Oral Health in Sunderland: A Health Needs Assessment

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Executive summary

This document details the oral health of the people living within the boundaries of Sunderland City Council and describes the services currently commissioned to meet those needs. It identifies key oral health issues facing our local population, and makes a number of recommendations that, if accepted, will form the strategic objectives for Sunderland's first oral health promotion strategy.

Oral health is 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. Oral health varies over the life course from early life to old age, is integral to general health and supports individuals in participating in society and achieving their potential.¹ Oral diseases encompass a range of diseases and conditions that include dental caries, periodontal (gum) disease, tooth loss, oral cancer, birth defects such as cleft lip and palate².

Most oral diseases and conditions share modifiable risk factors with long term conditions and chronic diseases, including, cardiovascular disease, cancer and diabetes. These risk factors include tobacco use, alcohol consumption and unhealthy diets high in sugar.³ There is a proven relationship between oral and general health. For example, diabetes is linked with the development and progression of gum disease. Moreover, there is a causal link between high consumption of sugars and diabetes, obesity and dental decay⁴. Tooth decay is the most common oral disease affecting children and young people in England, yet it is largely preventable.⁵

Poor oral hygiene from poor tooth brushing, insufficient exposure to fluoride and consumption of a diet that is high in sugar are the main direct risk factors for an individual's poor oral health. The circumstances in which people live and work have a profound effect on their health and wellbeing, including their oral health. The causes of oral diseases, and related inequalities, are therefore mainly social and environmental.⁶

Contributory factors to poor oral health are shared by other major public health concerns; risk factors for obesity include consumption of food and drink high in sugar, while tobacco use and

¹ World Health Organization (2023). Oral Health. Available online at: <u>Oral health (who.int)</u>
² FDI World Dental Federation (2023). FDI'S definition of oral health. Available online at: <u>https://www.fdiworlddental.org/fdis-definition-oral-health</u>

² FDI World Dental Federation (2023). FDI'S definition of oral health. Available online at: <u>https://www.ldworlddental.org/fdis-definition-oral-health</u> ³ Wolf et al; (2022). Non-communicable Diseases and Oral Health: An Overview. Available online at: <u>Non-communicable Diseases and Oral Health: An Overview - PMC</u> (nih.gov)

⁴ Casanova et al (2014). Diabetes and periodontal disease. A two way relationship. Available online at <u>si.bdj.2014.907.pdf</u>
⁵ Local Government Association and Public Health England (2016). Tackling poor oral health in children. Available online at: <u>Tackling poor oral health in children</u> (Jacob Review).

⁶ Public Health England (2021). Inequalities in oral health in England. Available online at: Inequalities in oral health in England (publishing.service.gov.uk)

alcohol consumption are risk factors for gum disease and oral cancer. There is a two-way relationship between gum disease and Type-2 diabetes and an association between human papilloma virus and oral cancer among young people. A common risk factor approach can be applied to the promotion of general health and wellbeing that supports good oral health for people throughout their life i.e., reducing sugar consumption will have a positive impact on tooth decay and obesity, stopping smoking will reduce oral and lung cancer, gum disease and cardiovascular disease.⁷

The relationship between deprivation and poorer oral health is now well established. There is evidence for social gradients in the prevalence of dental decay, tooth loss, oral cancer, oral health related quality of life and service use. There are marked differences in dental decay experience of 5-year-olds related to deprivation; in England between 2021 and 2022 the prevalence of dental decay was 13.5% in 5-year-olds living in the least deprived areas compared with 35.1% for those living in the most deprived areas which is 2.5 times more than those in the least deprived.⁸

Good health is central to people's happiness and wellbeing. It also makes an important contribution to the local economy as healthy people live longer and are more productive. Despite tooth decay being largely preventable, a significant proportion of children and adults in Sunderland still have tooth decay.

Oral health is an integral part of overall good health and wellbeing and allows people to eat, speak, smile, and show emotions. It also affects a person's self-esteem, school performance and attendance at work or school.

Sunderland's residents have different experiences of oral health with significant inequalities in oral health across the city.

The Oral Health Promotion Strategy will outline what oral health is like in Sunderland and will set out plans for how it can be improved by further developing and building on evidence-based prevention work.

It is also important that we work together with our communities and partner organisations and strive to improve oral health for all residents through oral health promotion programmes with a particular focus on our residents who are most vulnerable to poor oral health.

 ⁷ Baskaradoss et al; 2019. Influence of Lifestyle on Dental Health Behaviour. Available online at: <u>Influence of Lifestyle on Dental Health Behavior - PMC (nih.gov)</u>
 ⁸ Office for Health Improvement and Disparities (2023). National Dental Epidemiology Programme (NDEP) for England: oral health survey of 5-year-old children 2022. Available online at: <u>National Dental Epidemiology Programme (NDEP) for England: oral health survey of 5 year old children 2022</u>

Unmet Need/Gaps in Data

Inequalities in oral health are evident in the UK across the social spectrum and across the life course largely reflecting the socio-economic inequalities that impact on general health. The COVID-19 pandemic is likely to have widened these inequalities as well as having a direct impact on dental care provision. Health behaviours, which also impact on oral health, such as smoking, and alcohol consumption have increased during the lockdown periods associated with the pandemic.⁹

During the first lockdown period in England all routine and non-urgent dental care stopped as practices were unable to operate safely. Resumption of services was gradual and slow as dental practices had to adapt to a new way of working with increased PPE and cross infection control procedures. Once NHS dental services were restored, uptake of care happened more quickly for adults than children.¹⁰ Secondary dental care was also affected as general anaesthetic tooth extraction lists in hospitals were cancelled and postponed.¹¹

Access to dentists remain a significant national challenge which has progressively got worse since the pandemic as all routine appointments were halted. There appears to be a divide amongst those living in deprived areas compared to those living in more affluent areas and the number of dentists available within a given area.¹²

There has been an impact on oral cancer rates. Routine dental examinations allow for screening of the mouth for early signs of oral cancer, however, during the pandemic there has been a decrease in routine examinations and a decrease in urgent referrals for suspected oral cancer.¹³

Many prevention schemes such as the supervised toothbrushing were also halted during the lockdowns when schools and early years settings were closed. The suspension of these programmes and their slow re-establishment is likely to have negatively impacted the oral health of children. Work has begun with Early Years settings to re-establish these schemes.

As the size of the older population increases in Sunderland¹⁴ so does the need for oral health provision amongst the elderly population residing in care homes.

 ⁹ Arora and Grey (2020). Health behaviour changes during COVID-19 and the potential consequences: A mini-review. Available online at: <u>sagepub.com</u>
 ¹⁰ Care Quality Commission (2022). Covid-19 insight 10: Dental access during the pandemic. Available online at: <u>COVID-19 Insight 10: Dental access during the</u>

pandemic ¹¹ Elsherif et al; 2021. Impact of cancelled general anaesthetic dental extractions appointments on children due to the COVID-19 pandemic. Available online at: <u>PubMed</u> (<u>nih.gov</u>) ¹² Stennett (2022). The impact of the COVID-19 pandemic on oral health inequalities and access to oral healthcare in England. Available online at: <u>British Dental Journal</u>

⁽nature.com) ¹³ Nath et al; 2022. Rise in oral cancer risk factors associated with COVID-19 pandemic mandates a more diligent approach to oral cancer screening and treatment.

Available online at: The Journal of the American Dental Association (ada.org) ¹⁴ Office for National Statistics (2022). How the population changed in Sunderland: Census 2021. Available online at: Census 2021 – ONS

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1. Introduction

Oral health is defined as the "standard of the oral and related tissues which enables an individual to eat, speak and socialise without active disease, discomfort or embarrassment". Oral health is a good indicator of overall health, well-being and quality of life, and encompasses a range of diseases and conditions that include dental caries, periodontal (gum) disease, tooth loss, oral cancer, dental trauma and birth defects such as cleft lip and palate.¹⁵ The majority of oral diseases and conditions share modifiable risk factors with leading noncommunicable diseases include tobacco use, alcohol consumption and unhealthy diets high in free sugars.¹⁶

1.1 Local government responsibilities and the purpose of an Oral Health **Needs Assessment**

The statutory dental public health responsibilities of local authorities include the following:

- Securing the provision of oral health improvement programmes to improve the health of the local population, to the extent that they consider appropriate in their areas.
- Securing the provision of oral health surveys to facilitate the assessment and • monitoring of oral health needs.
- The planning and evaluation of oral health promotion programmes
- The planning and evaluation of the arrangements for provision of dental services as • part of the health service (commissioning responsibility sits with the Integrated Care Board (ICB).
- Where there are water fluoridation programmes affecting the authority's area, the • monitoring and reporting of the effect of water fluoridation programmes.
- Participation in any oral health survey conducted or commissioned by the secretary of state.
- Supporting the Department of Health and Social Care in any future consultations on • water fluoridation schemes, including conducting public consultations in relation to such proposals.

In 2014, the National Institute for Health and Care Excellence (NICE) published several recommendations for local authorities to support them to improve oral health locally, with one

 ¹⁵ FDI World Dental Federation (2023). FDI'S definition of oral health. Available online at: <u>FDI (fdiworlddental.org)</u>
 ¹⁶ World Health Organization (2023). Oral Health. Available online at: <u>Oral health (who.int)</u>

of the main recommendations being to carry out an oral health needs assessment to help identify the local need.

Health Needs Assessments are a systematic method for reviewing the health issues facing a defined population and provide an opportunity to collect and analyse the data around a particular health problem. They often identify the groups most at risk of poor health outcomes to ensure that when the correct intervention is implemented and the resources are allocated, they target the right people in a way that achieves the greatest benefit.

The aim of the Sunderland Oral Health Needs Assessment is to inform all commissioners and stakeholders of the current standard of oral health and the provision of oral health services, which can be used to inform a strategic approach to oral health improvement. This will be done by:

- Defining good oral health and identifying common measures used to assess the standard of oral health.
- Using these measures to determine the standard of oral health in Sunderland and any variation within the authority. Data reported at levels lower than local authority level e.g., wards/MSOA/LSOAs is limited.
- Identifying whether any variation in the standard of oral health can be attributed to, and explained by, particular risk factors.
- Summarising the current services that are commissioned to improve oral health and their distribution across the city.
- To highlight priority areas to improve oral health across Sunderland which will be used to inform an oral health promotion strategy.

2. Types of Oral Disease

Oral disease consists of a number of conditions which affect the teeth and oral cavity. The two most common of these are dental caries (tooth decay) and periodontal (gum) disease. Both conditions are largely preventable. Other less common conditions include oral cancers, dental trauma, mouth ulcers, and tooth wear (dental erosion, attrition and abrasion).

2.1 Dental caries

The national prevalence of children with enamel and/or dentinal decay is 29.3%.¹⁷ Dental caries occur when bacteria in the mouth use sugars extracted from foods to make acids. Acid erodes the tooth resulting in a demineralisation of the enamel, leading to tooth decay. This process is usually asymptomatic in the early stages and becomes painful as the decay becomes more significant. There are two main methods of preventing the development and progression of dental decay: regular brushing of teeth with toothpaste containing fluoride and reducing the amount of foods and drinks with high sugar content.

2.2 Periodontal Disease

Periodontal disease is the inflammation of the gums and surrounding tissues. It is caused by the accumulation of bacteria, resulting in the degeneration and the loss of gum and bone tissue surrounding the teeth. Early signs include redness of the gum line, swelling and bleeding. Progression of the disease can cause destruction of the structures that support the tooth, resulting in loosening or loss. Prevention comes in the form of good oral hygiene, such as regular tooth brushing and adequate inter-dental cleaning, as these minimise the accumulation of bacteria and plaque around the gums.

2.3 Oral cancer

Oral cancer is a broad term which includes cancer of the mouth (or 'oral cavity') and the lip. It often includes the top of the throat (the pharynx) when the term 'oropharyngeal cancer' is used. The risk factors for cancer of the lip, mouth and top of the throat are similar and the term 'oral cancer' is used in this document to include cancer of all three areas. Oral cancer has a greater prevalence in those who smoke and drink alcohol and is strongly associated with deprivation.

According to research, up to 90% of oral cancer cases are preventable through modifying known risk factors¹⁸. The surgical treatment required to remove cancerous tissue is often extensive and can cause difficulty eating and speaking, and therefore detection of oral cancer at an early stage is essential for both increased survival rates and quality of life. People living in more deprived areas have greater rates of oral cancers and poorer outcomes, generally related to delayed diagnosis – regular dental reviews or check-ups that include a full oral examination increase the likelihood of any cancers being identified as early as possible.

 ¹⁷ Public Health England (2022). NDEP. Available online at: <u>National Dental Epidemiology Programme (NDEP) for England: oral health survey of 5 year old children 2022</u>
 ¹⁸ Van der Waal I, de Bree R, Brakenhoff R, Coerbergh J-W (2011). Early diagnosis in primary oral cancer: is it possible. Available online at: www.medicinaoral.com/pubmed/medoraly16 (3, p300.pdf)

Irregular attenders have worse outcomes for oral cancer than regular dental attendance, and regular dental attendance is more common in more affluent populations.¹⁹

Sunderland is significantly higher for Standardised incidence and mortality of CO0-C14, 2012 to 2016. England 14.55 per 100,000, Sunderland 18.57 per 100,000. Sunderland is significantly higher. Sunderland rate of mortality is also significantly higher 6.44 per 100,00 compared to 4.54 per 1000 for England.

The data for Standardised incidence and mortality of C00-C06 by statistical region, 2012 to 2016 shows Sunderland figures at 10.05 per 100,000 (England 8.36 per 100,000) however Sunderland was not significantly higher.²⁰

2.4 Causes and risk factors for poor oral health

Most oral health diseases and conditions share risk factors that are common in the main noncommunicable diseases (cancer, diabetes, cardiovascular disease and chronic respiratory disease). Tobacco, alcohol consumption and an unhealthy diet high in free sugars are some of the main causes of poor oral health.

There is a clear causal relationship between deprivation and poor oral health outcomes across all age groups. Oral health inequalities are defined by the Office for Health Improvement and Disparities as 'the differences in oral health between different groups that are avoidable and deemed to be unfair, unacceptable and unjust'.²¹ Good oral health is not enjoyed equally across all populations in England, and the impacts of poor oral health disproportionately affect vulnerable and socially disadvantaged individuals and groups.²²

The 2022 National Dental Epidemiology Programme (NDEP) for five-year-olds highlight that Children living in the most deprived areas of the country were almost 3 times as likely to have experience of dentinal decay (35.1%) as those living in the least deprived areas (13.5%). There were also disparities in the prevalence of experience of dentinal decay by ethnic group, which was significantly higher in the other ethnic group (44.8%) and the Asian or Asian British ethnic group (37.7%).23

¹⁹ Rylands J, Lowe D, Rogers SN (2016). Outcomes by area of residence deprivation in a cohort of oral cancer patients: Survival, health-related quality of life, and place of death Oral Oncol. Available online at: www.sciencedirect.com/science/article/pii/S1368837515003619)²⁰ Public Health England (2020). Oral cancer in England. Available online at: Oral cancer in England: a report on incidence, survival and mortality rates of oral cancer in

 ²² Public Health England (2020). Inequalities in Oral Health in England. Available online at: www.gov.uk/goversite
 ²³ Public Health England (2022). NDEP. Available online at: <a href="http://watanabulk.atanabukk.at survey of 5 year old children 2022 Programme (NDEP) for E

Overall, 23.7% of 5-year-old children in England in this survey had experience of dentinal decay. This was similar to the finding of the previous survey of 5-year-olds in 2019, where 23.4% of the surveyed children had experience of dentinal decay. Among the 23.7% of children with experience of dentinal decay, each child had on average 3.5 (confidence interval 3.50 to 3.59) teeth with experience of dentinal decay (at the age of 5 years children normally have 20 primary teeth).²⁴

The 2018 survey on adults attending dental practices showed that women had better oral health with respect to all outcomes except tooth loss and oral health related quality of life as compared to men.

