well as supporting CLA with overcoming fear of dentists and improving their oral health behaviours. Furthermore, most carers had not received any training to look after CLA's oral health.

## 12.4. Rough sleepers

The survey responses from rough sleepers in Harrow highlight significant oral health challenges. While many respondents demonstrated a good understanding of oral hygiene and reported brushing regularly, these efforts were often undermined by unstable housing, limited access to dental services, financial insecurity, and the practical hardships of rough sleeping.

Barriers to accessing care were pronounced. Some rough sleepers reported being told by dental practices that they could not arrange an appointment due to a lack of identification or a fixed address, while others were deterred by cost or a lack of understanding about how to access services. Reports of pain, tooth loss, and gum disease were common, compounded by dietary challenges and communication difficulties.

Despite these obstacles, many participants expressed a strong desire to maintain their oral health. Positive experiences with NHS dental care were characterised by kindness, prompt appointments, and cost exemptions through benefits. However, others described the system as confusing, inaccessible, or unwelcoming, particularly for those new to the UK or unfamiliar with navigating healthcare.

Suggestions for improvement ranged from practical changes, such as free toothbrushes and toothpaste or more accessible healthy food, to broader structural solutions, including more compassionate care and stable housing. For many, the ability to care for their teeth was inextricably linked to having a place to live.

## 12.5. Refugees and asylum seekers

The survey responses from Refugees and Asylum Seekers also indicated unmet oral health needs. Many reported bleeding gums, frequent dental pain and having lost adult teeth.

Alongside this, Refugees and Asylum Seekers reported a range of barriers to achieving good oral health. Dental care was underutilised, and many individuals lacked clear knowledge of how to access NHS services. Language barriers were a major concern, with limited use of interpreters despite clear demand. Respondents highlighted that affordability and accessibility of healthy food and oral hygiene products further limited their ability to maintain good oral health behaviours. Inconsistent advice was also identified by respondents as undermining engagement with oral hygiene practices.

Our findings suggest that addressing these issues requires provision of clearer, consistent and culturally competent information about how to engage with good oral health behaviours and access NHS dental care. Many respondents also emphasised the importance of accessible dental treatment when asked how their oral health could be improved.

## 12.6. Older adults in care homes

The results for this population group are very limited due to a low number of responses to the carers survey (five responses in total). What our findings suggest is that carers supporting older adults in care homes in Harrow identified oral health as a vital yet under-supported area of care. Despite a clear commitment to providing good oral hygiene, carers were often limited by gaps in training and difficulties accessing NHS dental services.

Dentists and carers largely identified oral health as being worse in older adults in care homes than the general population, however accessing dental care is challenging for them. Issues that were raised included limited availability of dental services that visit care homes to provide care, and that even when external appointments were arranged these were often affected by cancellations or a lack of transport.

NICE provide a comprehensive set of guidelines on oral health for adults in care homes. This states that care homes should have policies on oral health, that staff conduct assessments of oral health needs and that residents are supported with their daily mouth care as set out in their personal care plan.[78] Our survey findings suggest that oral health appears to be generally integrated into daily care plans and assessments are usually, but not always, performed for new residents. There is some variability in oral health policies in workplaces, with not all care homes having a clear dedicated policy in place. In addition, although most carers reported receiving basic oral health training and education, it was clear from carer feedback that this was insufficient particularly when caring for residents with complex oral health needs.

# 13. Local services

This section provides a comprehensive overview of all key services in the London Borough of Harrow that are involved in the prevention and treatment of oral disease and promoting good oral health. This includes dental care, Local Authority commissioned services and key settings that deliver oral health programmes (such as schools and supervised toothbrushing). By outlining the key services involved in improving oral health in Harrow, we aim to facilitate data-driven and evidence-based identification of service gaps and ideas for optimising the provision of oral health care in Harrow.

## 13.1. NHS Dental services

As of March 2025, there were 36 dental practices in Harrow delivering NHS care. Their locations are shown in Figure 32. In March 2025 we conducted a snapshot assessment of how many of these practices were accepting NHS patients. We found that 15 practices were taking new NHS patients, while 18 were not. We were unable to obtain information from the other 3 practices despite attempts to contact them.

This mapping reflects the experience Harrow residents would have had when arranging an NHS dentist at this point in time. However, it is important to note that this exercise was conducted in March 2025 which is at the end of the financial year, with the new allocation of funding for practices coming at the start of the following month (April). This timing likely influenced the availability of NHS dental practices. In addition, people are allowed to access an NHS dentist anywhere in England, therefore although this provides a picture of availability in Harrow, residents are also able to access NHS dentists outside of the borough.

There is a Community Dental Service (CDS) available in Harrow, as highlighted on Figure 32, which is provided by the Whittington NHS Trust. The CDS is a service that caters for patients with additional social, medical or dental care needs and can provide treatment under sedation or home visits. For instance, they treat children who are very anxious or uncooperative, have disabilities or medical conditions requiring special care. They also treat adults with complex needs such as severe learning disabilities, physical disabilities, medical conditions (such as those who are medically compromised) or mental health problems as well as people experiencing homelessness and people who are housebound. It is important to note that General Dental Practices (GDPs) are capable of seeing the majority of people with additional care needs.

Nevertheless, the local CDS is vital to providing dental care to groups who experience oral health inequalities and its capacity to effectively operate is fundamental to delivering this. However, the CDS in Harrow is under significant pressures, with their own data showing a waitlist of just over 850 patients in July 2025 – this is children and adults waiting to be seen for their first appointment. This data also shows that between April 2024 and March 2025, the CDS accepted a total of 1533 referrals. Between July 2024 and June 2025, the CDS saw 3533 patients, which includes new and recalled child and adult patients, and conducted 564 general anaesthetics (554 children, 10 adults).

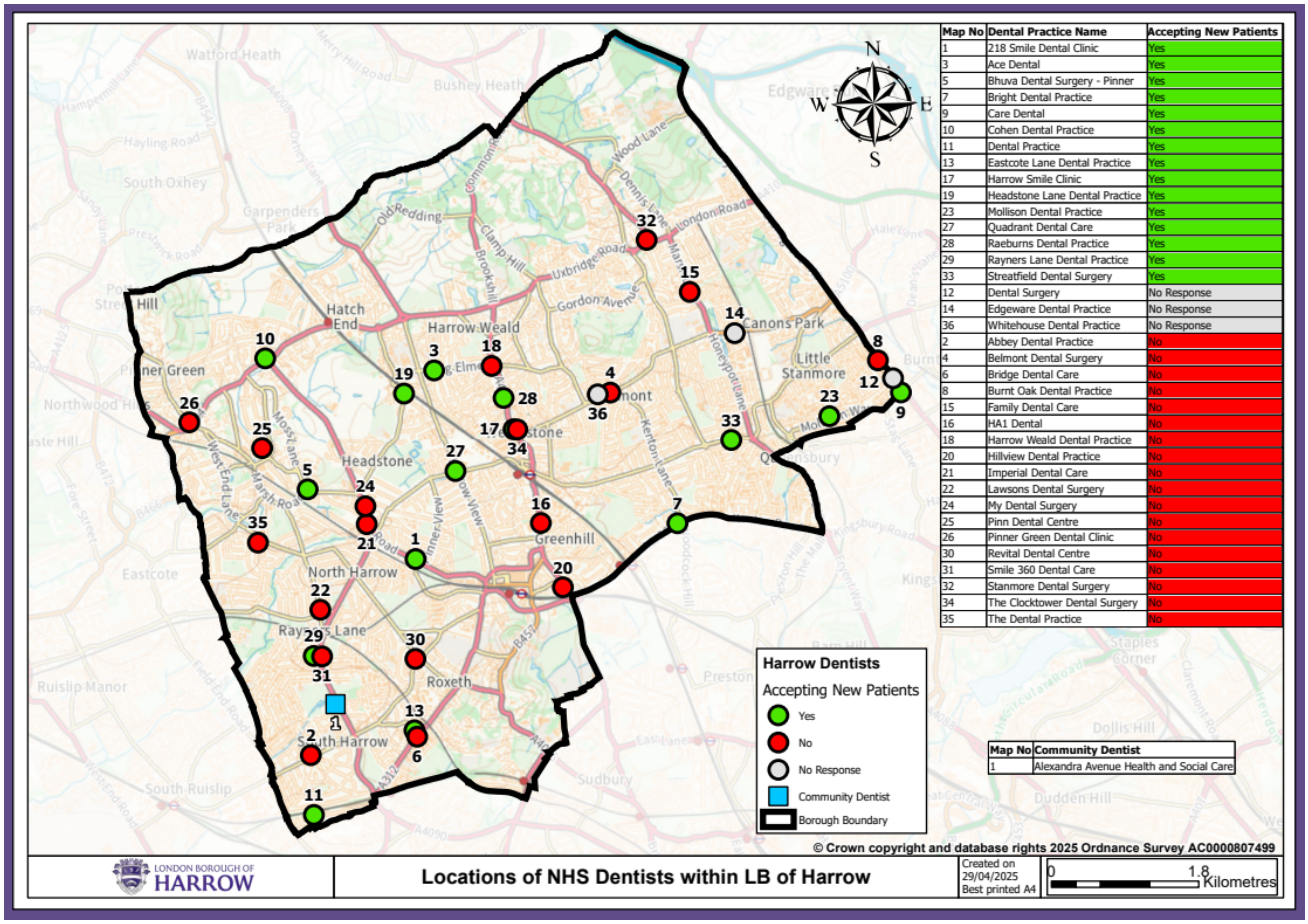
The number of accepted referrals to the CDS in 2024/25 is relatively consisted with pre-pandemic levels, with 1581 in 2019/20. This was followed by a drop to 858 in 2020/21 during the Covid-19 pandemic and followed by a rise upwards of 1764 in 2023/24, with 1533 in 2024/25 as already mentioned. However, treatment is increasingly being provided in-house rather than being referred on to secondary care, subsequently placing greater pressure on the CDS and increasing wait times.

People are referred to the CDS by a dentist or other health and social care professional.[79] Once treatment is completed, people are discharged back to their referring dentist or are asked to find their own dentist. In some instances, the CDS works collaboratively with local GDPs and provide shared care, usually with Paediatric patients.

Urgent NHS dental care can be accessed via individual dental practices or by contacting NHS 111.[80] Residents who require more advanced or emergency dental care can receive this from secondary care services. The closest A&E is Northwick Park Hospital, situated just south of the borough border, and should only be accessed for dental emergencies such as uncontrollable bleeding or obstructed airways. Northwick Park Hospital is also the North-west London centre for Oral and Maxillofacial surgery, who, amongst many other things, provide surgical care for oral cancers.

The CDS may also refer Harrow residents requiring more complex oral health treatment to hospitals in central London who are able to cater for these needs. These are: King's College Hospital, University College Hospital, Chelsea and Westminster Hospital and Project Toothfairy in the Royal London Hospital.

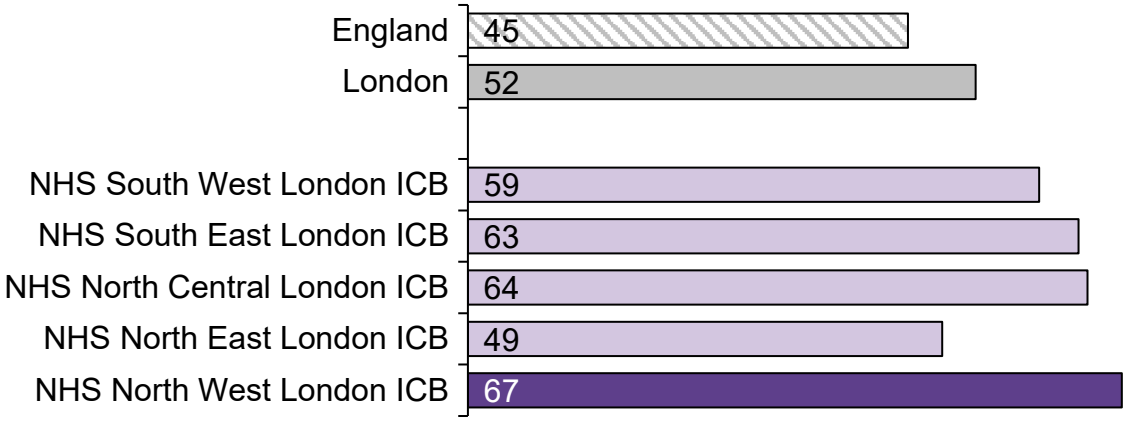
**Figure 32: Locations of NHS Dentists in the London Borough of Harrow, and whether or not they are accepting new NHS patients in March 2025**



### *13.1.1. Dental workforce*

Data on the dental workforce is only available for the whole of the North-West London ICB, and not at a Harrow-specific level. It 2023/24, there were 1,427 dentists in North-West London. This meant that there were 1,483 people per dentist, or 67 dentists per 100,000 people. North-West London ICB has the most dentists per population of all regions in London, and is much higher than the national average as shown in Figure 33.[81]

**Figure 33: Dentists per 100,000 population by ICB (2023/24)[81]**




The raw number of NHS dentists in North-West London has steadily risen over recent years, up from 1,338 in 2018/19 to 1,427 in 2023/24. Importantly, there has also been an increase in the number of NHS dentists per population as shown in Figure 34. In North-West London, the population per dentist has increased from 64 in 2018/19 to 67 per 100,000 people. In 2023/24, 7.7% of NHS dentists in North-West London were new joiners, while 7.1% of the dental workforce left. This turnover is a similar picture to the rest of England and is slightly higher than pre-COVID levels. For instance, in North-West London the proportion of joiners and leavers were 5.8% and 5.7% respectively in 2018/19.[81,82]

**Figure 34: NHS dentists per 100,000 population.[81,82]**

### *13.1.2. Access*

Detailed data on how Harrow's population access NHS Dentistry was collected from NHS Business Service Authority (BSA). Guidance outlines that children should be seen by a dentist at least every 12 months, and adults every 24 months. Therefore, the data for how children and adults access dental care is represented as such. It is important to note that this data only captures NHS dental care access and does not account for private care. This will therefore limit the percentage of people seen by an NHS dentist within the recommended timeframes.

Up to March 2025, 56.7% of children in Harrow had been seen by a dentist in the last 12 months, and 39% of adults had been seen in the last 24 months. These figures were relatively high amongst North-West London boroughs, as shown in Figures 35 and 36.

**Figure 35: Percentage of children seen by NHS dentists in the past 12 months in North-West London boroughs (2024/25) (NHS BSA)**

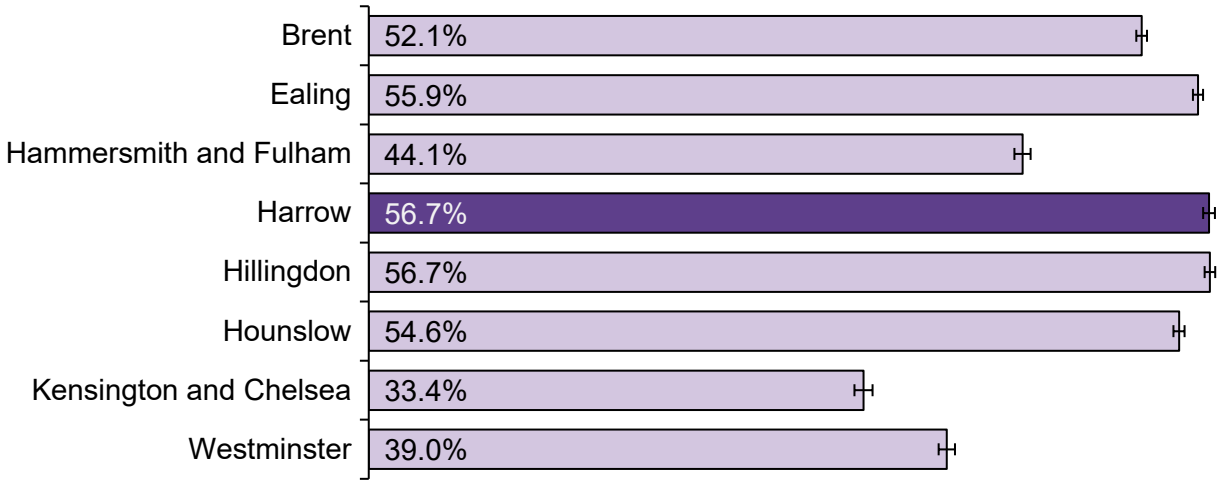
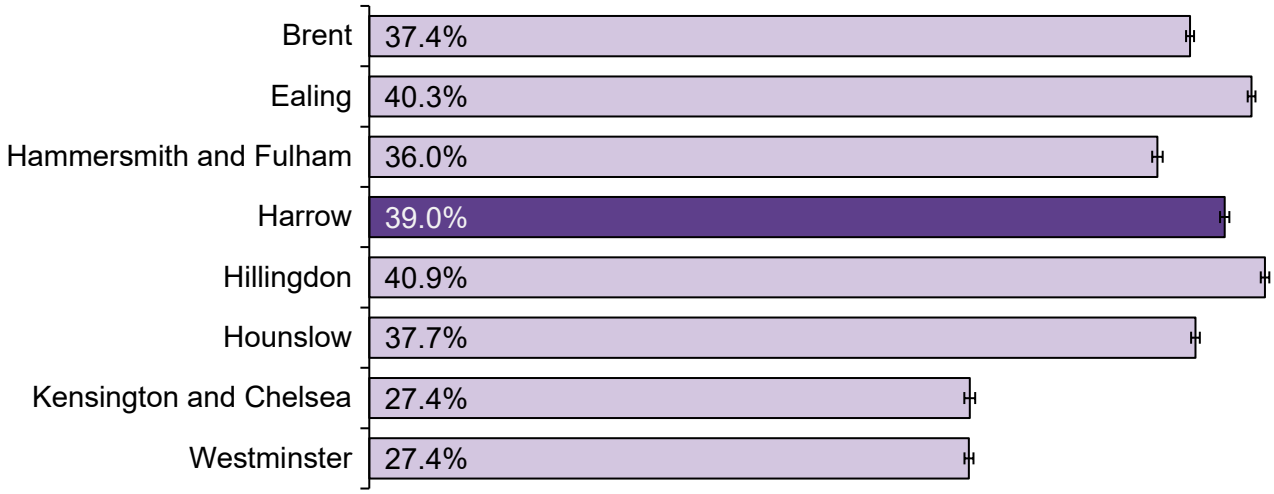
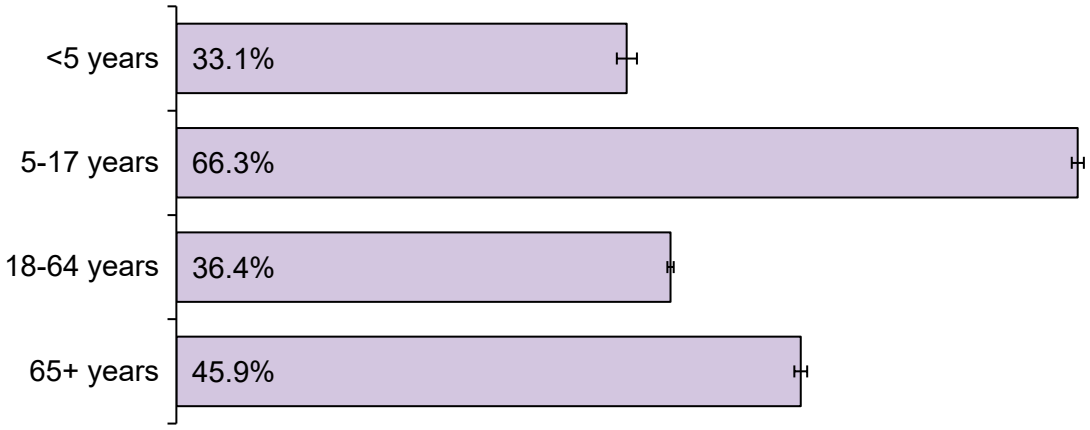



**Figure 36: Percentage of adults seen by dentists in the past 24 months in North-West London boroughs (2024/25) (NHS BSA)**



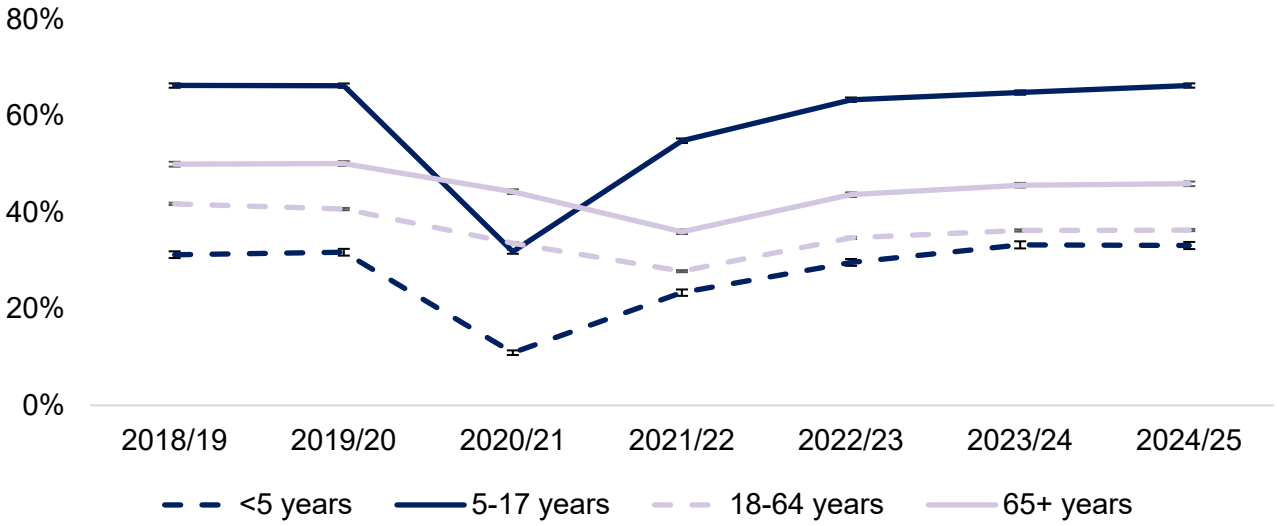
When looking at a further breakdown of the percentage of children and adults seen by a dentist by age group, this shows significant variability. Children aged 5-17 years were most likely to have been seen within the recommended timeframe as shown in Figure 37, with only 33.1% of children aged under 5 years seen in the last 12 months. The QMUL report on 0-5-year-old oral health provided a deep dive into access of NHS dental services amongst this age group. It showed that access rates are particularly low amongst 0-2-year-olds at 22.0% seen in the last 12 months, although this was still higher than the London average. In contrast, 50.6% of 3-5-year-olds accessed an NHS dentist in Harrow within that timeframe.

**Figure 37: Percentage of children seen in the last 12 months and adults seen in the last 24 months in Harrow (2024/25) (NHS BSA)**




In addition, Figure 38 shows the trend of children and adults seen by NHS dentists over time. This shows a clear drop in NHS dentistry access during the Covid-19 pandemic, but in 2024/25 recovered to pre-pandemic rates for children. However, access rates for adults remain slightly below pre-pandemic levels.

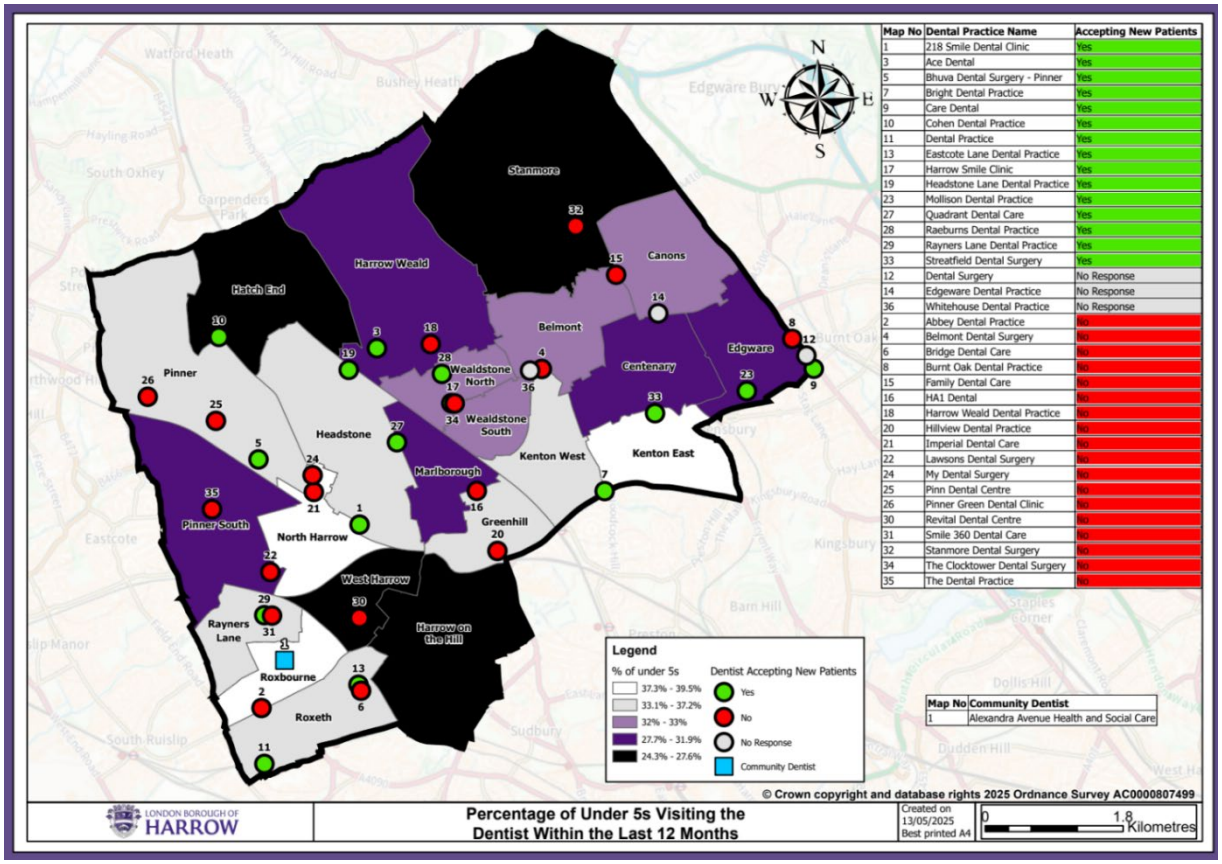
**Figure 38: Percentage of children seen in the last 12 months and adults seen in the last 24 months in Harrow over time (NHS BSA)**



We were able to break down this data further to assess how children and adults access NHS dentistry by borough ward. Our analysis showed that there was significant variation in the proportion of children and adults accessing NHS dental care between wards, and this also varied by age groups. Regression analysis was conducted to assess for a relationship between dental care access and deprivation, but no clear link was observed.

We also conducted a mapping exercise to visualise how access varies across the borough and how this relates to available NHS dental services. An example is shown below in Figure 39, which is for children under 5-year-olds. It is again worth noting that the availability of NHS dental practices is a snapshot picture from March 2025, and that this exercise was not a statistical mapping test. The maps for all other age groups can be found in Appendix 5, alongside a table with full percentages of access rates between ages in each borough ward.

**Figure 39: Percentage of <5-year-old children seen by an NHS dentist in the past 12 months by Harrow ward (up to March 2025), with locations of NHS Dentists and whether or not they are accepting new NHS patients in March 2025 (NHS BSA)**




The 2025 HAY Harrow survey, focussed on school children in Years 3-13 also included a question "In the last 12 months, have you visited a dentist?". The NHS BSA data provides a much more comprehensive overview of dental care access across all children of this age, however the HAY Harrow survey also provides stratified results by certain population groups. In summary, this shows that substantially fewer Asylum Seeker children accessed a dentist in the last 12 months (56% compared to 81% of non-Asylum Seekers), similarly to those whose first language is not English (74% compared to 85% of those whose first language is English). There were no considerable

differences between ethnicities or for children with SEND. Graphs visualising these results can be found in Appendix 2.

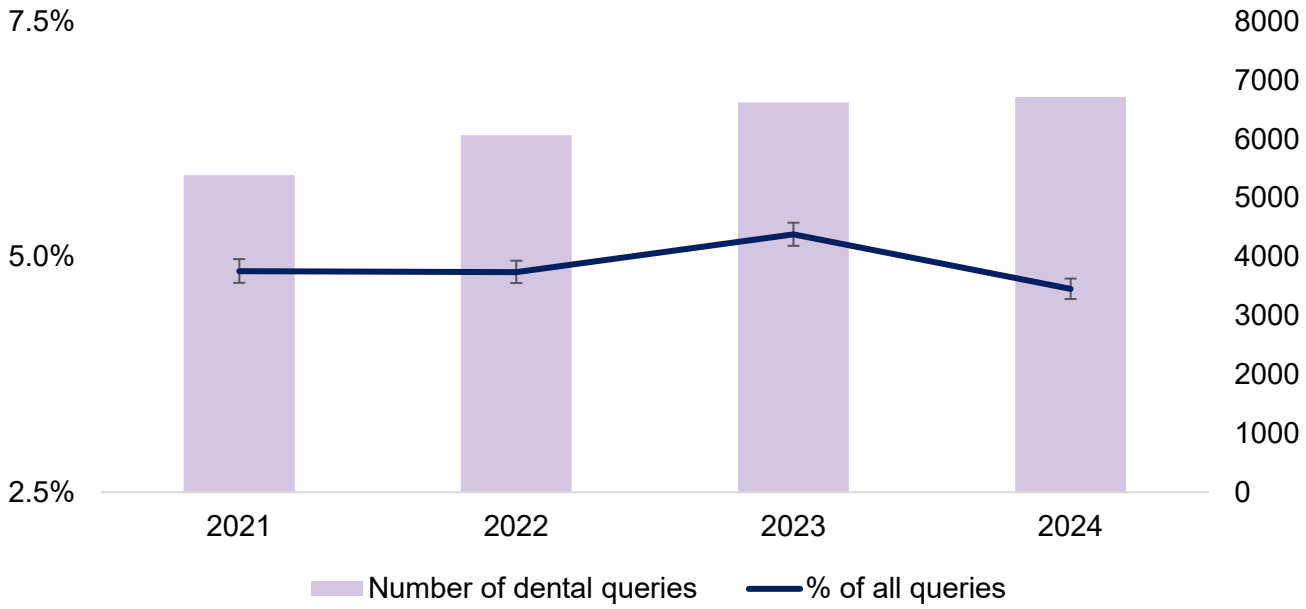
### *13.1.3. NHS 111*

NHS 111 is an NHS service available online and over the phone that directs people to the best source of help. It provides support for all health-related queries, including dental issues and accessing urgent dental care.[83] The use of NHS 111 services for dental queries can reflect challenges accessing dental care, as people use it as a mechanism to see a dentist after struggling to arrange an appointment via a dental practice. However the number of dental-related calls and online queries are also influenced by the level of need amongst a population, with more queries occurring due to worse oral health.[84]

The data provided by NHS 111 was divided into online and telephone service queries, which we have combined in our analysis to represent the overall use of NHS 111 for dental queries in Harrow. In 2024, NHS 111 online received 2972 dental queries and NHS 111 telephony service had 3750 calls, a total of 6722 queries. Last year, dental related queries made up 4.7% of all NHS 111 queries in Harrow, which is slightly below the national average. Figure 40 shows how the raw number of dental related queries in Harrow has slowly risen over time, however as a percentage of all NHS 111 queries this has remained consistent.

Looking at the percentage of all NHS 111 queries that are dental-related is more insightful, as general use of NHS 111 has risen over time which contributes towards the rising raw number of dental queries.

**Figure 40: The number of dental queries for NHS 111 and as a percentage of all queries in Harrow over time (NHS 111)**

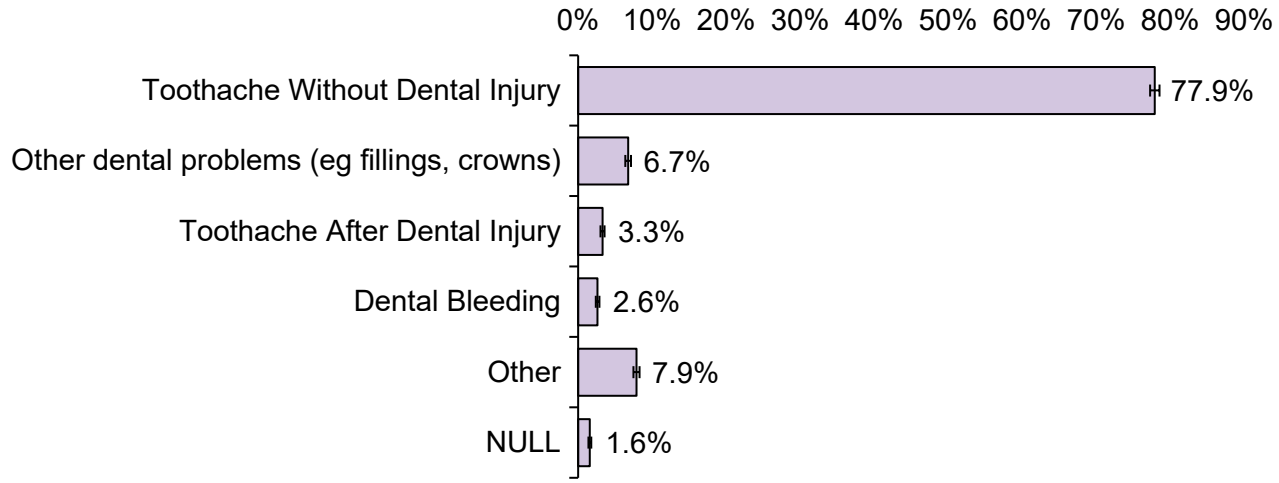



It was also possible to stratify the NHS 111 data to explore the reasons for and outcomes of dental related queries in Harrow. This data was available as symptom group and dental disposition. The symptom group outlines the symptoms the individual was experiencing and subsequently the

reason why they were making a call or online query to NHS 111. The dental disposition describes the outcome of the call or online query, and the advice the individual would have been provided by NHS 111.