There is an increased risk of poor oral health where there is a presence of other risk factors present, including:

- Being socially excluded
- Belonging to a particular minority ethnic group and/or migrant group
- Severe and enduring mental illness and/or a learning disability
- Substance misuse
- Homelessness
- Having limited mobility and/or being disabled
- Having a long-term medical condition
- Being a sex worker
- Being care experienced
- Being older and vulnerable (including adults in care and nursing homes)
- Refugees and people seeking asylum
- Having limited, restricted or no access to dentistry

2.5 The impact of poor oral health at an individual and population level

A 2019 report from Public Health England reported that tooth decay can cause problems with eating, sleeping, communication and socialising, causing over 60,000 days being missed by school-aged children for hospital extractions alone.²⁵ It can also cause significant pain and discomfort and affect day to day functioning and self-esteem, with adults experiencing poor

 ²⁴ Public Health England (2019). NDEP. Available online at: <u>National Dental Epidemiology Programme for England: oral health survey of five-year-old children</u>
 ²⁵ Public Health England (2019. Child Oral Health: Applying All Our Health. Available online at: <u>www.gov.uk/government/publications/child-oral-health-applying-all-our-health-applying-all-our-health</u>

oral health reporting a negative impact on their confidence and their perceived prospects of gaining employment and being promoted at work.²⁶

Poor oral health also disproportionately affects a number of population groups. In older people, including care home residents, poor oral health can lead to pain that significantly affects mood and behaviour, and also limits food options due to the impact on chewing and swallowing food which can in turn lead to nutritional deficiency. There is also a clear link between poor oral health and pneumonia in older people, with the risk being greatest when periodontal disease, dental caries and poor oral hygiene are compounded by swallowing and feeding problems. The cost to the NHS of treating oral health conditions is estimated to be around £3.4 billion per year.²⁷

Poor oral health impacts on children and families. It affects children's ability to eat, smile and socialise and causes pain and infection with days missed at school, and parents' work, to attend a dental service to receive care. Dental decay is largely a preventable disease.²⁸

2.6 The impact of COVID-19 and access to dentistry on oral health outcomes

During the first wave of the pandemic in the interest of patient and dental staff safety, routine dental services were paused in March 2020 and urgent dental care centres (UDCs) were established to provide access only to clinically confirmed urgent dental care. In July 2020 all practices gradually re-opened for limited face to face care in strict accordance with Nationally mandated COVID-19 NHS Dentistry Standard Operating Procedures and IPC constraints. As part of those arrangements' practices were required to prioritise patients based on clinical need and urgency into their significantly reduced safe operating capacity, creating inevitable delays and backlogs over time for patients seeking non-clinically urgent and more routine dental care at that time. As part of those nationally mandated COVID-19 response arrangements practices were provided with income protection but also mandated to operate at significantly reduced and safe levels of face-to-face access levels throughout the prolonged COVID-19 pandemic period.

All dental practices are now able to safely provide a full range of treatment however demand for care remains extremely high with dental practices having to balance addressing the

²⁶ Public Health England (2019). Adult Oral Health: Applying All Our Health. Available online at: <u>www.gov.uk/government/publications/adult-oral-health-applying-all-our-health/adult-oral-health-applying-all-our-health.</u>
²⁷ Public Health England (2019). Adult Oral Health: Applying All Our Health. Available online at: <u>www.gov.uk/government/publications/adult-oral-health-applying-all-our-health.</u>

health/adult-oral-health-applying-all-our-health) last accessed 1st June 2022 ²⁸ Jackson et al; 2011. Impact of poor oral health on children's school attendance and performance. Available online at: Impact of Poor Oral Health on Children's School Attendance and Performance - PMC (nih.gov)

backlog of care with managing new patient demand, whilst also facing workforce recruitment and retention issues which continues to mean a delay in meeting demand for more routine and non-urgent care.

Work undertaken elsewhere in England to quantify the impact of COVID-19 demonstrates that it is significantly likely that measures taken to restrict COVID-19 had, and will continue to have, a detrimental impact on both the immediate and future oral health of the population. Factors that may have affected the oral health of Sunderland residents include:

- For 3 months at the beginning of the pandemic, no routine care was available.
- In the absence of easy access to dentistry during the pandemic, opportunities for routine check-ups and good preventative care were limited for the whole population.
- School closures, and other measures to reduce the spread of COVID-19 throughout the course of the pandemic such as limited health visitor home visits for all but the most vulnerable children, meant that many children and young people had no access to preventative and oral health services like supervised tooth brushing and fluoride varnish programmes.
- General anaesthetic for dental care was affected by COVID-19 with loss of access to theatre capacity and clinical staff.
- The reduction in the administration of general anaesthesia during Covid will have resulted in longer periods of pain and antibiotic use, particularly for groups more likely to require a general anaesthetic including people with additional needs, learning disabilities and people with dentophobia.
- Untreated dental issues during this time would have impacted on whole families in the form of sleepless nights, difficulty concentrating on schoolwork and knock-on stress for parents.
- Evidence of an increase in the consumption of sugary food across all age groups during the pandemic increases the risk of dental decay and widens existing oral health inequalities.²⁹³⁰

 ²⁹ Ruiz-Roso MB, Knott-Torcal C, Matilla-Escalante DC, Garcimartin A et al (2021) COVID-19 Lockdown and changes of the dietary pattern and physical activity habits in a cohort of patients with Type 2 Diabetes Mellitus doi: 10.3390/nu12082327
 ³⁰ Sylvetsky AC, Kaidbey JH, Ferguson K, Visek AJ, Sacheck J (2022) Impacts of the COVID-19 pandemic on children's sugary drink consumption: a qualitative study 10.3389/fnut.2022.86025

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2.7 Public views on access to dentistry

In 2022, a regional Healthwatch North East report discusses the experiences of the public accessing and using NHS dental services between late November 2021 until early January 2022. The feedback received from the public accessing NHS dental services was very difficult, whether registering with an NHS dentist, getting treatment or even getting treatment at a dental hospital. It also appeared that, even prior to Covid, NHS dentists were only funded to cover 50% of the population.

The findings within this report highlight that whilst there are good experiences of dental care in the North East of England, general feedback indicates that staffing shortages, and historic concerns within the dental system are adversely impacting public dental health. In addition, additional Health and Safety measures, whilst welcome and necessary, are leading to delays in treatment. It seems from the dental practice survey that dental teams are doing their best to see and treat as many patients as possible in the time allowed and with limited resources. Residents are becoming increasingly frustrated about being able to find an NHS dentist willing or able to take them on as new patients. Many people who have been successful in being taken on, or who were already established with their local dental practice, feel they are waiting too long for an appointment for minor dental treatment. This is having a knock-on effect with dental problems getting worse so that it becomes necessary for urgent treatment rather than being nipped in the bud.

There are some clear indicators of areas where improvements could be made including ensuring NHS Choices website contains up to date information, providing supportive advice to patients who are on waiting lists and often in discomfort, and improving NHS 111 advice and information. Improved communication from dental practices to keep patients up to date with what is happening, and to provide immediate advice and support for those on waiting lists where they are experiencing pain would be welcomed by the public. Perhaps the most important indicator is that it is clear that there are too few NHS dentists available to service the needs of the North East population.³¹

The NHS Dental Statistics for 2021-2022 Annual Report highlights that 16.4m adults were seen by an NHS dentist in the 24 months leading up to 30 June 2022. The number of children seen by a dentist was 5.6m.³²

 ³¹ HealthWatch Darlington (2022). Experiences of Dental Care Services. Available online at: <u>Regional Healthwatch Dentistry Consultation Report 2022</u>
 ³² NHS Dental Statistics (2022). NHS Dental Statistics for England 2021-22 Adults seen by an NHS Dentist. Available online at: <u>NHS Dental Statistics for England, 2021-</u>
 ²³ Annual Report

2.8 Commissioning dentistry: dental services in Sunderland

Commissioning responsibility transferred from NHS England to the North East and North Cumbria Integrated Care Board (ICB) with effect from 1 April 2023. Under NHS Dentistry national regulation there is no 'formal registration' of patients with dental practices as part of their NHS Dentistry offer, patients can therefore approach any dental practice offering NHS care for access. Dental contracts and provision are activity and demand led with the expectation practices deliver courses of treatment with recall intervals appropriate to clinical need and manage their available commissioned capacity to best meet both local demand and the clinical needs of patients presenting to their practice.

The contract regulations set out the contract currency which is measured in units of dental activity (UDAs) that are attributable to a 'banded' course of treatment prescribed under the regulations. NHS North East and North Cumbria Integrated Care Board (ICB) do not commission private dental services but the NHS dental regulations do not prohibit the provision of private dentistry by NHS Dental Practices.

The North East and North Cumbria Integrated Care Board (ICB) are responsible for the planning, commissioning and monitoring of dentistry services. The current contractual arrangements for dentistry have been in place since 2006, with care commissioned under one of three contracts:

- General Dental Services (GDS) contract
- Personal Dental Services Agreement (PDS and PDS+)

There are 19 NHS contracts (22 practice delivery sites) in Sunderland. All of these contracts are GDS contracts.

Sunderland has 139 dentists. There are 50 dentists per 100,000 population during 2021/22. This is higher than the North East and Cumbria region at 46 dentists per 100,000 and England (43 per 100,000). There has been a 5.4% decrease between 2020/21 and 2021/22 from 53 to 50 dentists per 100,000 population.³³

The ICB are also responsible for the commissioning of other primary care services such as urgent and emergency dentistry. This can be provided in both primary and secondary settings, and can be accessed via 111, local dental triage arrangements, or via Accident & Emergency Departments. All other secondary care dentistry is by referral only and provided in NHS

³³ NHS Dental Statistics (2022). NHS Dental Statistics for England 2021-22 Annex 2 (Sub-national). Available online at: <u>NHS Dental Statistics for</u> England, 2021-22, Annual Report

hospitals under a standard NHS contract. They also commission orthodontic services, community dental service for vulnerable patients with additional needs that cannot be met with high street practices. They also offer oral surgery and domiciliary care.

The table below highlights the NHS Commissioned Capacity in Sunderland.

Commissioned general dental access data as of 1 July 2023 Units of Dental Activity (UDAs)³⁴

NHS General Dental Service Contracts (Practices)	UDAs Commissioned
19 (22)	474,824

Community Dental Services are commissioned to provide a full range of dental services for patients of all ages who have difficulty accessing general dental services. This may include groups of people such as residents in care homes, those in refugee centres, homeless populations, people with complex physical and/or mental health needs, people with learning disabilities, and those with dentophobia. South Tyneside and Sunderland NHS Foundation Trust provide this service to residents of Sunderland, South Tyneside and Gateshead.

Other responsibilities:

Organisation (local organisation)	Key responsibilities
Local Dental Networks	Network of local dental professionals
	supported by NHSE to encourage service
	improvements and reduce health
	inequalities
Sunderland City Council	Scrutiny of NHS Dental Services via Health
	and Wellbeing Board
	Supporting on any future consultation on
	water fluoridation schemes, including the
	continuation of existing schemes)
Office for Health Improvement and	Overall responsibility of the Dental
Disparities	Epidemiology Programme.

³⁴ NHS North East and North Cumbria Update on NHS Dentistry. NHS Commissioned Capacity, ppt presentation.

NHS England	Dental public health teams provide
	specialist oral health advice and support to
	dental commissioning teams and local
	authorities.

2.9 Professional views on access to dentistry

The British Dental Association (BDA) issued a statement that it is not financially viable to continue delivering NHS care to patients under the GDS contract, noting that financial pressures among its members are prompting many to go private. A BDA poll of 2,200 dentists found that 45% are likely to go fully private, with almost 50% stating they had cut down NHS treatment since the pandemic and 75% stating that they will further reduce the number of NHS patients they treat in order to remain viable.³⁵

Nationally, the latest available data shows that number of dentists delivering services on behalf of the NHS fell from 23,733 to 21,544 between January 2020 and January 2021, with a decline of 951 dentists the previous year.³⁶ Surveys from the BDA and other groups representing dentists all note that a significant number of dentists feel that the quality of care that can be offered is compromised as a result of the GDS, with less time being able to be spent on oral health promotion and specialist care for patients with additional needs.³⁷

2.10 Access to dental services

Healthwatch County Durham published a report in 2021 on accessing an NHS Dentist in Durham where the report highlighted a problematic shortage of NHS dental places for new registrations and routine appointments not being available. There are long waiting times for new registrations and non-emergency treatments such as routine checkups. The report found

³⁵ British Dental Association (2022). Nearly half of dentists severing ties with NHS as government fails to move forward on reform. Available online at: <u>Press releases</u> <u>Nearly half of dentists severing ties with NHS as government fails to move forward on reform (bda.org)</u>. ³⁶ Source available online at: <u>Dental deserts' form in England as dentists guit NHS, experts warn | Dentists | The Guardian</u>

³⁷ British Dental Association (2023). Evidence to the review body on doctors' and dentists' remuneration for 2023-24. Available online at: <u>DDRB-23-24-round-BDA-</u> submission.pdf

that Do Not Attends (DNA's) are a problem in the county and appointments are being wasted. Dental practices are aware patients do not need to be registered to access treatment.³⁸

A Healthwatch survey conducted by North Tyneside on 235 residents in 2022 on 'Dentistry' found that for most people, the process of finding a dentist has been time consuming and fraught with difficulties. It has involved ringing round multiple dentists in the area, with many people unable to find any taking on NHS patients. As covid restrictions began to ease, people still struggled to get appointments for minor dental problems and check-ups, with long waits for treatment, extended by cancellations and rescheduling generated by the practice. Some people stated their dental health deteriorated during these times, even to the extent of losing teeth. The people who took part in the survey felt that the delays will cost them in the long run, both in terms of the state of their teeth and the extra cost of treatment.³⁹

Office for Health Improvement and Disparities (OHID) data show the percentage of people who successfully obtained an NHS dental appointment in the last two years in Sunderland was 83.6%⁴⁰. This is comparable with England average of 77%. Sunderland is performing the highest out of all the other north-east regions. However, these figures need to be interpreted with some caution. They are taken from the GP survey where approximately 2.5 million surveys are sent out each year and the response rate is typically around 30 - 35%.

2.11 Inequalities of access

There is significant regional variation in access to NHS dental care. The Local Government Association (LGA) highlights that people living with the highest levels of deprivation are more likely to miss out on NHS dental provision. Analysis of data published by the then Public Health England (PHE) in 2021, examining oral health inequalities, shows that post-pandemic geographic inequalities have been widening. PHE also stressed that the impacts of poor oral health disproportionally affect vulnerable and socially disadvantaged individuals and groups in society.⁴¹

Those affected by unequal access to oral health include:⁴²

 ³⁸ Healthwatch County Durham (2021). Access to an NHS Dentist in County Durham. Available online at: <u>FINAL Dentistry Report - Feb 2022</u>
 ³⁹ Healthwatch North Tyneside (2022). Dentistry. Available online at: <u>Briefing</u>

³⁹ Healthwatch North Tyneside (2022). Dentistry. Available online at: <u>Bri</u> ⁴⁰ OHID: Fingertips: <u>Public health profiles - OHID (phe.org.uk)</u>

⁴¹ PHE, Inequalities in oral health in England: summary (2021) Available online at: <u>https://www.gov.uk/government/publications/inequalities-in-oral-health-in-</u> england/inequalities-in-oral-health-in-england-summary

 ⁴² Healthwatch England (2022) Our position on NHS dentistry. Available online at: <u>Our position on NHS dentistry | Healthwatch</u>

- people who are entitled to free treatment on the NHS, including children and young people, pregnant women, and those in receipt of low-income benefits
- people from ethnic minority backgrounds
- people with additional or complex needs including those with SEND and autism
- people from vulnerable groups including refugees and asylum seekers
- people who are homeless

Government statistics from the 2021 Adult Oral Health Survey highlight people from the most deprived areas (57%) are less likely to contact their dentist when they need treatment compared with those from the least deprived (78%). Similarly, the statistics also show that more people in deprived neighbourhoods have pain (41%) or broken or decayed teeth (40%) compared with those living in the least deprived neighbourhoods (25% and 30% respectively).⁴³

A 2021 poll from Healthwatch England found that of those respondents from lower socioeconomic backgrounds, fewer ethnic minority people (26%) than white people (41%) said they were planning to go to a dentist for regular check-ups, post-pandemic. Healthwatch England also report that ethnic minority people from lower socio-economic backgrounds were also twice as likely to avoid dental treatment because of costs, compared to white people from lower socio-economic backgrounds.⁴⁴ A theme from the written evidence is the additional impact the increasing cost of living has had on people's ability to pay either NHS or private dental charges. In their January 2023 report into the impact of rising cost of living on people's access to appointments and prescriptions, Healthwatch England expresses concern that this may disincentivise people further from seeking treatment, particularly those on low incomes, and subsequently lead to poorer oral health outcomes.⁴⁵

More recently, in their March 2023 report, the Care Quality Commission (CQC) found that, when they looked at 50 care homes between April and June 2022, 25% of the providers reported that their service users could 'never' access NHS dental care, compared to 6% in 2019. Similarly, those providers reporting that they could 'always or mostly always' access NHS dental care dropped to 35% in 2022 from 67% in 2019.⁴⁶ These findings are of additional

⁴³ OHID (2022) The impact of COVID-19 on access to dental care: a report from the 2021 Adult Oral Health Survey. Available online at: https://www.gov.uk/government/statistics/the-impact-of-covid-19-on-access-to-dental-care

https://www.gov.uk/government/statistics/the-impact-of-covid-19-on-access-to-dental-care ⁴⁴ HealthWatch England (2023) Healthwatch England submission to the Health and Social Care Committee's Inquiry on NHS dentistry. Available online at: committees parliament uk/writees/idence/11/223/off/

Committees, partiament, unwrittenevicence in rzzczypu/
 ⁴⁵ HealthWatch England (2023) Health and the cost of living. Available online at: 20221207 Cost of Living waves 1 and 2 <u>0.pptx (live.com)</u>

⁴⁶ Care Quality Commission (2023) Smiling matters: oral health in care homes - progress report. Available online at: <u>Smiling matters: Oral health in care homes - progress</u> report - Care Quality Commission (cqc.org.uk)

concern, given the additional treatment needs of many older people and the complexity of providing such care. For example, in the elderly, poor oral health can lead to malnutrition.

Many patients are not aware of what they are entitled to under the current system. Healthwatch England and the Care Quality Commission (CQC) have called for policymakers to ensure that the public are better informed about NHS dentistry. For example, people are not necessarily aware that dental practices do not operate in the same way as GP surgeries, that they are not formally "registered", and that they do not need to live in a catchment area to go to a specific practice.47

2.12 Actions to address the difficulties in accessing NHS Dental services

The ICB have set out actions to address some of the difficulties which are listed below:⁴⁸

- New reforms to the dental contract the first in 16 years
- NHS dentists paid more for treating more complex cases, such as people who need • three fillings or more.
- Dental therapist can accept patients for NHS treatments, providing fillings, sealants, preventative care for adults and children, which will free up dentists' time for urgent and more complex care.
- Dental practices are now contractually required to update the NHS website and directory of services to give greater visibility on the availability of a dentist.
- Dental practices who have workforce available have opportunity with local • commissioner agreement to increase their activity by a further 10% to see as many patients as possible.
- Acknowledged further reforms required discussions taking place at national level to identify solutions to recruitment and retention pressures, and to understand and address the constraints of the current national NHS dental contract mechanisms.
- National Dental Plan

2.13 Local actions to address the difficulties in accessing NHS Dental services⁴⁹

Additional funding made available to all NHS dental practices who have the capacity to deliver additional clinical sessions to provide treatment to patients with urgent dental care needs as well as prioritisation of cared for children and unscheduled care patients

⁴⁷ House of Commons Health and Social Care Committee (2023) NHS dentistry report 2022-2023. Available online at: NHS dentistry (parliament.uk)

⁴⁸ 48 NHS North East and North Cumbria Sunderland Overview Scrutiny Committee (2023) Update on NHS Dentistry. Powerpoint Presentation.

with dental complaints and complex high care needs to help reduce oral health inequalities (Sunderland - 408 sessions in 2022-23 and 204 sessions April – June 2023).

- Increased local investment during 2022-23 into specialist orthodontic service to secure additional treatment capacity in order to help reduce waiting times for patients.
- Funding made available to improve access to clinical triage via NHS111, as well as additional treatment capacity in the dental out of hours treatment services.
- Funding of an advert in the British Dental Journal to try to attract overseas dentists and to support them through the process of getting on the National Dental Performers List which is required to enable them to delivery NHS dental care.
- Introduced a flexible commissioning arrangement that provides a training grant to support the employment of overseas dentists.
- Re-commissioning of activity, where possible, from NHS contracts that have been handed back with other local NHS dental providers.

3 Oral health policy and guidance

3.1 Introduction

The last national strategy that was designed to specifically address improvements in oral health was published by the Department of Health in 2005. Public Health England and the National Institute for Health and Care Excellence (NICE) have published toolkits and a number of evidence-based guidelines to support local authorities to improve the oral health of their populations. The responsibility of local authorities to conduct oral health surveys are carried out as part of the Public Health England (PHE) dental public health intelligence programme (formerly known as the national dental epidemiology programme). The various NICE guidance documents on oral health covers both good practice and the clinical effectiveness and cost effectiveness of interventions for improving dental health, especially for local communities and residents in a close setting at greater risk of poor oral health, such as care homes and prisons.

Publication	Year	Summary
Choosing Better Oral Health: an oral health plan for England (Department of Health) ⁵⁰	2005	Focus on actions to address oral health inequalities, and social determinants of oral health, with 6 key areas for action: increasing the use of fluoride, improving diet and reducing sugar intake, encouraging preventive dental care, reducing smoking, increasing the early detection of mouth cancer, and reducing dental injuries.
Delivering Better Oral Health – an evidence-based toolkit for prevention (Public Health England) ⁵¹	2017 (updated in 2021)	Evidence summary for interventions includes minimum concentrations of fluoride in toothpaste to prevent dental decay, advice on daily toothbrushing, and the important role of fluoride varnish as part of clinical activity to prevent tooth decay. 2021 update includes new guidance for brief interventions for dental professionals that bring positive oral health behaviour change, with a focus on good oral hygiene, optimising exposure to fluoride, reducing sugar consumption and encouraging healthier eating, stopping smoking and reducing the harm related to alcohol consumption.
Local authorities improving oral health: Commissioning better oral health for children and young people – an evidence informed toolkit for local authorities (PHE) ⁵²	2013	Includes the guiding principles of commissioning oral health services; evidence of effective oral health promotion interventions; recommendations regarding taking a life-course and integrated approach, partnership working, and putting children and young people at the centre of commissioning oral health services.
Commissioning better oral health for vulnerable older	2018	Covers a range of commissioning options that are supported by evidence including the daily

⁵⁰ Department of Health (2005). Choosing Better Oral Health: an oral health plan for England (<u>http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH412321</u>) ⁵¹ Public Health England Delivering Better Oral Health : an evidence based toolkit for prevention (<u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/605 266/Delivering_better_oral_health.pdf</u>) ⁵² Least authorities improving oral health: commissioning better oral health for children and young people: summary version (publishing.service.gov.uk)

people - an evidenced- informed toolkit for local		use of higher fluoride toothpaste, the quarterly application of fluoride varnish, support with
authorities (PHE) ⁵³		maintaining oral hygiene, staff training, protocols for oral care in care settings, routine denture identification marking, promoting
		dietary change in community settings, outreach
		and comprehensive geriatric assessment in
		primary care for older people living
		independently.
Improving oral health: a	2020	A toolkit that outlines the role of fluoridation of
community water		water in local oral health improvement
fluoridation toolkit for local		strategies – the document covers changes at a
authorities54		population level that do not focus on individual
		behaviour change.
NICE guidelines PH55: Oral	2014	Describes ways to improve oral health by
health improvement for local		improving diet and oral hygiene, and access to
authorities and their		dental services. It recommends incorporating
partners ⁵⁵		oral health promotion in existing services for all
		children, young people and adults at high risk
		of poor oral health.
NICE guidelines NG48: Oral	2016	Supports oral health for adults in care homes
Health for adults in Care		by recommending policies on oral health that
homes NG48 ⁵⁶		are developed and followed. It advises
		residents to have their mouths assessed on
		their admission and that care plans are put in
		place which include daily mouth care. Staff
		should have the knowledge and skills to
		support people's oral health and undertake or
		support daily mouth care.
NICE Quality standard	2016	Covers activities undertaken by local authorities
QS139L Oral health		and general dental practices to improve oral
		health. It focuses on people at high risk of poor

 ⁵³ Commissioning better oral health for vulnerable older people - GOV.UK (www.gov.uk)
 ⁵⁴ Improving oral health: a community water fluoridation toolkit for local authorities (publishing.service.gov.uk)
 ⁵⁵ Overview | Oral health: local authorities and partners | Guidance | NICE
 ⁵⁶ Overview | Oral health for adults in care homes | Guidance | NICE

promotion in the	oral health or who find it difficult to use dental
community ⁵⁷	services. It describes high-quality care in
	priority areas for improvement.

Compliance with guidelines around maintaining or improving oral health in care homes is often assessed by the Care Quality Commission. A national report⁵⁸ showed that the awareness of the guideline recommendations was low amongst care home staff, and not all care home residents were supported to maintain good oral health. The report further showed that only around half of the care homes had provided training to their staff on supporting residents with their oral care. An oral health care home audit is currently being undertaken in Sunderland to review compliance with guidance and good practice, and there is a commitment to ensuring that all care homes within the local authority include oral hygiene and mouth care in the care plans of all residents. The care home audit should be available to review in September 2023.

3.2 Policies relating to the wider determinants of oral health

3.2.1 Healthy Weight

Weight is often related to other health issues. One of those health issues is gum disease, also known as periodontal disease. Gum disease includes gum infections, from inflamed gums to tissue and bone damage. These serious infections can lead to bone loss and other sicknesses if not treated.59

Weight and gum disease are linked in several ways. Gum disease can lead to tooth loss. The gums can separate from the tooth, leading to loose teeth or teeth that come out of the mouth.⁶⁰

Having a weight that is too low is not healthy for teeth. A person with a very low weight can be at risk for osteoporosis, a condition where a person's bones start to break easily. Research suggests that the bone condition may play a role in a person getting gum disease, decrease jawbone density, and result in tooth loss.6162

There are increasing levels of childhood obesity in Sunderland and prevalence of childhood obesity (reception and year 6) is greatest in areas with highest levels of deprivation. The

⁵⁷ Overview | Oral health promotion in the community | Quality standards | NICE 58 Smiling matters: oral health in care homes (2016) Smiling matters: oral h e in care homes - Care Quality Commission (cqc.org.uk)

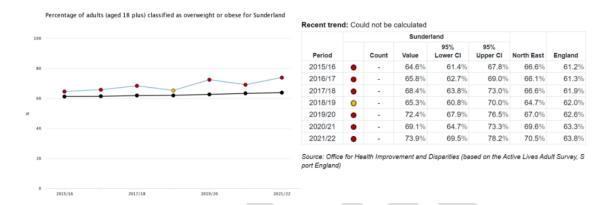
⁵⁹ National Institute of Dental and Craniofacial Research (2016). Gum Disease. Available online at: Gum disease

⁶⁰ Centers for Disease Control and Prevention (2013). Periodontal disease. Available online at: <u>Periodontal disease</u>
⁶¹ Anil S, Preethanath RS, AlMoharib HS, Kamath KP, Anand PS (2013). Impact of osteoporosis and its treatment on oral health. Available online at: <u>Impact of</u>

osteoporosis and its treatment on oral health. ⁶² National Institute on Aging (2022). Osteoporosis. Available online at: <u>Osteoporosis</u>.

prevalence of overweight (including obesity) in Sunderland is persistently higher than England with a high maternal BMI being a risk factor for both maternal and infant health.⁶³

The government launched its '*Healthy weight, healthy lives*' strategy in 2008⁶⁴ to tackle rising obesity. The strategy opened with the statement 'Britain is in the grip of an epidemic', highlighting that two-thirds of all adults and children were either overweight or obese. The



government suggested that, if action was not taken by 2050, the proportion of people becoming overweight or obese would rise to 9 out of 10 adults and two-thirds of children. The societal cost of obesity by 2050 was put at a figure of £50bn per year.

The government strategy initially focused its efforts on reducing the number of obese and overweight children to the same levels as in 2000 by 2020.

The strategy set out five domains in which the government would take action:

- **Promoting the health of children** investing £75m in a marketing campaign to support and encourage parents to make positive changes in the diet and physical activity levels of their children.
- Promoting healthy food work with industry and other stakeholders to produce a Healthy Food Code of Good Practice, to encourage the food and drink industry to reduce the consumption of salt, sugar and saturated fat.
- **Building physical activity into people's lives** the government committed to review its overall approach to physical support, including the role of Sport England.
- **Personalising advice and support** through the provision of clear and comprehensive information for the public to access through NHS Choices.

⁶³ Sunderland City Council (2023) Healthy Weight JSNA. Available online at: <u>Healthy Weight JSNA (sunderland.gov.uk)</u>

⁶⁴ HM Government (2008). Healthy weight, healthy lives: a cross-government strategy for England. Available online at: <u>Healthy weight, healthy lives: a cross-Government</u> strategy for England (legislation.gov.uk)

Creating incentives for better health - including working with businesses to find ways of promoting healthy lives and healthy eating.

Since then, a policy paper published in 2020⁶⁵ on '*Tackling obesity: empowering adults and* children to live healthier lives' sets out how to empower people with the right information to follow the advice provided in order to live healthier.

The strategy will make sure that the labelling of products in store and in cafes and coffee shops helps people to be well informed on the food they are buying. Key to this is ensuring front of pack nutritional labelling is presented in a way that people find helpful and easy to understand. What and where we eat is constantly evolving. Buying food on the go or getting takeaways are increasingly important. On average the portions of food or drink that people eat out or eat as takeaway meals contain twice as many calories as their equivalent bought in a shop. Research suggests that food we eat outside the home makes up 20 to 25% of adult calorie intake. All foods high in processed fat and sugar are detrimental to the health of our teeth.

3.2.2 Smoking

Smoking is the leading cause of preventable illness and premature death in England, with 2 out of 3 long term smokers dying prematurely, and many more living with smoking-related illnesses. However, many people don't realise the damage that smoking does to their mouth, gums and teeth. Smoking can lead to tooth staining, gum disease, tooth loss, and in more severe cases mouth cancer.⁶⁶

Tooth staining - One of the effects of smoking is staining on the teeth due to the nicotine and tar in the tobacco. It can make your teeth yellow in a very short time, and heavy smokers often complain that their teeth are almost brown after years of smoking.

Gum disease - Smoking can also lead to gum disease. People who smoke are more likely to produce bacterial plaque, which leads to gum disease. The gums are affected because smoking causes a lack of oxygen in the bloodstream, so the infected gums don't heal. Smoking causes people to have more dental plaque and causes gum disease to get worse more quickly than in non-smokers. Gum disease is still the most common cause of tooth loss in adults. Unfortunately, gum disease does not usually cause pain as it gets worse, so you do not notice the damage it is doing. However, the bacteria are sometimes more active and this makes your

es Department of Health and Social Care (2020). Tackling obesity: empowering adults and children to live healthier lives. Available online at: Tackling obesity: empowering adults and children to live healthier lives - GOV.UK (www.gov.uk) ⁶⁶ Oral Health Foundation. Smoking and oral health. Available online at: <u>Smoking and oral health</u>

gums sore. This can lead to gum abscesses, and pus may ooze from around the teeth. Over a number of years, the bone supporting the teeth can be lost. If the disease is left untreated for a long time, treatment can be more difficult.⁶⁷

Mouth cancer - Most people know that smoking can cause lung and throat cancer, but many people still don't know that it is one of the main causes of mouth cancer too. Every year thousands of people die from mouth cancer brought on by smoking. Cancer can appear in the mouth, where the disease can affect the lips, tongue, cheeks and throat. Nearly 1 in 5 (17%) of oral cavity cancers in the UK are caused by smoking.68

Anyone can be affected by mouth cancer, whether they have their own teeth or not. Mouth cancers are more common in people over 40, particularly men. However, research has shown that mouth cancer is becoming more common in younger patients and in women. There are, on average, almost 7,800 new cases of mouth cancer diagnosed in the UK each year. The number of new cases of mouth cancer is on the increase, and in the UK has increased by over half in the last decade alone. More than 2,300 people in the UK die from mouth cancer every year. Sunderland has the 7th highest rate of deaths from oral cancer in England.⁶⁹ Many of these deaths could be prevented if the cancer was diagnosed early enough. People with mouth cancer are more likely to die than those having cervical cancer or melanoma skin cancer.