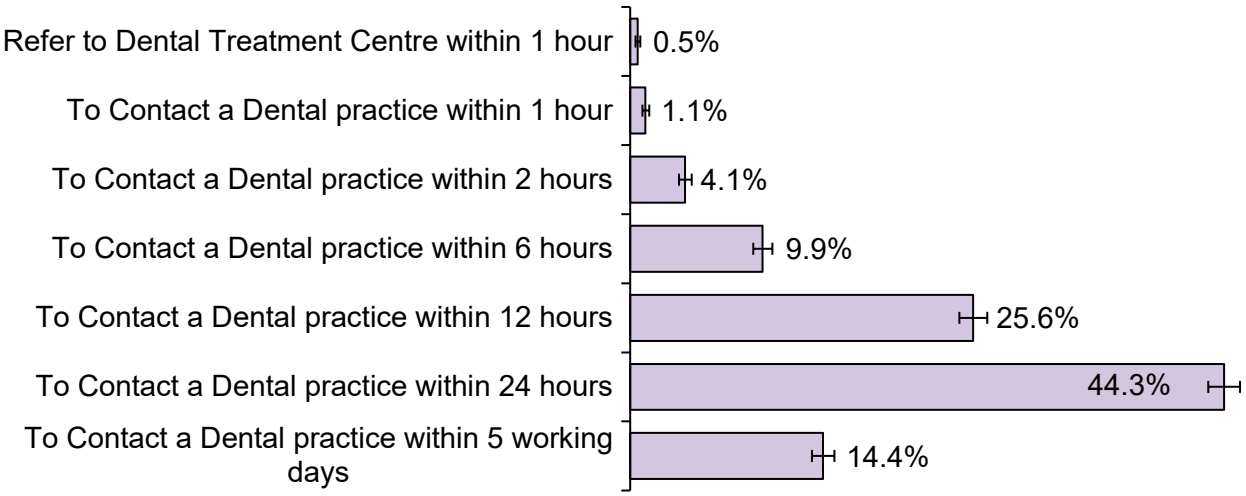
Most dental queries made to NHS 111 in Harrow were for toothache (unrelated to dental injury), accounting for 77.9% of the total as shown in Figure 41. This finding indicates that toothache is the main reason people in Harrow seek urgent dental care.

**Figure 41: Percentage of all NHS 111 dental queries by symptom group in Harrow (2024) (NHS 111)**




When looking at disposition, contacting a dental practice within 24 hours was the most common outcome followed by contacting a dental practice within 12 hours, as shown in Figure 42. This shows that most dental queries were advised to seek urgent care. Following this, a reasonable number of queries were less urgent, with the advice given to contact a dental practice within 5 working days.

**Figure 42: Percentage of all NHS 111 dental queries by disposition in Harrow (2024) (NHS 111)**



### *13.1.4. Commissioning and delivery of NHS Dental Services*

In 2023/24, 34 million dental courses of treatment were delivered in England to 23 million adults and 11 million children. Although these numbers have improved since the Covid-19 pandemic, they still fall well short of pre-pandemic delivery.[85] In addition, the NHS spent £3.1 billion on dental care, which translates to a substantial real-terms cut and a drop from £65 to £54 per person since 2019-20.[86,87] Altogether, this reflects national constraints with NHS Dentistry funding and consequently its delivery.

The NHS dentistry money pot derives from a combination of central funding (75%) and patient charges (25%).[86] Patients charges vary according to the band of treatment which reflect the need and complexity of the care required. Band 1 treatment covers basic care such as routine examination, whereas Band 3 (the highest band) includes crowns, dentures and bridges. Band 1 and urgent treatment charges stand at £27.40, while Band 3 rises to £326.70. This money is collected by dental practices and passed to the NHS.

Responsibility for commissioning NHS dental services lies with the ICB. Payments for primary care dentistry are made for Units of Dental Activity (UDAs), up to a maximum annual value agreed in each dental provider's contract. Each treatment course is worth a set number of UDAs, with higher bands being worth more. The total value of these contracted UDAs is paid to dental providers in monthly instalments over the financial year beginning 1st April. If a provider does not fulfil 96% of their allocated UDAs, the money for the care that has not been provided may be recovered by the commissioner. On the other end of the scale, providers can be reimbursed for up to 110% of their UDA allocations, subject to agreement with their commissioner.[88]

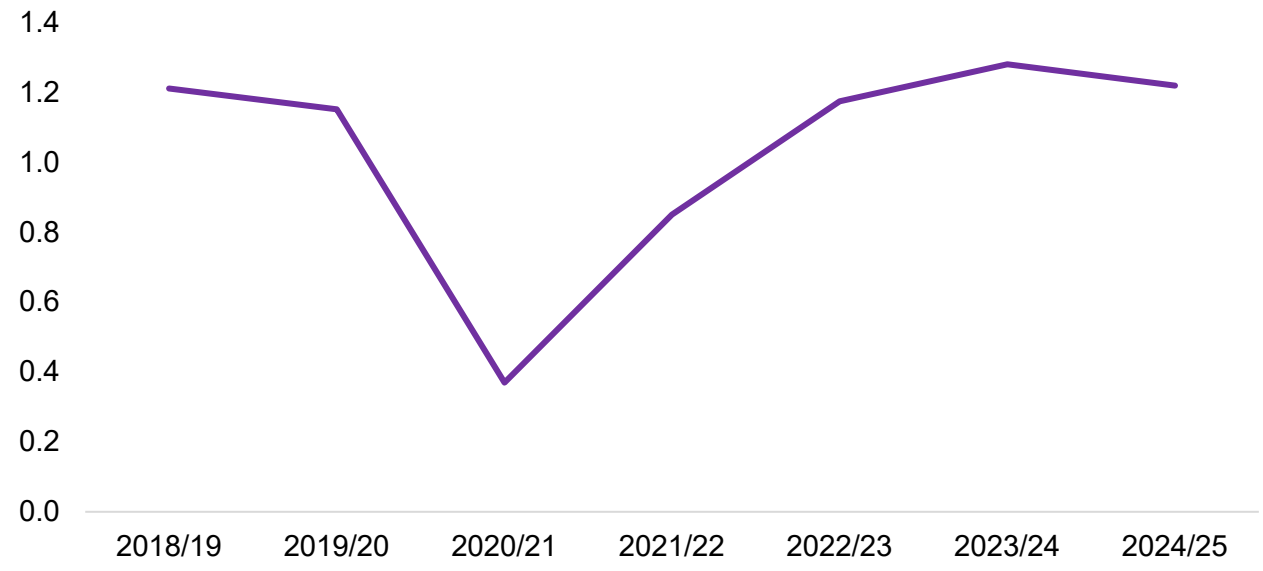
Local data on the commissioning and delivery of NHS dental services was provided by NHS BSA. In 2024/25, NHS dental practices in Harrow were commissioned to provide 346,814 UDAs at a value of £12,704,491. Over this period, these NHS dental practices delivered 324,394 UDAs, which was 93.5% of the care that was commissioned across the borough. Over two thirds (72%) of NHS dental practices in Harrow did not reach the expected 96% of UDA delivery, although as mentioned above this activity is recovered and reallocated with prioritisation to areas of greatest need.

This was in contrast to 2023/24, which saw 98.3% of UDAs being delivered and a smaller proportion of practices not reaching their UDA targets (38%). This is also despite an increase in the number of UDAs commissioned with greater financial value, up from 345,937 and £12,278,248 respectively in 2023/24.

The reduction in UDA delivery has also resulted in a decrease in the number of UDAs delivered by person in Harrow – 1.22 in 2024/25, down from 1.28 in 2023/24. The most recent comparable national and London data on UDAs is from 2023/24, which showed that UDA delivery per person in Harrow was slightly higher than the England average of 1.26, but lower than the London average of 1.37. To calculate this, the estimated population in England was taken from ONS and for London and Harrow from the GLA.

Figure 43 shows UDA delivery per person over time in Harrow. There is a clear drop during the Covid-19 pandemic, followed by a recovery to pre-pandemic levels over the last few years.

**Figure 43: UDAs delivered per person in Harrow over time (2018/19 to 2024/25) (NHS BSA)**




Data on what dental treatment is provided is represented as FP17s. FP17s are forms used by dentists to document and claim for dental activity. They are submitted to NHS BSA by practices and contain information on what treatment band the care belongs to, the patient charge collected and the number of UDAs performed.[18]

Figure 44 shows the number of FP17s in Harrow by NHS dental treatment band, including the breakdown of Band 2 treatments. Alongside this, Figure 45 shows how NHS dental practices in Harrow used their commissioned UDAs to deliver care. Altogether this indicates that most dental treatment in Harrow falls under Band 1, however a greater proportion of UDAs are used to deliver more complex care at higher Bands.

**Figure 44: Number of FP17s by band in Harrow (2024/25) – including combined and breakdown of Band 2 treatments (NHS BSA)**

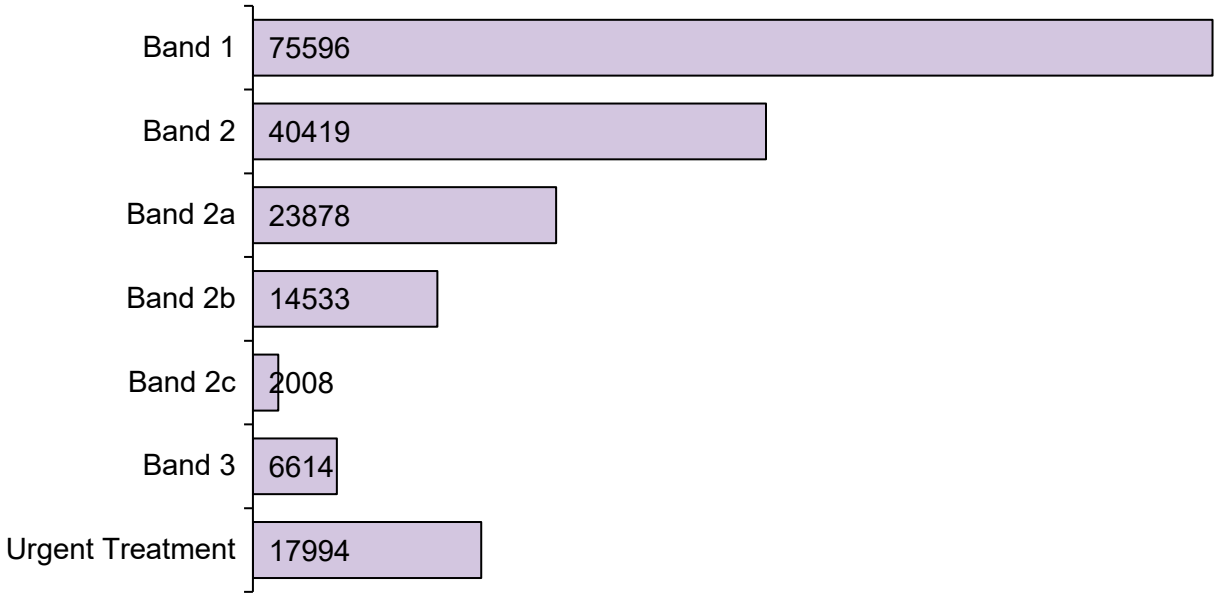
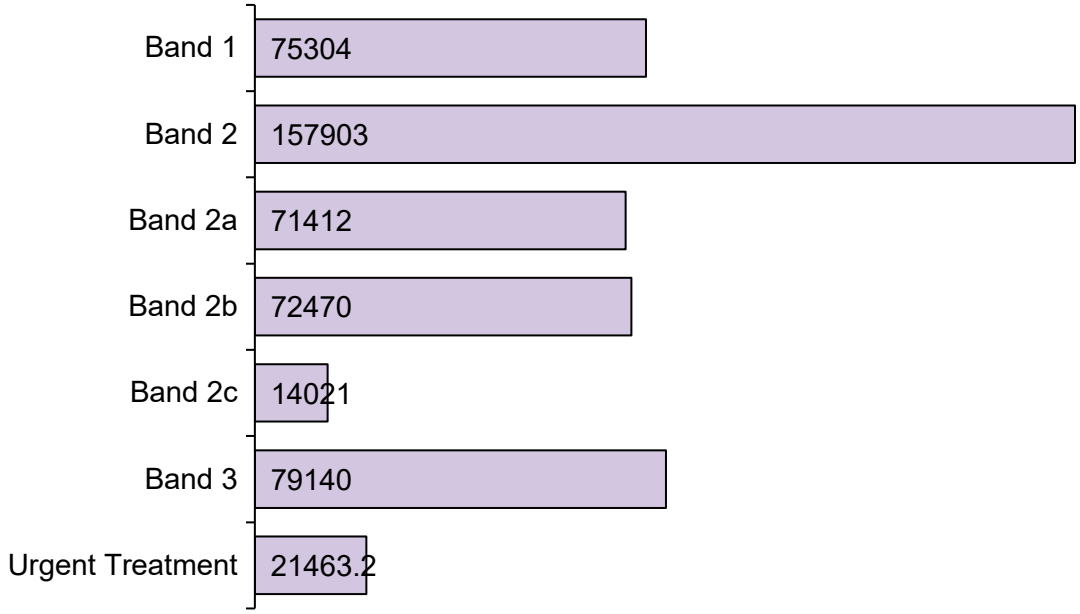


**Figure 45: Number of UDAs by band in Harrow (2024/25) – including combined and breakdown of Band 2 treatments (NHS BSA)**

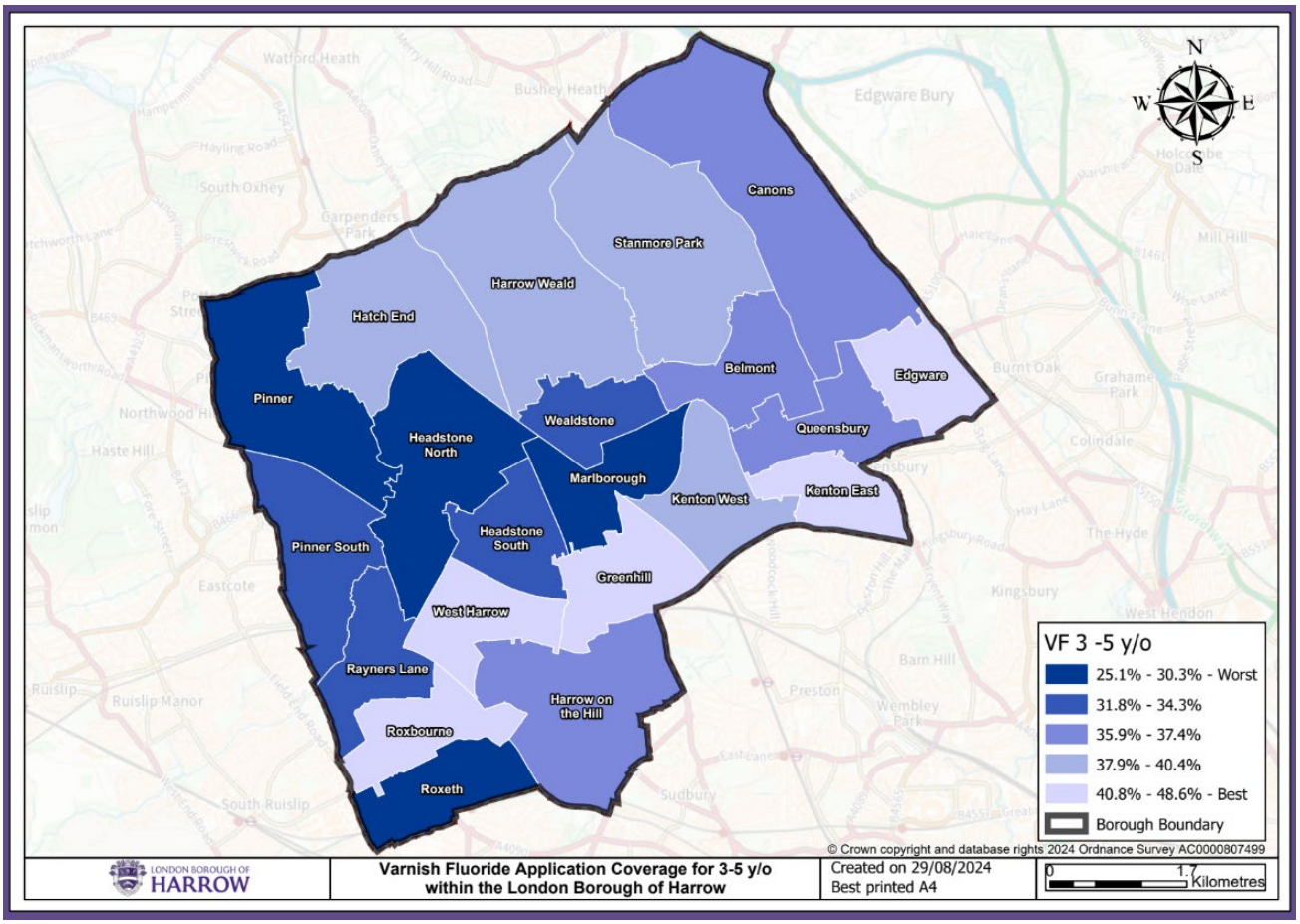



It was also possible to stratify FP17 data by ethnicity to explore for any inequalities in treatment. This data is extremely limited though, as 42% of FP17s did not have a recorded ethnicity, largely because patients declined to have their ethnicity recorded. The data did suggest that those from Mixed or Other ethnic backgrounds had a higher number of FP17s per person. A graph of these findings can be found in Appendix 6.

### *13.1.5. Fluoride Varnish applications*

The QMUL report extracted data on fluoride varnish applications by dentists, which are recommended twice yearly for children aged 3 years and old. 33.9% of 3-5-year-old children in Harrow received fluoride varnish applications in 2022-23, which was higher than the London and national averages. Although there was variation in applications by ward as shown in Figure 46, there was no association by deprivation level.

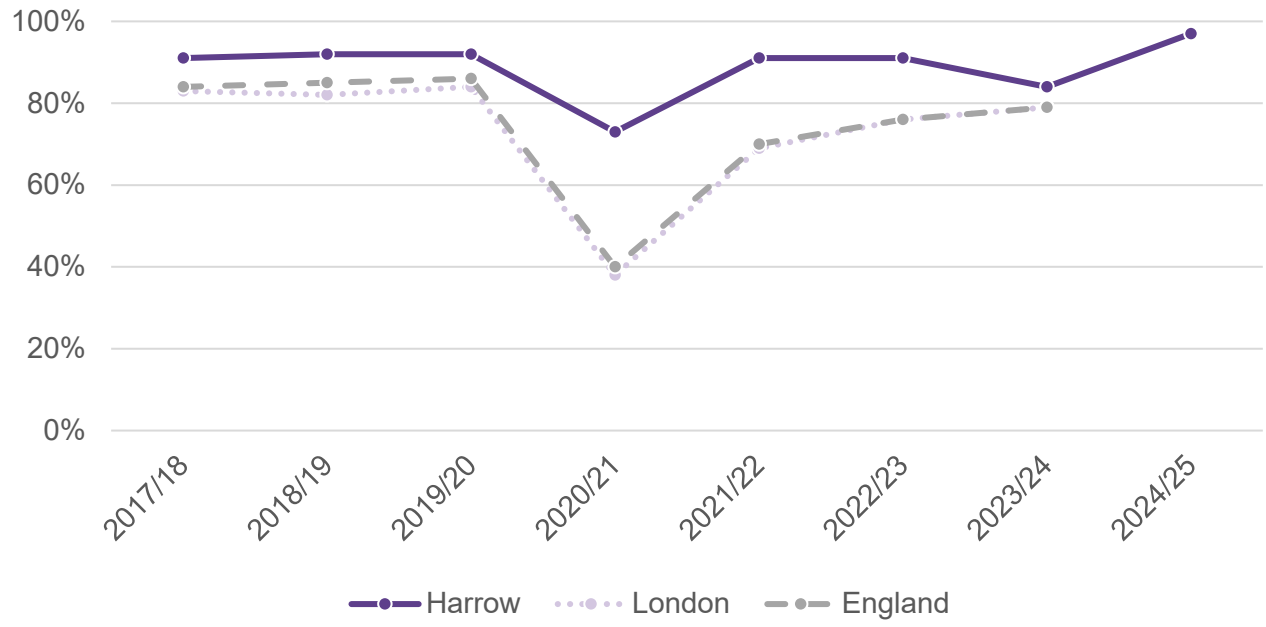
**Figure 46: Fluoride varnish application rates for 3-5-year-old children in Harrow (2022-23)[76]**



### *13.1.6. Children Looked After dental checks*

It is a statutory requirement that CLA receive dental checks at least annually. This is following an initial overall health assessment within the first 28 days of a child entering care.[89] The percentage of CLA who received up-to-date dental checks in Harrow was 97% in 2024/25, above the target of 95% and a rise from 84% in 2023/24 as shown in Figure 47. The latest available national data form 2023/24 shows that Harrow was above the England and statistical neighbour averages at the time (Harrow 84%, statistical neighbour average 80%, England average 79%).

**Figure 47: Trend of the percentage of CLA in Harrow, London and England with up-to-date dental checks**




Healthy Smiles was a pilot scheme previously available in Harrow that aimed to enhance accessibility of NHS Dental Care for CLA. It provided a dedicated dental referral service contactable by phone that would direct CLA to the nearest designated dental practice taking part in the scheme. These dental practices were not located in every Local Authority, although there was one situated in Harrow.[93] The pilot scheme saw only 5 CLA in Harrow, and therefore it was discontinued due to a lack of uptake.

## 13.2. Local Authority Commissioned Services

Since 2017 Harrow Public Health have delivered interventions to address child tooth decay. This was due to the high prevalence of tooth decay as evidenced by the NDEP survey findings, A&E attendances and hospital admissions for tooth extractions. This work started with a contract with the Whittington NHS Trust to go to selected schools in the most deprived areas to deliver oral health workshops and raise awareness on how to prevent tooth decay.

Following this in 2018, a training programme was developed for all front-line staff across Health Visiting, School Nursing, GPs, Early Education Practitioners, foster carers, social workers as well as the voluntary and community sector (VCS) to highlight the importance of MECC style interactions. Guidance and information was also circulated to all 0-5-year settings and schools which was aligned with the national campaign and resources from Start4Life.

In 2020, the Supervised Toothbrushing (STB) Programme “Harrow Happy Smiles” was started in schools and has been scaled up considerably since. This STB programme is delivered by the Whittington Health Oral Health Promotion team.

### *13.2.1. Supervised Toothbrushing Programme*

STB is a widely implemented approach that involves children brushing their teeth in a supervised setting, usually at schools or other Early Years settings. It aims to ensure that children brush their teeth regularly and develop good oral health behaviours form an early age. More information about STB can be found in the Best Practice section of this report.

Having started in 2020, the STB Programme in Harrow now runs in 82 Early Years settings and Reception schools, reaching over 3000 children between the ages of 3 and 5-years-old. The Programme is implemented by the Harrow Oral Health Promotion team, and Harrow Public health commission the Whittington NHS Trust to provide this service. The Oral Health Promotion team work closely with these settings to introduce STB, train staff to deliver it and conduct quality assurance monitoring.

The Programme underwent an options appraisal in 2023, and the decision was made to recommission and up-scale delivery of STB over funding a new targeted community fluoride-varnish programme. This decision was based on evidence of STB being an effective universal intervention, is practically simpler to implement and is more cost-effective (fluoride varnish programmes are significantly more costly).[90] The next review of the STB programme is due to be performed in 2026, and an evaluation of the programme is currently being conducted to feed into this.

### *13.2.2. Oral Health training and Making Every Contact Count (MECC)*

MECC is an evidence-based approach recommended by Public Health and NHS guidance. It empowers frontline staff to deliver brief interventions through conversations and signpost individuals towards healthier lifestyle choices. MECC training builds staff confidence and knowledge, ensuring that key health messages are delivered consistently across services and communities.[91]

Since 2018, the Harrow Public Health team has promoted MECC approaches to improve oral health through its Healthy Teeth Harrow training programme. Delivered by the Oral Health Promotion team, this programme focuses on staff and parents in schools and Early Years settings. A report on Healthy Teeth Harrow demonstrated its effectiveness at increasing frontline staff knowledge – for instance, knowledge on tooth brushing advice increased from 57% to 85%.

In 2023, a broader and more sizeable MECC programme was commissioned. This programme, called Healthy Harrow, is delivered by the VCS organisation Voluntary Action Harrow. It includes a dedicated oral health module and integrates oral health messages into other training, such as the “Healthy Beginnings” module.

Healthy Harrow training is particularly targeted at: Healthcare professionals, teachers and Early Years practitioners, VCS organisations, caregivers for children and individuals with disabilities, as well as Local Authority staff.

Key oral health messages include: Effective oral hygiene practices, prevention of common dental issues and how to support individuals with additional needs. It aims to ensure health messaging to local people is clear and consistent.

An evaluation of the Healthy Harrow programme was conducted in 2024, which showed that people who participated in MECC training found it beneficial and had applied their learning in practice. Important recommendations from the evaluation covered the need to work with frontline services to promote MECC and embed it into general training for their role with dedicated time to do this.

In the last year, one MECC session on oral health was delivered with 14 attendees. In addition, there were two sessions on Healthy Beginnings with 23 attendees as well as two in-house sessions delivered to a VCS organisation and maternity champions. Attendees to the general sessions included people from the voluntary sector, Harrow Council and public health. Furthermore, Voluntary Action Harrow in collaboration with the Oral Health Promotion team have produced information on oral health in their MECC booklet resource.

Ongoing efforts aim to strengthen partnerships with frontline organisations with resources and tools to support staff, expand reach to more community-based settings and ensure oral health remains a priority within broader health promotion efforts.

### *13.2.3. Health Visiting and School Nursing*

As part of the 0-19 contract, Health Visitors provide oral health support in their regular reviews. This is aligned with the Healthy Child Programme[92] and includes informing mothers that they are entitled to free dental care until their child is 12 months old, reminding them to take their child to the dentist, providing information about the importance of brushing their child’s teeth as soon as the first tooth appears and using demonstration kits to show them how to do this, as well as providing Brush for Life toothbrushing packs at the 12 and 24 month reviews.

In addition, a small number of targeted families (55 currently) receive intensive family support via the Maternal Early Childhood Sustained Home-visiting (MECSH) programme. As part of this work, Health Visitors conduct maternal oral health assessments and promote “Lift the Lip”, an awareness campaign that provides information to families on how to look after their child’s teeth and check them for signs of decay.

The latest local data from the end of 2024 on Health Visiting shows that 89% of births receive a face-to-face New Birth Visit within 14 days by a Health Visitor, with almost all the remaining births receiving a New Birth Visit by 30 days. This data also shows that 85% of children received a 6–8-week review by 8 weeks of age, 84% received a 12-month review and 80% a 2-2.5-year review.

Data collected specifically as part of the MECSH programme (which has small sample sizes) showed that 65% (48) of clients were at risk of poor oral health and 47% (35) reported having problems in their mouth. In addition, 57% (42) had seen a dentist in the last 12 months and 92% (68

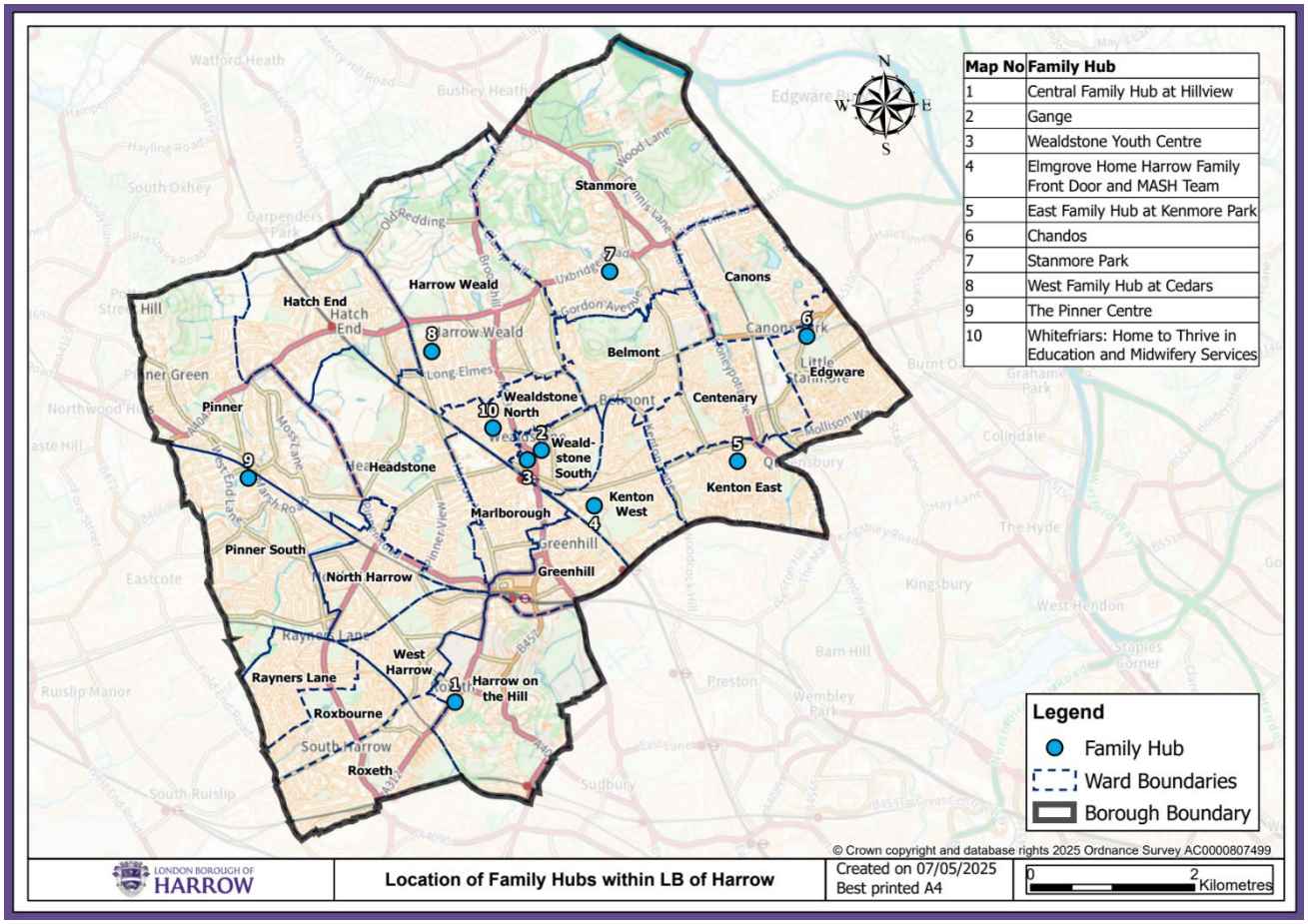
used fluoride toothpaste. During pregnancy, 64% (18) received oral health education and only 39% (11) had a dental check-up. At 14 months, only 39% of children had a dental check-up.

At the start of every academic year, schools are offered health promotion sessions for parents and children, including on oral health. Schools then choose what sessions they would like to host from this menu of options. Uptake is variable, with the most recent data from 2022-23 showing that there were a total of 29 sessions delivered to all schools in Harrow across the year. 26 of these sessions were for children, with only one for parents. 46 schools did not deliver any sessions on oral health. School Nurses do not do much oral health work with individual children, and when they do it is almost exclusively during Child Protection Health Assessments. Oral health is included in this assessment as a key sign of neglect or abuse. Roughly 150 children in Harrow are on Child Protection Plans a quarter, although this can vary.

### *13.2.4. Family Hubs*

Harrow has ten Family Hubs in the borough. The location of these Hubs are shown on Figure 48. The purpose of these hubs is to provide families with accessible support and advice that is closer to home. This is delivered in partnership with VCS, health and care providers.[94] The hubs run a number of oral health promotion sessions, delivered by trained oral health champions. In the six months from October 2024 to March 2025, the hubs delivered 10 sessions across 6 locations and reached 120 carers (parents and other carers) and 89 children.

**Figure 48: Locations of Family Hubs in Harrow**



### *13.2.5. UNICEF Baby Friendly*

The UNICEF Baby Friendly initiative is an evidence-based approach which aims to better support families with breastfeeding and developing close and loving relationships so that all babies get the best possible start in life. It does this by settings standards, providing training and support and assessing progress.[95] In Harrow, the Health Visiting team were fully reaccredited in 2019 and are now working towards reassessment. The Family Hubs are starting the process of working towards this accreditation.

Implementation of the Baby Friendly initiative increases breastfeeding rates and improves mothers' experience of breastfeeding, which is beneficial for oral health.

### *13.2.6. HPV Vaccinations*

The HPV vaccine is recommended for all children aged 12-13-years-old (in Year 8) and people at higher risk of HPV, such as gay, bisexual and other men who have sex with men after 45 or under. For school children, HPV vaccinations are delivered as a school-based programme which in Harrow is provided by Vaccination UK.[96] Eligible individuals who are home-schooled or outside mainstream schooling should also be offered the vaccine, and GP practices are required to provide for eligible adolescent boys and girls who missed the vaccination as part of the programme.[97]

### *13.2.7. Healthy Start*

Healthy Start is an NHS programme designed to support disadvantaged families to eat healthily and promote childhood development. It is available to people receiving qualifying benefits who are pregnant or have parental responsibility for a child under the age of 4 years. It provides parents with a Healthy Start card with money on it to buy milk, fruit, vegetables or pulses, as well as receive vitamins.[98] The latest data on uptake from April 2025 shows that there are 1,088 people on the scheme in Harrow, a similar number to the 1,125 in April 2023. This data is limited though as it only includes those who are able to make a digital application to the scheme. In addition, we do not know the proportion of eligible people who utilise Healthy Start due to an absence of data on how many people and families are eligible.[99]

### *13.2.8. Stop smoking and alcohol support services*

The Harrow Public Health team commissions local VCS organisation Via to provide and deliver smoking cessation services in the borough. Via also deliver the alcohol misuse support service for adults in Harrow, while Compass Elevation provide for children and young people. The services offer free and confidential advice, and can be accessed by self-referral or completed by any professional, from healthcare staff to housing support workers.

## 13.3. Schools and education

Schools play a crucial role in improving the oral health of children, supporting them to develop good oral health behaviours at an early age and ultimately helping to give them the best possible start in life. They are a key setting for a number of oral health interventions, namely STB and broader programmes such as Healthy Schools and Early Years London. As of Autumn 2024, there were a total of 38,852 children attending all schools in Harrow, with 3,022 of these being reception age.[100] Harrow also has four Special Schools – two primaries and two secondaries. The location of all schools, nurseries and playgroups in Harrow can be found in Appendix 7.

Not only are schools vitally important to improving oral health in children, but there is a co-existing relationship whereby poor oral health can significantly impact on a child's education. Data shows that 26% of children miss days from school due to dental pain and infection, with an average of 3 days of school missed and some up to 15.[55] There is no locally collected data on school absence due to oral health issues or dental appointments though. Nonetheless, this demonstrates the much broader impact oral health has on our lives and wellbeing.

### *13.3.1. Healthy Schools London and Healthy Early Years London*

Public Health guidance recognises the vital role education settings play in promoting the oral health of children through the food and drink they consume, and advises that all education settings have healthy eating policies in place.[55] In London specifically, the Mayor introduced the award schemes Healthy Schools London[101] and Healthy Early Years London[102]. These programmes encourage and support education settings to review their current provision, implement targeted health improvement measures, and help children, staff and families to make healthier choices. Importantly, this includes promoting healthier eating behaviours that are beneficial for oral health.[101,102] In Harrow, 57 schools have registered with Healthy Schools London, with 42 achieving bronze, 42 silver and 24 gold awards. Meanwhile, 90 settings have registered for Healthy Early Years London, with 34 achieving bronze, 15 silver and 10 gold awards.

Six schools and eight Early Years settings in Harrow have dedicated their programme work to oral health, with many of these achieving Gold awards. It should be noted though that many other education settings engage in work that is also beneficial to oral health, such as healthier eating policies, however their objective is not to directly impact upon the oral health of pupils but more generally improve health or related conditions such as obesity.

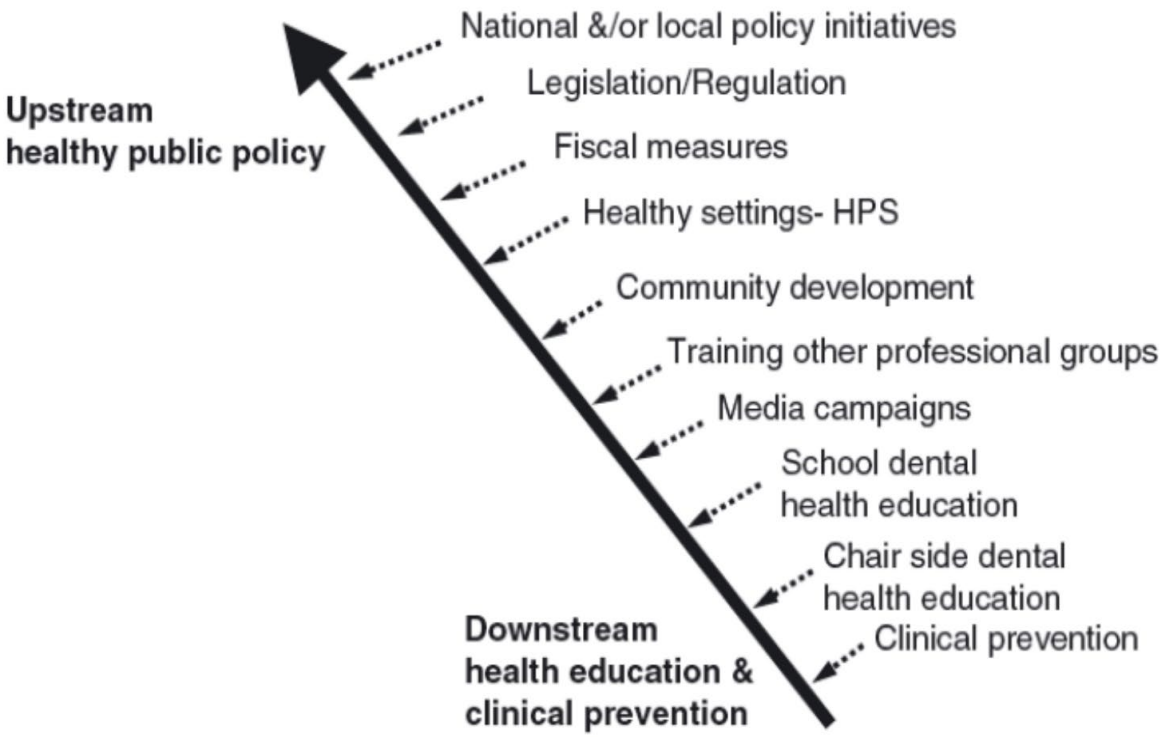
# 14. Policy and Best Practice

## 14.1. Overarching policies

As a Local Authority Public Health team, it is our statutory duty to identify and address local health inequalities.[15] In addition, NICE guidance states that oral health should be a core component of Local Authority Joint Strategic Needs Assessments and Health and Wellbeing Strategies.[1] This is particularly important given the historically high rates of poor oral health in Harrow. Therefore, improving oral health is recognised as a priority in the "Healthy People" chapter of the Harrow Health and Wellbeing Strategy.[103]

Public Health guidance states that addressing the oral health needs of the population should involve a combination of upstream, midstream and downstream interventions that follow the principle of proportionate universalism. In that sense, interventions to improve oral health should be available to the whole population, but with a proportionate and targeted focus on those in greatest need. Upstream actions include creating healthier public policies, strengthening community action and reorientating health services towards prevention. These should be complemented by downstream interventions, such as the delivery of fluoride. Figure 49 represents the cross-section of these interventions.[104]

**Figure 49: Upstream and downstream options for oral disease prevention[105]**




As previously discussed in this report, oral health shares risk factors with a number of other non-communicable diseases. Therefore, adopting a common risk factor approach is important to integrating the promotion of good health more generally. This more efficiently and effectively improves the health of a population.[104]

An Oral Health Steering Group has operated in Harrow for many years to foster collaboration, address inequalities and improve the oral health of the borough by implementing whole-system initiatives that adopt these overarching principles. In addition, it is also important to consider integration and collaboration with neighbouring boroughs. Public Health guidance recommends that commissioning considers financial approaches to maximise the value of investment and return on this investment through pooled budgets and collaborative commissioning with services and other local authorities.[104] The creation of a North-West London oral health working group for local authorities is a sign of growing opportunity and appetite to share learning and work collaboratively.

## 14.2. Oral health promotion

Local authorities are statutorily required to provide or commission oral health promotion programmes.[15] Public Health guidance states that children and young people (CYP) and their families should be at the heart of commissioning, however provision should take a whole life-course approach. It advocates for the support of CYP through their families and carers, as well as early years, school and community settings. This guidance states that the delivery of oral health promotion activities should adopt the principles of proportionate universalism and that a combination of upstream, midstream and downstream interventions should be implemented to address the needs of the population.[104]

Additional guidance on oral health promotion is provided by NICE. This states that oral health promotion services should provide tailored support to populations at high risk of poor oral health. For instance, this could include outreach services to vulnerable populations.[1] Specifically for children, NICE guidance recommends that a “whole-school” approach should be taken to promoting oral health. This includes ensuring that school policies and procedures promote and protect oral health, plain drinking water is readily available for free and children are encourages to bring refillable water bottles to school, sugar-free food and drink choices are provided, evidence-based oral health information is given to children, carers and parents and that schools work with oral health promotion teams. This is in addition to statutory requirements for Early Years settings to engage with oral health promotion activities, introduced in 2021 as part of the Early Years foundation stage (EYFS) statutory framework.[106]

NICE guidance also states that public sector services should promote oral health in the workplace through a variety of strategies. Specifically, this could include raising awareness of good oral health behaviours, providing information about how to access local dental care and also ensuring the workplace environment promotes oral health through the provision of plain drinking water free of charge, providing a choice of sugar-free food, drinks and snacks and encouraging and supporting breastfeeding. For health and social care services, oral health promotion should be incorporated into existing services for all people at high risk of poor oral health. This guidance also recommends that Local Authorities consider how to improve oral health through addressing wider determinants, for example local planning decisions for fast-food outlets.[1]

When considering oral health promotion and behaviour change for children evidence demonstrates the importance of involving parents. Children’s oral health is correlated with the knowledge and understanding of their parents, resulting from the influence they have on the behaviours their children acquire during infancy and maintain during early childhood. This evidence suggests that taking a whole family and community approach to promoting children’s oral health is more effective than individual-based interventions.[107]

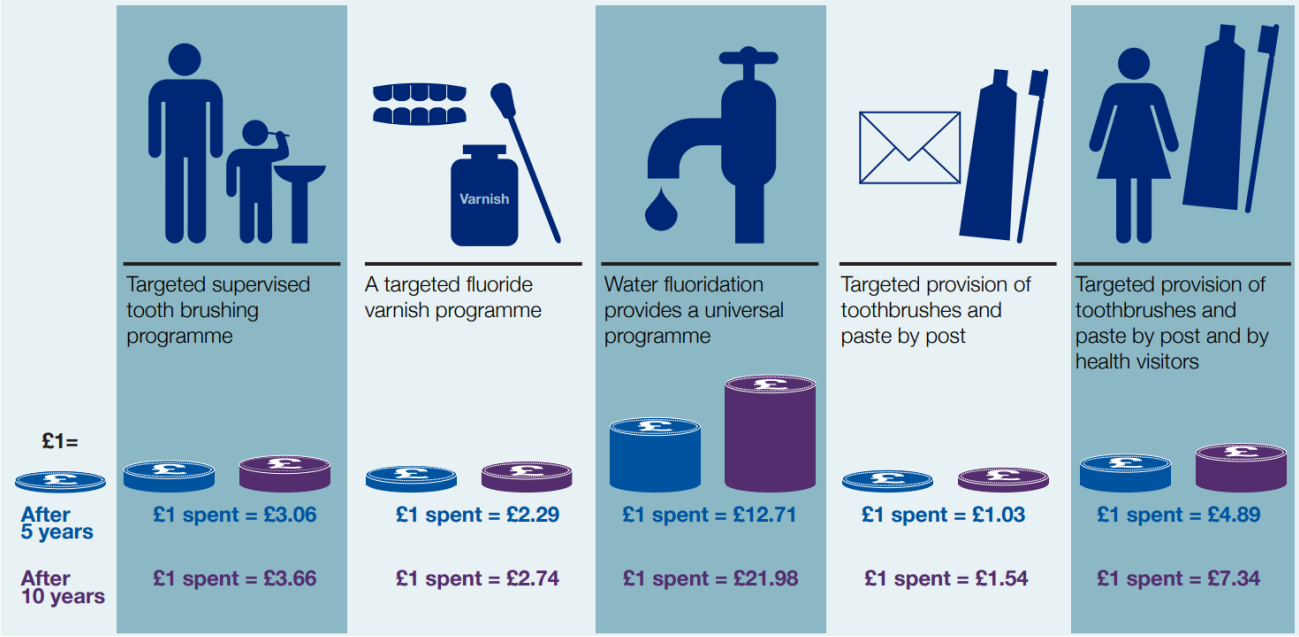
### *14.2.1. Supervised Toothbrushing*

STB is an evidence-based intervention that improves oral health outcomes and reduces inequalities. In particular, the Scotland-wide Childsmile programme showed that brushing at school

over a 3 year period significantly reduced tooth decay rates in all children but especially those living in the most deprived areas, who also saw a reduction in tooth decay rates within 1 year.[108]

In addition, STB is highly cost-effective. After 5 years, return on investment (ROI) for targeted STB is £3.06 for every £1 spent, which after 10 years increases to £3.66 for every £1 spent. STB has also been shown to reduce school absences, with an extra 2,666 school days per 5,000 children after 5 years.[55] This is visualised in Figure 50, which also contains information about the cost effectiveness of other oral health promotion interventions

**Figure 50: Return on investment for oral health improvement programmes for 0-5-year-olds[109]**




OHID provided updated guidance on the commissioning and delivery of STB programmes in April 2025.[110] Alongside this, an STB toolkit for London was produced in May 2025 to support Local Authorities in implementing successful STB programmes.

This was also following an announcement made a month prior that OHID would roll out a national STB programme for 3-5-year-olds in Early Years settings in the most deprived areas of England. This also included a promise of £11million worth of financial support to Local Authorities to deploy the programme, as well as a partnership with Colgate to donate toothbrushes and toothpaste.[111] Specifically, Harrow will receive £17,000 of this funding.

The OHID STB guidance was updated to ensure programmes are evidence-informed, safe and have clear accountability and reporting arrangements to demonstrate impact. Guidance also states that STB schemes should align with the aims of local oral health strategies and be coordinated with other initiatives and existing services to avoid duplication and maximise use of resources. It also specifically outlines that commissioners should use the Oral Health Needs Assessment to identify areas where children are at high risk of poor oral health and appropriate for targeted STB schemes.[110] This is further supported by NICE guidance which recommends STB schemes should be implemented in nurseries and primary schools in areas where children are at high risk of poor oral health.[1] Given the STB programme is Harrow is universal, this is less relevant, although consideration must be paid to ensuring that the STB programme continues to cover the areas of greatest need.

A national survey of STB programmes in England was conducted in 2023 to highlight key barriers and facilitators to implementing a successful scheme. Barriers include lack of funding, poor communication and engagement between Local Authorities, providers and settings, oral health not being considered a priority and little system capacity or other logistical challenges. On the other hand, facilitators include integrated and mandated public health approaches with clear guidance, good collaboration between Local Authorities, providers and settings, delivery approaches that are flexible and empower setting staff to take ownership and adequate availability of resources.[112] It is crucial that our local STB programme continues to reflect and learn from these experiences.

### *14.2.2. Provision of toothbrushes/toothpaste*

The targeted provision of free toothbrushes and toothpaste can encourage parents to adopt good oral health practices and start brushing their child's teeth when it first.[55] Guidance recommends delivery is designed to minimise uptake issues and therefore maximising the impact on reducing inequalities. When provision of brushing packs is conducted using a combination of postal delivery and via health visitors, this increases the cost-effectiveness of such a scheme. In this instance, ROI for every £1 spend is £4.89 after 5 years, and £7.34 after 10 years, as shown in Figure 50.[55] Integrating oral health into the work of Health Visitors is an effective downstream intervention that Harrow currently adopts, as covered earlier in this report.[104]

### *14.2.3. Community fluoride varnish programmes*

There is strong evidence to show that targeted community fluoride varnish programmes are an effective intervention to improve oral health outcomes. This approach involves the application of fluoride varnish to children's teeth by trained professionals in community settings. When targeted at high-risk populations, fluoride varnish programmes have been shown to reduce oral health inequalities.[55] Although such programmes have a positive ROI (£2.29 for every £1 spend after 5 years, £2.74 after 10 years),[55] recent evidence shows that in some instances they have limited cost-effectiveness which does not meet NICE recommended thresholds.[113] This is largely due to their significant cost to implement. Successful delivery also depends on children having varnish applications at least twice a year.[55]

### *14.2.4. Water Fluoridation*

Around 10% of England's population currently have a fluoridated water supply, with no fluoridation schemes in London.[57] Evidence shows that it is a highly effective and safe approach to improving oral health outcomes, for instance reducing dental caries rates and oral health related hospital admissions.[55] Decisions regarding water fluoridation lie with the Secretary of State for Health,[114] and plans are in process to expand water fluoridation in the North-East of England.[115] Despite calls to fluoridate water in London,[116] there is no indication of a move to implement this and our Oral Health Needs Assessment has very limited influence on these decisions.

### *14.2.5. Breastfeeding*

Breastfed babies experience less tooth decay in addition to being provided with the best nutrition for their general health. There is strong evidence to suggest that mothers should be supported to breastfeed exclusively for the first 6 months of a baby's life and continue doing so while introducing solids from 6 months onwards. Amongst other guidance, it is also important to note that sugar should not be added to food or drinks given to babies or toddlers.[57]

### *14.2.6. Smoking and tobacco*

The Harrow Public Health team recently completed a Tobacco Control Health Needs Assessment,[62] which identified key areas of action based on evidence, policy and local intelligence. This included the need to enhance provision of local Stop Smoking Services and establish partnership working across the whole health and care system to create a cohesive, effective and sustainable approach to reducing tobacco use. Alongside this, guidance states that dentists should refer patients to local Stop Smoking Services.[57] Together this presents an opportunity to provide support for patients at high risk of poor oral health outcomes, particularly oral cancer.

### *14.2.7. Healthy eating environments*

Public Health and NICE guidance highlight the importance of making healthier choices the easier choices for individuals. As such, it advises that healthier eating policies are introduced in schools and early years settings as an upstream intervention.[1,104] This is supported by UK Government guidance for Schools and Early Years settings, which promote availability of healthy food options and a balanced diet on school menus.[117,118] All these guidelines take a common risk factor approach, with benefits including but ultimately much broader than oral health, for instance tackling obesity.

In London, the Mayor continues to promote Healthy Schools London and Healthy Early Years London to make schools healthier environments for children.[101,102] These programmes offer flexibility to schools to choose their areas of focus depending on the needs of their pupils, their priorities and capabilities. Nevertheless, much of the guidance focusses on interventions that promote good oral health such as healthier eating practices. As part of Healthy Schools London, the Mayor is also encouraging schools to become water only. This means that water and milk are the only drinks available in schools.[119]

National UK Government guidance outlines how Local Authorities can shape their planning policies to promote health food environments. In particular it highlights key areas to consider: proximity to locations where children and young people congregate such as schools or community centres, areas with poor health outcomes and inequalities and over-concentration of certain uses within a specific area.[120] However, the London Borough of Harrow's policies do not mention creating healthier food environments for local communities. The most recent Local Plan for Harrow was produced by the Council in 2012,[121] and although promoting healthy communities and reducing health inequalities are a key objective in the Sustainability Proposal, there is no mention of the food environment of fast-food outlets.[122] The Council is currently producing a new Local Plan which should be finalised by the start of 2026, however this has already been through the consultation phase.[123]

It is also worth noting that policies exist on a national scale that have important local impacts. This includes the Sugar Reduction Programme and Soft Drink Industry Levy introduced in 2016, which has had mixed success in reducing the purchases of food and drink high in sugar.[124]

### *14.2.8. Oral health training*

Delivering oral health training to care providers has been shown to improve oral health outcomes and reduce inequalities. This includes the professional workforce, such as healthcare and Early Years staff, as well as formal and informal carers. As a result, oral health training is a recommended midstream intervention. NICE guidance specifically states that frontline health and social care staff should receive training in promoting oral health, including advice on good oral health behaviours and signposting to advice on local dental services.[1] As a key part of Public Health guidance towards

sustaining and developing the workforce, MECC is highlighted as an excellent approach to provide advice to local people across the whole life course.[104]

## 14.3. NHS Dental Care

The structure of NHS dentistry is still governed by the 2006 contract changes, with some recent reforms.[125] In this system, dentists are self-employed under two main contract types: General Dental Services (GDS) and Personal Dental Services (PDS). Other NHS dental services such as urgent, community and secondary dental care may be commissioned differently, for instance by NHS Trusts.[88] Patients no longer register with a dentist and only have a formal relationship with a dental care provider when undergoing a course of treatment. Most patients must pay to receive NHS dental care according to the band of treatment as outlined earlier in this report. However, NHS dental services are free for some patients, specifically those who are:[126]

- Under 18, or under 19 and in full-time education
- Pregnant or have had a baby in the last 12 months
- Being treated in an NHS hospital and treatment is being carried out by a hospital dentist
- Receiving low-income benefits, or under 20 and a dependant of someone receiving low-income benefits

The commissioning of NHS dental services was devolved from NHS England to ICBs in April 2023. This move was intended to promote provision of dental care to better meet the needs of the local population and reduce local oral health inequalities, guided by the CORE20PLUS5 approach.[127] A children and young people's version of CORE20PLUS5 was introduced in 2022 and includes oral health as one of the five focus areas.[128] This specifically identifies tooth extractions due to dental decay as the outcome of concern, but as has already been highlighted in this report, this stems from the wider determinants of oral health. The North-west London ICB is committed to addressing inequalities and dental service pilots are being proposed to do this.

The previous Conservative government implemented a "Plan to Recover and Reform NHS Dentistry" in February 2024, which involved incentivising dentists to see new NHS patients and work in areas with low dental service provision, make NHS dental work more attractive by increasing the UDA rate, prevent poor oral health in children through a "Smile for Life" programme, undertake a consultation on water fluoridation and increase dental workforce capacity.[129] However this was criticised by dentists for not addressing the dental contract as the fundamental cause of the issues facing NHS dentistry and an absence of additional funding to pay for these changes.[86]

The current Labour government followed up on their manifesto pledge to tackle issues facing NHS Dentistry[130] with the chapter "Fixing the Foundations in Dentistry" as part of the 10 Year Health Plan, published in July 2025.[131] This included prioritisation of urgent care with a promise to create capacity for 700,000 additional urgent dental appointments, alongside action to prevent poor oral health such as expanding the use of fluoride varnish and fissure sealants in addition to the national STB programme. The Plan also includes a requirement for all newly qualified dentists to practice in the NHS for a minimum of 3 years, and a promise to work with dentists to achieve beneficial dental contract reform.[131]

In addition, the fundamental role which dentists play in the prevention of oral disease and promotion of good oral health is already laid out in various guidance and legal acts, which dentists and dental services must follow.

### *14.3.1. Providing preventive dental care*

NICE guidance states that dentists should provide oral health prevention advice to patients at every opportunity.[132] This includes information on oral hygiene, diet, smoking and alcohol which is tailored to individual needs. Dentists should also identify patients at higher risk of poor oral health and provide additional preventive care.[57] Specifically, dentists should ask every patient if they use tobacco, then provide brief advice and refer to stop smoking services if necessary. They should also consider asking patients about their alcohol use.[132]

In addition, guidance recommends that children above the age of 3 should have fluoride varnish applied twice a year by a dentist. This can also be considered for adults and children aged under 3 years if the dentist is concerned about their teeth.[133]

### *14.3.2. Dental service design*

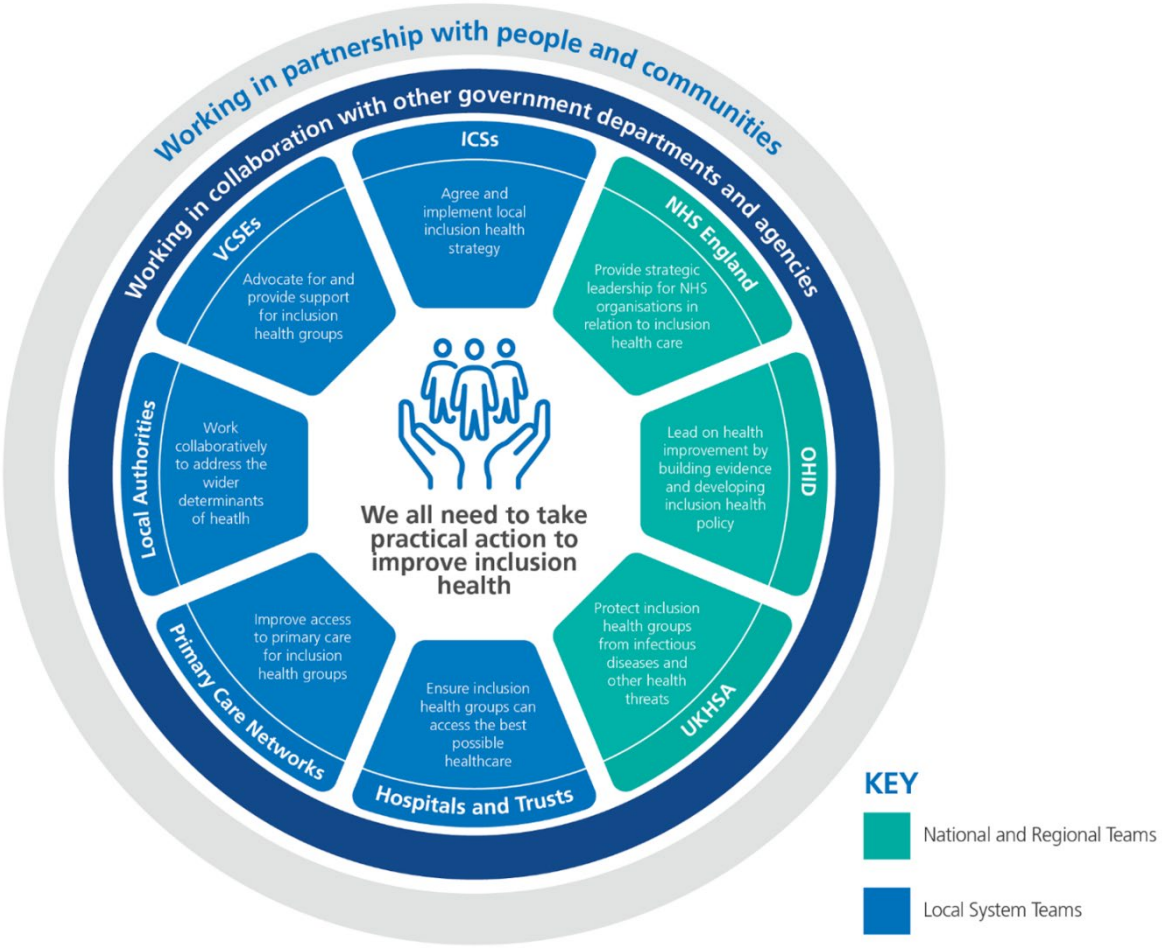
Dental service design that caters for the needs of the local population is delivered at both individual practice and wider system levels. Dental services must be designed to deliver care and cater for all patient needs. It is a legal obligation for dental services to make reasonable adjustments when caring for their patients under the Equality Act 2010,[14] for example those with learning disabilities.[35] This might include practical adjustments to the physical environment or changes to service processes, such as providing greater appointment flexibility.

To optimise the delivery of dental services it is also important to highlight good practice. This supports learning and promotes continuous improvement of care. The CQC produced a useful resource to share such learning. One example was a dentist-led oral health promotion programmes targeted at the local community to prevent dental decay linked with high sugar diets, particularly around religious festivals and celebrations. Another dental practice provided more accessible care by keeping same-day appointments available for all urgent needs, regardless of whether the patient was already registered with the practice.[134]

At a population level, guidance states that local systems must consider how to use available resources most effectively to deliver care that improves oral health across their population. The current dental contract framework enables ICBs to procure additional or further services to meet local population needs. This involves additional or reallocated investment into new or existing contracts and services.[135]

In addition, ICBs also have the opportunity to commission Inclusion Health dental services. These services cater for people who are socially excluded and often experience poor health. They frequently face barriers to accessing healthcare services due to their design, and these poor experiences alongside an intersecting array of factors such as stigma, discrimination, poverty and trauma lead to a perpetuating cycle of individuals not seeking healthcare despite their high needs. Ultimately this results in poor outcomes and significant health inequalities. There are a number of Inclusion Health groups, which include people experiencing homelessness, vulnerable migrants and refugees and other marginalised groups. NHS England is calling for action on promoting Inclusion Health and alongside OHID, UKHSA and VCS partners, has laid out a framework for services and systems to support implementation. They advise that action on Inclusion Health should be aligned to CORE20PLUS5, with the “PLUS” including these vulnerable groups who should be a priority for reducing health inequalities as is the ICBs legal duty. The NHS England guidance outlines the benefits Inclusion Health has in improving health outcomes and reducing inequalities. The roles and responsibilities of each partner organisation are outlined in Figure 51.[136]

**Figure 51: An overview of roles and responsibilities in relation to Inclusion Health[136]**




It is also important to highlight the importance of incorporating learning and patient experiences into the shaping of system-level dental service design. An organisation that is fundamental for this is Healthwatch, whose purpose is to act as an independent body that utilises patient experiences of health and social care to influence policy and practice. Healthwatch published their position on NHS Dentistry in July 2024. This included the need to establish greater involvement of Healthwatch and communities in shaping local NHS dental services and fundamental reform on NHS Dentistry, as well as specific recommendations to create more joined-up schemes between dental practices and settings such as GP practices and schools, ensuring NHS dental budgets are ring-fenced by the ICB, greater promotion of NHS dental charge exemptions and ensuring dental practices comply with their contractual duty to update their NHS appointment availability.[137]

## 14.4. Reducing inequalities

Much of the policy and best practice guidance that has been outlined in this section of our report aims to reduce oral health inequalities. In addition, specific guidance is provided for certain vulnerable groups.

### *14.4.1. Children and adults with SEND*

"Oral care and people with learning disabilities" provides up-to-date guidance on improving the oral health of some people with SEND and reducing oral health inequalities that they experience.[35] This includes individual and service level interventions to tackle barriers to receiving dental care and improve oral hygiene. Individual level strategies include dental practices (including General Dental Practices) making reasonable adjustments, reducing fear of accessing dental care and the importance of good communication by clinical staff. At a service level, support and training on oral health for carers, as well as learning disability training for dental staff are key. Furthermore, providing information in an accessible format is important to ensuring education on good oral hygiene is effective.[35]

Starting this year (2025), all CYP with SEND in residential special schools and colleges across England will be offered free NHS dental checks, as well as eyesight and hearing tests. The aim of this programme is to ensure dental issues are identified promptly, and to support CYP with SEND to get the right care and follow-up support as quickly as possible.[138]

### *14.4.2. Refugees and asylum seekers*

Asylum seekers mostly receive Section 95 (Immigration and Asylum Act 1999)[139] support which entitles them to free NHS dental care, which they must access using a HC2 Certificate. If an asylum seeker is not receiving Section 95 support then they can still apply to get free NHS dental care. All asylum seeker children are able to access NHS dental care for free as any child would in the UK.[140]

Guidance was published in 2021 on the "Model of oral healthcare for asylum seekers and refugees" by Public Health England and the NHS.[141] It was designed to provide guidance to local dental systems, including local authorities and VCS organisations, to assist asylum seekers and refugees in accessing NHS dental care. It aims to address the barriers this group faces, such as low health literacy and structural obstacles to accessing care. The model outlines a 7-step process to improve access and includes information on rights, entitlements and how to find NHS dentists. It emphasises the importance of tailored support from local authorities and community services to ensure culturally appropriate oral health promotion and ultimately help to reduce health inequalities.

### *14.4.3. Older adults in care and nursing homes*

NICE provide a comprehensive set of guidelines on oral health for adults in care homes.[78] This guidance sets out clear recommendations for a range of individual roles and services involved in the care of adults in care homes. Specifically, it covers the need for care home policies on oral health and support with access to dental services, that staff conduct assessments of oral health needs and that residents are supported with their daily mouth care as set out in their personal care plan. Mouth care should follow appropriate guidance to ensure residents receive evidence-based support.[57] To support this, an oral health toolkit has been developed for care homes. This contains training materials for staff, information to provide to residents, their families and carers and documents for care home managers. It also contains valuable information for care home commissioners, such as key performance indicators (KPIs) to include in care home contracts which support good oral health.[25]

This NICE guidance also states that oral health promotion teams should develop and provide care homes with oral health education materials, support and training to help them meet the needs of all their residents, particularly those with complex needs. They should also help care home managers to source local oral health services and create links to local general dental practices and CDS.[78]

Furthermore, Public Health guidance recommends that Local Authorities consider whether specific targeted oral health improvement programmes are implemented for vulnerable older adults. These include high fluoride toothpastes, fluoride varnish programmes, supporting people and their carers with oral hygiene, oral health training for care staff and carers, and ensuring oral care policies are implemented and followed in care settings.[142]

### *14.4.4. Children Looked After*

Local Authorities have a statutory duty to promote the welfare of CLA. CLA must have an initial health assessment within 28 days of entering care, followed by assessments at least annually thereafter. These must include dental checks by a dentist.[89] There is otherwise no specific guidance on oral health or dental care for CLA.

### *14.4.5. Rough sleepers*

There is also no specific guidance on oral health or dental care for rough sleepers. General health guidance on homelessness does exist and highlights the duty of healthcare professionals and services to support their needs. This includes individual-level actions such as providing greater flexibility and holistic care, to shaping system-level service design and commissioning.[143,144]

# 15. Key Findings

This section provides an overview of the key findings from this Oral Health Needs Assessment. Details relating to these findings can be found throughout this report.

*Population level overview of oral health in Harrow*

- **Oral health in Harrow appears to be improving, but prevalence is still high**: In children, rates of tooth decay, hospital admissions and tooth extractions are falling although remain above national averages. For adults there is less data available, however hospital admissions are falling while oral cancer rates are stagnant. It is important to caveat the hospital-related data, as the reduction in admissions and extractions will be contributed to by increased community capacity, however the extent of this is unclear. Nevertheless, our findings indicate that the evidence-based population-level interventions implemented in Harrow since 2018 are having a positive effect and improving oral health.
- **Oral health inequalities exist in Harrow:** Data shows that significant oral health inequalities exist in Harrow. For children, deprivation was associated with higher rates of hospital admission due to tooth decay. In addition for adults, oral cancer mortality was higher amongst those of male sex. While our survey cannot be used to explicitly identify local inequalities, our findings indicate that children and adults with SEND, Children Looked After, rough sleepers, refugees and asylum seekers and older adults in care homes may experience unmet oral health needs. It is important to note that Public Health and dental care guidance is clear regarding our duty to address inequalities, with specific interventions recommended to do so.