Most cases of mouth cancer are linked to tobacco and alcohol. Cigarette, cigar and pipe smoking are the main forms of tobacco use in many parts of the world. Alcohol increases the risk of mouth cancer, and if tobacco and alcohol are taken together the risk is even greater. Mouth cancer can often be spotted in its early stages by the dental team during a thorough mouth examination. If mouth cancer is diagnosed early, then the chances of a cure are good. Many people with mouth cancer go to their dentist or doctor too late.⁷⁰

Sunderland has made considerable progress over the last ten years with smoking rates down from 24.3% in 2011 to 15.2% in 2021, however the rate is still higher than the regional average of 14.8% and the national average of 13%. There are also significant geographical differences across the city, with smoking rates higher in areas with the highest levels of deprivation. In addition, in a recent Health Equity Audit, it was estimated (using the ONS Population Survey 2021) that smoking rates are higher amongst males (17%) than females (13.5%) and that smoking rates are higher amongst those within the mid-age categories (35 to 54-year-olds). Previous data had indicated that rates were higher in younger age ranges, and the Sunderland

⁶⁷ Oral Health Foundation. Gum disease. Available online at: <u>Gum disease</u> ⁶⁸ ASH Smoking and Cancer Fact Sheet (2023) Available online at: - <u>Smoking and Cancer - ASH</u> ⁶ Local Tobacco Control Plan. Available online at: <u>Local Tobacco Control Profiles - OHID (phe.o</u> ⁷⁰ Oral Health Foundation. Mouth cancer. Available online at: <u>Mouth cancer</u>

Adult Lifestyle Survey (ALS) carried out in 2017, identified that smoking prevalence was higher in adult males and in the younger age groups. Some populations have been identified as having higher smoking prevalence including those in routine and manual occupations with Sunderland rates high at 28.9%, compared to a regional average of 26.1% and England average of 24.5%. The ALS also highlighted adults with a learning disability (26.7%) reported significantly higher smoking prevalence than the Sunderland average. Those with mental health conditions have significantly higher smoking rates than the general population and smoking in pregnancy is a high-risk cohort.⁷¹

The government's policy Smoke-free generation; tobacco control plan published in 2017⁷² set out the ambition to create a smokefree generation, with a smoking prevalence rate of 5% or below. In 2022, an independent review was commissioned and led by Dr Javed Khan OBE, which made 15 key recommendations to ensure this ambition was achieved.⁷³ In 2023, the Government announced eight steps they would be taking to achieve their ambition, including a call for evidence on youth vaping, a national swap to stop programme, a national smoking in pregnancy incentive scheme, support for those with mental health conditions and a focus on smoking in the Major Conditions Strategy.

Locally, reducing tobacco prevalence is a key priority for the Sunderland Health and Wellbeing Board, with an agreed HWB aspiration to work towards reducing adult smoked tobacco in Sunderland to below 5% by 2030 and the Sunderland Smokefree Partnership, a multi-agency group, lead on achieving this strategic vision.

3.2.3 Drugs and Alcohol

Drugs – Many drugs can cause a craving for sugar, such as sweets and fizzy drinks, which can cause tooth decay. Drugs such as Methamphetamine and Heroin can also cause you to have a dry mouth which causes reduced saliva flow in the mouth which can lead to tooth decay and gum disease. Some drugs, such as Ecstasy and Cocaine can lead to jaw-clenching and tooth grinding. This can result in cracked or broken teeth, as well as headaches and jaw pain. Those with drug dependency issues may also be less likely to prioritise teeth brushing. This could lead to gum disease, dental decay and tooth loss.

⁷¹ Sunderland City Council (2023). Tobacco Joint Strategic Needs Assessment. Available online at: <u>Microsoft Word - Update JSNA Tobacco July 2023</u>

⁽sunderland.gov.uk) ⁷² Department of Health (2017). Towards a smokefree generation: tobacco control plan for England. Available online at: <u>A Tobacco Control Plan for England</u> ⁷³ Office for Health Improvement and Disparities (2022). The Khan review: making smoking obsolete. Available online at: <u>The Khan review: making smoking obsolete -</u> <u>GOV.UK (www.gov.uk</u>)

In 2020 Dame Carol Black was commissioned by the Home Office and the Department of Health and Social Care to undertake a 2-part independent review of drugs to inform the government's thinking on what more can be done to tackle drug related harms.⁷⁴

Following these recommendations, the government published its new 10-year drug strategy 'From Harm to Hope' which sets out how the government aims to reduce the harm that drugs cause across our communities.

There are 3 key strands to this strategy⁷⁵:

- Breaking drug supply chains
- Delivering world class treatment and recovery
- Achieve a generational shift in demand for drugs

The strategy estimates that over 300,000 people are using heroin and crack cocaine in England. This is the biggest section of the illegal drugs market with an estimated value of £5.1 billion a year. Use of these drugs is thought to be linked to around half of all theft, burglary and robbery with, on average, people with dependency issues using drugs on 251 days of the year at a cost of £12,538.

Estimates of prevalence of opiate and crack cocaine use in 2016/17⁷⁶ suggest that Sunderland has a rate of:

- 9.2 per 1,000 population aged 15-64 opiate and/or crack cocaine users (around 1652 people) compared to an England rate of 8.85 per 1,000.
- 8.32 per 1,000 population aged 15-64 opiate users (around 1493 people) compared to an England rate of 7.37 per 1,000.
- 3.97 per 1,000 population aged 15-64 crack users (around 712 people) compared to an England rate of 5.10 per 1,000.

Alcohol - Alcoholic drinks such as white wine, beer and cider can be very acidic. This causes erosion of the enamel on the teeth, possibly leading to pain and sensitivity. When you eat or drink anything acidic, your teeth come under an 'acid attack' for up to one hour. During this time, your enamel is weakened, and your saliva is working to return the mouth to a neutral pH level.

⁷⁴ Department of Health and Social Care (2021). Independent review policy paper. Available online at: <u>Independent review of drugs by Dame Carol Black: government response - GOV.UK (www.gov.uk)</u>
⁷⁵ HM government (2021). From harm to hope: drug strategy. Available online at: <u>From harm to hope: a 10-year drugs plan to cut crime and save lives</u>

⁽publishing.service.gov.uk)

⁴⁶Liverpool John Moores University and Glasgow Prevalence Estimation (2017). Estimates of the prevalence of opiate use and/or crack cocaine use, 2014/15: sweep 11 report. Available online at: <u>2017_09_estimates_of_the_prevalence_of_opiate_use_andor_crack_cocaine_use_201415_sweep_11_pdf (limu.ac.uk)</u>

Many mixers and alcopops are high in sugar. When you eat or drink anything that contains sugar, it reacts with the plaque in your mouth and produces plaque acids. It is these acids that attack the teeth and cause dental decay.77

Many of Sunderland's alcohol health outcomes are significantly worse than the North East and England averages, this places a significant burden on health services in Sunderland.

There was a rise in admissions for alcohol specific conditions between 2014/15 (752 per 100,000) and 2019/20 (1,171 per 100,000). Admissions in 2020/21, were at a similar level to the previous year at 1,160 per 100,000. The most recent data for 2021/22 shows a rate of 1,218 per 100,000*, with Sunderland being the second highest in the North East (991) and significantly higher than the England average of (626).

Admission episodes for alcoholic liver disease (Broad) in Sunderland in 2021/22 was 310.1 per 100,000*. This is above the North East rate (238.5) and significantly higher than the England rate (154.4). Notably, Sunderland had the highest admission episodes for alcoholic liver disease in females in England at 239.3 per 100,000, with the England value at 99.6.

Alcohol-related mortality in Sunderland for 2021 was 64.4 per 100,000*. Sunderland had the highest alcohol-related mortality rates in the North-East (50.4) and was significantly above the England average (38.5). Sunderland had the second highest alcohol-related mortality rates for females in England at 36.6 per 100,000, with the England value at 21.3.

There has however been a slight decrease in hospital specific admissions for young people under 18 years overall. However, despite this decrease, during the three-year pooled period 2016/18 (from the 152 local authorities in England), Sunderland had the third highest rate per 100,000 in England, and the second highest rate in the North East.⁷⁸

Young people continue to drink to harmful levels; therefore, there is a need to continue to educate young people to the harms of alcohol, and ensure services are appropriate to the needs of young people. Data for 2016-18 also shows that individually both females and males in Sunderland had the 3rd highest rate per 100,000 (from the 152 local authorities). Research data also shows worrying drinking patterns particularly in 15-year-old girls. The impact of harmful drinking and alcohol dependence is greater for those in the lowest income bracket and experiencing the highest levels of deprivation, thus the needs of these people are not being met. People living in more deprived areas of Sunderland have higher standardised rates of alcohol related hospital admissions.

 ⁷⁷ Oral Health Foundation. Drugs, alcohol and your oral health. Available online at: <u>Drugs, alcohol and your oral health</u>
 ⁷⁸ Sunderland Alcohol Strategy. Calling Time: It's time to rethink drink. Available online at: <u>FINAL ALCOHOL STRATEGY2.pdf (sunderland.gov.uk)</u>

In 2005 when the Licensing Act came into force Sunderland had 621 Premises Licenses, as of 2023 Sunderland had 948 Premises including clubs, licensed to sell alcohol, of which:⁷⁹



The UK Government's Alcohol Strategy published in 2012⁸⁰ sets out proposals to cut 'binge drinking', alcohol-fuelled violence, and number of people drinking to damaging levels. it highlights the need to adopt a new approach in relation to alcohol which tackles excessive alcohol misuse including:

- Availability of cheap alcohol
- Marketing, advertising and sale of alcohol •
- Lack of challenge to people that drink and cause harm to others •
- Improved measures to tackle alcohol related offending •
- Better regulation of licensed premises •
- Engagement of the drinks industry in encouraging healthier drinking behaviours •
- Supporting people to make informed choices about alcohol and ensure that they • understand the risks of excessive alcohol use.

In Sunderland we recognise that alcohol is a complex issue within our society and no single approach will be successful in isolation. Alcohol remains one of the key drivers of health inequalities and of the key causes of premature death and therefore it requires commitment and contributions from a range of partners across the city. Our recently published partnership alcohol strategy 'Calling Time: It's time to rethink drink' was launched to coincide with Alcohol awareness week in July and has three key objectives:

- Objective 1 Prevention and early intervention
- Objective 2 Providing specialist interventions to promote a quality treatment and recovery system.
- Objective 3 Protecting children, young people and families from alcohol related harm.

The strategy is supported by an action plan that coordinates the ongoing work to reduce alcohol harms. This includes the expansion of the Alcohol Care Team within the trust, the

 ⁷⁹ Sunderland City Council (2019). Alcohol JSNA. Available online at: <u>Alcohol JSNA</u>
 ⁸⁰ HM Government (2012). Alcohol strategy. Available online at: <u>Alcohol strategy - GOV.UK (www.gov.uk)</u>

review of the Statement of Licensing Policy, the funding of dedicated posts within the treatment and recovery system and the promotion of alcohol harm awareness raising initiatives and campaigns.

3.2.4 Ageing Well

Embedding oral health as an integral part of general health and wellbeing to ensure that older people can live happy, healthy, and connected lives for as long as possible.

3.3 Legislative measures to improve oral health

3.3.1 Sugar Tax Levy

Dental caries is one of the largest health concerns worldwide, and a key causative factor is excess sugar intake. Sugar-sweetened beverages (SSBs) are one of the largest sources of added sugars, which significantly contribute to adverse oral and general health. To reduce SSB consumption and its consequent impact on health, including dental caries, several interventional measures have been implemented; sugar taxation is one such measure.

The optimal pH of oral cavity is 6.7 to 7.2, the threshold for dental caries development is pH 5.5 and dentine erosion occurs at pH 6.0. However, after sugar consumption, the pH in plaque can fall rapidly to <5.0 through production of acids (predominantly lactic acid) by bacterial metabolism. The percentage of tooth material loss in enamel and dentine erosion increases with exposure time and frequency of consumption.⁸¹

The soft drinks industry levy (SDIL), or 'sugar tax', is a levy applied to UK-produced or imported soft drinks containing added sugar. It was announced in George Osborne's March 2016 budget and came into force from April 2018⁸².

The levy is paid to HMRC by the packager for drinks produced in the UK, or importer for drinks produced overseas, at the following levels:

- No levy on soft drinks containing less than 5g of sugar per 100ml
- 18p per litre on soft drinks containing between 5g and 8g of sugar per 100ml

⁸¹ Chowdhury et al; (2019) Highly acidic pH values of carbonated sweet drinks, fruit juices, mineral waters and unregulated fluoride levels in oral care products and drinks in India: A public health concern. Available online at: <u>Highly acidic pH values of carbonated sweet drinks, fruit juices, mineral waters and unregulat</u> care products and drinks in India: a public health concern - PubMed (nih.gov) care products and drinks in India: a public health concern - PubMed (nih.gov) ⁸² Institute for Government (2022) Sugar tax. Available online at: <u>Sugar tax | Institute for Government</u>

• 24p per litre on soft drinks containing more than 8g of sugar per 100ml.

The SDIL was introduced as an anti-obesity policy. It was central to the 2016 Childhood Obesity Strategy⁸³, and was informed by proposals from public health experts and high-profile campaigners. Alongside its importance for public health, supporters emphasised its potential economic benefits through reducing obesity-related NHS expenditure and wider associated barriers to labour market participation.

SDIL is widely regarded as a success. The total sugar sold in soft drinks by retailers and manufacturers decreased by 35.4% between 2015 and 2019, from 135,500 tonnes to 87,600 tonnes. Over the same period, the sales-weighted average sugar content of soft drinks declined by 43.7%, from 5.7g/100ml to 2.2g/100m.⁸⁴

3.3.2 Planning system to control takeaways in Sunderland

The health of people in Sunderland is varied compared with the England average. Sunderland is one of the 20% most deprived local authorities in England and about 26% (12,600) of children live in low-income families. Life expectancy for both men and women is lower than the England average. Obesity is one of our most significant and complex challenges, undermining individual and family health and wellbeing, impacting on business and education, and contributing to significant costs across health, social care and a wide range of services⁸⁵.

Annual spend on the treatment of obesity and diabetes is greater than the amount spent on the police, the fire service and the judicial system combined. The UK-wide NHS costs attributable to overweight and obesity are projected to reach £9.7 billion by 2050, with wider costs to society estimated to reach £49.9 billion per year.⁸⁶

There is a strong relationship between deprivation and childhood obesity. Analysis of data from the National Child Measurement Programme (NCMP) shows that obesity prevalence among children in both Reception and Year 6 increases with increased socioeconomic deprivation (measured, for example, by the 2010 Index of Multiple Deprivation (IMD) score). Obesity prevalence in the most deprived 10% of children is approximately twice that of the least deprived 10%. The increasing consumption of out-of-home meals that are often cheap

at: www.gov.uk/government/publications/2010-to-2015-government-policy-obesity-and-healthy-eating
⁸⁵ Public Health England (2017) Sunderland Health Profile. Available online at: www.gov.uk/government/publications/2010-to-2015-government-policy-obesity-and-healthy-eating

⁸³ HM Government (2016) Child Obesity: A Plan for Action. Available online at: www.gov.uk/government/publications/childhood-obesity-a-plan-for-action ⁸⁴ Department of Health and Social Care (2015) '2010 to 2015 government policy obesity and health eating.' Available online at: www.gov.uk/government/publications/2010/bit/2015.covernment.policy.obesity.and health eating.' Available online at: www.gov.uk/government/publications/2010/bit/2015.covernment.policy.obesity.and health eating.'

⁸⁶ Public Health England (2017) Health matters: obesity and the food environment. Available online at: <u>Health matters: obesity and the food environment - GOV.UK</u> (www.gov.uk)

and readily available at all times of the day has been identified as an important factor contributing to rising levels of obesity.⁸⁷

Public Health England estimated in 2014 that there were over 50,000 fast food and takeaway outlets, fast food delivery services, and fish and chip shops in England. More than one quarter (27.1%) of adults and one fifth of children eat food from out of-home food outlets at least once a week. These meals tend to be associated with higher energy intake, higher levels of fat, saturated fats, sugar, and salt, and lower levels of micronutrients. A recent study shows that the exposure to takeaway food outlets was positively associated with consumption of takeaway food⁸⁸.

National and regional planning policy recognise the role of special planning in promoting health and reducing the risk of poor health, including how the environment can impact on overweight and obesity. One of the ways in which planning can have the greatest impact on health, and in particular obesity levels, is to restrict hot food takeaways. A diet which is high in saturated fat and salt and which includes trans-fat contributes to the risk of developing cardiovascular disease (CVD), cancers and obesity which in turn increases the risk for type 2 diabetes and oral health problems⁸⁹.

There are two specific Sunderland Local Plan policies proposed within the draft Core Strategy and Development Plan which cover hot food takeaways. Policy HWS1 indicates that the Council will seek to improve health and wellbeing within the city by managing the location and number of, and access to, unhealthy eating outlets. Policy EP12 seeks to restrict the number and concentration of hot food takeaways within designated centres in order to protect their vitality and viability. Following the recommendations of the Health Impact Assessment for the Plan, representations received during the consultation on the draft Core Strategy and Development Plan, and discussions with Public Health partners, it has been deemed appropriate to include further guidance within the Plan on how the Council will seek to restrict access to hot food takeaways in order to promote positive health outcomes.⁹⁰

3.4 National outcome measures

There are three national outcome measures specifically about oral health.

 ⁸⁷ Public Health England (2017) Health Matters: obesity and the food environment guidance. Available online at: <u>Health matters: obesity and the food environment - GOV.UK (www.gov.uk)</u>
 ⁸⁸ The British Medical Journal (2014) Associations between exposure to takeaway food outlets, takeaway food consumption, and body weight in Cambridgeshire, UK:

²⁴ The British Medical Journal (2014) Associations between exposure to takeaway food outlets, takeaway food consumption, and body weight in Cambridgeshire, UK: population based, cross section. Available online at: <u>Associations between exposure to takeaway food outlets</u>, takeaway food consumption, and body weight in <u>Cambridgeshire</u>, UK: population based, cross sectional study | The BMJ

⁸⁹ Department of Health and Social Care (2011) Healthy Lives, Healthy People: A Call to Action on Obesity in England. Available online at: <u>Healthy Lives, Healthy People:</u> <u>A Call to Action on Obesity in England - GOV.UK (www.gov.uk)</u> ⁹⁰ Sunderland City Council (2018) Public Health Evidence in relation to the use of the planning system to control hot food takeaways (April 2018). Available online at:

²⁰ Sunderland City Council (2018) Public Health Evidence in relation to the use of the planning system to control hot food takeaways (April 2018). Available online oce21157 14 Public Health Evidence in relation to the use of the planning system to control hot food takeaways Report Cover A4.qxp (sunderland.qov.uk)

The Public Health Outcomes Framework⁹¹ has a single oral health outcome measure that measures the level of tooth decay in children aged 5yrs.

The NHS Outcomes Framework⁹² has two outcome indicators:

3.7.i Decayed teeth – this indicator measures improvement of quality of life for people with dental disease, comparing improvement in oral health over long periods of time for people who regularly visit the dentist.

3.7.ii Tooth extractions due to decay in children admitted as inpatients to hospital, aged 10yrs and under - this indicator measures tooth extractions in children, which in many cases can be prevented with good, early, preventative dentistry.

Sunderland's performance against these outcome measures is discussed in Section 4.

3.5 The evidence base for oral health interventions

3.5.1 Oral health promotion service design

Much oral health improvement work, including preventative services aimed at preventing decay and periodontal disease, takes place in dentistry services. For community based oral health promotion, NICE guidance suggests that interventions which aim to improve oral health will also have a positive impact on general health, with many chronic conditions having shared risk factors. The common risk factor approach provides a basis for the integration of oral and general health promotion activities and is likely to be a more cost-effective method of improving the overall oral health of the population.

Regular feedback from stakeholders and service users, including previous work undertaken in Sunderland⁹³, also supports a preference for being offered a holistic approach to improving health and wellbeing as opposed to a reactive service for a particular problem.

3.6 Oral Health promotion interventions for children under 5

The three main interventions to prevent tooth decay amongst children are reduced consumption of foods and drinks containing sugar, twice a day brushing of teeth with a fluoride toothpaste and seeing a dentist at different stages of a child's tooth development. The

Public Health Outcomes Framework - GOV.UK (www.gov.uk) <u>NHS Outcomes Framework (NHS OF) - NHS Digital</u> The Health of Sunderland: Key Themes from the DPH Annual Report 2015 (<u>PowerPoint Presentation (sunderland.gov.uk</u>))

following evidence-based oral health interventions also show a good return on investment to reduce tooth decay amongst children aged 5:94

- Targeted supervised toothbrushing programmes (£1=£3.06 return on investment after 5 years)
- Targeted fluoride varnish programmes can bring $(\pounds 1 = \pounds 2.29 \text{ return on investment after})$ 5 years)
- Targeted provision of toothbrushes and toothpaste by post and by health visitors can • bring (£4.89 return on investment for every £1 invested after 5 years)

3.6.1 Supervised Toothbrushing Programme

Good oral hygiene, including toothbrushing with a fluoride toothpaste is the main way people can improve and maintain good oral health. Reviews of multiple research studies, show that the daily application of fluoride toothpaste to teeth reduces the incidence and severity of tooth decay in children.⁹⁵ However, children in more deprived areas are less likely to brush their teeth at least twice daily.96

Targeted childhood settings such as nursery and school settings can provide a suitable supportive environment for children to take part in a supervised toothbrushing programme, teaching them to brush their teeth from a young age and encourage support for home brushing⁹⁷. The evidence tells us that to maximise caries prevention children aged 3 to 6 years should brush their teeth at least twice, supervised by a parent or carer. This should be last thing at night (or before bedtime) and on at least one other occasion. The toothpaste should contain at least 1,000 ppm fluoride, only using a pea-sized amount and spitting out after brushing rather than rinsing, to avoid diluting the fluoride concentration. With children under 3, a toothpaste containing at least 1,000 ppm fluoride should be used but only a smear.98

At a population, school or early years' level, the evidence tells us that brushing each day at school over a two-year period is effective for preventing tooth decay and can establish lifelong behaviour to promote oral health. It is also important that school based toothbrushing activity should promote and support toothbrushing in the home as well as the school or early vears setting.99

- shing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/560 973/ROI_oral_health_interventions.pdf)
- (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/ille/ood_stainer_ord_trainer_ord_t evidence-based-toolkit-for-prevention
 ⁹⁶ Children's Dental Health Survey (2013): https://files.digital.nhs.uk/publicationimport/publ7xxx/pub17137/cdhs2013-report2-dental-disease.pdf
 ⁹⁷ M. Glick et al (2016), A new definition for oral health developed by the FDI World Dental Federation opens the door to a universal definition of oral health. BDJ: Vol 221

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1060471/water-fluoridation-health-monitoring-report-2022.pdf

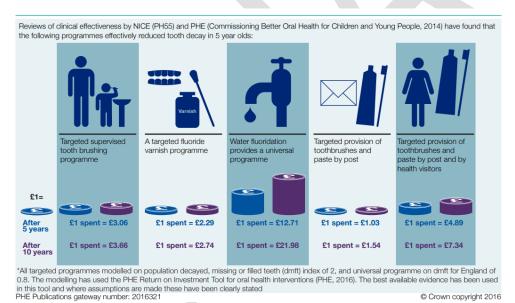
⁹⁴ Public Health England (2016) Improving the oral health of children: cost effective commissioning

No 12 ⁹⁸ OHID: Water fluoridation Health monitoring report for England (2022):

⁹⁹ Children's Dental Health Survey (2013): https://files.digital.nhs.uk/publicationimport/pub17xxx/pub17137/cdhs2013-report2-dental-disease.pdf

NICE guidance for oral health in local authorities (LAs) recommends that LAs consider supervised tooth brushing schemes for nurseries in areas where children are at high risk of poor oral health, this is based on its evidence review. Evidence from targeted supervised toothbrushing programmes, delivered by trained members of staff in a specific setting (such as nurseries), also shows a subsequent reduction in dental treatment costs for children¹⁰⁰.

In 2016 PHE commissioned a review of effectiveness and economic evidence for oral health interventions for 0–5-year-olds. A modelling tool was also developed which can be used by commissioners of oral health improvement programmes to determine the cost effectiveness and return on investment (ROI) of oral health initiatives. Figure below shows the modelling tool and the return on investment for 5 interventions which are considered to be clinically effective. It can be seen that water fluoridation offers the best return on investment followed by targeted provision of tooth packs, especially via health visitors and then supervised brushing schemes. Therefore, these approaches will continue to be included in this strategy.



Return on investment of oral health improvement¹⁰¹

3.6.2 Fluoride Varnish Application

Fluoride varnish is one of the best options for increasing the availability of topical fluoride regardless of the levels of fluoride in any water supply. This should happen when a child visits a dental surgery and is strongly recommended. The dental caries-preventive effectiveness of fluoride varnish in both permanent and primary dentitions is clear. Several systematic reviews conclude that applications twice a year produce an average reduction in dental caries

¹⁰⁰ NICE (2016) QS139, Oral health promotion in the community: <u>https://www.nice.org.uk/guidance/qs139</u>

¹⁰¹ Public Health England (2016). Return on investment of oral health improvement programmes of 0-5 year olds*: ROI finala (publishing.service.gov.uk)

increment of 37% in the primary and 43% in the permanent dentition. Much of the evidence of effectiveness is derived from studies which have used sodium fluoride 22,600 ppm (2.26% NaF) varnish for application.¹⁰²

An overarching review of five systematic reviews looking at both the effectiveness and costeffectiveness of targeted fluoride varnishing for children at higher risk of poor oral health showed a positive effect on their oral health. The effect was greater in children from low socioeconomic backgrounds, particularly where regular toothbrushing with fluoride, or access to fluoridated water, was not present.¹⁰³

In 2016, NICE published "Oral health for adults in care homes (NG48)" which included a series of recommendations for Long Term Care Facility (LTCF) residents including improving access to dental services for LTCF residents, improving the oral health knowledge and skills of care home staff and the implementation of oral health assessments, mouth care plans and daily oral care for all residents. Whilst the guideline development committee reviewed all available evidence on oral health of LTCF residents, they acknowledged a lack of good quality data on the effectiveness of oral health interventions for LTCF residents and identified this as a priority area for future research. The role of fluoride in the prevention of dental caries and the mechanisms through which this preventative effect is achieved have been well described; however, the vast majority of studies investigating the effects of fluoride interventions have been carried out in children. Studies including adults have shown that fluoride is an effective caries preventative measure across all age groups, whilst a review of fluoride interventions to prevent root caries in adults found that the regular application of topical fluoride was effective in achieving this.¹⁰⁴

The following data for Sunderland has been aggregated for the 19 General Dental Services contracts within Sunderland. The data is collected as part of the Dental Assurance Framework (DAF) for each dental contract and has been provided by the Integrated Care Board.

High level fluoride varnish data for general dental contracts in Sunderland is as follows:

¹⁰² OHID (2021) Chapter 9: fluoride guidance paper: <u>Chapter 9: Fluoride - GOV.UK (www.gov.uk)</u>

 ¹⁰³ Fluoride varnishes for dental health: A review of the clinical effectiveness, cost-effectiveness and guidelines – The Canadian Agency for Drugs and Technologies in Health (CADATH) Available online at: <u>https://www.ncbi.nlm.nih.gov/books/NBK401516/#S17</u>
 ¹⁰⁴ Jabir et al; 2021. Evaluating the effectiveness of fluoride varnish in preventing caries amongst Long-Term Care Facility Residents. Available online at: <u>Evaluating the</u> effectiveness of fluoride varnish in preventing caries amongst Long-Term Care Facility Residents. Available online at: <u>Evaluating the</u> effectiveness of fluoride varnish in preventing caries amongst Long-Term Care Facility Residents - Jabir - 2022 - Gerodontology - Wiley Online Library

January to March 2023	April to June 2023
Number of courses of treatment on children	Number of courses of treatment on children
involving application of fluoride varnish -	involving application of fluoride varnish -
5,537	5,536
% of courses of treatment on children	% of courses of treatment on children
involving application of fluoride varnish -	involving application of fluoride varnish -
59.3%	61.0%

Nationally, the estimated percent of adult courses of treatment that contained fluoride varnish clinical interventions fell by 2.2% between 2017-18 and 2018-19. However, child courses for the same treatment rose by 12.1%.¹⁰⁵

3.7 Oral Health promotion interventions for general population

3.7.1 Water fluoridation

Fluoride is a naturally occurring mineral found in soil, food and drink and also in drinking water supplies, in varying amounts. In some parts of England, the level of fluoride in the public water supply already reaches the target concentration of water fluoridation schemes (one milligram per litre (1mg/l), sometimes expressed as one part per million (1ppm).¹⁰⁶

At a population level, water fluoridation is the most effective way of reducing inequalities, as it ensures that people in the most deprived areas receive fluoridated water, and it does not require any behaviour change among the population. OHID monitor the effects of water fluoridation schemes on the health of people living in the areas covered by these arrangements and reports its findings every four years. The findings of the 2022 health monitoring report are consistent with the view that water fluoridation at levels within the UK regulatory limit (<1.5mg/l) is an effective, safe, and equitable public health intervention to reduce the prevalence, severity, and consequences of dental decay. It reported strong statistical evidence for a clinically significant reduction in dental caries, indicated by prevalence, severity, and hospital admissions for extraction, with increasing fluoride concentration. The greatest benefit was seen in the most deprived areas, supporting previous

 ¹⁰⁵NHS Dental Statistics for England, 2021-22, Biannual Report - NHS Digital
 ¹⁰⁶Department of Health and Social Care (2022) Health and Care Bill: water fluoridation policy paper: Health and Care Bill: water fluoridation - GOV.UK (www.gov.uk)

conclusions that drinking water that has been fluoridated is an effective public health intervention for tackling dental health inequalities.¹⁰⁷

Water fluoridation should be part of an overall oral health strategy, it is one intervention which should run alongside others, for example, fluoride varnish application. Delivering Better Oral Health is an evidence-based toolkit which provides interventions and advice on how dental health professionals can improve and maintain the oral and general health of their patients. It recommends that children from the age of 3 attending NHS dental services should be offered fluoride varnish treatment at least twice a year.¹⁰⁸ Other interventions would include supervised toothbrushing schemes and oral health checks for care home residents. A number of initiatives are already underway in Sunderland to improve the oral health of our population, current work and future work is described in the strategy.

A recent study conducted by the Office for Health Improvement and Disparities (OHID) and the UK Health Security Agency (UKHSA), show children and young people in areas of England with higher fluoride concentrations were up to 63% less likely to be admitted to hospital for tooth extractions due to decay than those in low fluoride concentrations, with the greatest benefit in the most deprived areas.¹⁰⁹

In 2022 the Health and Care Act introduced new legislative measures that aim to make it easier for health and care organisations to deliver joined-up care for people who rely on multiple different services, building on earlier recommendations by NHS England and NHS Improvement. The Health and Care Act 2022 amended the Water Industry Act and moved responsibility for water fluoridation from local authorities to central government. Sunderland does not currently have fluoridated water but will support any future consultation with secretary of state in how to move forward with this when the time arises.

3.8 Current oral health promotion services in Sunderland

Growing Healthy Sunderland (GHS) – Growing Healthy Sunderland provides an integrated Public Health service for expectant mothers, children and young people and their families in the city.

The Oral Health Team facilitate a wide range of free oral health training packages to health and social care professionals including health visitors, school nurses, nursery nurses, childminders, Children Centre staff, and staff caring for vulnerable groups and patients with

¹⁰⁷ OHID: Water fluoridation Health monitoring report for England (2022): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1060471/water-fluoridation-health-monitoring-report-2022.pdf

¹⁰⁸ OHID (2021), Delivering better oral health: an evidence-based toolkit for prevention : https://www.gov.uk/government/publications/delivering-better-oral-health-an-

evidence-based-toolkit-for-prevention ¹⁰⁹ Office for Health Improvement and Disparities (2022) Water fluoridation: Health monitoring report for England 2022

special care needs. The Oral Health team attend regular events, interacting with a variety of population groups to educate on the importance of good oral health. They also participate in national campaigns such as National Smile Month.¹¹⁰

There is an Oral Health action plan in place covering workforce training, dissemination of oral health messages, and implementation of tooth brushing scheme to early years settings in key localities using data from 0-5s registered with dentists. Local service data captured by GHS has demonstrated a decline in the number of children aged 0-5 years attending a dentist. The average percentage registered in 2020/21 was 52.6%, latest available data for quarter 3 of 2021/22 shows a reduction to 44%.

Through the GHS service the *Health Visiting Service* discuss oral health at mandated visits (6-8 weeks, 12-15 months, 2-2.5yrs, 3-4yrs) and encourage dental attendance. GHS Service also provide *Supervised Tooth Brushing* in schools – The Supervised Toothbrushing Programme is an evidence-based programme which is just one of our public health interventions that has successfully continued to be delivered into schools and nurseries throughout the Sunderland area. It is a good example of collaborative working between colleagues in education, local authorities, oral health promotion team, parents/carers and the children themselves.