*Reasons for poor oral health*

- **There is variation in how Harrow residents engage with good oral health behaviours**: Although much of the data in this Needs Assessment suggests that many people in Harrow display good oral health behaviours, this is variable. Results show that many people, including children, do not engage with such practices. Barriers at a structural and personal level creates challenges with engaging with these behaviours, and these particularly affect vulnerable population groups.
- **Risk factors for oral cancer are prevalent in Harrow**: Smoking rates in Harrow are higher and HPV vaccination uptake lower than the national average. In addition, alcohol-related harm has not declined in recent years. Tackling these risk factors would help to reduce oral cancer rates, with referral services already available to support residents.
- **Unhealthy diets and food environments**: There are pockets of unhealthy food environments within Harrow. These promote greater availability and affordability of foods which harm oral health, as well as other non-communicable diseases such as obesity, cardiovascular disease and diabetes. Within Harrow there is an association between unhealthy food environments and deprivation, although it is a weak connection. Harrow Council do not have any policies in place to promote healthier food environments in the borough, although the Public Health team have been successfully engaging settings to take part in the Healthy Schools London and Healthy Early Years London schemes.

- **Harrow is a diverse borough**: Harrow is a very culturally diverse area with many spoken languages. Some cultural practices are linked to poor oral health, such as betel nut chewing, and language can act as a barrier to accessing dental care.
- **Exclusive breastfeeding is declining**: Although overall breastfeeding rates in Harrow are unchanged in the last decade, fewer mothers are exclusively breastfeeding. Evidence demonstrates the benefit exclusive breastfeeding has on oral health
- **The wider determinants of oral health exert influence in Harrow:** This key finding overlaps with many of the others, however it is important to specifically highlight the influence that the wider determinants of oral health display in Harrow. This includes structural barriers such as the affordability and availability of healthy foods and toothbrushing equipment, cultural and social norms and barriers to accessing and receiving dental care amongst many others.

*NHS dental care*

- **Access rates for NHS dental services are variable within Harrow:** Although overall NHS dental care access rates in Harrow are high amongst other North-West London boroughs, they vary by age and location with no clear link to deprivation. Access rates are particularly low for children below the age of 5-years-old and adults aged 18-64. This also ties in with findings from the QMUL report and our Needs Assessment survey that most children are taken to the dentist for the first time later than is recommended (when the first tooth appears or at least by their first birthday).
- **Accessing NHS dental care can be challenging:** Findings from the QMUL report and our Needs Assessment survey found that although many people found it easy to access NHS dental care, experiences were variable. Some people find it hard to find a dentist accepting NHS patients, and our mapping of NHS dental services in the borough also revealed that most practices were not seeing NHS patients and availability by location varied. Vulnerable at-risk groups frequently find it hard to access NHS dental care which can compound unmet oral health needs.
- **UDAs have recovered to pre-Covid levels, however many dental practices do not use their allocated UDAs**: The number of UDAs delivered per person in Harrow has recovered to pre-Covid levels, however this has reduced since the last financial year. Overall, 93.5% of UDAs commissioned in Harrow were delivered in 2024/25 and 72% of NHS dental practices did not reach the expected UDA delivery threshold.
- **Experiences of receiving dental care in Harrow are generally positive, but variable**: Findings from the QMUL report and our Needs Assessment survey showed that most people had a good experience receiving dental care in Harrow. However, many did not and faced specific issues including practices and dentists not accommodating for complex needs. Language barriers and a lack of interpreter services were also highlighted and affects dental care quality. Furthermore, only a third of young children received twice yearly fluoride varnish applications and this varied by location in Harrow.

*The wider oral care system*

- **Carers receive little support and training on oral health**: There are a significant number of carers in Harrow, both paid and informal. Our survey findings demonstrate that carers for vulnerable populations at risk of oral health inequalities feel inadequately supported to provide oral care or advice. They have received little training which would empower and

enable them to better support the people they care for with their oral health. The benefit of this is strongly supported by guidance and evidence.

- **Residents and carers receive inconsistent advice**: Findings from the QMUL report and our Needs Assessment survey showed that many residents and carers receive inconsistent messages about oral health across the health and care system. This makes it difficult for people to know what behaviours they should be engaging with to improve their oral health. Our survey showed that there is support from dentists, carers and residents to act upon this.
- **Harrow has an ageing population**: Harrow has a slowly growing and ageing population. Data suggests that Harrow may have a high domiciliary care need, and there are a considerable number of older adults in care homes. Meeting the oral health needs of older dependent adults will help to improve general health and reduce demand on social care.
- **Integration, collaboration and focus**: Public Health guidance and evidence demonstrate the need to take a whole life-course approach to oral health promotion, centred on children, their families and carers as well as vulnerable population groups. This should be achieved through collaborative and integrated working with settings and services. Local data and insights support this approach.

*Limitations*

- **Local insight was not gathered on all vulnerable population groups**: This Oral Health Needs Assessment provided a substantially more comprehensive insight into local experiences of certain vulnerable population groups than most. However, due to capacity constraints, we were not able to gather insight into all groups who may experience oral health inequalities. This includes people with severe and complex mental and physical health conditions, people with alcohol or drug dependence, prisoners and sex workers.
- **Some data should be interpreted with caution**: Throughout this report have paid close attention to stipulating which data has significant limitations and lacks generalisability. This includes many of the NDEP surveys, particularly for adults. In addition, although the Needs Assessment survey provides useful insight, responses from the target population groups were low which limits generalisability of results.
- **This Needs Assessment is unable to influence change beyond its scope:** Dental reform and water fluoridation are both crucial to improving oral health in Harrow, however this Needs Assessment does not have the capability to influence either of these.

# 16. Recommendations

This Oral Health Needs Assessment has identified unmet oral health needs and inequalities which it is our statutory duty to address.[15] Nonetheless, poor oral health affects people throughout the population of Harrow. Therefore, a proportionate universalism approach should be taken. Taking this approach will ensure that interventions to improve the oral health of Harrow residents are universal, but proportionate to need therefore tackling inequalities, and targeted according to who needs what. For oral health work specifically related to children, this will also enable us to give every child the best possible start in life.[45]

The recommendations of this Needs Assessment have been designed to align with these fundamental public health principles, as well as support enhanced focus on preventing poor oral health, reduce pressure on dental services and ultimately improve oral health outcomes across the borough. Many of these outcomes depend upon behaviour changes that benefit oral health. To truly enable and empower such change, we must also consider a behavioural science approach that gives people the capability, opportunity and motivation to engage.[145]

The recommendations of this Needs Assessment are designed to address local oral health issues however are confined to the responsibilities and capabilities of those operating at a local level. There are many policies devised at a national government or NHS level which, despite this Needs Assessment raising the need to redesign them, it is limited to influence. The recommendations of this Needs Assessment have therefore been designed to align with the current wider regional and national policy context so that we can make best of the circumstances and deliver achievable improvements to oral health in Harrow. Specifically, local action in Harrow will need to react to and accommodate change resulting from the 10 Year Health Plan.[131]

In order to have a true and meaningful impact on improving Harrow's oral health, a sustainable, collaborative, whole-system approach must be taken that intervenes at upstream, midstream and downstream levels. The recommendations outlined in this report consider who holds responsibility for certain actions given their position within the oral health system.

*Recommendation area 1: Enhance integration and collaboration*

At a local level:

1.1 Policy makers, services, providers and representative groups should work more closely together to ensure that the right approaches are being delivered, frontline staff are supported, and settings are encouraged and enabled to implement oral health improvement action. This should be led and coordinated through the Harrow Oral Health Steering Group. Integrated Neighbourhood Teams (INTs) could also play a key role in facilitating this connectivity.

1.2 Invites to the Oral Health Steering Group should be extended to reflect the findings of this Needs Assessment and the action taken at a Harrow level. Suggestions include VCS representatives for vulnerable population groups such as rough sleepers, and commissioning teams for key services like social care, particularly care homes.

At a regional level:

1.3 The Harrow Public Health team should continue to strengthen collaboration with other Local Authorities to share learning and consider the prospect of pooled budgets, collaborative commissioning and advocating for regional services to improve oral health.

*Recommendation area 2: Address and overcome risk factors and the wider determinants of oral health*

**2.1 Address the structural determinants of health:** Harrow Oral Health Steering Group partners should consider how they can influence policy that addresses the structural determinants of health, particularly for vulnerable population groups. This ranges from upstream policy interventions, such as housing policies to tackle homelessness and address child poverty to give every child the best start in life, to downstream approaches to provide accessible health services that cater for the needs of these population groups. Specifically, the Oral Health Steering Group should support the recommendations of the borough Homeless Health Needs Assessment, which is due to be completed soon.

**2.2 Address the unhealthy food environment in Harrow:** The Harrow Public Health team should work to support the Local Authority to implement planning policies that promote healthier eating environments as per UK Government guidance "Health and Safe Communities". This will be further bolstered by the upcoming Healthy Weight Plan, due to be written later in 2025, that will enable a common risk factor approach.

**2.3 Promote healthy food and drink in schools:** The Harrow Public Health team should continue to encourage local schools to engage with the Healthy Schools London and Healthy Early Years London schemes, as well as promoting water-only schools. Education setting menus should continue to be reviewed to ensure they meet the School and Early Years national food and drink standards.

**2.4 Promote the Healthy Start scheme:** The Harrow Public Health team should continue to work with frontline services (such as Maternity, Health Visiting, and Early Years) to promote the Healthy Start scheme, supporting disadvantaged families to eat healthily.

**2.5 Support UNICEF Baby Friendly in Harrow:** The Oral Health Steering Group should support the work to get Harrow's Family Hubs and Health Visiting service to obtain the full UNICEF Baby Friendly accreditation.

**2.6 Support the recommendations of the Harrow Tobacco Health Needs Assessment:** The Oral Health Steering Group should support the recommendations of the Harrow Tobacco Health Needs Assessment, particularly that the stop smoking service want to work more closely with a range of partners including dentists

**2.7 Maximise uptake of HPV vaccinations:** The Harrow Public Health team should work with schools and immunisation partners to increase uptake of HPV vaccinations locally

*Recommendation area 3: Extend the Harrow Oral Health Promotion offer*

**3.1 Continue Supervised Toothbrushing and Health Visitor brushing pack Programmes:** The Harrow STB and brushing pack programmes should be continued as per guidance and evidence, utilising the new London STB toolkit and financial support available from national government. Consideration must be paid to ensuring ongoing coverage of the areas of greatest need, particularly given the turnover of Early Years settings.

**3.2 Broaden to a family focus:** Oral health promotion activities in Harrow should look to extend to a family focus, targeting parents as well as children to improve oral health awareness, behaviours and outcomes across the whole family. This should be targeted

primarily at the families of children who are at increased risk of poor oral health, such as those from more deprived areas, refugees and asylum seekers and children with SEND.

**3.3 Expand Oral Health Promotion work with vulnerable population groups:** The Harrow Oral Health Promotion team should look to expand their work with the vulnerable population groups outlined in this Needs Assessment and use best practice guidance to do so, for instance considering outreach activities – providing education and resources directly to vulnerable groups in their community (for example, at VCS hubs). This will involve ensuring that the team is enabled to undertake this task with sufficient funding and resources, and utilise established and newly formed VCS connection to deliver this.

**3.4 Enhance integration of oral health promotion into services:** Harrow Oral Health Steering Group members should work with services and settings to boost oral health promotion practices. This will involve engagement with settings and services as well as empowering and enabling them to provide clear and consistent oral health messages through appropriate training, as outlined below. Particular settings and services of interest are Early Years, Social Care and VCS organisations supporting vulnerable population groups. Deployment should provide a broad coverage across services and prioritised to reduce oral health inequalities

**3.5 Increase and embed oral health training for the wider health, education and social workforce:** This should be jointly delivered and coordinated between the Healthy Harrow MECC programme and Oral Health Promotion team to ensure that messaging is aligned and targeted at the right level for frontline staff and carers. Key roles that should be targeted by this training are frontline staff and carers for children and vulnerable population groups, and will promote clear and consistent oral health messages across the borough. This should also include consideration of embedding oral health promotion and MECC into the general training of these roles. In addition, the Oral Health Promotion team and Voluntary Action Harrow should continue to develop informative evidence-based oral health promotion resources that frontline staff can utilise and share with residents on oral health behaviours, support and accessing NHS dental services.

**3.6 Increase and support School Nursing and Family Hub oral health sessions:** The Harrow Public Health team should work with School Nurses, Schools and Family Hubs to encourage and support more sessions on oral health, including promoting these sessions to parents. This should form part of an increased family focus delivered via key settings and services, in addition to targeting by area of greatest need such as schools with children from more disadvantaged or vulnerable backgrounds.

**3.7 Increase promotion and education on oral cancer:** Oral Health Promotion activity and training should include more information on oral cancer, including cultural practices such as betel quid and areca nut chewing and Shisha smoking. This should be targeted at higher risk groups through partnership with local VCS and health services.

**3.8 Increase promotion of early and regular dentist visits:** Oral Health promotion activity and training should aim to increase the number of children being taken to the dentist regularly and earlier than currently practiced in Harrow (when teeth first appear or at least by their first birthday). This must be done in conjunction with optimising access to NHS dentistry.

**3.9 Align oral health promotion with economic, workforce and workplace strategies:** The Harrow Public Health team is exploring an economic strategy that focuses on workforce health. This should include promotion of good oral health behaviours and advocacy for policies that are beneficial for oral health, particularly for those who are unemployed or working in manual jobs who experience oral health inequalities. This should also include advocacy of integrating oral health with frontline services exposed to these groups, such as employment services, who could deploy MECC interventions.

*Recommendation area 4: Improve NHS Dentistry access*

**4.1 Utilise commissioning options:** The North-West London ICB should continue to consider how UDA allocation in Harrow could best address the needs of the population. This includes utilising targeted commissioning to procure additional or further services in places with limited access to dental care or services that cater for vulnerable population groups. Decisions at a Harrow-level should involve the local LDC, the heads of key local dental services and Dental Public Health professionals as stated in commissioning guidance.[135] In addition, other members of the Harrow Oral Health Steering Group should support the ICB by providing intelligence and conducting community engagement to raise awareness of additional or further services.

**4.2 Advocate for Inclusion Health initiatives:** The North-West London ICB should continue to consider how Inclusion Health initiatives could be commissioned in Harrow. If introduced, other members of the Harrow Oral Health Steering Group should support the ICB by raising awareness of availability to eligible individuals.

**4.3 Support free NHS dental checks in SEND schools:** Members of the Harrow Oral Health Steering Group should work to support the awareness and delivery of the national initiative to provide free NHS dental checks in SEND schools.

**4.4 Continue provision of Children Looked After dental checks:** The Oral Health Steering Group should work with Local Authority teams, foster carers, CLA and dental services to continue to ensure that a high proportion of CLA receive annual dental checks

**4.5 Create opportunities to support a dental workforce for the future:** Members of the Harrow Oral Health Steering Group, particularly the ICB and LDC, should look to support investment in the local dental workforce. This should consider the need for delivering neighbourhood services via INTs and explore opportunities for dental workforce training, particularly to provide care to vulnerable population groups. For example, this could include Dental Specialty Training such as Paediatric Dentistry and Special Care Dentistry positions, or any other NHS programmes that are available.

**4.6 Provide up-to-date information on NHS dentist availability:** The Harrow Oral Health Steering Group should work with dental practices to ensure that up-to-date information about whether they are accepting NHS patients is available to the public, either via the NHS website, or creating a separate contemporaneous list that is cascaded to the public regularly.

**4.7 Streamline referral processes:** NHS dental services should look to streamline and solidify referral processes to increase accessibility of services to vulnerable populations, so that VCS organisations are aware and enabled to make appropriate referrals to dental services such as CDS.

**4.8 Align dental practices to settings**: Harrow Oral Health Steering Group members should continue to consider how NHS dental practices could be aligned with certain key settings (for example schools, care homes or Family Hubs). Consideration should be made of prioritising settings that cater for populations at greater risk of poor oral health (such as children with SEND) or where there is a need to increase dental access rates (for example, children under the age of 5-years-old). This should help to streamline referral processes to NHS dental care for frontline staff. The ICB would be responsible for the commissioning of such services, supported by other Steering Group members to promote and raise awareness of their availability.

**4.9 Alleviate unnecessary pressure on Community Dental Services:** Aside from the recommendations of this Needs Assessment, the Oral Health Steering Group should work to determine how pressures on the CDS can be alleviated. This will enable the CDS to provide the special care that is vital to cater for particularly vulnerable patients.

**4.10 Consider domiciliary and complex care need:** Dental services in Harrow must keep pace with our ageing population to ensure domiciliary and/or complex care needs are catered for. This includes people in care homes and other dependent adults living at home. This will play an important role in improving dependent adults' general health and subsequently helping to reduce demand on social care.

*Recommendation area 5: Optimise delivery of NHS Dentistry*

**5.1 Reduce variability of experiences:** Harrow Oral Health Steering Group partners should work with local dentists to reduce the variability of service experience and inconsistency of advice provided, sharing information and highlighting good practice such as appointment text reminders to patients. Another important area is ensuring that NHS dental practices make reasonable adjustments for those with additional needs

**5.2 Overcome language barriers:** Harrow Oral Health Steering Group partners should work to support local dental practices to overcome language barriers by increasing the availability and use of interpreter services

**5.3 Increase fluoride varnish applications:** The 33.9% of 3-5-year-old children in Harrow receiving twice-yearly fluoride varnish applications is largely contributed to by the fact that less than half of children of this age access a dentist. Nevertheless, increasing the overall percentage of fluoride varnish applications would help to improve oral health outcomes. This should be done by increasing awareness of accessing dental care regularly amongst parents, increasing accessibility of NHS Dentistry and working with local NHS dentists to increase the provision of twice-yearly fluoride varnish applications.

**5.4 Increase tobacco and alcohol referrals:** Work with local NHS dentists to increase awareness of stop smoking and alcohol support services and encourage dentists to utilise existing referral pathways

*Recommendation area 6: Advance intelligence and research*

**6.1 Enhance participation in annual NDEP surveys**: The Harrow Public Health team should work with relevant partners to increase participation in annual NDEP surveys as is their statutory duty. At the very least, this should ensure that minimum uptake thresholds are met so that the results of every NDEP survey can be deemed reliable and therefore utilised.

**6.2 Improve insight into care home oral health practices:** Given the limited information gathered by our Needs Assessment survey, there remains a need to engage with local care homes with Harrow and gain better insight into oral health practices. This will enable the Harrow Oral Health Steering Group to best respond to the 2025 NDEP survey findings on older adults in care homes and support care homes to optimise oral health practices.

**6.3 Maximise local intelligence of vulnerable population groups:** This Needs Assessment was not capable of collecting local data on the oral health of all vulnerable population groups who may experience inequalities, such as vulnerable older adults outside of care homes and those with mental and physical health conditions. The Oral Health Steering Group should consider opportunities to explore the local oral health experiences of these groups and how they can be supported to improve their outcomes.

**6.4 Assimilate Healthwatch connections:** Community insight and engagement can be enhanced through the Harrow Public Health team and LDC connections to Healthwatch. This should include inviting Healthwatch to the Oral Health Steering Group

**6.5 Explore academic research opportunities:** The Harrow Public Health team should work collaboratively with internal and external colleagues and partners to explore academic research opportunities that will increase insight into oral health in Harrow, strengthen connections, increase local academic investment, improve health outcomes and reduce inequalities.

**6.6 Measure and evaluate impact of interventions:** The Oral Health Action Plan which will follow this Needs Assessment should consider how the whole-systems approaches implemented are monitored and evaluated for their impact with clear outcome measures.

**6.7 Improve or introduce mechanisms to monitor oral health impact:** The Oral Health Steering Group should consider how partners could improve or introduce methods to record the impact poor oral health has on people. For example, the Harrow Public Health team should explore whether schools can code school child absence specifically related to oral health.

**6.8 Utilise local intelligence and the evidence-base:** The Oral Health Steering Group should utilise intelligence on local oral health needs in combination with the wider evidence-base to ensure the most appropriate oral health interventions are delivered for our population, within available capacity.

*Recommendation area 7: Advocate for change beyond the scope of this Needs Assessment*

**7.1 Support the implementation of Water Fluoridation**: All members of the Harrow Oral Health Steering Group should advocate and support the implementation of Water Fluoridation locally as a safe and effective measure to improve oral health.

**7.2 Support beneficial and meaningful dental reform**: The members of the Harrow Oral Health Steering Group should advocate for dental reform that benefits patients and NHS dentists

# 17. References


1. National Institute for Health and Care Excellence (NICE). Oral health: local authorities and partners. NICE guideline PH55. 2014 Oct 22 [cited 2025 Jul 11]. Available from: https://www.nice.org.uk/guidance/ph55
2. World Health Organization. Oral health [Internet]. Geneva: WHO; [cited 2025 Jul 11]. Available from: https://www.who.int/health-topics/oral-health#tab=tab_1
3. World Health Organization. Integrated people-centred eye care, including preventable vision impairment and blindness: report by the Director-General. Geneva: WHO; 2022 Apr 27 [cited 2025 Jul 11]. Available from: https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_10Add1-en.pdf
4. Public Health England. Inequalities in oral health in England [Internet]. London: GOV.UK; 2021 Mar 19 [cited 2025 Jul 11]. Available from: https://www.gov.uk/government/publications/inequalities-in-oral-health-in-england
5. Office for Health Improvement and Disparities. National Dental Epidemiology Programme (NDEP) for England: oral health survey of 5-year-old schoolchildren 2024 [Internet]. London: GOV.UK; 2025 Mar 5 [cited 2025 Jul 11]. Available from: https://www.gov.uk/government/statistics/oral-health-survey-of-5-year-old-schoolchildren-2024/national-dental-epidemiology-programme-ndep-for-england-oral-health-survey-of-5-year-old-schoolchildren-2024
6. Public Health England. Oral health survey of adults attending dental practices 2018 [Internet]. London: GOV.UK; 2020 Jun 16 [cited 2025 Jul 11]. Available from: https://www.gov.uk/government/publications/oral-health-survey-of-adults-attending-dental-practices-2018
7. Oral Health Foundation. The State of Mouth Cancer UK Report 2020/21 [Internet]. Rugby: Oral Health Foundation; 2020 [cited 2025 Jul 11]. Available from: https://www.dentalhealth.org/thestateofmouthcancer
8. Peres MA, Macpherson LMD, Weyant RJ, Daly B, Venturelli R, Mathur MR, et al. Oral diseases: a global public health challenge. *Lancet*. 2019;394(10194):249–60. doi:10.1016/S0140-6736(19)31146-8 [cited 2025 Jul 11]. Available from: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)31146-8/abstract
9. Penchansky R, Thomas JW. The concept of access: definition and relationship to consumer satisfaction. *Med Care*. 1981;19(2):127–40. doi:10.1097/00005650-198102000-00001 [cited 2025 Jul 11]. Available from: https://pubmed.ncbi.nlm.nih.gov/7206846/
10. The King's Fund. Public satisfaction with the NHS and social care in 2024: results from the British Social Attitudes survey [Internet]. London: The King's Fund; 2025 Apr 2 [cited 2025 Jul 11]. Available from: https://www.kingsfund.org.uk/insight-and-analysis/reports/public-satisfaction-nhs-social-care-in-2024-bsa
11. Healthwatch England. Access to NHS dentistry 2024: findings [Internet]. London: Healthwatch; 2024 Nov 20 [cited 2025 Jul 11]. Available from: https://www.healthwatch.co.uk/report/2024-11-20/access-nhs-dentistry-2024-findings

12. Stennett M, Tsakos G. The impact of the COVID-19 pandemic on oral health inequalities and access to oral healthcare in England. *Br Dent J*. 2021;230(2):63–8. doi:10.1038/s41415-021-3718-0 [cited 2025 Jul 11]. Available from: https://www.nature.com/articles/s41415-021-3718-0
13. Watt RG, Venturelli R, Daly B. Understanding and tackling oral health inequalities in vulnerable adult populations: from the margins to the mainstream. *Br Dent J*. 2019;227(6):539–44. doi:10.1038/s41415-019-0472-7 [cited 2025 Jul 11]. Available from: https://www.nature.com/articles/s41415-019-0472-7
14. United Kingdom. Equality Act 2010 [Internet]. London: The Stationery Office; 2010 [cited 2025 Jul 11]. Available from: https://www.legislation.gov.uk/ukpga/2010/15/contents
15. United Kingdom. Health and Social Care Act 2012 [Internet]. London: The Stationery Office; 2012 [cited 2025 Jul 11]. Available from: https://www.legislation.gov.uk/ukpga/2012/7/contents
16. Levesque J-F, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. In: *Healthcare Access – Barrier and Facilitators* [Internet]. Bethesda (MD): National Center for Biotechnology Information (US); 2013 [cited 2025 Jul 11]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK551699/
17. ScienceDirect. Edentulism – an overview [Internet]. Amsterdam: Elsevier; [cited 2025 Jul 11]. Available from: https://www.sciencedirect.com/topics/medicine-and-dentistry/edentulism
18. NHS Business Services Authority. Dental activity processing [Internet]. Newcastle upon Tyne: NHSBSA; [cited 2025 Jul 11]. Available from: https://www.nhsbsa.nhs.uk/activity-payment-and-pension-services/dental-activity-processing
19. Public Health England. Health inequalities: place-based approaches to reduce inequalities [Internet]. London: GOV.UK; 2019 Jul 29 [cited 2025 Jul 11]. Available from: https://www.gov.uk/government/publications/health-inequalities-place-based-approaches-to-reduce-inequalities
20. Praveen BH, Prathibha B, Reddy PP, Monica M, Samba A, Rajesh R. Co relation between PUFA index and Oral Health Related Quality of Life of a Rural Population in India: A Cross-Sectional Study. J Clin Diagn Res. 2015; 9(1):ZC39–ZC42. doi:10.7860/JCDR/2015/11427.5489 [cited 2025 Jul 11]. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC4347175/
21. HM Government. Children with special educational needs and disabilities (SEND): support and guidance [Internet]. London: GOV.UK; [cited 2025 Jul 11]. Available from: https://www.gov.uk/children-with-special-educational-needs
22. Office for National Statistics. Census [Internet]. Newport: ONS; [cited 2025 Jul 11]. Available from: https://www.ons.gov.uk/census
23. Greater London Authority. Housing-led population projections [Internet]. London: London Datastore; [updated 2024 Aug; cited 2025 Jul 14]. Available from: https://data.london.gov.uk/dataset/housing-led-population-projections
24. Office for Health Improvement and Disparities. Public health profiles [Internet]. London: Fingertips; [updated 2025 Jul; cited 2025 Jul 14]. Available from: https://fingertips.phe.org.uk
25. Public Health England. Oral health toolkit for adults in care homes [Internet]. London: GOV.UK; 2020 Nov 27 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/publications/adult-oral-health-in-care-homes-toolkit/oral-health-toolkit-for-adults-in-care-homes

26. World Health Organization. Diet and oral health: factsheet on oral health and sugars [Internet]. Copenhagen: WHO Regional Office for Europe; [date unknown; cited 2025 Jul 14]. Available from: https://apps.who.int/iris/bitstream/handle/10665/345149/WHO-EURO-2018-3298-43057-60255-eng.pdf
27. Cancer Research UK. Head and neck cancers incidence statistics [Internet]. London: Cancer Research UK; [cited 2025 Jul 14]. Available from: https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/head-and-neck-cancers/incidence
28. Care Quality Commission. Smiling matters: oral health care in care homes [Internet]. London: CQC; 2019 Jun 24 [cited 2025 Jul 14]. Available from: https://www.cqc.org.uk/sites/default/files/20190624_smiling_matters_full_report.pdf
29. Care Quality Commission. Smiling matters: oral health in care homes – progress report [Internet]. London: CQC; 2023 Mar 20 [cited 2025 Jul 14]. Available from: https://www.cqc.org.uk/publications/smiling-matters-oral-health-care-homes-progress-report
30. United Kingdom. Housing Act 1996: Part VII – Homelessness [Internet]. London: The Stationary Office; 1996 [cited 2025 Jul 14]. Available from: https://www.legislation.gov.uk/ukpga/1996/52/part/VII
31. Greater London Authority. CHAIN reports: Combined Homelessness and Information Network [Internet]. London: London Datastore; [cited 2025 Jul 14]. Available from: https://data.london.gov.uk/dataset/chain-reports/
32. Yusuf H, Golkari A, Kaddour S. Oral health of people experiencing homelessness in London: a mixed methods study [Internet]. BMC Public Health. 2023;23:1701 [cited 2025 Jul 14]. Available from: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-023-16648-x
33. NHS England. Special educational needs and disability (SEND): children and young people [Internet]. London: NHS England; [cited 2025 Jul 14]. Available from: https://www.england.nhs.uk/learning-disabilities/care/children-young-people/send/
34. Department for Education. Special educational needs in England: academic year 2023/24 [Internet]. London: Explore Education Statistics; 2024 Jun 27 [cited 2025 Jul 14]. Available from: https://explore-education-statistics.service.gov.uk/find-statistics/special-educational-needs-in-england/2023-24
35. Public Health England. Oral care and people with learning disabilities [Internet]. London: GOV.UK; 2025 Apr 28 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/publications/oral-care-and-people-with-learning-disabilities/oral-care-and-people-with-learning-disabilities
36. Department for Education. Children looked after in England including adoptions: reporting year 2024 [Internet]. London: Explore Education Statistics; 2024 Nov 14 [cited 2025 Jul 14]. Available from: https://explore-education-statistics.service.gov.uk/find-statistics/children-looked-after-in-england-including-adoptions/2024
37. Hurry KJ, Ridsdale L, Davies J, Murihead VE. The Dental Health of Looked After Children in the UK and Dental Care Pathways: A Scoping Review. Community Dent Health [Internet]. 2023 Aug 31;40(3):154-161 [cited 2025 Jul 14]. Available from: https://pubmed.ncbi.nlm.nih.gov/37162290/

38. Home Office. Immigration system statistics: regional and local authority data [Internet]. London: GOV.UK; 2025 May 22 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/statistical-data-sets/immigration-system-statistics-regional-and-local-authority-data
39. Keboa MT, Hiles N, Macdonald ME. The oral health of refugees and asylum seekers: a scoping review [Internet]. Glob Health. 2016;12:59 [cited 2025 Jul 14]. Available from: https://pubmed.ncbi.nlm.nih.gov/28587471/
40. Wainman NE, Phillips OR, Morling JR. Facilitators and barriers to asylum seeker and refugee oral health care access: a qualitative systematic review [Internet]. Br Dent J. 2024;236(12):906–912 [cited 2025 Jul 14]. Available from: https://www.nature.com/articles/s41415-024-7235-9
41. NHS Digital. Health Survey for England, 2022 Part 1: Adults' health-related behaviours [Internet]. Leeds: NHS Digital; 2024 Jun 6 [cited 2025 Jul 14]. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2022-part-1/adults-health-related-behaviours
42. Harrow Council. Harrow Vitality Profiles: Deprivation [Internet]. Harrow: Harrow Council; [date unknown] [cited 2025 Jul 14]. Available from: https://www.harrow.gov.uk/downloads/file/26921/deprivation.pdf
43. Ministry of Housing, Communities & Local Government. English indices of deprivation 2019 [Internet]. London: GOV.UK; 2019 Sep 26 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019
44. Public Health England. Health matters: obesity and the food environment [Internet]. London: GOV.UK; 2017 Mar 31 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2
45. Marmot M, Allen J, Goldblatt P, Boyce T, McNeish D, Grady M, et al. Fair society, healthy lives: The Marmot Review [Internet]. London: Institute of Health Equity; 2010 [cited 2025 Jul 14]. Available from: https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review
46. Odoms-Young A, Brown AGM, Agurs-Collins T, Glanz K. Food Insecurity, Neighborhood Food Environment, and Health Disparities: State of the Science, Research Gaps and Opportunities [Internet]. Am J Clin Nutr. 2023 Dec 30;119(3):850–861 [cited 2025 Jul 14]. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10972712/
47. Mackenbach JD, Ibouanga EL, van der Veen MH, Ziesemer KA, Pinho MGM. Relation between the food environment and oral health—systematic review [Internet]. Eur J Public Health. 2022 Aug [cited 2025 Jul 14];32(4):606–616. Available from: https://academic.oup.com/eurpub/article/32/4/606/6645756
48. Consumer Data Research Centre. Priority Places for Food Index [Internet]. Leeds: University of Leeds; [cited 2025 Jul 14]. Available from: https://priorityplaces.cdrc.ac.uk/
49. Morales ME, Berkowitz SA. The Relationship between Food Insecurity, Dietary Patterns, and Obesity [Internet]. Curr Nutr Rep. 2016 Jan 25;5(1):54–60 [cited 2025 Jul 14]. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC6019322/

50. Public Health Wales. Fast food density in Wales [Internet]. Cardiff: Public Health Wales; 2019 May 3 [cited 2025 Jul 14]. Available from: https://phw.nhs.wales/services-and-teams/child-measurement-programme/additional-reports/fast-food-density-in-wales/
51. Oral Health Foundation. Diet and my teeth [Internet]. Rugby: Oral Health Foundation; [cited 2025 Jul 14]. Available from: https://www.dentalhealth.org/diet-and-my-teeth
52. Aiello LM, Quercia D, Schifanella R, Del Prete L. Tesco Grocery 1.0, a large-scale dataset of grocery purchases in London [Internet]. Sci Data. 2020 Mar 3 [cited 2025 Jul 14];7:28. Available from: https://www.nature.com/articles/s41597-020-0397-7
53. Public Health England. England's poorest areas are fast food hotspots [Internet]. London: GOV.UK; 2018 Jun 29 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/news/englands-poorest-areas-are-fast-food-hotspots
54. The Food Foundation. Families cutting back on healthy food risks widening health inequalities [Internet]. London: The Food Foundation; 2024 Feb 27 [cited 2025 Jul 14]. Available from: https://foodfoundation.org.uk/news/families-cutting-back-healthy-food-risks-widening-health-inequalities
55. Public Health England. Health matters: child dental health [Internet]. London: GOV.UK; 2017 Jun 14 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/publications/health-matters-child-dental-health/health-matters-child-dental-health
56. Moynihan PJ, Kelly SAM. Effect on Caries of Restricting Sugars Intake [Internet]. J Dent Res. 2014 Jan;93(1):8–18 [cited 2025 Jul 14]. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC3872848/
57. Office for Health Improvement and Disparities, Department of Health and Social Care, NHS England. Delivering better oral health: an evidence-based toolkit for prevention. London: GOV.UK; 2021 [updated 2021 Nov 9; cited 2025 Jul 14]. Available from: https://www.gov.uk/government/publications/delivering-better-oral-health-an-evidence-based-toolkit-for-prevention
58. Corrêa SCL, Uchôa SAL, Corrêa DL, Corrêa VC. Assessing the impact of breastfeeding on oral health and facial development. In: Health of Tomorrow: Innovations and Academic Research. 2023 [cited 2025 Jul 14]. Available from: https://www.researchgate.net/publication/377323844_Assessing_the_impact_of_breastfeeding_on_oral_health_and_facial_development/fulltext/659feb92c77ed940476e0d1a/Assessing-the-impact-of-breastfeeding-on-oral-health-and-facial-development.pdf
59. Cancer Research UK. Risks and causes of mouth and oropharyngeal cancer [Internet]. London: Cancer Research UK; [cited 2025 Jul 14]. Available from: https://www.cancerresearchuk.org/about-cancer/mouth-cancer/risks-causes
60. Oral Health Foundation. Smoking and oral health [Internet]. Rugby: Oral Health Foundation; [cited 2025 Jul 14]. Available from: https://www.dentalhealth.org/smoking-and-oral-health
61. Office for Health Improvement and Disparities. Adult oral health survey 2021: health-related behaviours [Internet]. London: GOV.UK; 2024 Jan 25 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/statistics/adult-oral-health-survey-2021/adult-oral-health-survey-2021-health-related-behaviours
62. Cheung LY, Marriott P, Baugh S, Miller S, Hasnain A, Balakrishnan D. Harrow tobacco control health needs assessment. London: Harrow Council; 2024 Nov [cited 2025 Jul 14]. Available

from: https://www.harrow.gov.uk/downloads/file/32682/Harrow_tobacco_needs_assessment_FINAL_ah4_v2.pdf

63. Oral Health Foundation. Cheers to oral health: the positive impact of giving up alcohol [Internet]. Rugby: Oral Health Foundation; [cited 2025 Jul 14]. Available from: https://www.dentalhealth.org/Blog/cheers-to-oral-health
64. National Cancer Institute. HPV vaccine may prevent oral HPV infection [Internet]. Bethesda (MD): National Cancer Institute; 2017 Jun 5 [cited 2025 Jul 14]. Available from: https://www.cancer.gov/news-events/cancer-currents-blog/2017/hpv-vaccine-oral-infection
65. UK Health Security Agency, NHS England. Over a quarter of pupils missing out on HPV vaccine [Internet]. London: GOV.UK; 2025 Mar 4 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/news/over-a-quarter-of-pupils-missing-out-on-hpv-vaccine
66. Public Health England. Oral health survey of 5-year-old children 2019 [Internet]. London: GOV.UK; 2020 Mar 19 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/statistics/oral-health-survey-of-5-year-old-children-2019
67. Scientific Advisory Committee on Nutrition. Feeding in the first year of life: SACN report [Internet]. London: Public Health England; 2018 Jul 17 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/publications/feeding-in-the-first-year-of-life-sacn-report
68. Public Health England. Oral health survey of 3-year-old children 2013 [Internet]. London: GOV.UK; 2014 Sep [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/publications/oral-health-survey-of-3-year-old-children-2013
69. Public Health England. Oral health survey of 3-year-old children 2020 [Internet]. London: GOV.UK; 2021 Mar 30 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/statistics/oral-health-survey-of-3-year-old-children-2020
70. Office for Health Improvement and Disparities. Oral health survey of children in year 6, 2023 [Internet]. London: GOV.UK; 2024 Feb 1 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/statistics/oral-health-survey-of-children-in-year-6-2023
71. Kaddour S, Slater S, Feleke R, Doran G, Halpin L, Srinivasan A, Yusuf H. Secondary analysis of child hospital admission data for dental caries in London, UK: what the data tells us about oral health inequalities. BMJ Open. 2023;13(10):e072171. Available from: https://bmjopen.bmj.com/content/13/10/e072171
72. Office for Health Improvement and Disparities. Methods for calculating numbers and rates of hospital tooth extractions [Internet]. London: GOV.UK; 2024 Feb 8 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/publications/analysis-of-tooth-extractions-in-hospital-methods-and-data-quality/methods-for-calculating-numbers-and-rates-of-hospital-tooth-extractions
73. Office for Health Improvement and Disparities. Hospital tooth extractions in 0 to 19 year olds: 2024 [Internet]. London: GOV.UK; 2025 Feb 25 [cited 2025 Jul 14]. Available from: https://www.gov.uk/government/statistics/hospital-tooth-extractions-in-0-to-19-year-olds-2024
74. Public Health England. National Dental Epidemiology Programme for England: oral health survey of mildly dependent older people 2016 [Internet]. London: Public Health England; 2018

Jun [cited 2025 Jul 14]. Available from: https://assets.publishing.service.gov.uk/media/5c49c6a4ed915d389a2a9d64/NDEP_For_England_oral_health_survey_of_mildly_dependent_older_people_2016_report.pdf

75. Aghanashini S, Puvvalla B, Mundinamane DB, Apoorva SM, Bhat D, Lalwani M. A comprehensive review on dental calculus. J Health Sci Res. 2016;7(2):42–50. Available from: https://www.johsr.com/doi/pdf/10.5005/jp-journals-10042-1034
76. Yusuf H, Golkari A, Valenzuela J, Liow A. Determinants of Oral Health in Early Childhood in Harrow. London: Institute of Dentistry, Queen Mary University of London; 2024 Aug [cited 2025 Jul 15]. Available from the Harrow Public Health team on request PublicHealth@harrow.gov.uk
77. General Dental Council. Types of registrants [Internet]. London: General Dental Council; [cited 2025 Jul 15]. Available from: https://www.gdc-uk.org/about-us/what-we-do/the-registers/types-of-registrants
78. National Institute for Health and Care Excellence. Oral health for adults in care homes: NICE guideline [NG48] [Internet]. London: NICE; 2016 Jul 5 [cited 2025 Jul 15]. Available from: https://www.nice.org.uk/guidance/ng48
79. Whittington Health NHS Trust. Community Dental Service: Brent and Harrow [Internet]. London: Whittington Health NHS Trust; [cited 2025 Jul 15]. Available from:
80. National Health Service (NHS). How to find an NHS dentist in an emergency [Internet]. London: NHS; 2025 May 14 [cited 2025 Jul 15]. Available from: https://www.nhs.uk/nhs-services/dentists/how-to-find-an-nhs-dentist-in-an-emergency/
81. NHS Business Services Authority. Dental statistics – England 2023/24 [Internet]. Newcastle upon Tyne: NHSBSA; 2024 Aug 22 [cited 2025 Jul 15]. Available from: https://www.nhsbsa.nhs.uk/statistical-collections/dental-england/dental-statistics-england-202324
82. NHS Digital. NHS dental statistics for England, 2022–23: annual report [Internet]. Leeds: NHS Digital; 2023 Aug 24 [cited 2025 Jul 15]. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/nhs-dental-statistics/2022-23-annual-report
83. National Health Service (NHS). NHS 111 online: get help for your symptoms [Internet]. London: NHS; [cited 2025 Jul 15]. Available from: https://111.nhs.uk/
84. Ogbebor O. The rise in dental service recommendations from NHS 111 [Internet]. London: Nuffield Trust; 2023 Aug 3 [cited 2025 Jul 15]. Available from: https://www.nuffieldtrust.org.uk/resource/chart-of-the-week-the-rise-in-dental-service-recommendations-from-nhs-11
85. NHS Business Services Authority. Dental statistics narrative 2023/24 [Internet]. Newcastle upon Tyne: NHSBSA; [cited 2025 Jul 15]. Available from: https://nhsbsa-opendata.s3.eu-west-2.amazonaws.com/dental/dental_narrative_2023_24_v001.html
86. Garratt K, Danechi S. NHS dentistry in England [Internet]. London: House of Commons Library; 2025 Jun 11 [cited 2025 Jul 15]. Available from: https://commonslibrary.parliament.uk/research-briefings/cbp-9597/
87. National Audit Office. Investigation into the NHS dental recovery plan: HC 308, 2024–25 [Internet]. London: NAO; 2024 Nov 27 [cited 2025 Jul 15]. Available from: https://www.nao.org.uk/wp-content/uploads/2024/11/Investigation-into-the-NHS-dental-recovery-plan-HC-308-summary.pdf

88. Baird B, Chikwira L. Dentistry in England explained [Internet]. London: The King's Fund; 2023 Oct 11 [cited 2025 Jul 15]. Available from: https://www.kingsfund.org.uk/insight-and-analysis/long-reads/dentistry-england-explained
89. NHS England. Paediatric dentistry [Internet]. London: NHS England; 2023 May 16 [cited 2025 Jul 15]. Available from: https://www.england.nhs.uk/long-read/paediatric-dentistry/
90. Anopa Y, McMahon AD, Conway DI, Ball GE, McIntosh E, Macpherson LMD. Improving child oral health: cost analysis of a national nursery toothbrushing programme [Internet]. PLoS ONE. 2015 Aug 25 [cited 2025 Jul 15];10(8):e0136211. Available from: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0136211
91. Public Health England, NHS England, Health Education England. Making every contact count: consensus statement [Internet]. London: NHS England; 2016 Apr [cited 2025 Jul 15]. Available from: https://www.england.nhs.uk/wp-content/uploads/2016/04/making-every-contact-count.pdf
92. Office for Health Improvement and Disparities. Healthy child programme [Internet]. London: GOV.UK; 2023 Jun 27 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/collections/healthy-child-programme
93. Whittington Health NHS Trust. Healthy smiles for children looked after [Internet]. London: Whittington Health NHS Trust; [cited 2025 Jul 15]. Available from: https://www.whittington.nhs.uk/document.ashx?id=15635
94. London Borough of Harrow. Harrow's Family Hub Network [Internet]. London: Harrow Council; [cited 2025 Jul 15]. Available from: https://www.harrow.gov.uk/familyhubs
95. UNICEF UK. About the Baby Friendly Initiative [Internet]. London: UNICEF UK; [cited 2025 Jul 15]. Available from: https://www.unicef.org.uk/babyfriendly/about/
96. Vaccination UK. HPV vaccine [Internet]. London: Vaccination UK; [cited 2025 Jul 15]. Available from: https://www.schoolvaccination.uk/hpv-vaccine
97. UK Health Security Agency. HPV vaccination: guidance for healthcare practitioners [Internet]. London: GOV.UK; 2023 Jun 20 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/publications/hpv-universal-vaccination-guidance-for-health-professionals/hpv-vaccination-guidance-for-healthcare-practitioners
98. NHS Business Services Authority. Get help to buy food and milk (Healthy Start) [Internet]. London: NHS; [cited 2025 Jul 15]. Available from: https://www.healthystart.nhs.uk/
99. NHS Business Services Authority. Healthy Start: uptake data – England [Internet]. London: NHS; 2023 Feb [cited 2025 Jul 15]. Available from: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.healthystart.nhs.uk%2Fwp-content%2Fuploads%2F2023%2F02%2FEngland-Uptake-Data.xlsx
100. Department for Education. 2024 to 2025 school census: business and technical specification version 1.5 [Internet]. London: GOV.UK; 2024 Jan 1 [cited 2025 Jul 15]. Available from: https://assets.publishing.service.gov.uk/media/67891f202080f65f988bd307/2024_to_2025_school_census_business_and_technical_specification_v1.5.pdf
101. Greater London Authority. Healthy Schools London [Internet]. London: GLA; [cited 2025 Jul 15]. Available from: https://www.london.gov.uk/programmes-strategies/health-and-wellbeing/healthy-schools-london
102. Greater London Authority. About Healthy Early Years London [Internet]. London: GLA; [cited 2025 Jul 15]. Available from: https://www.london.gov.uk/programmes-strategies/health-and-wellbeing/healthy-early-years-london/about-healthy-early-years-london

103. London Borough of Harrow. Health and Wellbeing Strategy 2022–2030 [Internet]. London: Harrow Council; [cited 2025 Jul 15]. Available from: https://www.harrow.gov.uk/health-leisure/health-wellbeing-strategy-2022-30

104. Public Health England. Local authorities improving oral health: commissioning better oral health for children and young people [Internet]. London: UK Government; 2014 Jun [cited 2025 Jul 15]. Available from: https://assets.publishing.service.gov.uk/media/5a7d6f6bed915d269ba8aa6a/CBOHMaindocumentJUNE2014.pdf

105. Watt RG. From victim blaming to upstream action: tackling the social determinants of oral health inequalities [Internet]. Community Dent Oral Epidemiol. 2007 Feb;35(1):1-11 [cited 2025 Jul 15]. Available from: https://pubmed.ncbi.nlm.nih.gov/17244132/

106. Department for Education. *Early years foundation stage (EYFS) statutory framework*. London: GOV.UK; 2024 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/publications/early-years-foundation-stage-framework--2

107. Kaushik M, Sood S. A Systematic Review of Parents' Knowledge of Children's Oral Health [Internet]. Cureus 2023 Jul 6;15(7):e41485 [cited 2025 Jul 15]. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10404335/

108. Kidd JBR, McMahon AD, Sherriff A, Gnich W, Mahmoud A, Macpherson LMD, Conway DI. Evaluation of a national complex oral health improvement programme: a population data linkage cohort study in Scotland. *BMJ Open*. 2020;10(11):e038116. doi:10.1136/bmjopen-2020-038116

109. Public Health England. Return on investment of oral health improvement programmes for 0–5 year olds. London: Public Health England; 2016. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/560973/ROI_oral_health_interventions.pdf

110. Office for Health Improvement and Disparities. Commissioning and delivering supervised toothbrushing schemes in early years and school settings. London: Department of Health and Social Care; 2025 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/publications/improving-oral-health-supervised-tooth-brushing-programme-toolkit/commissioning-and-delivering-supervised-toothbrushing-schemes-in-early-years-and-school-settings

111. Department of Health and Social Care. Supervised toothbrushing for children to prevent tooth decay [Internet]. London: GOV.UK; 2025 Mar 7 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/news/supervised-toothbrushing-for-children-to-prevent-tooth-decay

112. Gray-Burrows KA, Day PF, El-Yousfi S, Lloyd E, Hudson K, Marshman Z. A national survey of supervised toothbrushing programmes in England [Internet]. *Br Dent J*. 2023;235(11):791–6 [cited 2025 Jul 15]. Available from: https://www.nature.com/articles/s41415-023-6182-1

113. Anopa Y, Macpherson LMD, McMahon AD. Wright W, Conway DI, McIntosh E. Economic Evaluation of the Protecting Teeth @ 3 Randomized Controlled Trial [Internet]. JDR Clin Trans Res. 2023 Jul;8(3):207-214 [cited 2025 Jul 15]. Available from: https://pubmed.ncbi.nlm.nih.gov/35442091/

114. United Kingdom. Health and Care Act 2022 [Internet]. London: The Stationery Office; 2022 [cited 2025 Jul 15]. Available from: https://www.legislation.gov.uk/ukpga/2022/31/contents

115. Department of Health and Social Care. Consultation on community water fluoridation expansion in the North East of England: government response [Internet]. London: GOV.UK; 2025 Mar 7 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/consultations/community-water-fluoridation-expansion-in-the-north-east-of-england/outcome/consultation-on-community-water-fluoridation-expansion-in-the-north-east-of-england-government-response

116. London Assembly. Getting to the root of London's dental problems [Internet]. London: London City Hall; 2025 Jan 16 [cited 2025 Jul 15]. Available from: https://www.london.gov.uk/who-we-are/what-london-assembly-does/london-assembly-press-releases/getting-root-londons-dental-problems

117. Department for Education. School food standards: practical guide [Internet]. London: GOV.UK; 2025 Feb 13 [cited 2025 Jul 15]. Available from:

118. Department for Education. Early Years Foundation Stage: nutrition guidance [Internet]. London: GOV.UK; 2025 May [cited 2025 Jul 15]. Available from: https://assets.publishing.service.gov.uk/media/6839b752210698b3364e86fc/Early_years_foundation_stage_nutrition_guidance.pdf

119. London Assembly. Water only school toolkit [Internet]. London: London City Hall; [cited 2025 Jul 15]. Available from: https://www.london.gov.uk/programmes-strategies/health-and-wellbeing/healthy-schools-london/water-only-school-toolkit

120. Department of Health and Social Care. Healthy and Safe Communities [Internet]. London: GOV.UK; [cited 2025 Jul 15]. Available from: https://www.gov.uk/guidance/health-and-wellbeing

121. London Borough of Harrow. Harrow Local Plan [Internet]. London: Harrow Council; [cited 2025 Jul 15]. Available from: https://www.harrow.gov.uk/planning-developments/local-plan#strategy

122. London Borough of Harrow. Local Plan: site allocation sustainability appraisal [Internet]. London: Harrow Council; [cited 2025 Jul 15]. Available from: https://www.harrow.gov.uk/downloads/file/23268/local-plan-site-allocation-sustainability-appraisal.pdf

123. London Borough of Harrow. New Local Plan consultation [Internet]. London: Harrow Council; 2025 Feb 26 [cited 2025 Jul 15]. Available from: https://www.harrow.gov.uk/planning-developments/new-local-plan-consultation

124. Public Health England. Sugar reduction and reformulation: progress report 2015 to 2020 [Internet]. London: GOV.UK; 2022 Dec [cited 2025 Jul 15]. Available from: https://assets.publishing.service.gov.uk/media/6388cd71d3bf7f328c0ded27/Sugar-reduction-and-reformulation-progress-report-2015-to-2020.pdf

125. NHS England. Dental contract reform [Internet]. London: NHS England; [cited 2025 Jul 15]. Available from: https://www.england.nhs.uk/primary-care/dentistry/dental-commissioning/dental-contract-reform/

126. NHS. Who can get free NHS dental treatment [Internet]. London: NHS; [cited 2025 Jul 15]. Available from: https://www.nhs.uk/nhs-services/dentists/who-can-get-free-nhs-dental-treatment/

127. NHS England. The insightful ICB board [Internet]. London: NHS England; 2023 Oct 3 [cited 2025 Jul 15]. Available from: https://www.england.nhs.uk/long-read/the-insightful-icb-board/

128. NHS England. Core20PLUS5 – an approach to reducing health inequalities for children and young people [Internet]. London: NHS England; [cited 2025 Jul 15]. Available from: https://www.england.nhs.uk/about/equality/equality-hub/national-healthcare-inequalities-improvement-programme/core20plus5/core20plus5-cyp/

129. Department of Health and Social Care, NHS England. Faster, simpler and fairer: our plan to recover and reform NHS dentistry [Internet]. London: GOV.UK; 2024 Feb 7 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/publications/our-plan-to-recover-and-reform-nhs-dentistry/faster-simpler-and-fairer-our-plan-to-recover-and-reform-nhs-dentistry

130. Labour Party. Build an NHS fit for the future [Internet]. London: Labour Party; [cited 2025 Jul 15]. Available from: https://labour.org.uk/change/build-an-nhs-fit-for-the-future/

131. Department of Health and Social Care. Fit for the future: 10-year health plan for England [Internet]. London: GOV.UK; 2024 Apr [cited 2025 Jul 15]. Available from: https://assets.publishing.service.gov.uk/media/6866387fe6557c544c74db7a/fit-for-the-future-10-year-health-plan-for-england.pdf

132. National Institute for Health and Care Excellence (NICE). Oral health promotion: general dental practice [Internet]. London: NICE; 2015 Dec 15 [cited 2025 Jul 15]. Available from: https://www.nice.org.uk/guidance/ng30/chapter/Recommendations

133. British National Formulary. Fluoride: treatment summary [Internet]. London: NICE; [cited 2025 Jul 15]. Available from: https://bnf.nice.org.uk/treatment-summaries/fluoride/

134. Care Quality Commission. Examples of notable practice for dentists [Internet]. London: Care Quality Commission; 2022 [cited 2025 Jul 15]. Available from: https://www.cqc.org.uk/guidance-providers/dentists/examples-notable-practice-dentists

135. NHS England. Opportunities for flexible commissioning in primary care dentistry: a framework for commissioners [Internet]. London: NHS England; 2023 [cited 2025 Jul 15]. Available from: https://www.england.nhs.uk/long-read/opportunities-for-flexible-commissioning-in-primary-care-dentistry-a-framework-for-commissioners/

136. NHS England. A national framework for NHS action on inclusion health [Internet]. London: NHS England; 2023 [cited 2025 Jul 15]. Available from: https://www.england.nhs.uk/long-read/a-national-framework-for-nhs-action-on-inclusion-health/

137. Healthwatch England. Our position on NHS dentistry [Internet]. London: Healthwatch; 2024 Jul 8 [cited 2025 Jul 15]. Available from: https://www.healthwatch.co.uk/news/2024-07-08/our-position-nhs-dentistry

138. NHS England. NHS rolls out free eyesight, hearing and dental checks for children at residential special schools [Internet]. London: NHS England; 2024 Oct 5 [cited 2025 Jul 15]. Available from: https://www.england.nhs.uk/2024/10/nhs-rolls-out-free-eyesight-hearing-and-dental-checks-for-children-at-residential-special-schools/

139. United Kingdom. Immigration and Asylum Act 1999, Section 95: Persons for whom support may be provided [Internet]. London: The Stationery Office; 1999 [cited 2025 Jul 15]. Available from: https://www.legislation.gov.uk/ukpga/1999/33/section/95

140. Office for Health Improvement and Disparities. Dental health: migrant health guide [Internet]. London: GOV.UK; 2021 Aug 17 [cited 2025 Jul 15]. Available from: https://www.gov.uk/guidance/dental-health-migrant-health-guide

141. Office for Health Improvement and Disparities. Oral healthcare: model for asylum seekers and refugees [Internet]. London: GOV.UK; 2021 Aug 13 [cited 2025 Jul 15]. Available

from: https://www.gov.uk/government/publications/oral-healthcare-model-for-asylum-seekers-and-refugees

142. Public Health England. Commissioning better oral health for vulnerable older people: an evidence-informed toolkit for local authorities [Internet]. London: Public Health England; 2018 Sep [cited 2025 Jul 15]. Available from: https://assets.publishing.service.gov.uk/media/5b9130d140f0b64afcf0493b/CBOH_VOP_V16_Final_WO_links.pdf

143. Public Health England. Homelessness: applying All Our Health [Internet]. London: GOV.UK; 2019 Jun 6 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/publications/homelessness-applying-all-our-health/homelessness-applying-all-our-health

144. Public Health England. Health matters: rough sleeping [Internet]. London: GOV.UK; 2020 Feb 11 [cited 2025 Jul 15]. Available from: https://www.gov.uk/government/publications/health-matters-rough-sleeping/health-matters-rough-sleeping

145. Michie S, van Stralen MM, West R. The behaviour change wheel: a new method for characterising and designing behaviour change interventions [Internet]. *Implement Sci.* 2011 Apr 23;6(42). Available from: https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-6-42

# 18. Appendix

## 18.1. Appendix 1: Food environment and deprivation regression analysis

The following Appendix section contains both maps of the purchases of products from Tesco across the borough and regression analysis conducted to explore the relationship between the food environment in Harrow and deprivation,

**Figure 52: Map of fraction of sweets in products purchased in Tesco[52]**

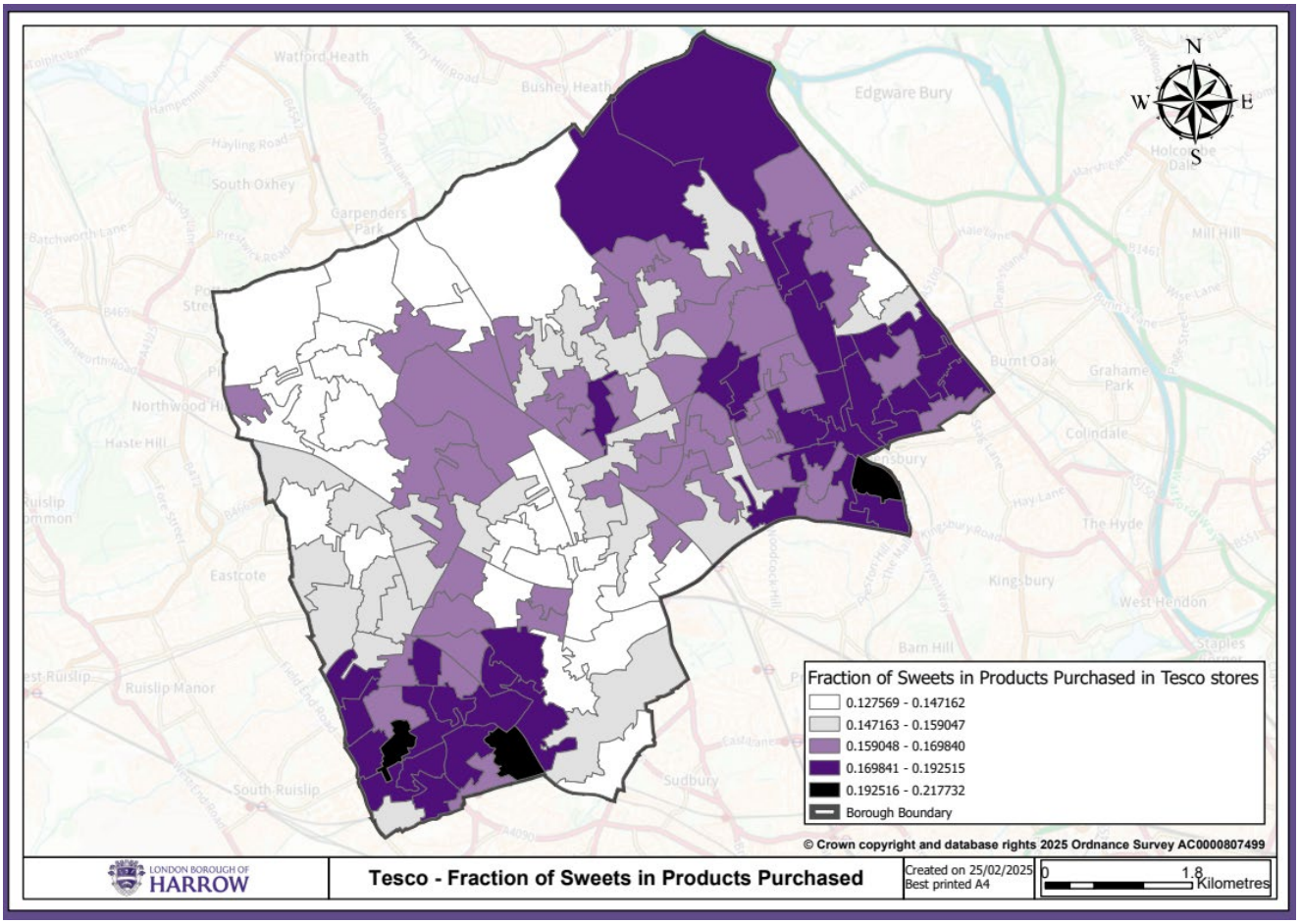


**Figure 53: Regression analysis assessing the relationship between fraction of sweets in products purchased in Tesco and deprivation[52]**

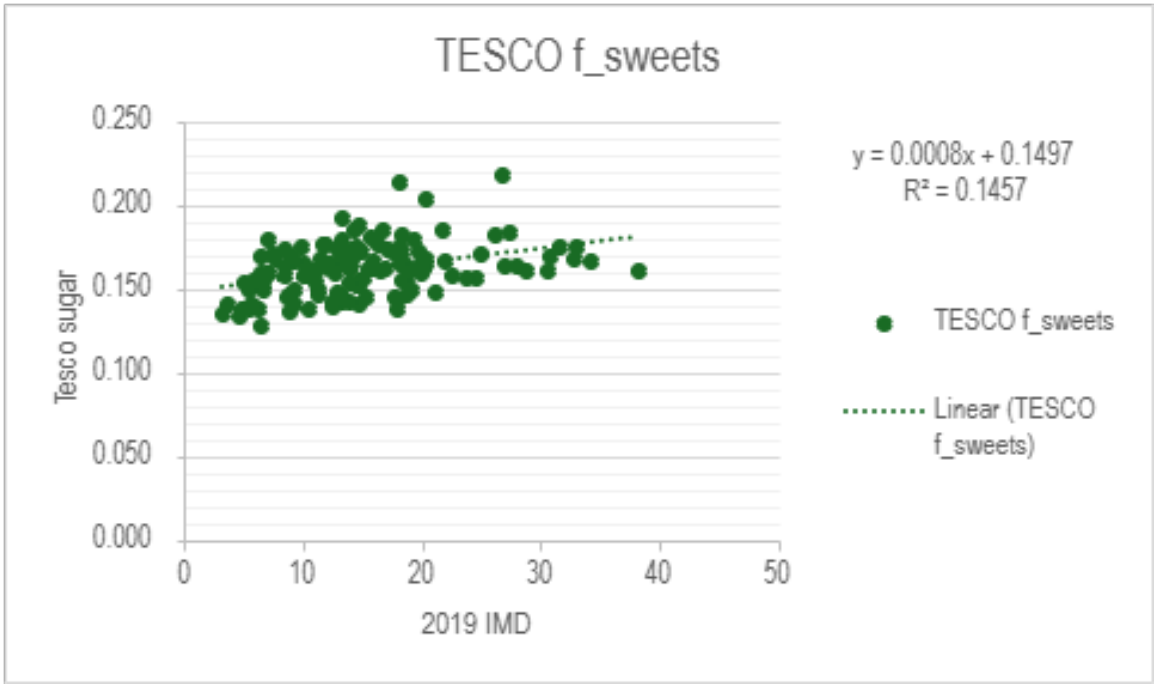



**Figure 54: Map of fraction of soft drinks in products purchased in Tesco[52]**

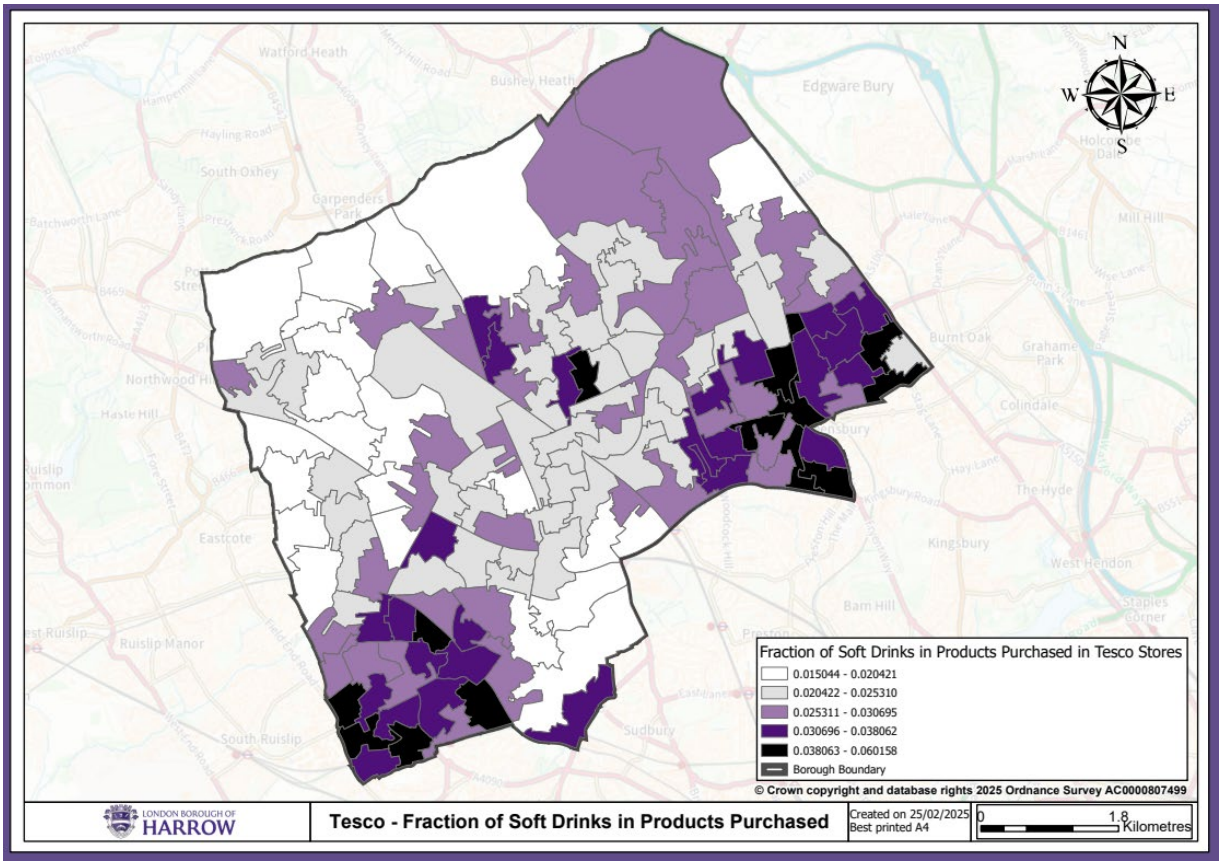


**Figure 55: Regression analysis assessing the relationship between fraction of soft drinks in products purchased in Tesco and deprivation[52]**