Every school and nursery that takes part in the brush bus programme is supported by a designated Oral Health Practitioner. This support includes monitoring, evaluation, and stock replenishment, a dental health talk to the children, parents and staff training. Positive parental consent is mandatory for participation in the programme and consent rates across Sunderland are above 99%. There are a total of 22 schools/nurseries participating in the programme (a list of these can be found in appendix 1). All venues participating in the supervised brushing programme have had supervised brushing support via telephone or face to face.

Activity to date:

 All Early Year Professionals (EYPS) have attended a supervised toothbrushing training session, so they are all aware of the scheme. There have been 7 staff training sessions provided with a total of 59 attendees.

¹¹⁰ NHS Harrogate and Districts NHS Foundation Trust (2023). Oral Health Promotion Team. Available online at: <u>Harrogate and District NHS Foundation Trust</u> (hdft.nhs.uk)

- There has been two open days at the Rainbow Children's Centre and Barnwell Children's Centre.
- There has been presence at the launch of Family Hubs at 4 locations (awaiting development in the East).
- Children's Centre staff training has concluded so now Family Hub staff to be trained.
- Early Years Practitioner Champions has been developed to support and provide additional health promotion. These champions support the scheme by delivering the brushes and buses as part of their early intervention and link visit to the nurseries.
- Sunderland achieved a successful bid for the sum of £7850 to provide early intervention for babies introducing the benefits of toothbrushing and good oral health. This will be combined with the usual focus on use of bottles, soother and a balanced weaning diet and encouragement to attend a Dentist. £4100 will be spent on routine distribution to 6–8-week babies and £3750 to distribute to areas of inequalities. Sunderland 0-19 will order the resources and recharge back to Public Health. Appropriate resources have been ordered for younger children which include hygiene packs containing toothbrush and toothpaste. Leaflets containing oral health promotion messaging will also be provided to parents.

Next Steps for 2023/24:

- Realign with Family Hubs in the development of new roles Infant Feeding Peer Supporter and Paid Peer supporter roles as well as providing oral health training.
- Review opportunities for co delivery in Family Hubs
- Support open days with oral health messages
- Adapt relevant information to go on Growing Healthy App
- Continue routine messages on Facebook
- Ongoing challenges with families unable to access Dentist support finding dentists where possible.
- As part of attaining health and wellbeing Charter marks in Schools there should be an opportunity to evidence that schools do promote oral health.

Elderly population - There is a pilot due to commence later this year where the focus is on targeted fluoride varnish in 5 residential homes with South Tyneside and Sunderland NHS Foundation Trust.

Oral Health Promotion Activity in Sunderland 2022-2023¹¹¹

Workstream - Sessions Sunderland 2022/2023	Sessions delivered (3.75hrs)	Number of Staff/service users trained	
Special Educational Needs Schools			
Oral health training	62	799	
programme for staff, pupils			
and parent/carers.			
Mouth Care for Adults			
Programme in Elderly +			
Residential Care			
Mouth care training	105	493	
programme for managers			
and operational staff			
providing personal care			
Mouth Care for Adults			
Programme			
in Learning Disabilities			
Residential Care	85	472	
Mouth care training			
programme for managers			
and operational staff			
providing personal care			
Health Professionals			
Oral Health training	1	10	
programme for health		10	
professional			

¹¹¹ South Tyneside and Sunderland Foundation Trust. Oral Health Promotion Activity Sunderland Locality 2022-2023

Vulnerable Groups (VG's) Oral health training/awareness delivered to staff and service users Examples of VG's may include: Mental health groups Women's refuges BMAE Drug and alcohol Travelling community Substance misuse	24	248	
National Campaign'sOral health awarenesssessionsNational no smoking dayNational smile monthStoptoberMouth Cancer AwarenessMonthWorld oral health day	13	233	
TOTAL	290	2255	

4 Oral Health Status in Sunderland

4.1 Demography

Sunderland has a population of 274,171 (Census, 2021). Compared to England, the population of Sunderland has a higher proportion of older people. 20.5% of the population are aged 65 and over, higher than England at 18.4%.¹¹²

¹¹² Sunderland Data Observatory (2023). Population report for Sunderland. Available online at: Population - UTLA | Sunderland

4.2 Epidemiology

There is evidence from epidemiological surveys and cancer registers that there are marked inequalities in oral health in England across all stages of the life course and over a number of different clinical indicators and related quality of life measures.

There is also evidence from NHS data that there are inequalities in the availability and utilisation of dental services across ages, sex, geographies and different social groups. Relative inequalities in the prevalence of dental caries in 5-year-old children in England had increased from 2008 to 2019.¹¹³

Ward level Index of Multiple Deprivation Score 2019¹¹⁴

The IMD score for 2019 shows that Sunderland is at 30.6 in comparison to England at 21.7. Out of all the wards in Sunderland, Hendon, Redhill and Southwick (55.8, 49.2 and 48.5 respectively) can be seen at the top of the deprivation scale. Fulwell is at the bottom of the scale at 9.0 which shows a stark difference in deprivation inequality amongst the most and least deprived wards.

Area	Recent Trend	Count	Value	95% Lower Cl	95% Upper Cl
England	-	-	21.7	-	-
Sunderland	-	-	30.6	-	-
Hendon	-	-	55.8	-	-
Redhill	-	-	49.2		-
Southwick	-	-	48.5	-	-
Sandhill	-	-	40.4		-
Pallion	-	-	40.4		-
St Anne's	-		39.1		-
Washington North	-	-	37.6		-
Hetton	-		36.7		-
Castle	-	-	35.1		-
Silksworth	-		30.9		-
Millfield	-	-	30.9		-
Copt Hill	-		30.6		-
St Chad's	-	-	29.8		-
Shiney Row	-		27.7		
Ryhope	-		26.4		-
Houghton	-		26.3		-
Washington Central	-	-	22.9		-
Washington West	-		20.9		-
Washington South	-		20.7		-
Washington East	-		20.7		-
St Michael's	-		20.2		-
Doxford	-		20.1		-
Barnes	-	-	20.0	-	-
St Peter's	-	-	19.7	-	-
Fulwell	-		9.0	-	

*The higher the score the more deprived a ward is

¹¹³ Public Health England (2021) Inequalities in Oral Health in England. Available online at: <u>Inequalities in oral health in England</u> ¹¹⁴ Office for Health Improvement and Disparities (2019). Public Health Profiles IMD Score. Available online at: <u>IMD Score 2019</u>

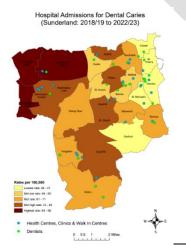
Children and adults accessing NHS primary dental care in Sunderland¹¹⁵

The table below highlights that the children in Sunderland were not accessing primary dental care as often as the North East and England. However, for adults in Sunderland these figures show the opposite story, they accessed dental care most in comparison to North East and England.

Area	Percentage of children (0-17 years) in 12 months before 31 March 2022	Percentage of Adults (18 years+) in 24 months before 31 March 2022
England	45.4%	34.6%
North East	45.8%	39.1%
Cumbria	48.3%	30.6%
Sunderland	43.0%	40.7%

Hospital admissions for Dental Caries in Sunderland by ward 2018/19 to 2022/23 general population¹¹⁶

Hospital admissions (all ages) for dental caries during the 5-year period: 2018/19 to 2022/23 shows the three wards: Washington North, West and South had the highest rates per 100,000 in Sunderland; between 84 and 96 per 100,000 respectively. These figures should be interpreted with caution as they do not include data from the Community Dental Service that undertake most of the extraction's activity for dental caries. It is confirmed that there is only one dental practice and one Health centre in Washington North, with the West and South not having either which could be one of the explanations of high hospital admissions within these area as access to community dental services is limited.



¹¹⁵ NHS Digital 2022 cited in NHS North East and North Cumbria Update on NHS Dentistry ppt.

¹¹⁶ Hospital Episode Statistics dataset (HES) (2023)

4.2.1 Epidemiology of oral health in children

Although oral health in general is improving in England, the last full oral health survey of fiveyear-olds in 2019 showed that just under a quarter have tooth decay.¹¹⁷ Each child with tooth decay will have on average 3 to 4 teeth affected. For those children at risk, tooth decay starts early.

In the 2022 oral health survey of 5-year-old children conducted by the National Dental Epidemiology Programme (NDEP) data was collected during the 2021-2022 school year. The survey was delayed from 2020 to 2021 by the coronavirus pandemic. In this survey of 5-year-olds in England, the national prevalence of children with enamel or dentinal decay was 29.3%.

Overall, 23.7% of 5-year-old children in England in this survey had experience of dentinal decay. This was similar to the findings of the previous survey of 5-year-olds in 2019, where 23.4% of the surveyed children had experience of dentinal decay. Among the 23.7% of children with experience of dentinal decay, each child had on average 3.5 teeth with experience of dentinal decay (at the age of 5 years children normally have 20 primary teeth).

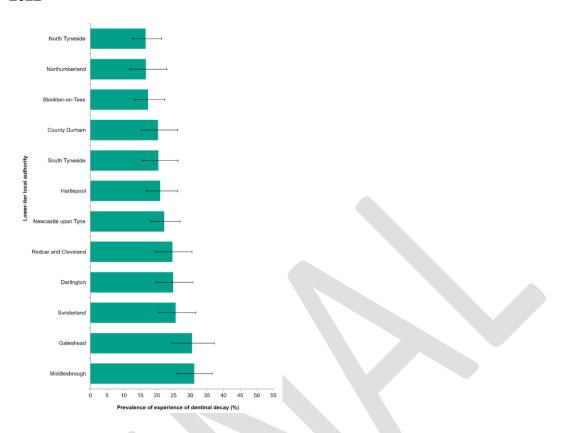
There had been a decrease in the prevalence of experience of dentinal decay in 5-year-olds from 30.9% in 2008 to 23.3% in 2017. However there has been no continuation of this improvement in 2019 or in the results of this latest survey. Inequalities in prevalence of experience of dentinal decay in 5-year-olds reduced from 2008 to 2015 but there have been no further reductions in inequalities since then¹¹⁸.

Children living in the most deprived areas of the country were almost three times as likely to have experience of dentinal decay (35.1%) as those living in the least deprived areas (13.5%). There were also disparities in the prevalence of experience of dentinal decay by ethnic group, which was significantly higher in the other ethnic group (44.8%) and the Asian or Asian British ethnic group (37.7%).

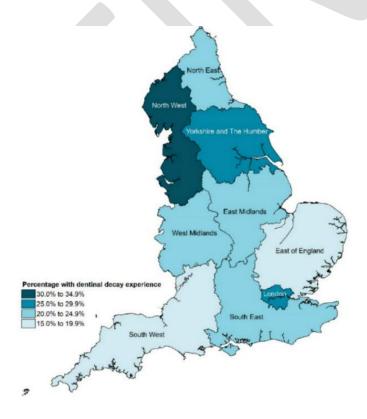
¹¹⁷ National Dental Epidemiology Programme (NDEP) for England: oral health survey of 5 year olds 2019 – a report on the variations in prevalence and severity of dental decay. (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873492/NDEP_for_England_OH_Survey_5yr_2019_v1.0.pdf)

¹¹⁸ Office for Health Improvement and Disparities (2023) National Dental Epidemiology Programme (NDEP) for England: oral health survey of 5 year old children 2022. Available online at: <u>National Dental Epidemiology Programme (NDEP) for England: oral health survey of 5 year old children 2022 - GOV.UK (www.gov.uk)</u>

Prevalence of experience of dentinal decay in 5-year-olds by upper-tier local authority, 2022



Prevalence of experience of dentinal decay in 5-year-olds by region, 2022



Mean d3mft data highlighted in table below for the years 2018/19, 2019/20 and 2021/22119120

%	Sunderland	North-East	National
d3mft at 3yrs (2019/20)	0.79	0.32	0.31
d3mft at 5yrs (2018/19)	1.10	0.82	0.80
% age 5yr olds visibly obvious dental decay (2021/22)	25.6	22.2	23.7

*Mean d3mft – average number of dentinally decayed (d3), missing due to dental decay (m) and filled (f) teeth (t)¹²¹

d3mft 3-year-olds data (2019/20)

The Sunderland rate for DMFT in 3-year-olds during 2019/20 was 0.79 (measured per child) compared to the North East (0.32) and England (0.31) averages.

Area ▲ ▼	Recent Trend	Count	Value	95% Lower Cl	95% Upper Cl
England	-	-	0.31 H	0.30	0.3
North East region	-	-	0.32 🛏	0.25	0.3
Sunderland	-	-	0.79	0.49	1.0
Middlesbrough	-	-	0.72	0.27	1.1
North Tyneside	-	-	0.61	0.00	1.5
Gateshead	-	-	0.37	0.21	0.5
County Durham	-	-	0.35	0.07	0.6
South Tyneside	-	-	0.23	0.08	0.3
Hartlepool	-	-	0.20	0.08	0.3
Darlington	-	-	0.20	0.08	0.3
Stockton-on-Tees	-	-	0.18	0.01	0.3
Northumberland	-	-	0.12	0.01	0.2
Newcastle upon Tyne	-	-	0.10 📕	0.00	0.2
Redcar and Cleveland	-	-	*	-	-

Source: Dental Public Health Epidemiology Programme for England: oral health survey of three-year-old children 2020

d3mft 5-year-olds data (2018/19)

Since 2014/15, the Sunderland average rate for DMFT in five-year-olds (measured per child) has fluctuated between 1.52 and 0.99, the Sunderland rate has however always been higher

¹¹⁹ Office for Health Improvement and Disparities. Fingertips. Available online at: DMFT at 3yrs (2019/20), DMFT at 5yrs (2018/19), % age 5 yr olds visibly obvious dental ¹²⁰ NDEP for England OH Survey 5Yr 2019 Results.ods (live.com)
 ¹²¹ World Health Organization (2023). Mean number of decayed, missing, and filled permanent teeth (mean DMFT) among the 12-year-old age group. Available online at:

than the England and North East averages for this particular measure. During 2018/19 Sunderland was the third highest in the North East with average DMFT in 5 year olds of 1.10 compared to the North East (0.82) and England (0.80) averages. Overlapping confidence intervals need to be taken in account when considering significant differences.

Area	Recent Trend	Count	Value ▲▼		95% Lower Cl	95% Upper Cl
England	-	-	23.7	н	23.3	24.0
North East region	-	-	22.2	H	20.8	23.8
Middlesbrough	-	-	31.2		26.2	36.6
Gateshead	-	-	30.5		24.6	37.3
Sunderland	-	-	25.6	⊢−−−	20.5	31.6
Darlington	-	-	24.8		19.7	30.8
Redcar and Cleveland	-	-	24.6		19.5	30.5
Newcastle upon Tyne	-	-	22.2	⊢−−− −−1	18.0	26.9
Hartlepool	-	-	21.0		16.7	26.1
South Tyneside	-	-	20.4	⊢−−−	15.6	26.3
County Durham	-	-	20.3		15.4	26.2
Stockton-on-Tees	-	-	17.3		13.2	22.3
Northumberland	-	-	16.7		11.9	22.9
North Tyneside	-	-	16.6		12.7	21.4

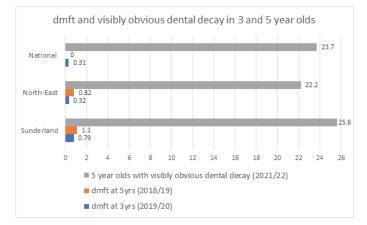
% 5-year-olds with visibly obvious decay data

During 2021/22, Sunderland was the third highest in the North East for visually obvious dentinal decay in 5 year olds, measured at 25.6%. The North East average was 22.2% and the England average 23.7%.

Агеа ▲ ▼	Recent Trend	Count	Value ▲▼		95% Lower Cl	95% Upper Cl
England	-	-	0.80		0.78	8.0
North East region	-	-	0.82	H	0.75	8.0
Middlesbrough	-	-	1.68		1.31	2.0
Redcar and Cleveland	-	-	1.15	⊢−−−	0.78	1.5
Sunderland	-	-	1.10		0.80	1.4
Darlington	-	-	1.01	⊢−−− −−−1	0.71	1.3
County Durham	-	-	0.81		0.58	1.0
Newcastle upon Tyne	-	-	0.78		0.61	0.9
Stockton-on-Tees	-	-	0.74		0.51	0.9
South Tyneside	-	-	0.73		0.46	1.0
Northumberland	-	-	0.68		0.48	0.8
Gateshead	-		0.58		0.40	0.7
Hartlepool	-	-	0.50		0.29	0.7
North Tyneside	-	-	0.41 H		0.28	0.5

Source: Dental Public Health Epidemiology Programme for England: oral health survey of five-year-old children 2019

d3mft visibly obvious dental decay in 3- and 5-year-olds (2018-2022)



The percentage of children seen in Sunderland in comparison with the rest of England is lower with a 1.7% difference.