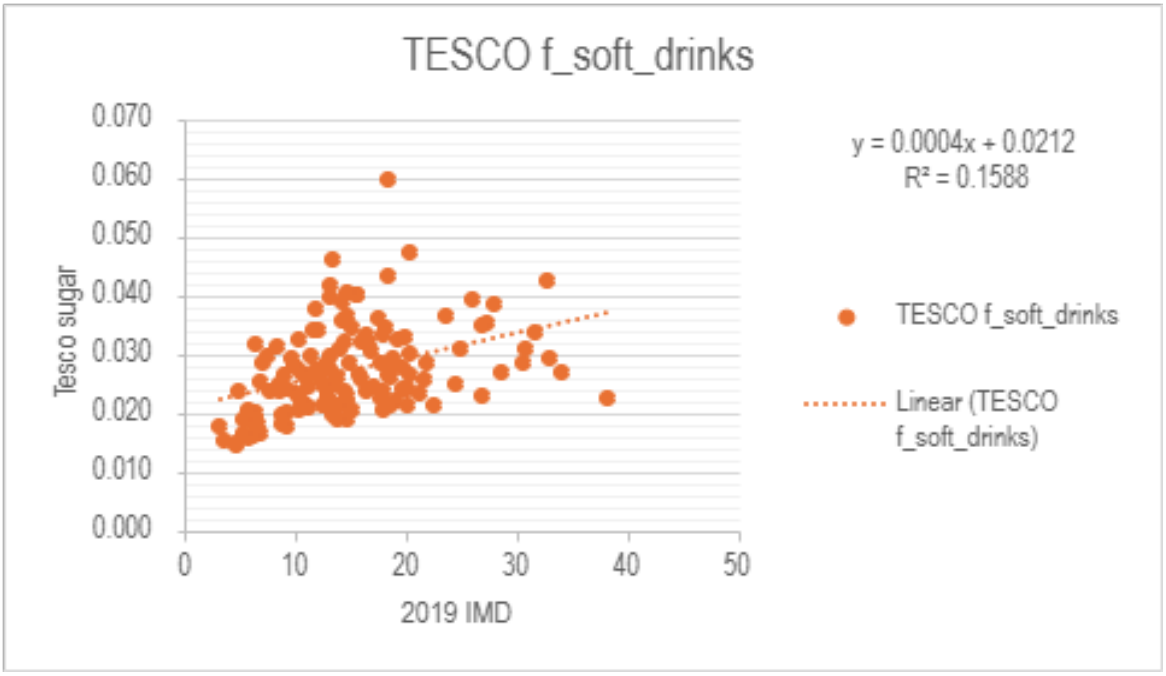



**Figure 56: Map of average weight of sugar in products purchased in Tesco[52]**

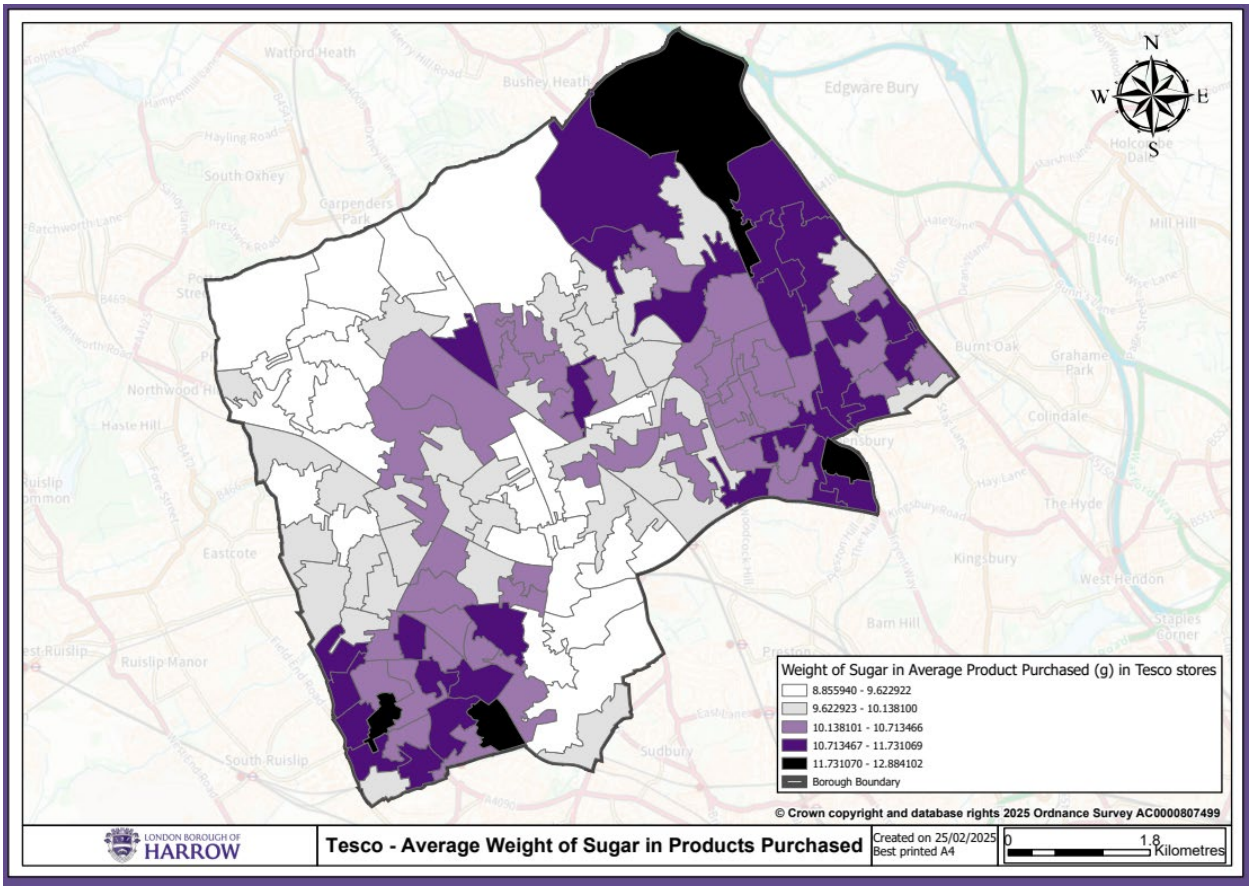


**Figure 57: Regression analysis assessing the relationship between weight of sugar in products purchased in Tesco and deprivation[52]**

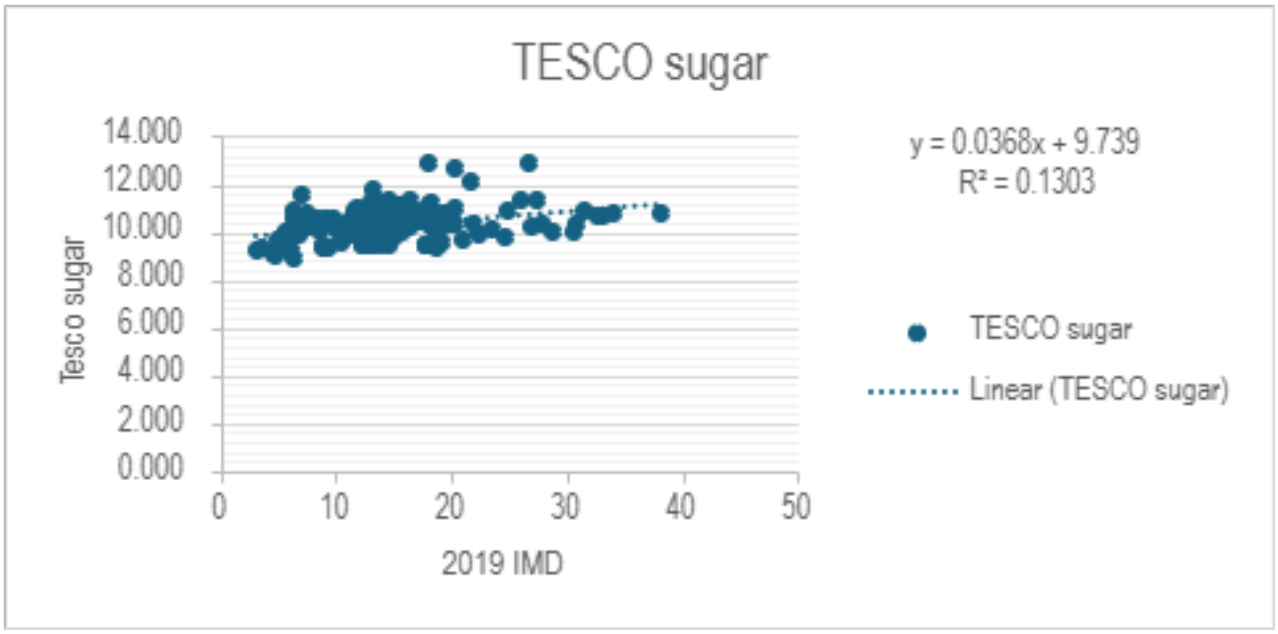
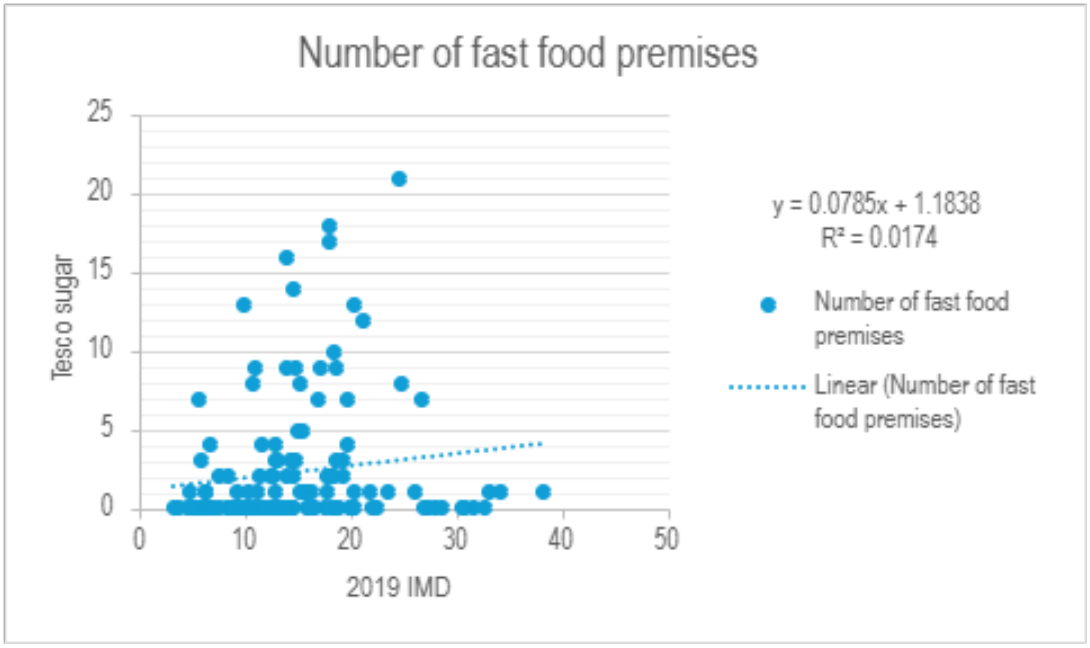



**Figure 58: Regression analysis assessing the relationship between number of fast-food premises and deprivation in Harrow[50]**



## 18.2. Appendix 2: Additional graphs of HAY Harrow results

The following graphs are stratified results to the question: “How often do you brush your teeth twice a day with toothpaste?”

**Figure 59: How often do you brush your teeth twice a day with toothpaste? Stratified by Asylum Seekers and non-Asylum Seekers (n = 3000, HAY Harrow 2025)**

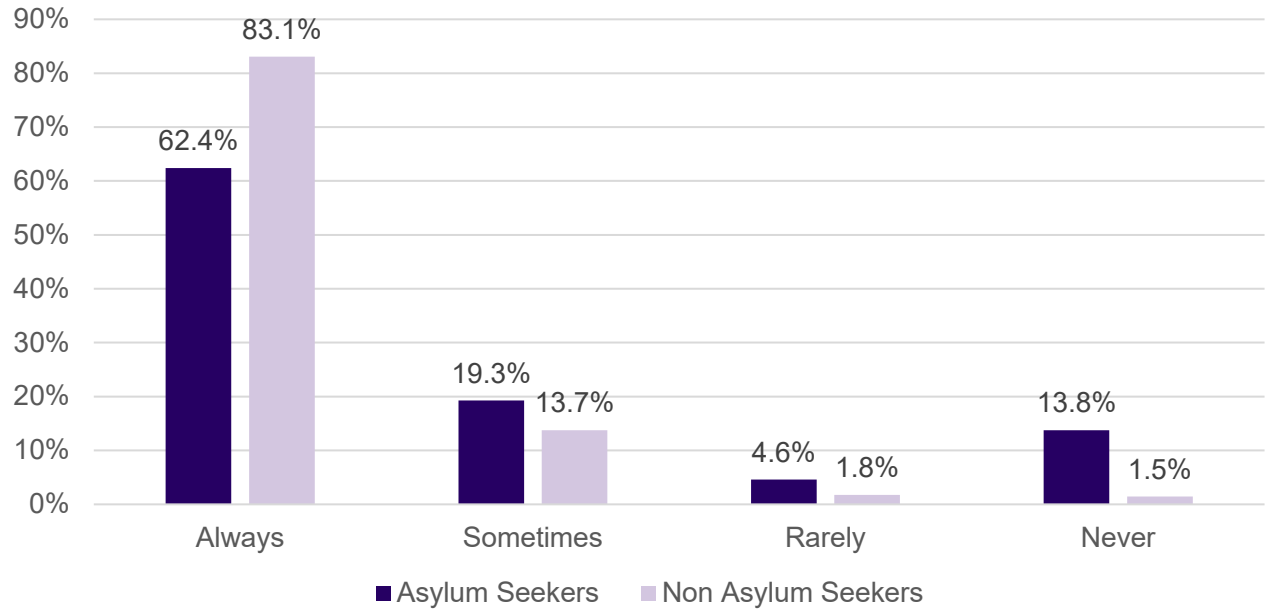



**Figure 60: How often do you brush your teeth twice a day with toothpaste? Stratified by SEND and non-SEND (n = 6805, HAY Harrow 2025)**

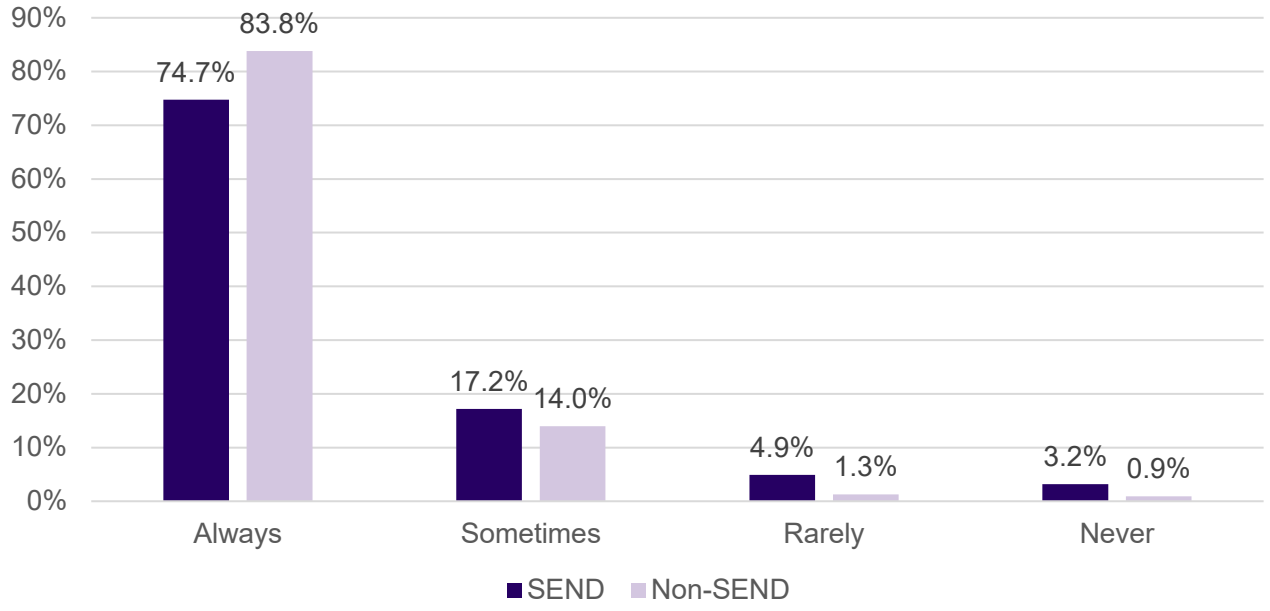


**Figure 61: How often do you brush your teeth twice a day with toothpaste? Stratified by English as a first language and English not a first language (n = 6745, HAY Harrow 2025)**

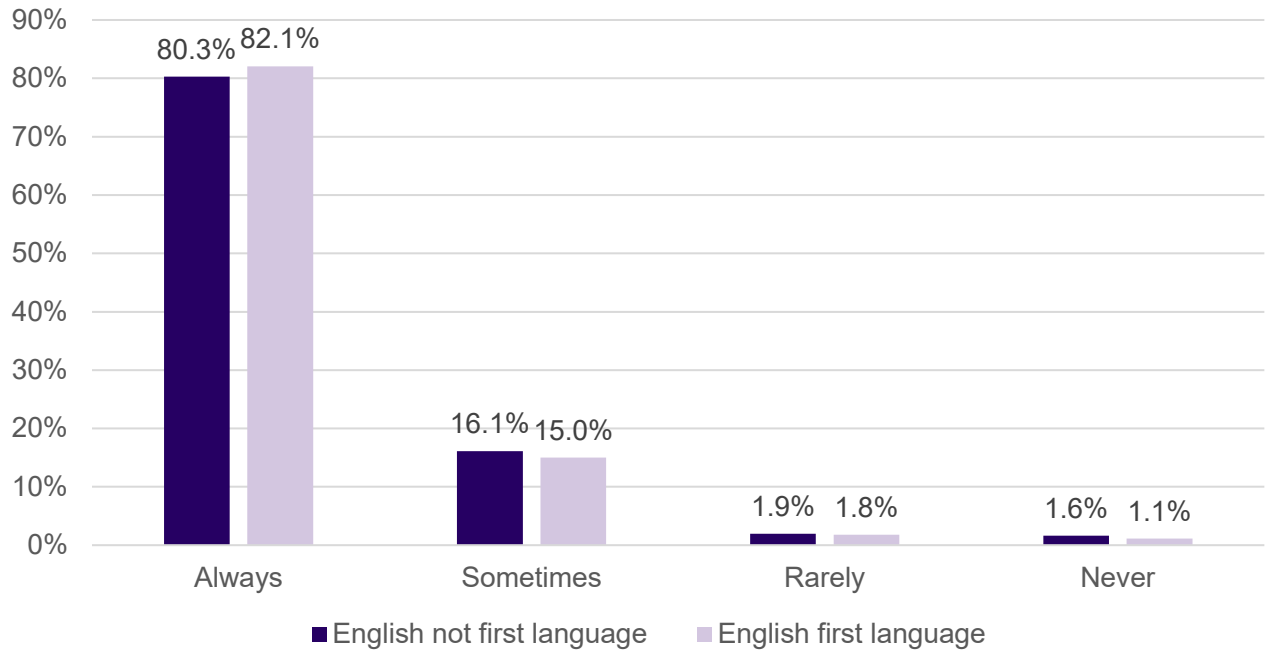
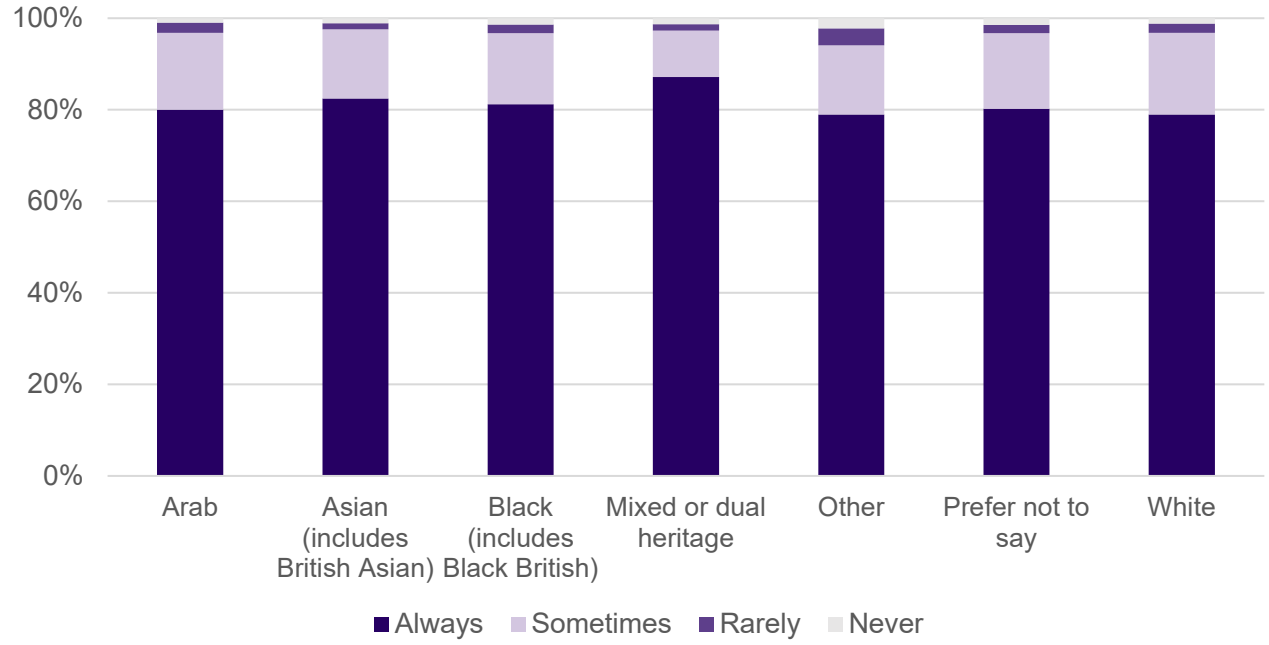



**Figure 62: How often do you brush your teeth twice a day with toothpaste? Stratified by ethnicity (n = 6595, HAY Harrow 2025)**



The following are graphs visualising HAY Harrow findings from questions related to dietary habits. They are in response to the questions: “How many times a week do you usually eat vegetables?”, “How many times a week do you usually drink fizzy drinks or energy drinks?” and “How many times a week do you usually eat fast-food or takeaways?”. The findings are stratified into different population groups. This includes by school Key Stages, with Key Stage 2 (KS2) representing school years 5 and 6, and Key Stage 3 to 5 (KS3-5) years 7 to 13.

**Figure 63: How many times a week do you usually eat vegetables? Stratified by school Key Stage (total n for Key Stage 2 to college = 7227, HAY Harrow 2025)**

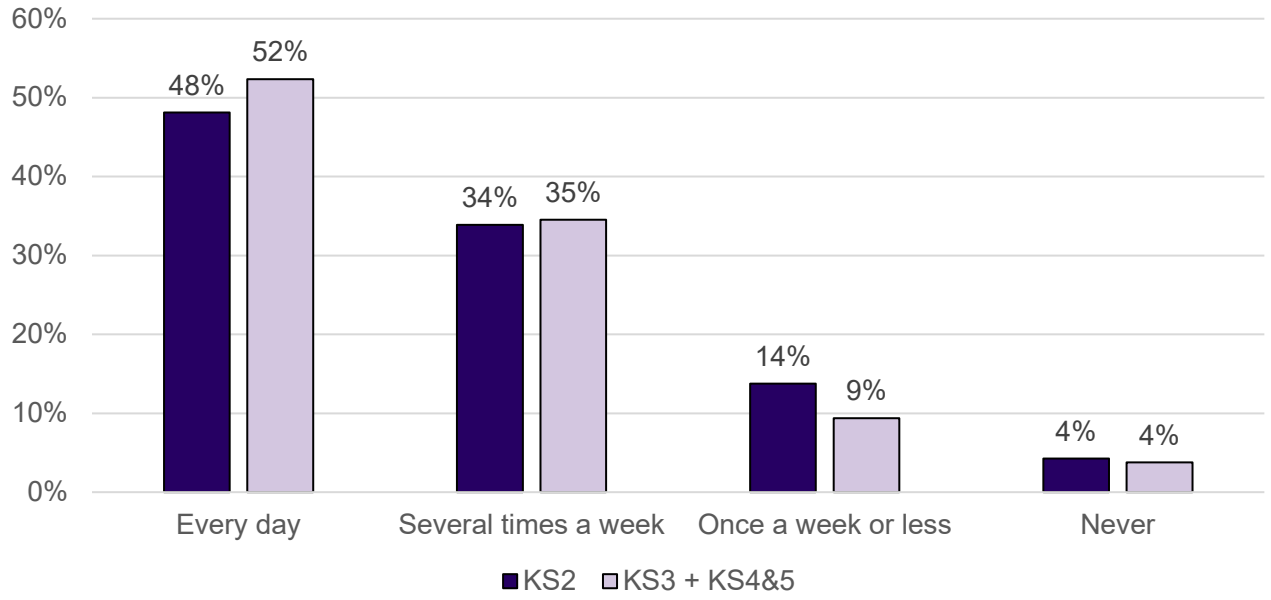


**Figure 64: How many times a week do you usually drink fizzy drinks or energy drinks? Stratified by Asylum Seekers and non-Asylum Seekers (n = 3244, HAY Harrow 2025)**

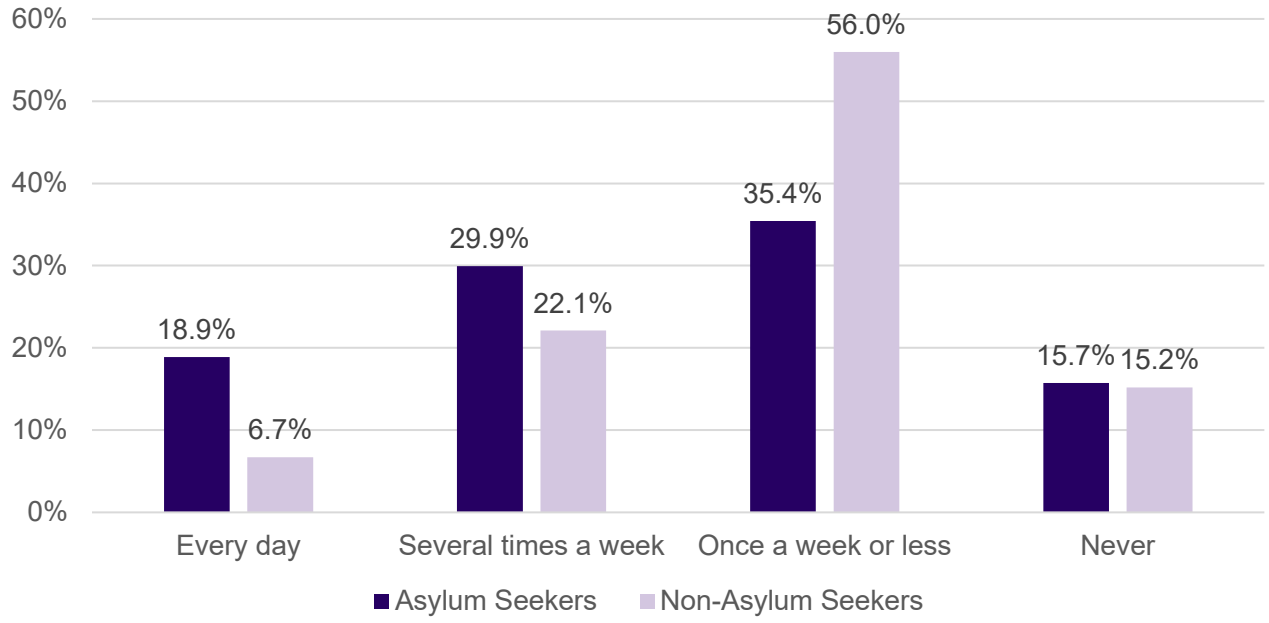



**Figure 65: How many times a week do you usually drink fizzy drinks or energy drinks? Stratified by SEND and non-SEND (n = 6695, HAY Harrow 2025)**

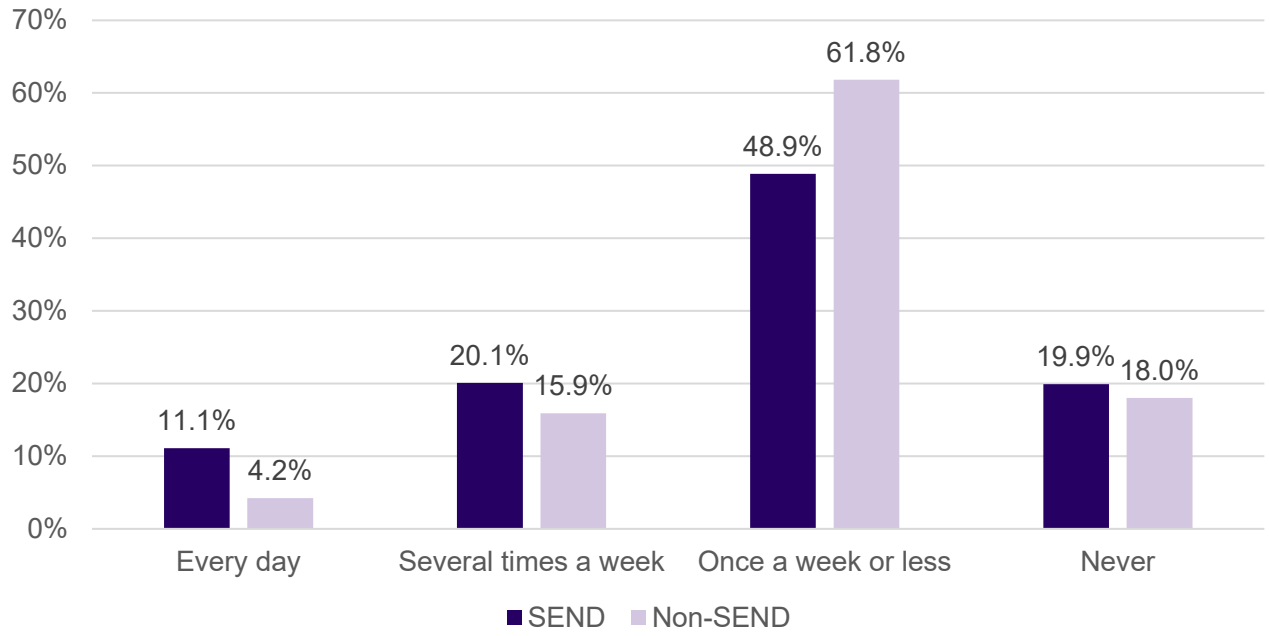


**Figure 66: How many times a week do you usually drink fizzy drinks or energy drinks? Stratified by English as a first language and English not a first language (n = 7102, HAY Harrow 2025)**

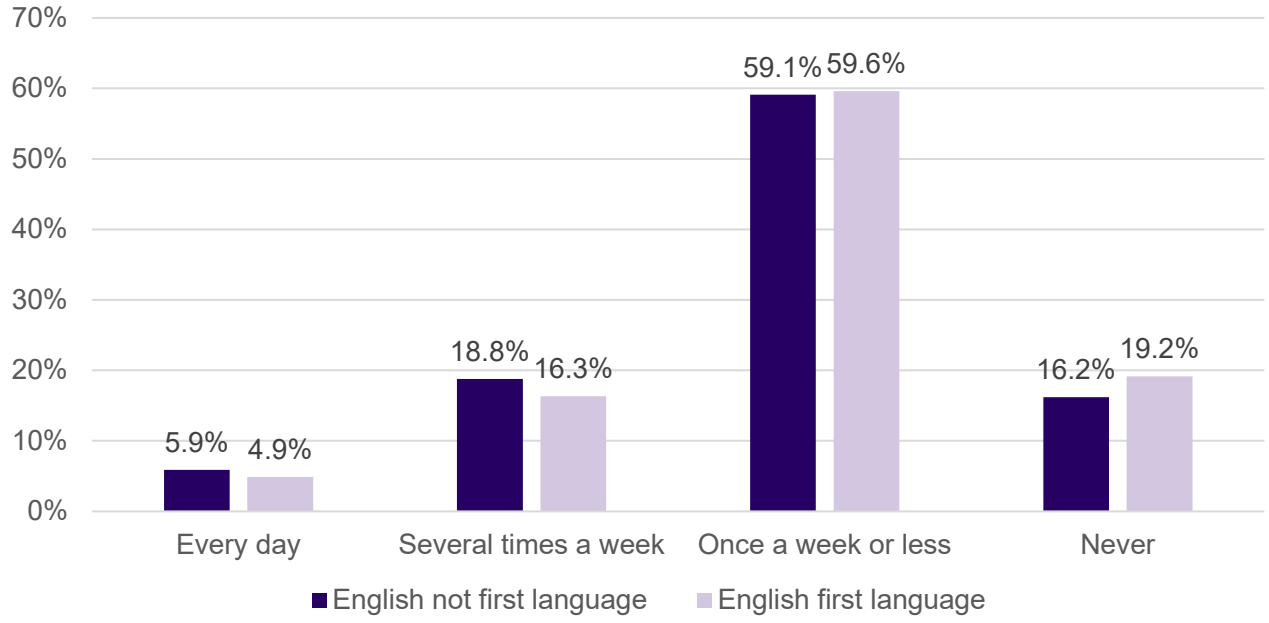



**Figure 67: How many times a week do you usually drink fizzy drinks or energy drinks? Stratified by ethnicity (n = 6940, HAY Harrow 2025)**

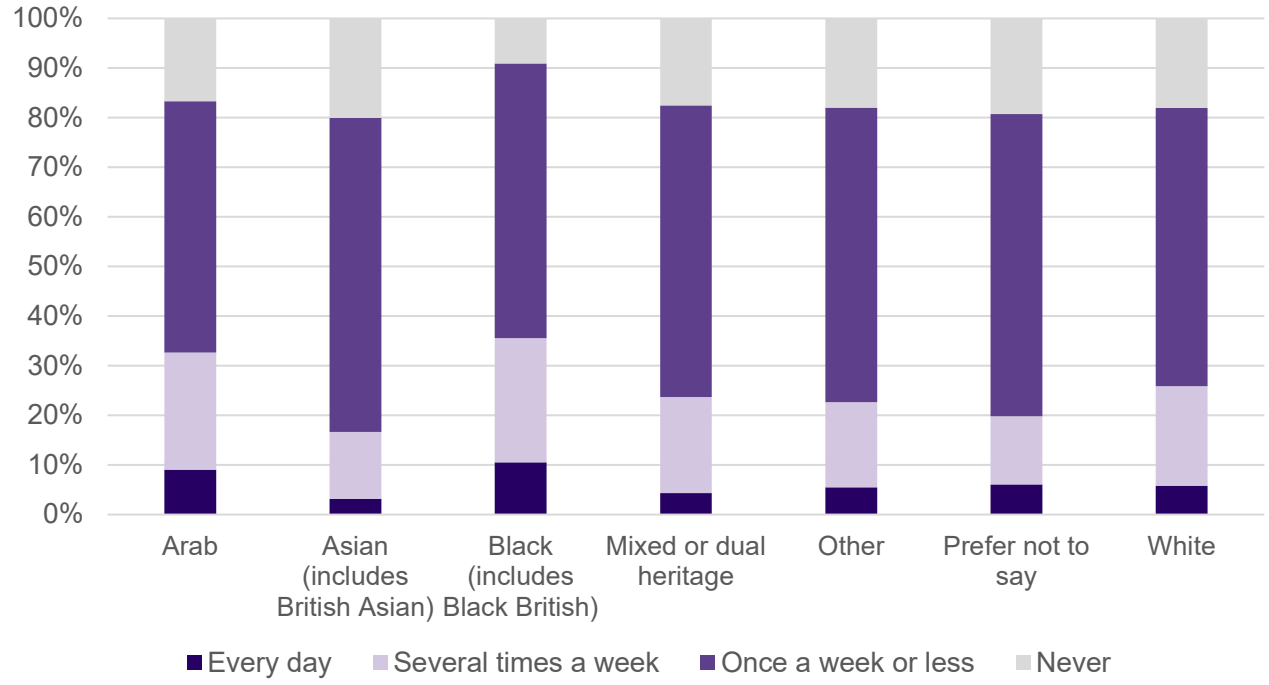


**Figure 68: How many times a week do you usually drink fizzy drinks or energy drinks? Stratified by school Key Stage (total n for Key Stage 2 to college = 7251, HAY Harrow 2025)**

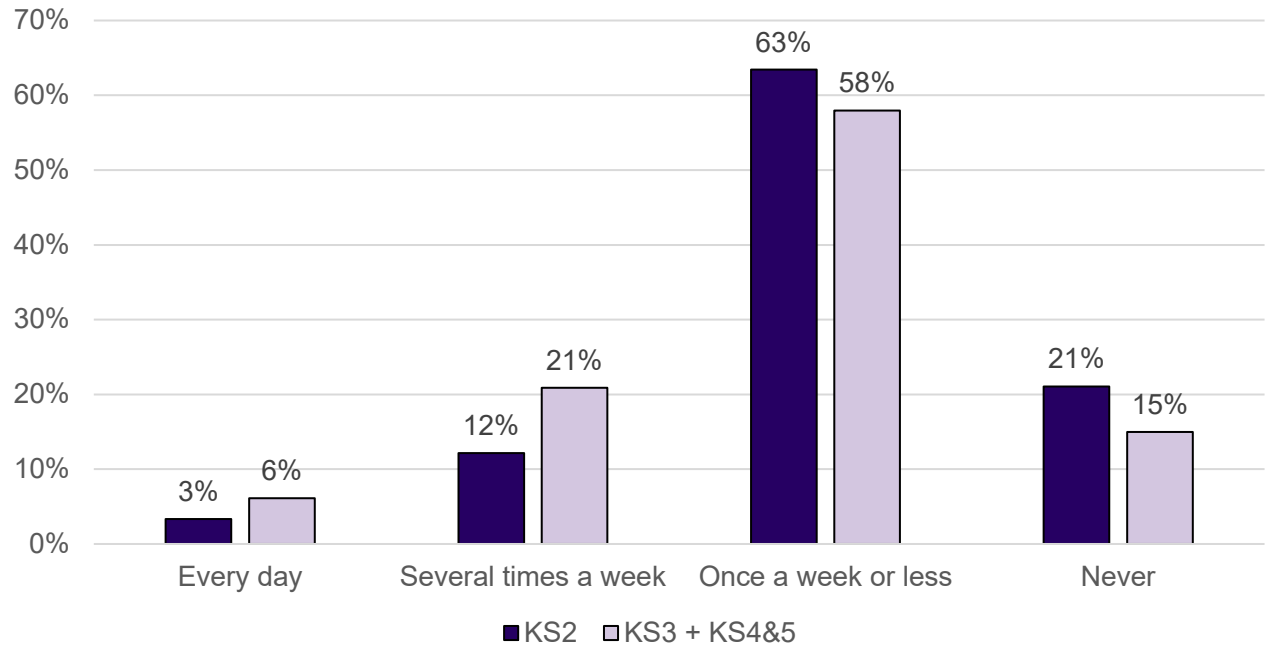



**Figure 69: How many times a week do you usually eat fast-food or takeaways? Stratified by Asylum Seekers and non-Asylum Seekers (n = 3250, HAY Harrow 2025)**

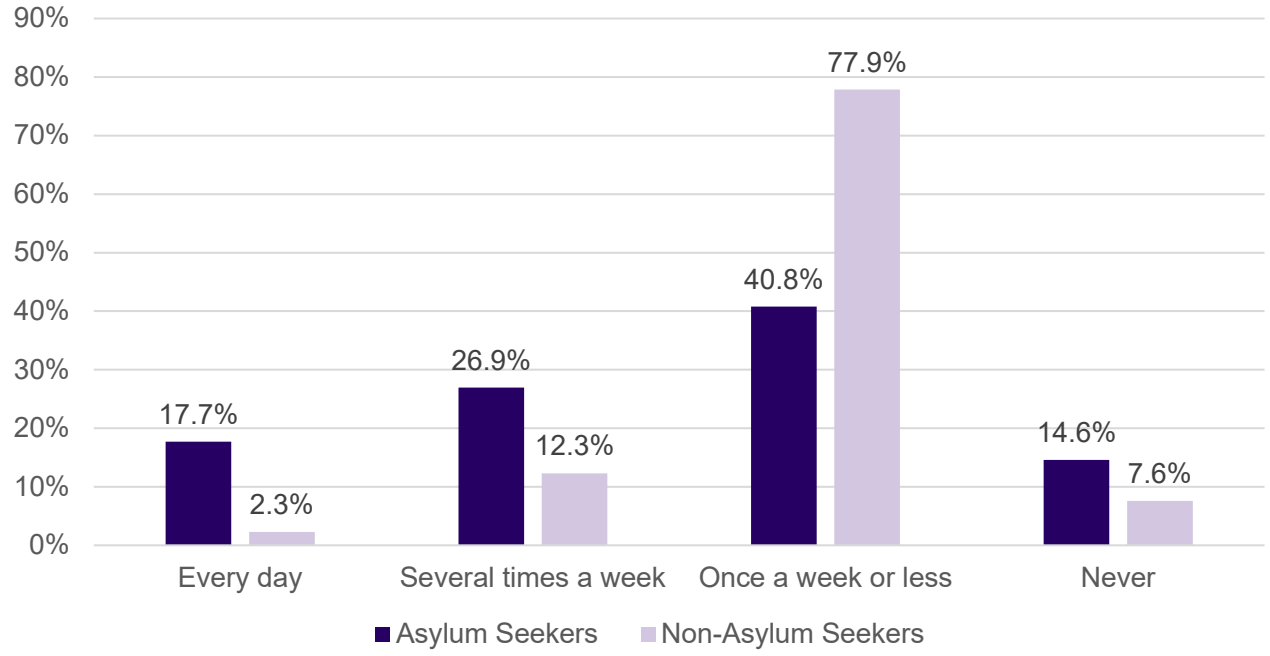


**Figure 70: How many times a week do you usually eat fast-food or takeaways? Stratified by SEND and non-SEND (n = 6696, HAY Harrow 2025)**

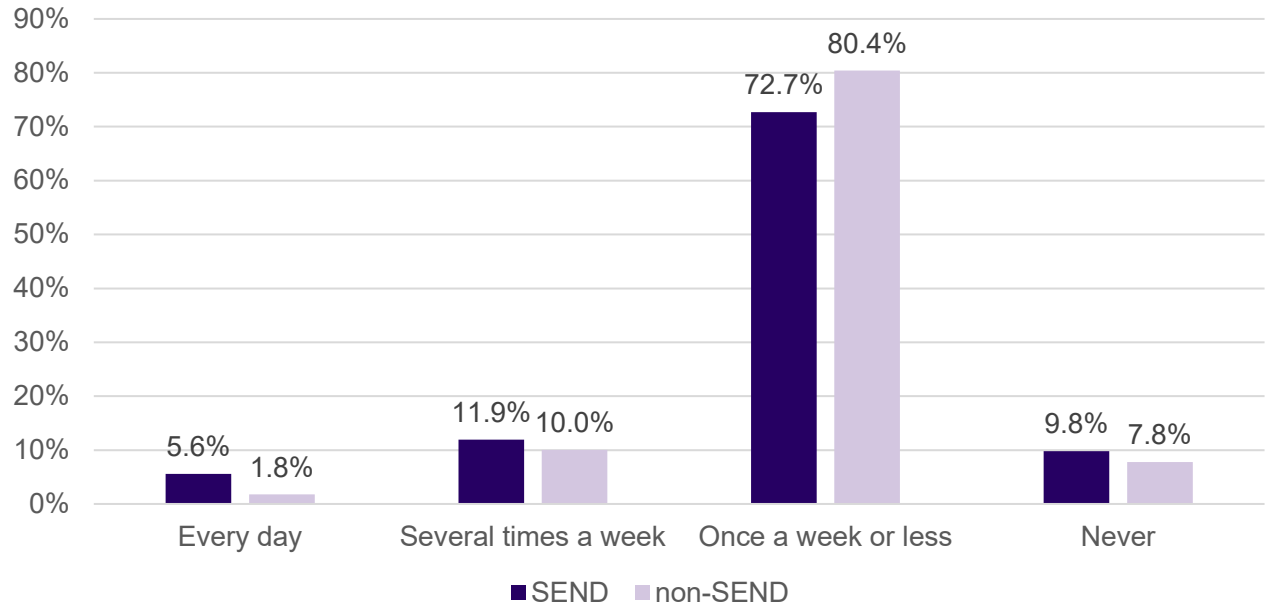



**Figure 71: How many times a week do you usually eat fast-food or takeaways? Stratified by English as a first language and English not as a first language (n = 7096, HAY Harrow 2025)**

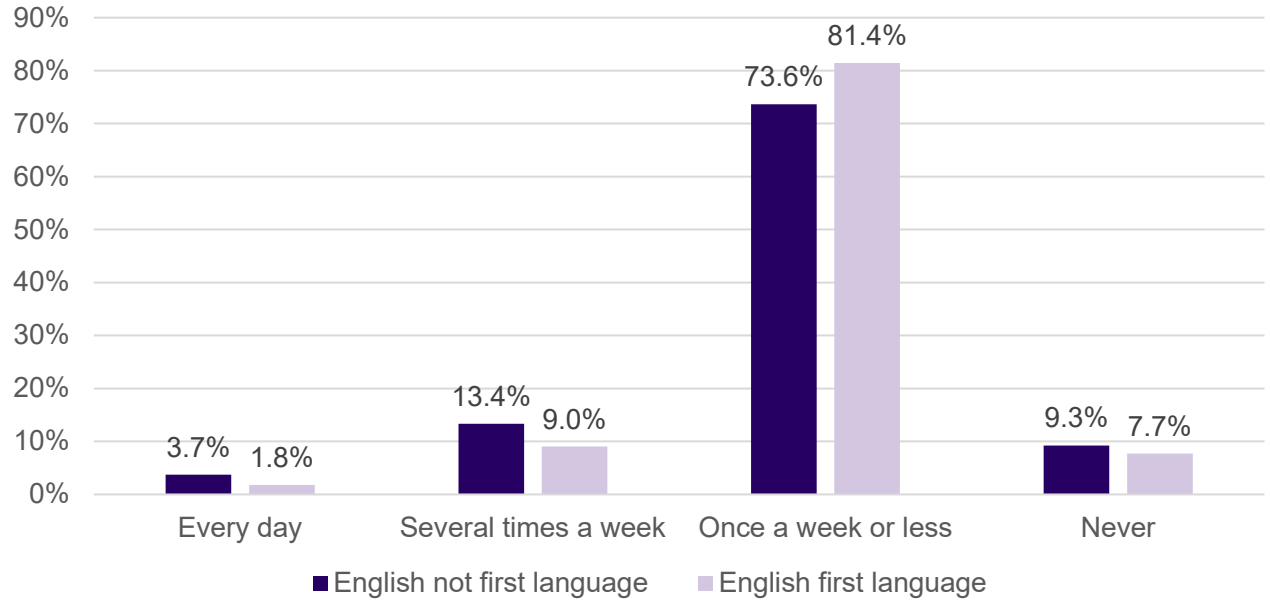


**Figure 72: How many times a week do you usually eat fast-food or takeaways? Stratified by ethnicity (n = 6938, HAY Harrow 2025)**

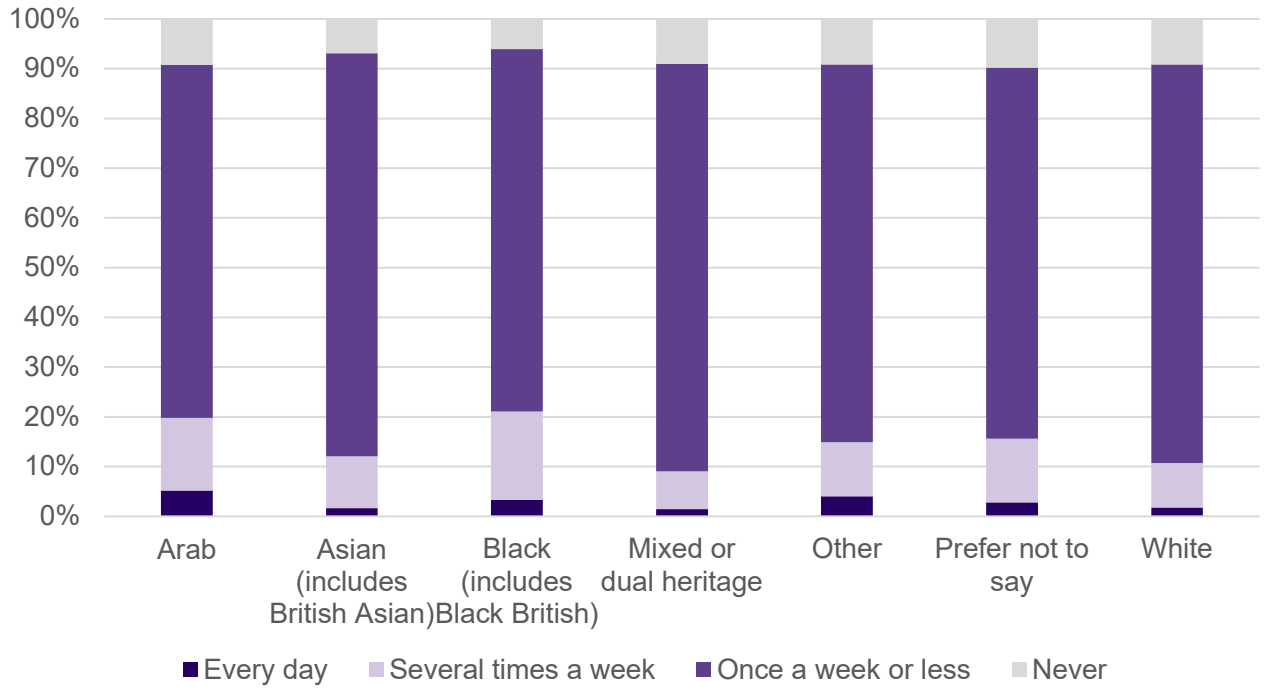



**Figure 73: How many times a week do you usually eat fast-food or takeaways? Stratified by school Key Stage (total n for Key Stage 2 to college = 7247, HAY Harrow 2025)**

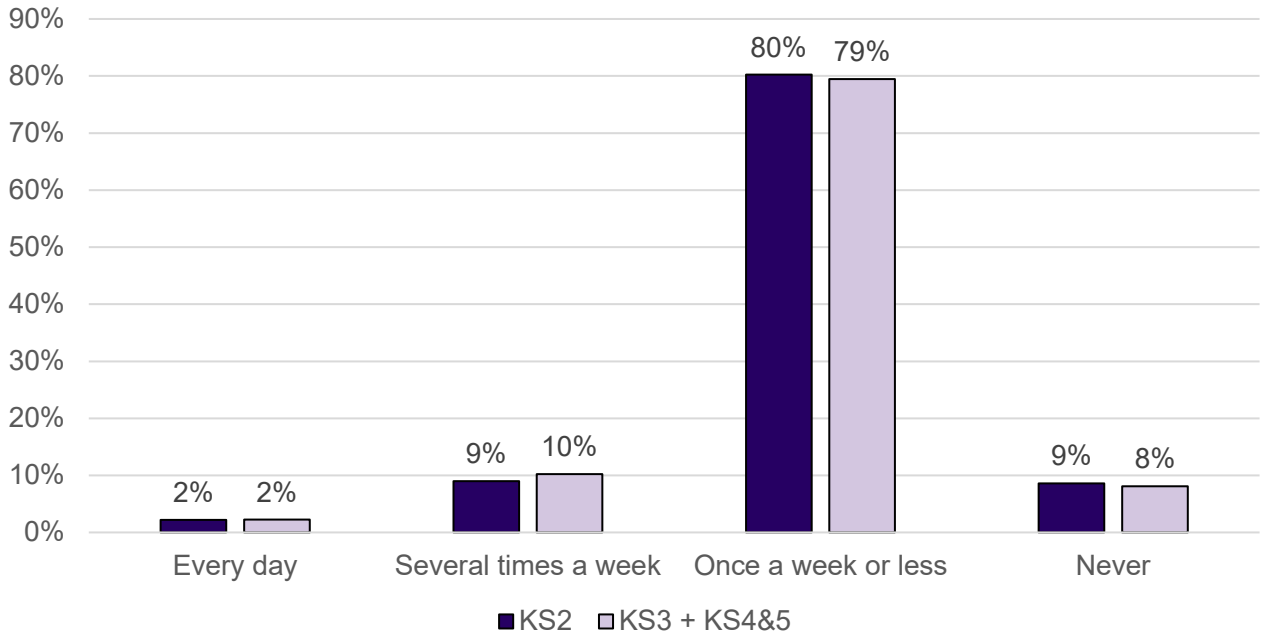


**Figure 74: In the last 12 months, have you visited a dentist? Stratified by Asylum Seekers and non-Asylum Seekers (n = 2914, HAY Harrow 2025)**

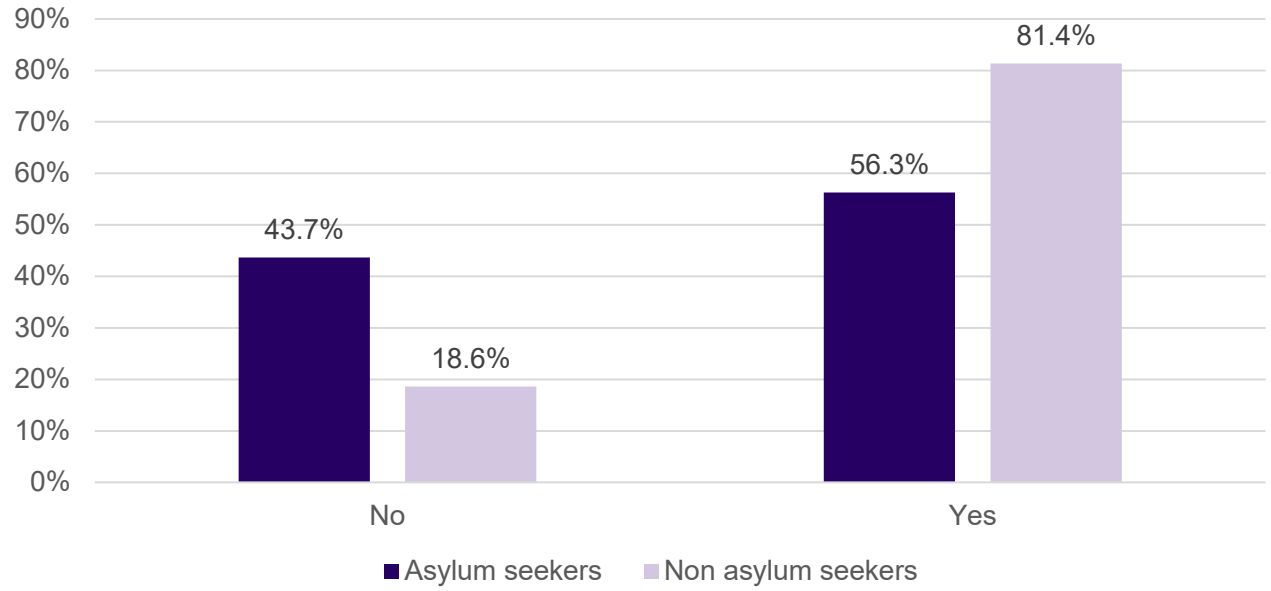



**Figure 75: In the last 12 months, have you visited a dentist? Stratified by SEND and non-SEND (n = 6577, HAY Harrow 2025)**

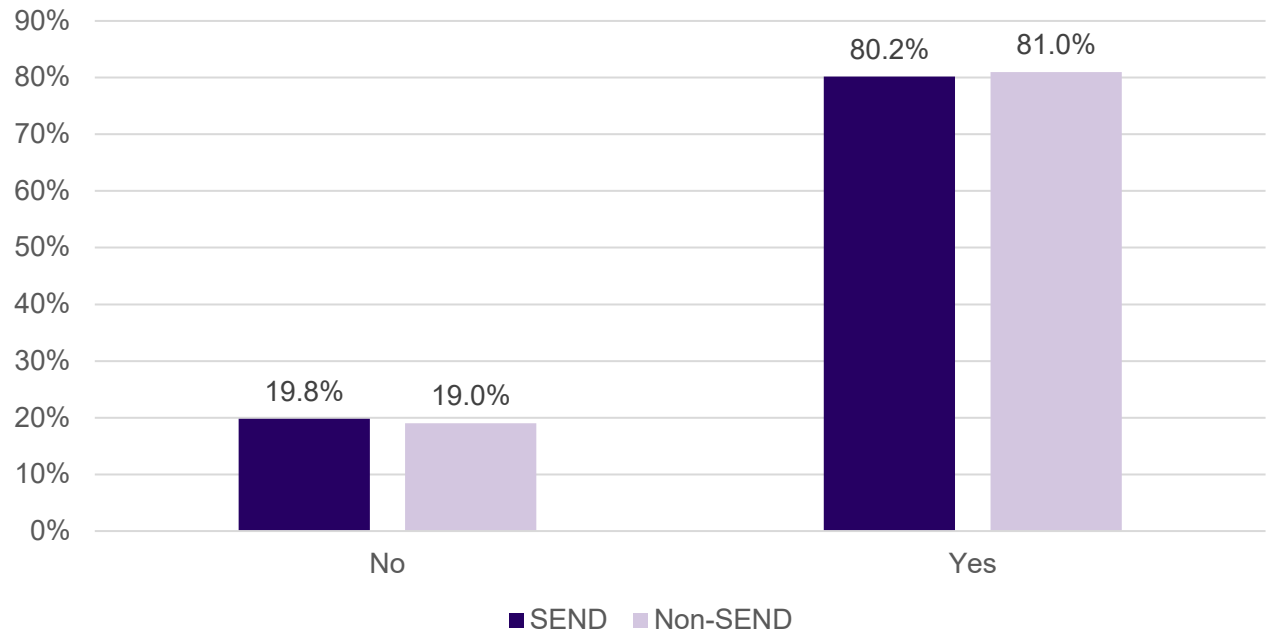


**Figure 76: In the last 12 months, have you visited a dentist? Stratified by English as a first language and English not as a first language (n = 6516, HAY Harrow 2025)**

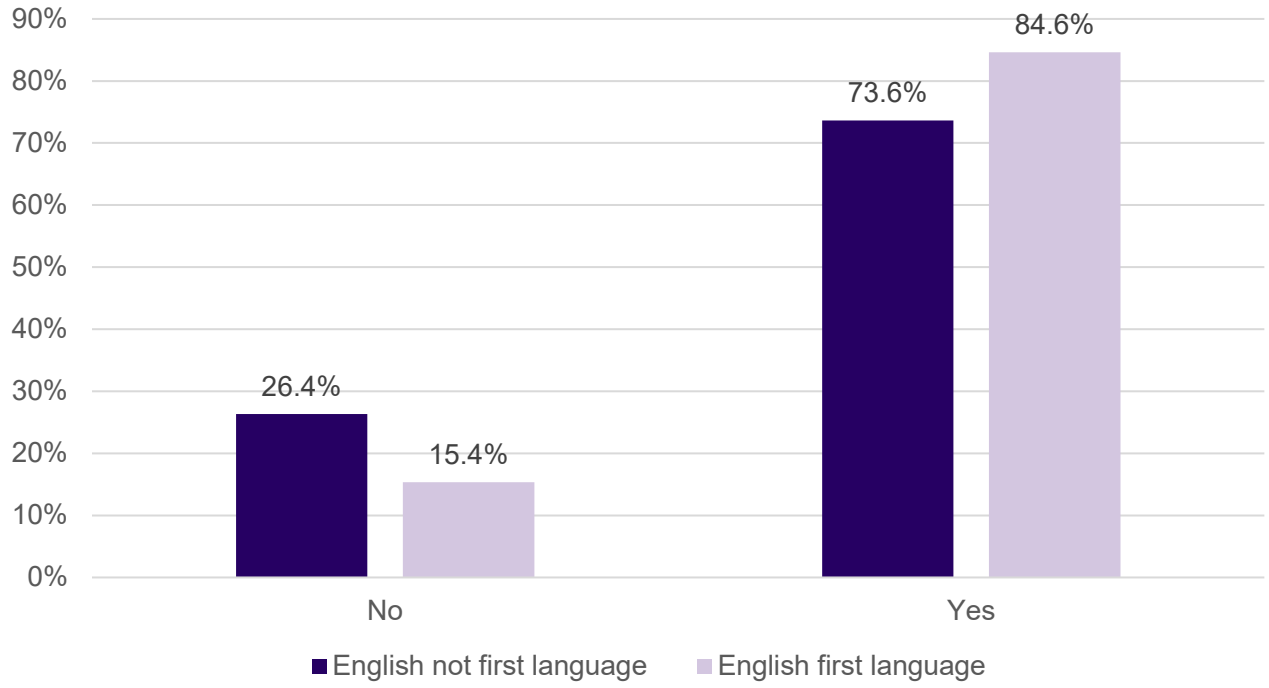
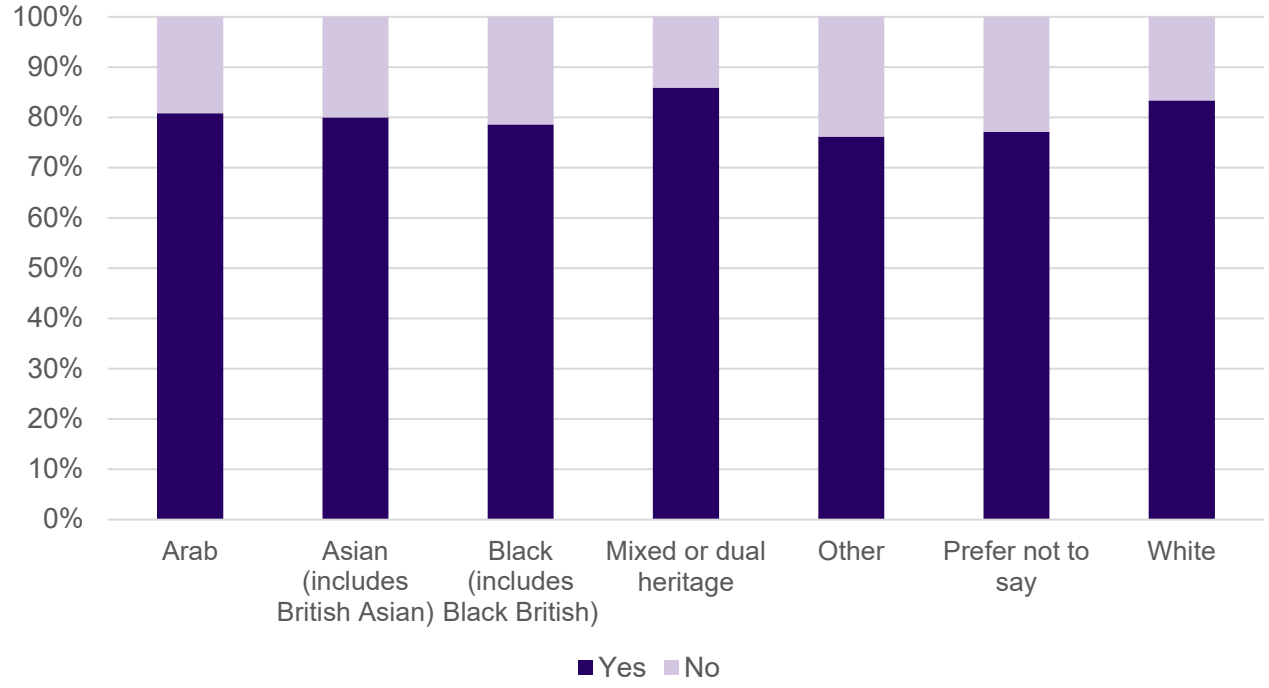



**Figure 77: In the last 12 months, have you visited a dentist? Stratified by ethnicity (n = 6360, HAY Harrow 2025)**



## 18.3. Appendix 3: Summary of additional oral health outcomes in 5-year-old children

**Table 2: Summary of additional outcomes related to tooth decay in 5-year-old children in Harrow, London and England in 2024[5]. The Harrow figures with a statistically significant difference have been labelled (*)**

| Outcome | Harrow | London | England |
|---|---|---|---|
| Average number of dentinally decayed (d3), missing due to dental decay (m) and filled (f) teeth (t) among those with any decay experience | 4.8* | 3.7 | 3.5 |
| Average number of dentinally decayed teeth among those with decay experience | 3.6 | 2.8 | 2.9 |
| Average number of missing (extracted due to decay) teeth among those with decay experience | 0.5 | 0.3 | 0.3 |
| Percentage of children with one or more obvious untreated dentinally decayed teeth | 23 | 23.6 | 19.8 |
| Average number of dentinally decayed teeth among those with untreated decay | 4.4* | 3.3 | 3.2 |
| Percentage of children who have had one or more teeth extracted due to dental decay (missing teeth) | 2.4 | 2.4 | 1.8 |
| Average number of missing (extracted due to decay) teeth among those with missing teeth | 5.2 | 3.1 | 3.5 |
| Percentage of children with one or more teeth with decay into the pulp or roots only remaining | 5.7 | 3.7 | 3.7 |
| Percentage of children with enamel and or dentinal decay | 31 | 30 | 26.9 |
| Percentage of children with any plaque on the exposed labial tooth surfaces of the upper anterior sextant | 19.4 | 23.7 | 22.1 |
| Percentage of children with plaque covering more than one-third of the exposed labial tooth surfaces of the upper anterior sextant | 4.9 | 4.7 | 3.3 |
| Percentage with pufa | 0.6 | 1.5 | 1.8 |

## 18.4. Appendix 4: Hospital admissions due to tooth decay by deprivation according to age

**Figure 78: Hospital admissions (per 100,000 people) related to tooth decay by deprivation among those aged 0-5 in Harrow (2022-2024) (WSIC)**