45.2% of children received NHS dental care in the 12 months to the 30 June 2022. The number of child patients seen in the previous 12 months remained stable between 2016-2019 at around 29,000. This increased to 33,800 by December 2019, before decreasing during the COVID-19 pandemic. The number of children being seen fell to 10,200 by 31st March 2021. Since then, numbers have started to increase. The latest data for the 12-month period to 30 June 2022 say 24,800 child patients.¹²²

Child Patients Seen in Local Authorities

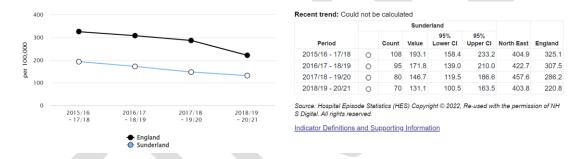
45.2% of child patients had been seen by a dentist in the previous 12 months (up to 30 June 22). This varied by age group. Only 26.7% of 1-year olds had seen a dentist in the previous 12 months, compared with 58.8% of 10-year-olds.

The period preceding Covid saw a higher percentage of children receiving NHS dental care. 64.5% of children in the 12 months up to 31 March 2020 had seen a dentist, higher than the England average at 61.3%.¹²³

 ¹²² NHS Dental Statistics (2022). Biannual Report. Available online at: <u>NHS Dental Statistics for England, 2021-22, Biannual Report - NHS Digital</u>
 ¹²³ NHS Dental Statistics (2022). Biannual Report. Available online at: <u>NHS Dental Statistics for England, 2021-22, Biannual Report - NHS Digital</u>



Public Health Outcomes Framework: Hospital admissions for dental caries (0 to 5 years) Sunderland compared against England¹²⁴



Hospital admissions for dental caries (0-5 years) 2018/19-20/21 per 100,000 comparing Sunderland with neighbours

Compared to its CIPFA nearest neighbours, Sunderland during 2018/19 and 2020/21 had the 7th lowest rate for dental caries admissions (0-5 years) amongst its 16 neighbours. The nearest neighbours average was 336.9.

Area	Recent Trend	Neighbour Rank	Count	Value ▲▼		95% Lower Cl	95% Upper Cl
England	-		26,427	220.8		218.1	223.
Neighbours average	-		2,820	336.9*	н	324.6	349.
Rotherham	-	4	525	931.3	le l	849.9	1,010.
Doncaster	-	9	510	775.6	H-1	709.7	845.
Wakefield	-	6	465	609.6	H	555.4	667.
Wigan	-	13	315	474.9	H-1	423.9	530.
Bolton	-	10	295	425.4	H=-1	375.6	473.
Middlesbrough	-	2	140	404.6	H	335.0	471.
Darlington	-	11	85	401.3	H	329.0	506.
Tameside	-	1	170	328.0	H-1	280.5	381.
St. Helens	-	5	75	205.3	E H	161.5	257.
Sunderland	-	-	70	131.1	F	100.5	163.
Halton	-	8	35	126.9	le→	82.4	168.
Hartlepcol	-	14	20	105.3	H	64.3	162.
Dudley	-	7	55	80.6	н	59.4	103.
Walsall	-	3	30	42.7	н	27.6	59.
Kingston upon Hull	-	12	20	32.8	H	22.6	54.
Derby	-	15	10	16.9	F	5.8	26.

¹²⁴ Office for Health Improvement and Disparities (2022). Hospital admissions for dental caries (0 to 5 years). Available online at: Public health profiles hospital admissions

Hospital admissions for dental caries (0-5 years) 2018/19-20/21 per 100,000 by North

East region¹²⁵

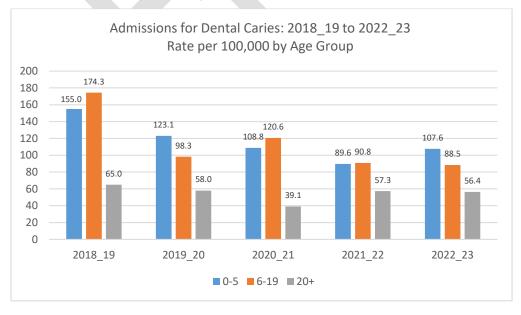
During 2018/19 and 2020/21, Sunderland compared well to the North East, with a rate of 131.1 per 100,000 hospital admissions for those aged 0-5 years, and has the second lowest rate of admissions within the North East. The Sunderland rate is significantly lower than both the North East (403.8) and England (220.8) averages.

Area ▲▼	Recent Trend	Count	Value		95% Lower Cl	95% Upper Cl
England	-	26,427	220.8		218.1	223.5
North East region	-	2,080	403.8	н	387.0	421.9
Northumberland	-	395	736.1	⊨	668.8	816.3
Newcastle upon Tyne	-	430	719.4	H	653.0	790.8
North Tyneside	-	185	448.8	H	388.7	520.9
Gateshead	-	165	432.1	H1	363.9	497.7
Middlesbrough	-	140	404.6		335.0	471.1
Darlington	-	85	401.3	H	329.0	506.6
County Durham	-	355	368.2	E H	328.9	406.4
South Tyneside	-	80	268.2	Hard Hard Hard Hard Hard Hard Hard Hard	209.7	330.0
Redcar and Cleveland	-	70	267.0	⊢	204.8	333.1
Stockton-on-Tees	-	90	216.2	Hered I	176.0	268.3
Sunderland	-	70	131.1	H	100.5	163.5
Hartlepool	-	20	105.3	F 1	64.3	162.7

Source: Hospital Episode Statistics (HES) Copyright © 2022, Re-used with the permission of NHS Digital. All rights reserved.

Admissions for Dental Caries by Age Group

The following figure shows that both the 0-5 year group and 6-19 year group have had consistently high admission rates over the past 6 years. In 2018/19 the 6-19 year group had the highest admissions at 174.3 per 100,000 shortly followed by the 0-5 year group at 155. In 2022/23 the 0-5 years was at 107.6 and we can see the number of admissions has started to come down from previous years.



¹²⁵ Office for Health Improvement Disparities (2022). Hospital Episode Statistics (HES) by North East region. Available online at: Public health profiles - OHID (phe.org.uk)

4.2.2 Epidemiology of oral health in adults

The 2021 Adult Oral Health Survey (AOHS) was carried out in February and March 2021 with a representative sample of adults in England aged 16 and over. Data was collected using self-completion questionnaires. Just over a third (35%) of participants reported that they needed dental advice or treatment at some point between the start of the first lockdown in March 2020 and the time of interview (between February and March 2021).

Women were more likely than men to have needed treatment or advice: 37% of women, compared with 33% of men. The need for dental treatment or advice increased with age, from 22% of those aged 16 to 24 years to 45% of those aged 75 years and over. More than half (56%) of adults who reported that their oral health was bad or very bad felt that they needed treatment or advice, compared with 42% of those with fair oral health and 30% of those who reported that their oral health was good or very good.

Adults who usually visited the dentist for a regular check-up (39%) were more likely to say they had needed treatment or advice than those who visited only when they were having trouble (31%), for the occasional check-up (26%) or those who had never been to the dentist (17%). Perceptions of the need for treatment or advice may have been influenced by participants' normal pattern of dental attendance.

The most common reason was because of a broken or decayed tooth (36% of those who needed help), followed by toothache or pain in the mouth (31%). Around a quarter of participants reported that they did not have a problem but wanted a check-up (24%).

The proportion of adults who needed help due to toothache or pain increased from 27% among those in the fifth of households with the highest incomes to 40% among those in the lowest income quintile. Adults in the 2 highest income quintiles were more likely to report that they did not have a problem but wanted a check-up (30% in each quintile) than those in the lower income quintiles. This proportion was lowest (17%) among those in the lowest income quintile.

Those who had needed dental treatment or advice between March 2020 and March 2021 were asked what action they took. Two thirds (68%) of those who needed treatment or advice between March 2020 and March 2021 contacted their usual dental practice. This is the proportion of all adults who answered this question and does not take into account whether all adults had a dental practice that they usually attended.

Smaller proportions of participants did other things: 10% contacted a new dental practice, 8% searched for dental advice on the internet or social media and 6% contacted 111 for help and

advice. (Calling 999 was offered as an option; no participants reported this.) One in 6 (16%) did not seek any advice or treatment. The most common reason for not seeking help was that participants were worried about catching COVID-19 or were shielding (23% of those who did not seek help). Other reasons were that they could not afford to pay for treatment or advice (13%), the problem got better without help (9%), the participant did not know how to access treatment or advice (9%), they could not find a dentist who would treat them (7%), they could not travel to the dentist (5%) or they had COVID-19 (3%).¹²⁶

Adult patients seen in Sunderland

Below is a graph that shows the number of patients seen (Adult) in Sunderland City Council in the 24 months leading up to 30 June 2022. The percentage of adults seen in Sunderland compared to the rest of England is higher with a difference of 7%.



44.4% of Adults in Sunderland received NHS dental care in the 24 months to the 30 June 2022, compared to 37.4% for England.

The number of adult patients seen increased towards the end of 2019 to 131,000, having remained stable at around 116,000 for the previous 2 years (rolling 24-month period). Since the start of the covid pandemic there was a steady decline in the number of patients seen falling to 90,700 as of 31st March 2022. There has since been an upward trend with patients seen increasing to 98,900 to 30 June 2022.¹²⁷

¹²⁶ OHID (2023). Adult Oral Health Survey 2021: technical report. Available online at: <u>GOV.UK (www.gov.uk)</u>

¹²⁷ NHS Dental Statistics (2022). Biannual Report. Available online at: NHS Dental Statistics for England, 2021-22, Biannual Report - NHS Digital

Oral cancer registrations 2017-19 directly standardised rate per 100,000¹²⁸

Sunderland had a rate of 20.7 per 100,000 compared to the North East (18.2) and England (15.4) averages.

Area	Recent Trend	Count	Value		95% Lower Cl	95% Upper Cl
England	-	24,115	15.4	l l	15.2	15.6
North East region	-	1,437	18.2	H	17.3	19.3
South Tyneside	-	112	24.3		20.0	29.3
Middlesbrough	-	79	21.8		17.2	27.3
Stockton-on-Tees	-	115	20.8		17.1	25.0
Sunderland	-	173	20.7		17.7	24.
Newcastle upon Tyne	-	142	20.6		17.3	24.3
Gateshead	-	120	20.4	H	16.9	24.
Hartlepool	-	52	18.5		13.8	24.3
North Tyneside	-	109	17.6	→ → →→	14.5	21.3
Redcar and Cleveland	-	73	16.7	⊢−−−	13.0	21.0
Northumberland	-	172	15.5		13.3	18.1
County Durham	-	248	15.4	H	13.5	17.
Darlington	-	42	13.1	<u> </u>	9.4	17.

Source: National Cancer Registration and Analysis Service retrieved from the Cancer Analysis System (CAS), NHS Digital

Tobacco is a known risk factor for oral cancers.¹²⁹ In England, 65% of hospital admissions (2014–15) for oral cancer and 64% of deaths (2014) due to oral cancer were attributed to smoking.¹³⁰ Oral cancer registration is therefore a direct measure of smoking-related harm. Given the high proportion of these registrations that are due to smoking, a reduction in the prevalence of smoking would reduce the incidence of oral cancer.

In January 2012 the Public Health Outcomes Framework was published, then updated in 2016. Smoking and smoking related death plays a key role in two of the four domains: Health Improvement and Preventing Premature Mortality.¹³¹

Mortality rate from oral cancer, all ages 2017-19 directly standardised rate per **100,000**¹³²

Sunderland had a rate of 8.2 per 100,000 compared to the North East (6) and England (4.7) averages.

¹³⁰ ONS (2016) Statistics on smoking. Available online at: <u>Adult smoking habits in the UK</u>
 ¹³¹ Department of Health and Social Care (2017). Public Health Outcomes Framework 2016 to 2019. Available online at: <u>PHOF 2016-2019</u>
 ¹³² OHID (2019). Mortality rates from oral cancer 2017-2019. Available online at: <u>OHID (phe.org.uk)</u>

¹²⁸ OHID (2019) Public Health Profiles Oral Cancer Registrations 2017-2019. Available online at: <u>OHID (phe.org.uk)</u> ¹²⁹ GBD et al; 2013. Risk Factors Collaborators. Global, regional and national comparative risk assessment of 79 behavioural, environmental and occupational, and

Area	Recent Trend	Count	Value		95% Lower Cl	95% Upper Cl
England	-	7,445	4.7	н	4.6	4.8
North East region	-	476	6.0	H	5.4	6.5
Middlesbrough	-	33	8.9		6.1	12.6
Hartlepool	-	24	8.5		5.4	12.6
Sunderland	-	67	8.2		6.4	10.5
South Tyneside	-	38	8.1		5.7	11.1
Stockton-on-Tees	-	42	7.6		5.5	10.3
Redcar and Cleveland	-	31	6.8	—	4.6	9.7
Gateshead	-	35	5.8	H	4.0	8.1
Newcastle upon Tyne	-	40	5.8	⊢	4.1	7.9
Darlington	-	18	5.5	—	3.3	8.7
County Durham	-	85	5.2	⊢	4.2	6.5
North Tyneside	-	24	3.8	 	2.4	5.7
Northumberland	-	39	3.4		2.4	4.6

Source: Calculated by OHID: Population Health Analysis (PHA) team from the Office for National Statistics (ONS) Annual Death Registrations Extract and ONS Mid Year Population Estimates

Over the last decade in the UK (between 2003-2005 and 2012-2014), oral cancer mortality rates have increased by 20% for males and 19% for females.¹³³ Five-year survival rates are 56%. Most oral cancers are triggered by tobacco and alcohol, which together account for 75% of cases.¹³⁴ Cigarette smoking is associated with an increased risk of the more common forms of oral cancer.

The risk among cigarette smokers is estimated to be 10 times more than that for non-smokers. More intense use of tobacco increases the risk, while ceasing to smoke for 10 years or more reduces it to almost the same as that of non-smokers.¹³⁵ Oral cancer mortality rates can be used in conjunction with registration data to compare survival rates across areas of England to assess the impact of public health prevention policies such as smoking cessation.

4.3 Vulnerable and High risk groups

Given that deprivation and low socioeconomic status has been identified as a risk factor it is therefore crucial that we support these communities which are identified below to improve their oral health. We know access is a barrier for people, therefore, future insights work involving working closely with these communities to gather their views and suggestions on how we can make it easier for them to access dental care will allow us to address some of these challenges whilst also helping to inform us on how we approach these communities to empower them to reach out for help.

 ¹³³ Cancer Research Campaign (2000). Cancer Statistics: Oral – UK. London
 ¹³⁴ Blot et al;1988. Smoking and drinking in relation to oral and pharyngeal cance
 ¹³⁵ La Vecchia et al; 1997. Epidemiology and prevention of oral cancer.

4.3.1 Care Experienced/Cared for Children

The Children Act 1989 defined Looked After Children (LAC) (also known as Children Looked After) as any child under the care of the local authority or provided with accommodation for a continuous period of more than 24 hours by the local authority. The number of cared for children in the UK has increased over the past 10-years with more children entering than leaving care.136

Despite an earlier increase amongst this group having dental check-ups, this number dropped by over 50% in 2020/21 compared to 2019/20; marginal improvements were made in 2021/22 as dental practices recovered from the COVID-19 pandemic. Although general health checks were maintained during the pandemic, the proportion having dental check-ups fell from 86% to 40%.137

Cared for Children were also identified as an under-researched vulnerable group in the 2021 Public Health England Oral Health Inequalities Report, which only included three peerreviewed publications, limited grey literature and no evidence from local reports or health needs assessments. This demonstrated a clear research gap.¹³⁸

This particularly vulnerable group of children have high dental needs. Oral health questions are included in the initial and review assessments for this group, and they usually attend primary care dental practices to receive treatment. Children may live with foster carers or sometimes in a residential home. It is important that we ensure staff and foster carers are able to promote oral health, support children with their daily mouth care and recognise signs of neglect. Equipping children and young people with oral health knowledge and embedding good oral hygiene practices and habits will benefit them throughout life.