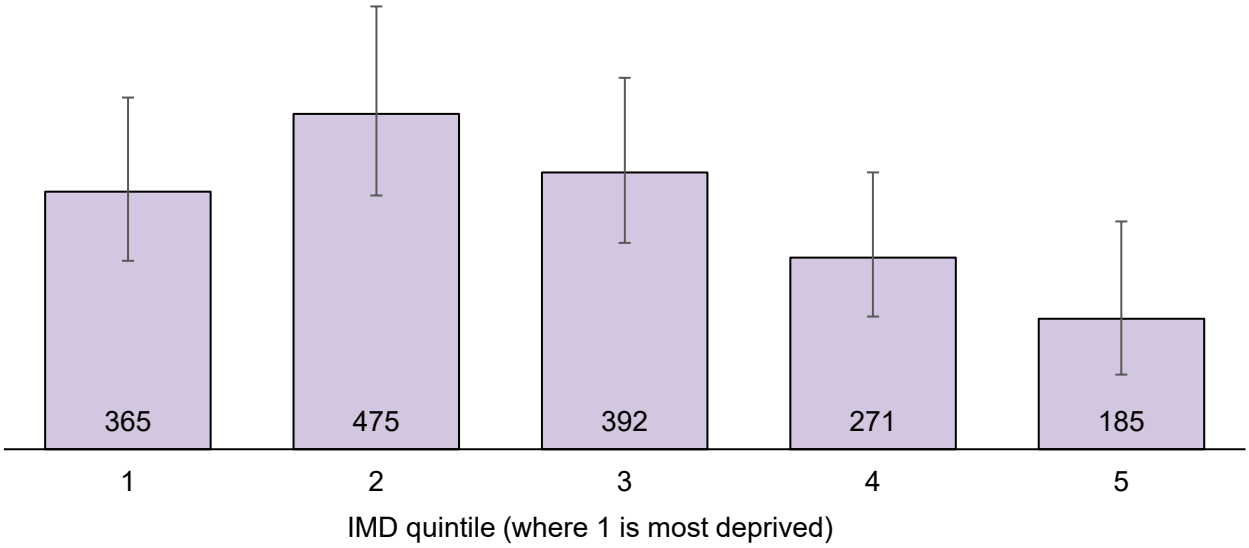



**Figure 79: Hospital admissions (per 100,000) related to tooth decay by deprivation among those aged 6-17 in North-West London (2022-24) (WSIC)**

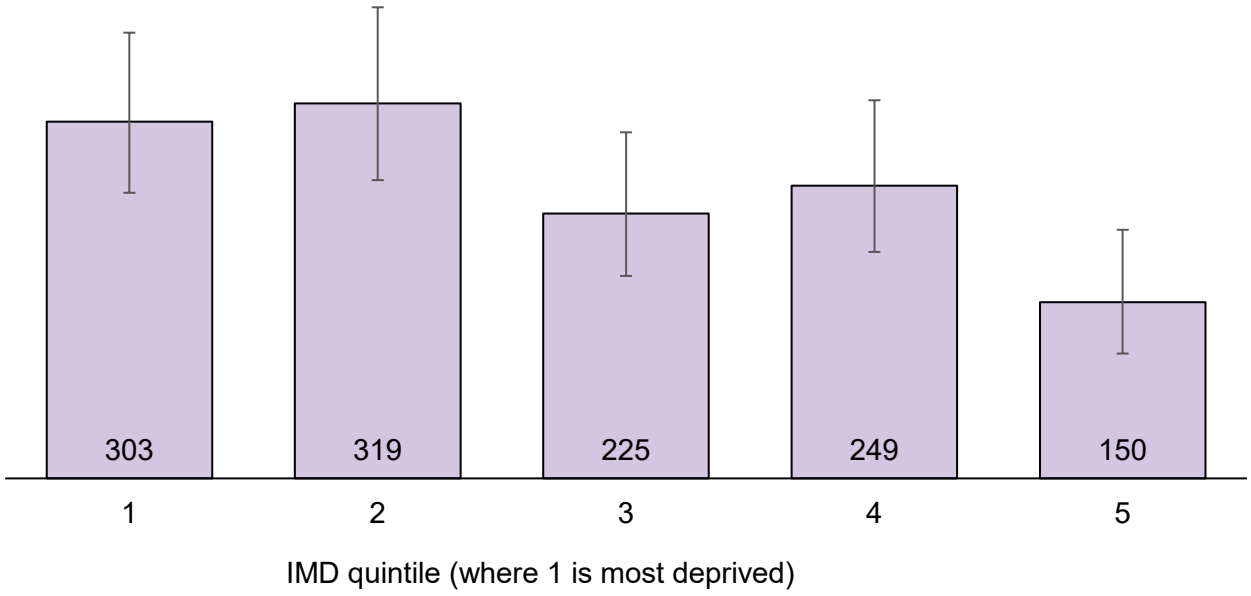


**Figure 80: Hospital admissions (per 100,000 people) related to tooth decay by deprivation among those aged 18-64 years in Harrow (2022-2024) (WSIC)**

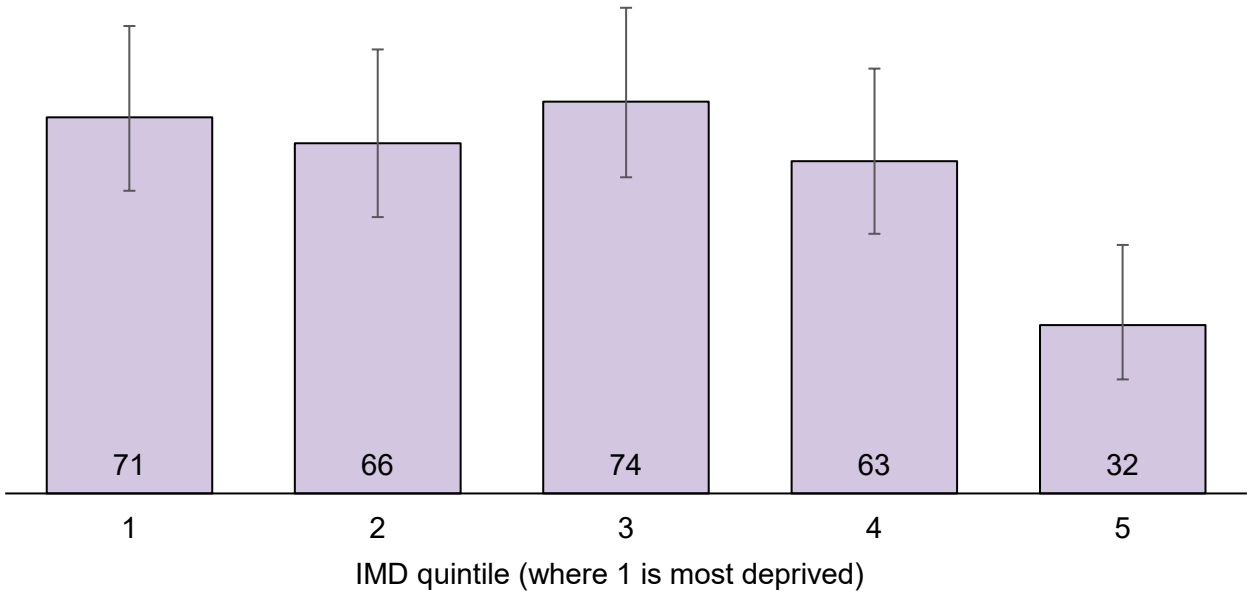
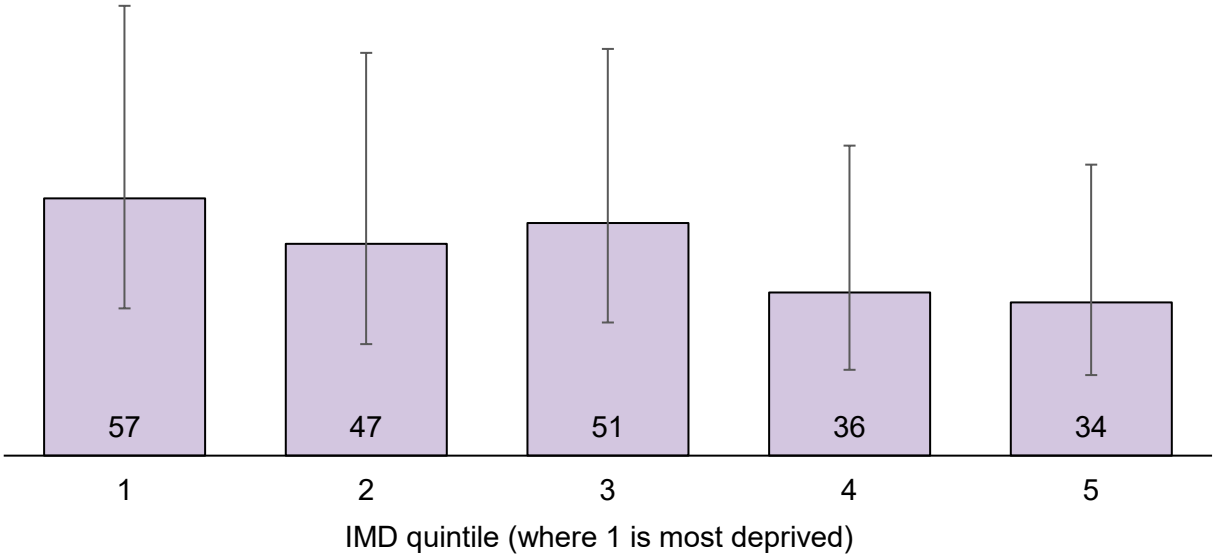



**Figure 81: Hospital admissions (per 100,000 people) related to tooth decay by deprivation among those aged 65 years or older in Harrow (2022-2024) (WSIC)**



## 18.5. Appendix 5: NHS Dentist access in Harrow by ward

**Table 3: Table of percentage of children and adults seen with in the last 12 and 24 months respectively by ward and age group (NHS BSA)**

| Harrow ward | Percentage of <5-year-olds seen in the last 12 months | Percentage of 5–17-year-olds seen in the last 12 months | Percentage of 18–64-year-olds seen in the last 24 months | Percentage of 65+ year olds seen in the last 24 months |
|---|---|---|---|---|
| Belmont | 32.7% | 71.3% | 39.5% | 46.5% |
| Canons | 32.2% | 68.2% | 28.5% | 30.6% |
| Centenary | 31.9% | 63.1% | 29.6% | 41.6% |
| Edgware | 30.5% | 66.2% | 31.7% | 42.4% |
| Greenhill | 35.9% | 72.4% | 32.0% | 57.0% |
| Harrow on the Hill | 27.6% | 49.3% | 31.3% | 44.8% |
| Harrow Weald | 31.4% | 65.8% | 43.5% | 48.6% |
| Hatch End | 26.0% | 64.4% | 35.2% | 39.2% |
| Headstone | 36.8% | 67.8% | 39.1% | 49.9% |
| Kenton East | 37.6% | 79.5% | 36.0% | 51.5% |
| Kenton West | 37.2% | 70.3% | 36.3% | 48.2% |
| Marlborough | 31.8% | 64.1% | 34.9% | 48.6% |
| North Harrow | 37.8% | 76.4% | 36.5% | 52.0% |
| Pinner | 35.8% | 71.0% | 40.0% | 43.9% |
| Pinner South | 30.9% | 64.9% | 37.1% | 43.3% |
| Rayners Lane | 36.2% | 71.7% | 42.8% | 54.1% |
| Roxbourne | 39.5% | 66.4% | 44.9% | 56.5% |
| Roxeth | 37.0% | 69.5% | 38.8% | 54.0% |
| Stanmore | 24.3% | 55.4% | 30.6% | 31.8% |

| | | | | |
|---|---|---|---|---|
| **Wealdstone North** | 32.7% | 65.6% | 42.6% | 55.8% |
| **Wealdstone South** | 33.0% | 60.2% | 38.2% | 52.2% |
| **West Harrow** | 27.1% | 62.6% | 35.0% | 51.6% |

**Figure 82: Percentage of <5-year-old children seen by an NHS dentist in the past 12 months by Harrow ward (up to March 2025) and mapped to local of available NHS dental practices (NHS BSA)**

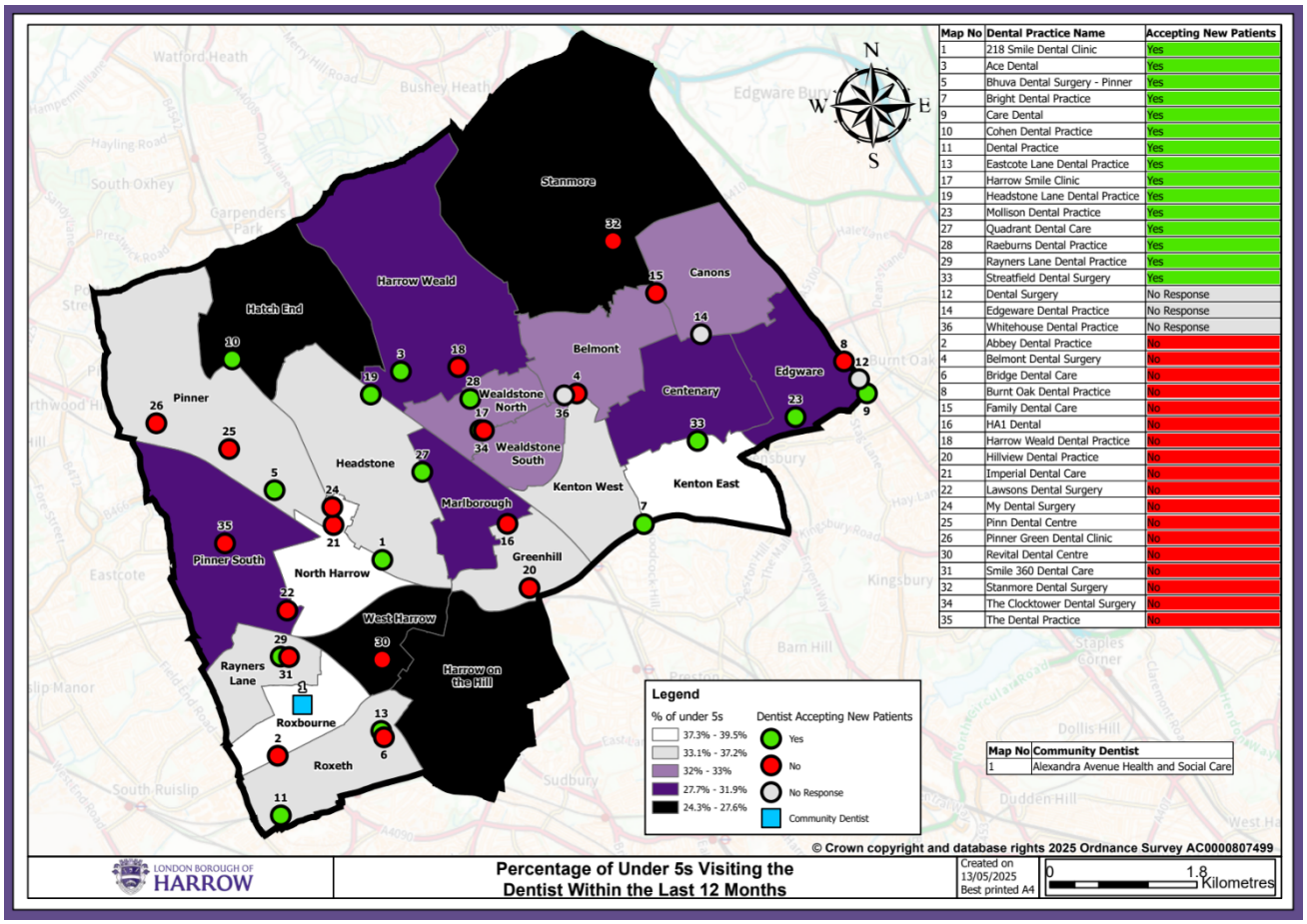


**Figure 83: Percentage of 5-17-year-old children seen by an NHS dentist in the past 12 months by Harrow ward (up to March 2025) and mapped to local of available NHS dental practices (NHS BSA)**

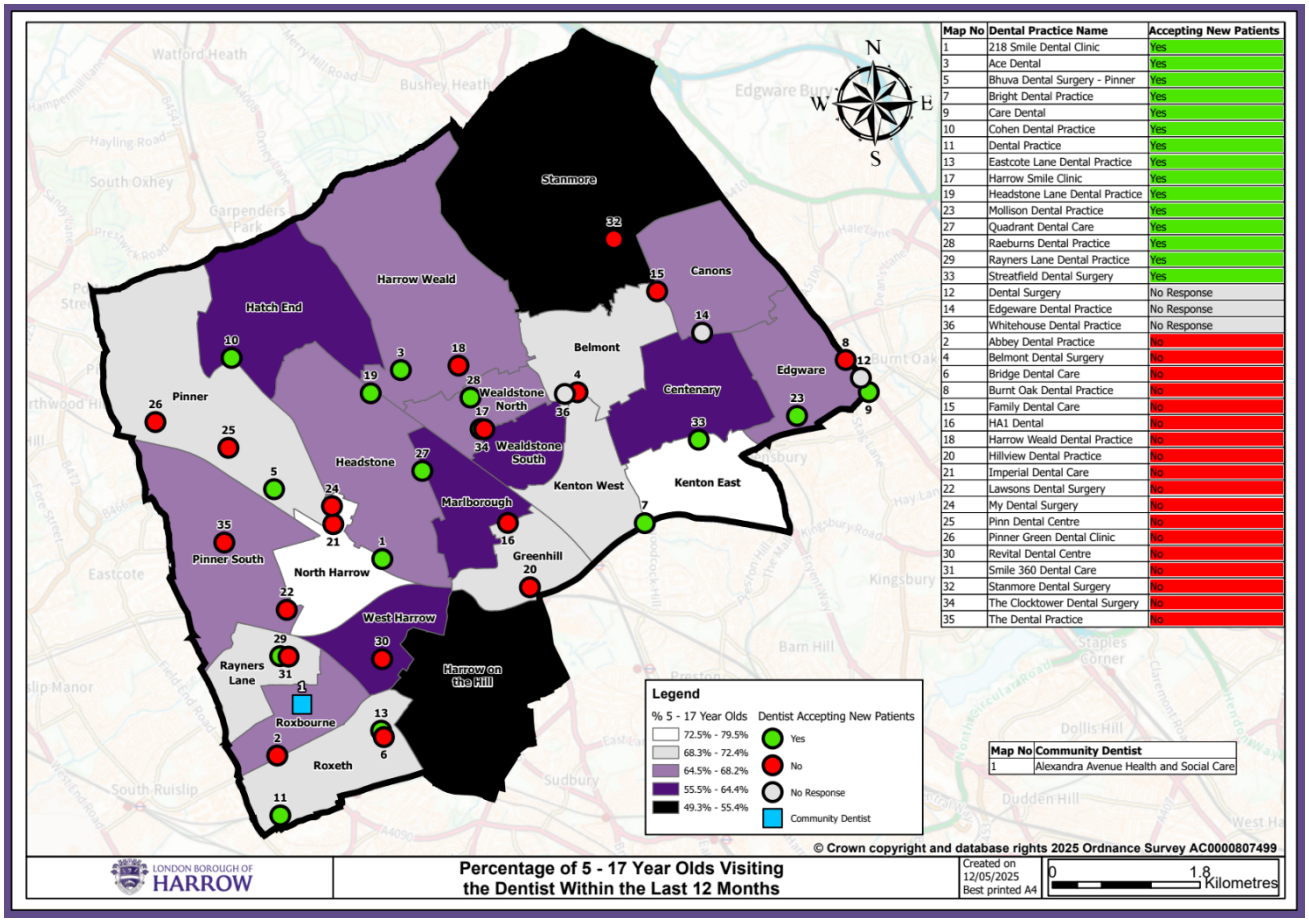
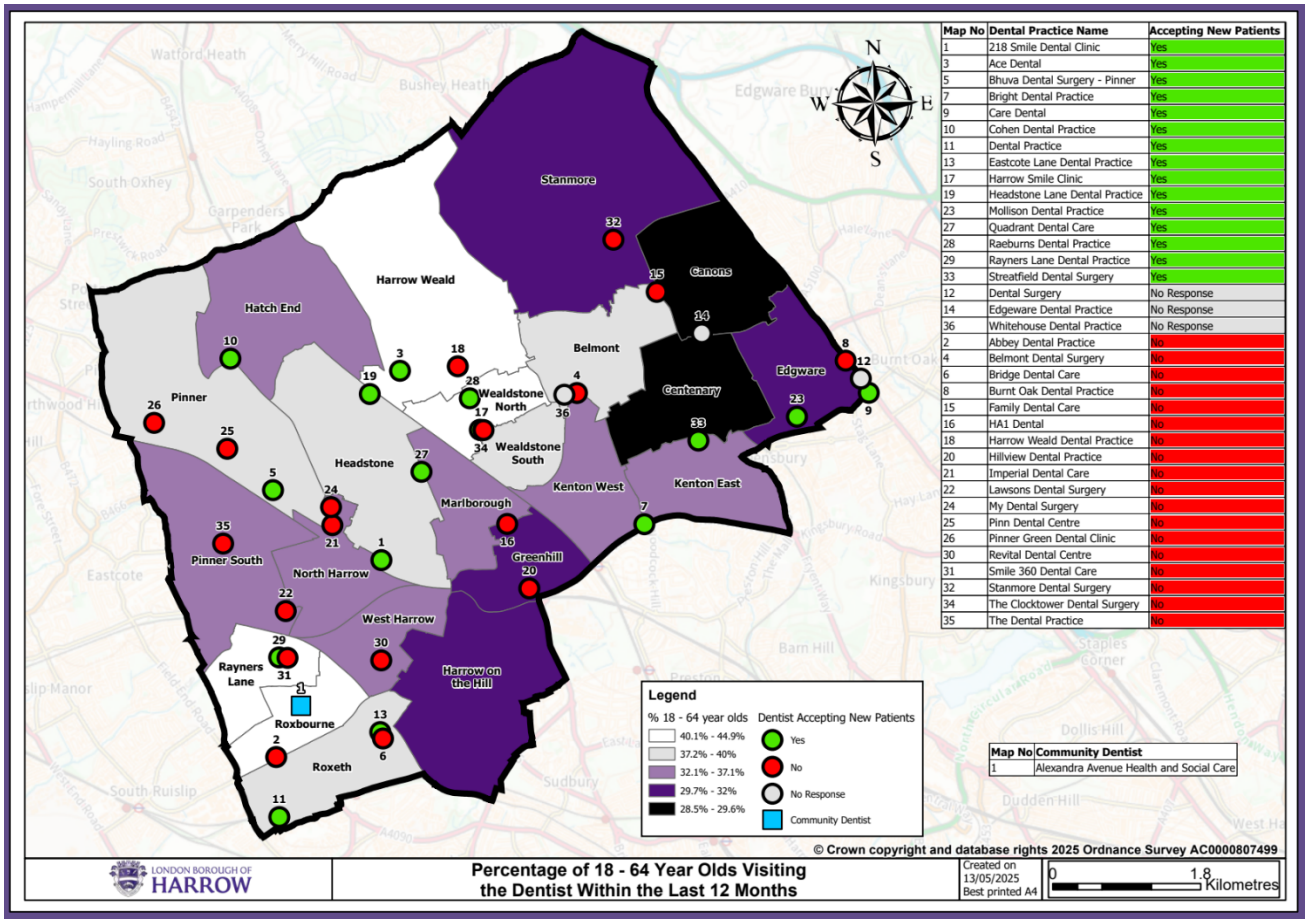


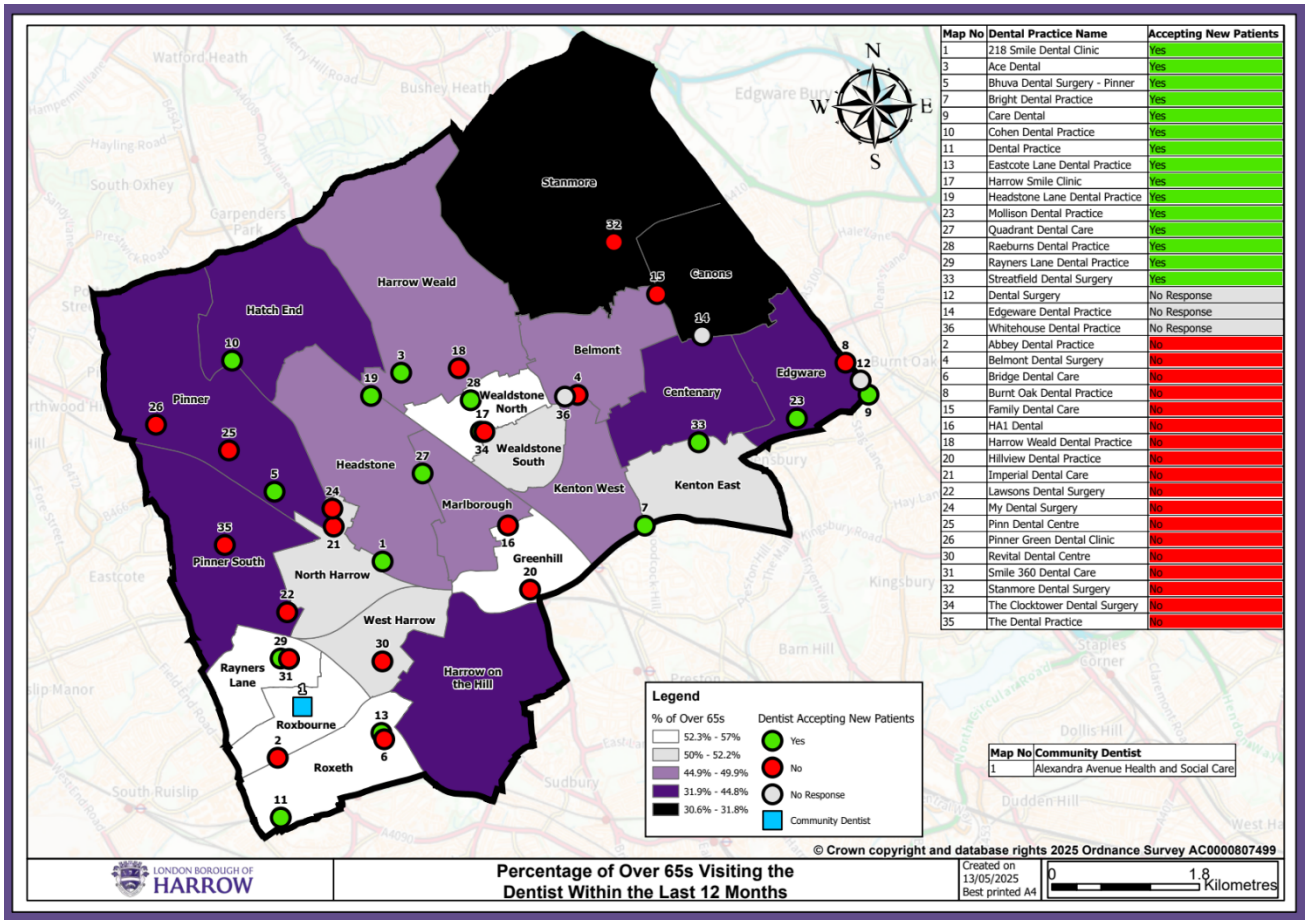
**Figure 84: Percentage of 18-64-year-old adults seen by an NHS dentist in the past 24 months by Harrow ward (up to March 2025) and mapped to local of available NHS dental practices (NHS BSA)**




| Map No | Dental Practice Name | Accepting New Patients |
|---|---|---|
| 1 | 218 Smile Dental Clinic | Yes |
| 3 | Ace Dental | Yes |
| 5 | Bhuva Dental Surgery - Pinner | Yes |
| 7 | Bright Dental Practice | Yes |
| 9 | Care Dental | Yes |
| 10 | Cohen Dental Practice | Yes |
| 11 | Dental Practice | Yes |
| 13 | Eastcote Lane Dental Practice | Yes |
| 17 | Harrow Smile Clinic | Yes |
| 19 | Headstone Lane Dental Practice | Yes |
| 23 | Mollison Dental Practice | Yes |
| 27 | Quadrant Dental Care | Yes |
| 28 | Raeburns Dental Practice | Yes |
| 29 | Rayners Lane Dental Practice | Yes |
| 33 | Streatfield Dental Surgery | Yes |
| 12 | Dental Surgery | No Response |
| 14 | Edgeware Dental Practice | No Response |
| 36 | Whitehouse Dental Practice | No Response |
| 2 | Abbey Dental Practice | No |
| 4 | Belmont Dental Surgery | No |
| 6 | Bridge Dental Care | No |
| 8 | Burnt Oak Dental Practice | No |
| 15 | Family Dental Care | No |
| 16 | HA1 Dental | No |
| 18 | Harrow Weald Dental Practice | No |
| 20 | Hillview Dental Practice | No |
| 21 | Imperial Dental Care | No |
| 22 | Lawsons Dental Surgery | No |
| 24 | My Dental Surgery | No |
| 25 | Pinn Dental Centre | No |
| 26 | Pinner Green Dental Clinic | No |
| 30 | Revital Dental Centre | No |
| 31 | Smile 360 Dental Care | No |
| 32 | Stanmore Dental Surgery | No |
| 34 | The Clocktower Dental Surgery | No |
| 35 | The Dental Practice | No |

| Map No | Community Dentist |
|---|---|
| 1 | Alexandra Avenue Health and Social Care |

**Figure 85: Percentage of 65+ year-old adults seen by an NHS dentist in the past 24 months by Harrow ward (up to March 2025) and mapped to local of available NHS dental practices (NHS BSA)**



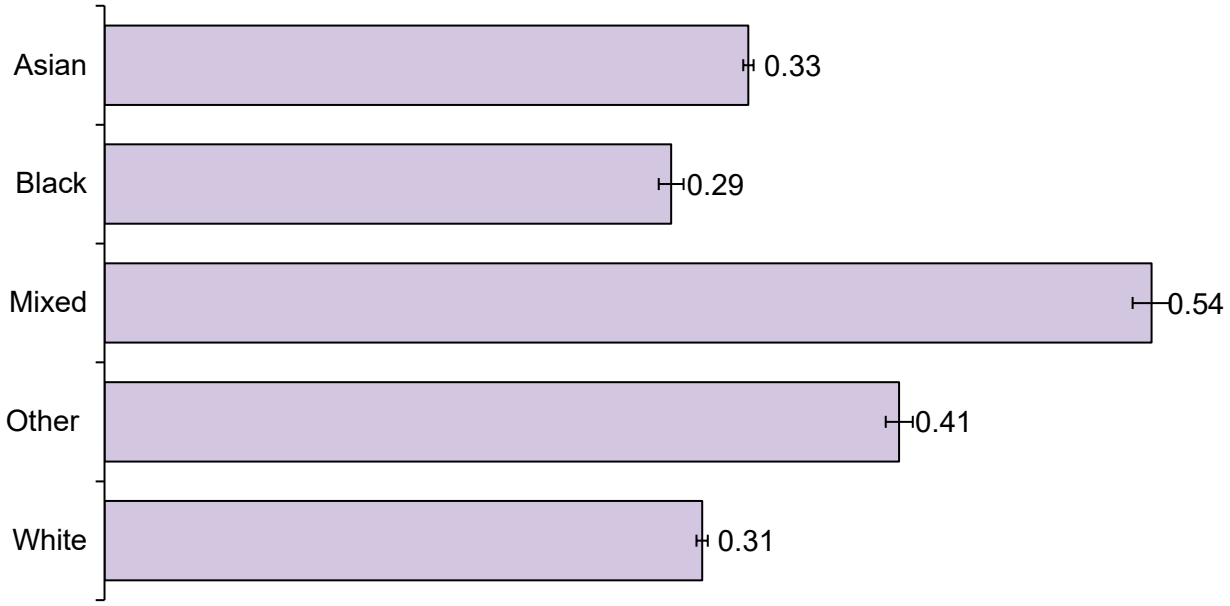

| Map No | Dental Practice Name | Accepting New Patients |
|---|---|---|
| 1 | 218 Smile Dental Clinic | Yes |
| 3 | Ace Dental | Yes |
| 5 | Bhuva Dental Surgery - Pinner | Yes |
| 7 | Bright Dental Practice | Yes |
| 9 | Care Dental | Yes |
| 10 | Cohen Dental Practice | Yes |
| 11 | Dental Practice | Yes |
| 13 | Eastcote Lane Dental Practice | Yes |
| 17 | Harrow Smile Clinic | Yes |
| 19 | Headstone Lane Dental Practice | Yes |
| 23 | Mollison Dental Practice | Yes |
| 27 | Quadrant Dental Care | Yes |
| 28 | Raeburns Dental Practice | Yes |
| 29 | Rayners Lane Dental Practice | Yes |
| 33 | Streatfield Dental Surgery | Yes |
| 12 | Dental Surgery | No Response |
| 14 | Edgeware Dental Practice | No Response |
| 36 | Whitehouse Dental Practice | No Response |
| 2 | Abbey Dental Practice | No |
| 4 | Belmont Dental Surgery | No |
| 6 | Bridge Dental Care | No |
| 8 | Burnt Oak Dental Practice | No |
| 15 | Family Dental Care | No |
| 16 | HA1 Dental | No |
| 18 | Harrow Weald Dental Practice | No |
| 20 | Hillview Dental Practice | No |
| 21 | Imperial Dental Care | No |
| 22 | Lawsons Dental Surgery | No |
| 24 | My Dental Surgery | No |
| 25 | Pinn Dental Centre | No |
| 26 | Pinner Green Dental Clinic | No |
| 30 | Revital Dental Centre | No |
| 31 | Smile 360 Dental Care | No |
| 32 | Stanmore Dental Surgery | No |
| 34 | The Clocktower Dental Surgery | No |
| 35 | The Dental Practice | No |

| Map No | Community Dentist |
|---|---|
| 1 | Alexandra Avenue Health and Social Care |

## 18.6. Appendix 6: FP17s by ethnicity

It is important to note that these findings are extremely limited, as 42% of FP17s did not have a recorded ethnicity, largely because patients declined to have their ethnicity recorded.

**Figure 86: FP17s per person by ethnicity in Harrow (2024/25) (NHS BSA)**



## 18.7. Appendix 7: Location of Nurseries, Pre-schools and Schools in Harrow

**Figure 87: Nurseries, Pre-schools and Schools within the London Borough of Harrow, correct as of January 2025**