The Department for Education (2015)¹³⁹ in its document 'promoting the health and wellbeing of children' provides guidance around dental health and reasonable steps that should be taken to ensure health outcomes are met for cared for children. The following section has been taken directly out of this document and outlines what should be done. "The local authority that looks after a child must take all reasonable steps to ensure that the child receives the health care services he or she requires as set out in their health plan. Those services include mental health services, medical and dental care treatment and immunisations, as well as advice and guidance on personal health care and health promotion issues."

¹³⁶ Department for Education (2022). Statistics: looked-after children. Children looked after in England including adoptions.

 ¹³⁷ Local Government Association (2022). Number of children looked after who had their teeth checked by a dentist in Peterborough.
 ¹³⁸ Hurry et al; (2023). The dental health of looked after children in the UK and dental care pathways: A scoping review. Available online at: <u>CDH 00252 Hurry web.pdf</u> ¹³⁹ Department for Education (2015). Promoting the health and wellbeing of children. Available online at: <u>Pror</u>update note added to start in August 2022 (publishing.service.gov.uk) ting the health and well-be

Data from the 01-06-22 up until 30-06-23 showed a total of 499 care experienced children and young people in Sunderland. 71% of Sunderland cared for children had seen a dentist in the past 12 months. This information includes both children new into care and those already in care who had their health reviewed during this time period. Breaking this data down further shows that those new into care (29%) had seen a dentist in the past year. This is a slight improvement compared to the year 2021/2022 which was 69%.¹⁴⁰

Data on the number of children registered with a dentist cannot be extracted as this would involve an individual review of 499 records which is not possible. This therefore highlights a gap in data that we do not get a measure of.

4.3.2 Children with Special Educational Needs and Disabilities

The needs of this group can vary, some may have social, emotional and mental health needs, whilst others may have more sensory needs. These sensory needs may prevent children and young people from accessing mainstream dental services and impacting on oral hygiene.

Provision of specialist dental health support that encourages dentistry attendance in educational settings is seen as a high priority. Evidence from a national oral health survey of five-year-old and 12-year-old children attending special support schools found that there was greater polarisation of dental decay among children attending special support schools than is typically seen among mainstream educated children. Put simply, fewer children have experience of decay, but those who have tend to have decay more severely, with more teeth affected than mainstream educated children.¹⁴¹

4.3.3 Learning Disabilities

The evidence shows that people with learning disabilities have poorer oral health and more problems in accessing dental services than people in the general population. People with learning disabilities may need additional help with their oral care and support to get good dental treatment because of cognitive, physical and behavioural factors.¹⁴²

¹⁴⁰ STSFT records data launchpad cared for children team pulled on 18/07/23. Lead Nurse, Children in Care Health Team. Sunderland Children Centre.
¹⁴¹ PHE (2015) Dental public health epidemiology programme Oral health survey of five-year-old and 12-year-old children attending special support schools 2014 A report

on the prevalence and severity of dental decay: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/774313/Oral_health_survey_for_children_in_special_support_schools_ 2014_Report.pdf

²⁰¹⁴ Report.pdf ¹⁴² Mac Giolla Phadraig et al (2014), National levels of reported difficulty in tooth and denture cleaning among an ageing population with intellectual disabilities. Journal of Dentistry and Oral Health. Available online at: (PDF) National levels of reported difficulty in tooth and denture cleaning among an ageing population with intellectual disabilities (researchgate.net)

Families, carers and staff who provide support to people with learning disabilities should receive oral health training and information to help prepare them to look after the oral health needs of those with learning disabilities.

4.3.4 Migrants and Asylum Seekers

Migrants, asylum seekers, resettled refugees, and Gypsy, Roma, Traveller community studies have indicated a high prevalence of oral disease and unmet oral healthcare needs in refugees, often exceeding the levels experienced by the most disadvantaged communities of the host country. Most commonly, refugees experience high levels of dental caries, periodontal disease, oral lesions, and traumatic dental injuries¹⁴³¹⁴⁴

Similar to the general population, people from migrant communities could be classified into three main groups in terms of their engagement with dental care services:

- People who wish to engage with services and require support to achieve dental fitness
- People who only wish to engage in case of an urgent need/pain
- People who do not wish to engage

When designing dental care pathways, some of the specific barriers for accessing care by migrants can be around:

- Language
- Prior beliefs about oral health
- Anxiety
- Understanding administration including exemption or partial exemption

The NENC region has around double the England average for the number of asylum seekers per 10,000 of population receiving section 95 support (i.e. housing and financial support) in 2021. Newcastle, Gateshead, Hartlepool, Middlesbrough, and Stockton-on-Tees are local authority areas all with over four times the England average of asylum seekers by this measure.¹⁴⁵

The table below highlights data that confirms a total of 487 asylum seekers receiving support in Sunderland at the end of December 2022.¹⁴⁶

 ¹⁴³ FDI (2021) Leave no one behind: what can you do to help improve the oral health of refugees? Available online at: Leave no one behind: what can you do to help improve the oral health of refugees? | FDI (fdiworlddental.org)
 ¹⁴⁴ Microsoft Power BI

¹⁴⁵ The Migration Observatory (2022)

¹⁴⁶ House of Commons Library (2023). Asylum statistics. Available online at: <u>Asylum statistics - House of Commons Library (parliament.uk)</u>

	-	Section 4 and 95		support (initial		seekers per
		Dispersed		accommodatio		10,000
	Total		Subsistence only	n)	Population	populatio
United Kingdom	110,171	56,029	4,649	49,493	66,980,375	
East Midlands	6,315	2,860	227	3,228	4,880,200	
East of England	6,259	1,709	289	4,261	6,334,500	
_ondon	25,863	7,581	1,876	16,406	8,799,800	
North East	6,285	5,397	151	737	2,647,100	2
North West	18,045	11,986	573	5,486	7,417,300	1
Northern Ireland	3,103	1,853	22	1,228	1,903,175	1
Scotland	5,210	4,495	139	576	5,479,900	
Bouth East	8,133	1,735	284	6,114	9,278,100	1
South West	4,114	1,300	158	2,656	5,701,200	2.
Jnknown	341	206	135	0		
Wales	3,142	2,681	97	364	3,107,500	
West Midlands	12,406	7,111	407	4,888	5,950,800	
Yorkshire and The Humber	10,955	7,115	291	3,549	5,480,800	
By region Ination						
North East						
County Durham	2	1	1	0	522,100	
Darlington	90	86	4	0	107,800	
Hartlepool	380	375	4	1	92,300	
Middlesbrough	624	584	33	7	143,900	
Northumberland	325	323	0	2	320,600	
Redcar and Cleveland	174	169	2	3	136,500	
Stockton-on-Tees	777	717	34	26	196,600	3
Tyne and Wear (Met County)						
Gateshead	863	766	14	83	196,100	3
Newcastle upon Tyne	1,810	1,236	27	547	300,200	
North Tyneside	298	293	5	0	209,000	
South Tyneside	455	440	10	5	147,800	3
Sunderland	487	407	17	63	274,200	1

4.3.5 Homelessness and Rough sleepers

People with experience of homelessness commonly suffer from poor oral health and are likely to have low-level engagement with dental services. They may not have access to toothbrushes or toothpaste or facilities where they can clean their teeth. Prioritising shelter, food, financial, health and social issues are likely to be above oral health, however, there is a recognition that this group may have specific oral health care needs.¹⁴⁷

4.3.6 People using Alcohol and Drug services

People who have a history of substance use are more likely to have poorer oral and dental health generally. This has been linked to a variety of potential contributory factors: smoking and tobacco use, dry mouth due to drug use and lifestyle factors e.g. poor diet often high in sugar, poor personal hygiene, less likely to attend dental appointments. The use of tobacco and alcohol is associated with increased risk of oral cancers.

5 Challenges moving forward

5.1 Dental Workforce Recruitment and Retention

¹⁴⁷ Paisi et al; 2019. 'Teeth Matter': engaging people experiencing homelessness with oral health promotion efforts. Available online at: PubMed (nih.gov)

There are a number of factors relating to workforce recruitment and retention that are affecting the ability of NHS dental practices to deliver the full level of commissioned access, these include:

- Younger generation and newly qualifying dentists more often choosing not to pursue an NHS Dentistry career or where they do, they are seeking a work life balance that limits their working commitment to part time NHS Dentistry.
- More experienced dentists and increasing dental nurses are choosing to retire early, move into private dentistry or pursue a different career path.
- General recruitment issues attracting new dentists into NHS Dentistry due to a range of issues including but not limited to; difficulties securing GDC and Performers List registration for overseas dentists, Dental Student and Foundation Dentistry Places being limited nationally and dentists not perceiving working within the current NHS Regulatory arrangements as being attractive in terms of pay, conditions and work life balance.

This creates difficulties for NHS dental practices locally and nationally to maintain and replace the level of clinical workforce they need in order to reliably deliver their full NHS dentistry capacity as they continue to try to fully recover from COVID-19 pandemic impacts.

5.2 Access to Dental Services

There appears to be a crisis of access in NHS dentistry. Many people are unable to access an NHS dentist or are travelling significant distances to get to one. Access varies across the country and is being experienced unequally by different groups.

Lack of access is impacting on the wider resources and places further pressure on the NHS, for example with patients developing conditions like diabetes, sepsis or oral cancer as a result of lack of routine care and treatment.¹⁴⁸¹⁴⁹ Being unable to see a dentist at routine intervals can also have implications for wider oral, physical health, mental health and social wellbeing.

It is important not only to think about medium and long-term solutions, but to focus on how to help people who can't access an NHS dentist right now and are having to live with the consequences.

The Government's ambition for everyone who needs an NHS dentist to be able to access one must ensure access within a reasonable timeframe and a reasonable distance. The

¹⁴⁸ Mouth cancer – reported spike after dental access issues - Dentistry.co.uk
¹⁴⁹ Mouth cancer rates set to go 'through the roof' as millions fail to visit dentist during lockdown – Association of Dental Groups (theadq.co.uk)

Government must set out how they intend to realise this ambition and what the timeline will be for delivery. It is vital that this ambition is the central tenet of the Government's forthcoming dental recovery plan.

A lack of public awareness about NHS dental services and how practices operate is contributing to access issues. The Government and NHS England should roll-out a patient information campaign with the aim of improving awareness of how NHS dentistry will work and ensure the public are better informed about what they are entitled to. This should clarify common misconceptions, for example, about patient registration, recall periods, and NHS dental charges and exemptions.

Practices should abide by NICE recall guidelines of up to two years for most adult patients, recognising the need for more regular recall for some. This should be monitored by NHS England to ensure it is being carried out¹⁵⁰.

5.3 The Dental Contract

Fundamental reform of the dental contract is essential and must be urgently implemented, not only to address the crisis of access in the short-term, but to ensure a more sustainable, equitable and prevention-focussed system for the future. Concerns around any further delay will lead to more dentists leaving the NHS and exacerbate the issues patients are experiencing with accessing services.

The ICB must urgently implement a fundamentally reformed dental contract, characterised by a move away from the current UDA system, in favour of a system with a weighted capitation element, which emphasises prevention and person-centred care. This should be based on the learnings from the Dental Contract Reform Programme and in full consultation with the dental profession. Patient registration under a reformed capitation-based contract will better enable those patients who currently can't access a dentist to be able to do so.

5.4 Integrated Care Systems

The dental profession should be represented on Integrated Care Boards to ensure they have the necessary expertise to inform decision-making around contracting and flexible commissioning. This should include wider engagement with the profession locally, for example through Local Dental Committees and Local Dental Networks.

¹⁵⁰ House of Commons Health and Social Care Committee (2023) NHS Dentistry. Available online at: <u>NHS dentistry (parliament.uk)</u>

The initiatives outlined by the Chief Dental Officer to help ICBs commission dental services in a way that best meets the needs of their local populations are welcomed. NHS dentistry England should provide evidence of the effectiveness of these initiatives, so that ICBs can see for themselves which options they could most usefully pursue and are best practice.

ICBs have been delegated responsibility for commissioning dental services by NHS England. They offer an opportunity to improve access locally, better integrate services around patients and address inequalities.

5.5 Limitations of Epidemiological and NHS Data¹⁵¹

There are limitations with availability and accessibility to dental data and oral health inequalities. Variations in oral health were not reported in epidemiological surveys and registers across all dimensions of inequality. For example, variation in oral health diseases by area deprivation was not reported in the 2009 adult dental health survey. Furthermore, there was no information describing variations in oral health by ethnicity, pregnancy and maternity, religion or homelessness in the 2009 adult dental health survey or the 2009 oral health surveys of adult subgroups. Prisoners were not included in these surveys. None of the adult dental surveys reported on trends in oral health inequalities. Variation in oral cancer by socioeconomic position, protected characteristics (except sex) or vulnerability types was also not reported in the cancer registers.¹⁵² With respect to children, there was no information describing variations in oral health by religion or vulnerability types in any of the children's surveys. Variations in dental service commissioning, delivery and utilisation were not reported across all dimensions of inequality. For example, no information was available of such variations by the majority of protected characteristics (disability, pregnancy and maternity and religion) or vulnerability types. Additionally, no data was available from the private dental sector or on inequalities in access to specialised care (apart from hospital tooth extraction).

In terms of recommendations, future epidemiological surveys should endeavour to report on variation in oral health across additional dimensions of inequality and data should be collected to enable trends of oral health inequalities amongst adults to be determined. Future NHS data should include information on variations by different dimensions of inequalities in relation to general and specialised care. A system should be set to collect data from the private dental sector.

¹⁵¹ Public Health England (2021). Inequalities in oral health in England. Available online at: <u>Inequalities in oral health in England - GOV.UK (www.gov.uk)</u>
¹⁵² Public Health England (2020). Oral cancer in England. Available online at: <u>Oral cancer in England</u>

6. Key recommendations

- Establish a local oral health improvement and advisory group to promote oral health messages to the general population.
- Increase the number of children and young people who have access to targeted toothbrushing, including the direct delivery of toothbrushes and toothpaste to individual homes.
- Establish the oral health requirements of vulnerable groups within the city, including new arrivals from areas where access to dentistry has been significantly limited as a result of war or displacement.
- Review the findings of the Sunderland care home audit when complete (timeline is September), to inform local actions.
- Ensure that opportunities to promote measures to improve oral health are maximised in local programmes of work.
- Establish a supervised toothbrushing programme in special education needs schools.
- Establish a targeted offer for children in special education needs schools to have access to the targeted fluoride varnishing programme.
- Prepare to support the Department of Health and Social Care when it comes to any future consultation on fluoridation of water in Sunderland, engaging with communities for their views.

7 Acknowledgements

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- North East and North Cumbria Integrated Care Board
- 0-19 Public Health Service, Sunderland
- Healthwatch, Sunderland
- Harrogate and District NHS Foundation Trust
- South Tyneside and Sunderland NHS Foundation Trust

• Housing Services, Sunderland

8. Appendices

Appendix 1 – Schools/nurseries participating in the supervised brushing programme

School / Nursery Name	Address			
Academey 360	Portsmouth Road, Sunderland			
Bernard Gilpin Primary	Hall Lane,Houghton Le Spring,Tyne and Wear			
Branes Infant Academy	Mount Road, Hight Barnes, Sunderland			
East Herrington Primary	Balmoral Terrace, East Herrington, Sunderland			
English Martyrs RC Primary	Redcar Road, Sunderland, Tyne and Wear			
Fatfield Academy	Southcroft, Washington, Sunderland			
Fulwell Academy	Ebdon Lane, Fulwell, Sunderland, Tyne and Wear			
Grange Park Primary	Swan Street, Sunderland			
Hudson Road Primary School	Villiers Street South, Sunderland, Tyne and Wear			
Marlborough Primary School	Marlborough Road, Sulgrave Road, Washington			
New Penshaw Academy	Langdale Road,New Penshaw,Houghton Le Spring			
Oxclose Primary Academy	Brancepeth Road, Washington,			
Oxclose Community Nursery School	Brancepeth Road, Washington,			
Richard Avenue Primary	Hurstwood Road, Sunderland, Tyne and Wear			
Rickleton Primary School	Vigo Lane, Washington, Tyne and Wear			
Shiney Row Primary School	Rear South View, Houghton Le Spring, Tyne and Wear			
Southwick Community Primary School	Shakespere Street, Southwick, Sunderland			
St Cuthberts Primary	Grindon Lane, Sunderland			
Usworth Collier Nursery	Manor Road,Sulgrave,Washington,Tyne and Wear			
Usworth Colliery Primary	Manor Road,Sulgrave,Washington,Tyne and Wear			
Wessington Primary School	Laner Cost, Glebe, Washington, Tyne and Wear			
Willow Wood Community School	Redcar Road, Sunderland, Tyne and Wear			