Oxfordshire

Oral Health Needs Assessment 2023

Final Report

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Executive summary: improving oral health services in Oxfordshire

This executive summary provides a comprehensive overview of key learning, recommendations and conclusions from the oral health needs assessment conducted in Oxfordshire. The assessment highlights the importance of oral health, the challenges faced in delivering adequate dental care, and the need to address inequalities in oral health outcomes. Based on the findings, a set of recommendations are proposed to improve oral health services in the region.

Introduction

The World Health Organisation (WHO) defines oral health as, - "a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, gum disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing".

A healthy mouth and smile enable people to eat, speak and socialise without pain or discomfort and play their part at home, school, work and in wider society activities. Unacceptable inequalities in oral health for vulnerable, disadvantaged and socially excluded people can be reduced by focusing on the wider determinants of health and targeting people at higher risk of developing dental disease. However, although dental disease is largely preventable, reaching those individuals who are the most vulnerable in deprived areas is challenging.

In 2019, the Care Quality Commission (CQC) wrote a report on the state of oral health care in care homes across England. The report revealed an extensive lack of awareness of National Institute for Health and Care Excellence (NICE) guidelines. It concluded that residents are not supported to maintain and improve their oral health. It is important to note that this CQC review occurred before the pandemic and given the significant challenges the COVID-19 pandemic has raised for care homes the reality of oral health care in care homes may have further deteriorated.

In May 2021, Healthwatch reported examples of patients turning to private dentistry to access routine treatment. The latest data from the GP Patient Survey shows a significant increase in the proportion of people who tried to get a dental appointment within the last two years but were unsuccessful. In 2020, 3.5% were unsuccessful, compared with 12.9% in 2022.

Research has identified that poor oral health is preventable; however, some population groups are at greater risk of tooth decay, gum disease or mouth cancer and have greater difficulty accessing dental services for prevention and treatment. These groups include looked after children (LAC), people with physical impairments or learning disabilities, people with chronic medical conditions, frailty or dementia. In addition, asylum seekers and refugees, people experiencing homelessness and Gypsy, Roma and Travelling communities are known to, or are likely to, experience dental problems as well as experiencing barriers to accessing dental care. Smoking and alcohol misuse increase people's risk of oral health problems, including mouth cancer.

Recommendations

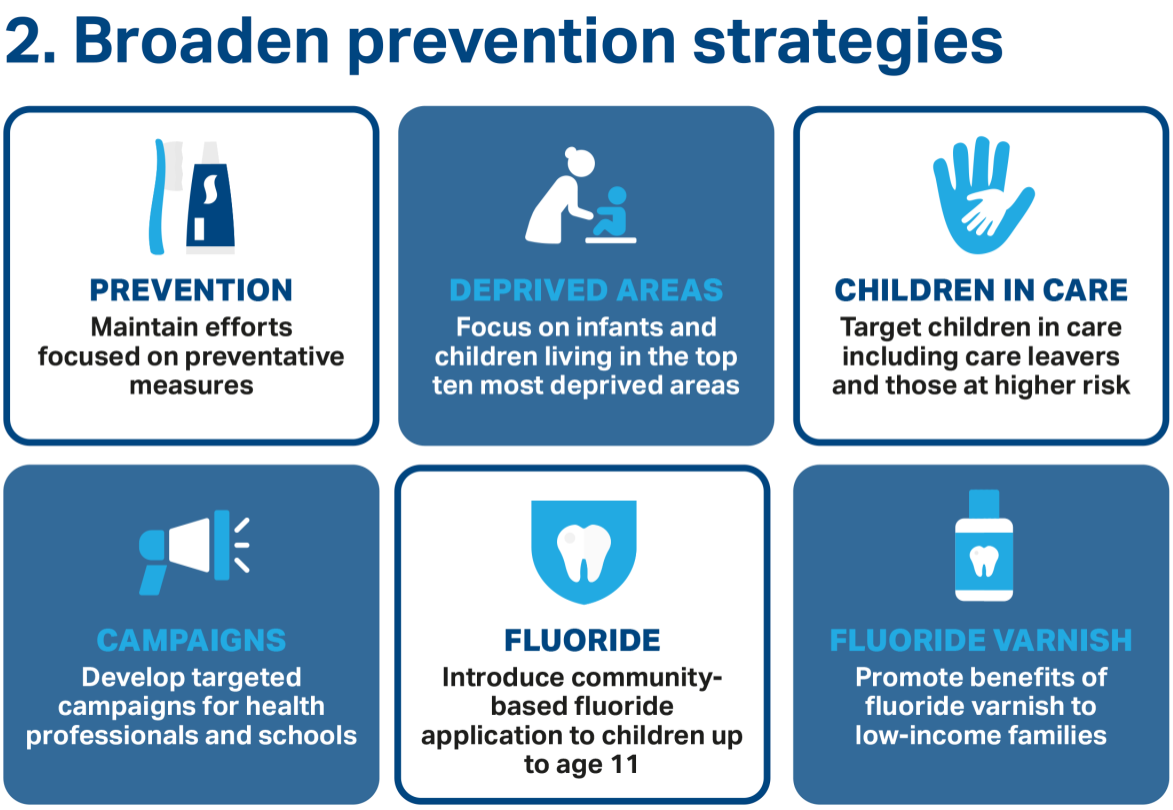
The oral health needs assessment conducted in Oxfordshire has shed light on the significance of oral health in individuals' overall well-being and the existing gaps in NHS dental care accessibility. The assessment emphasises the importance of preventive strategies, targeting vulnerable populations, and addressing key issues such as oral cancer and dental care in care homes.

The Oxfordshire System includes, but is not limited to, the Integrated Care System (ICS) and Integrated Care Board (ICB), Public Health, Children's and Adult Social Care, Early Years, care homes and Community Dental Services (CDS).

The following recommendations will require the Oxfordshire System to work together to address these challenges and improve oral health services in Oxfordshire:

1. **Make oral health one of the Oxfordshire System's top priorities**

Raise awareness regarding the impact of good oral health on an individual's quality of life. It is crucial to prioritise oral health as a key area of focus within Oxfordshire's health and social care system. All relevant oral health stakeholders within the system need to work together to improve oral health in Oxfordshire. This entails allocating adequate resources, establishing clear goals, and integrating oral health into wider health promotion and disease prevention strategies.

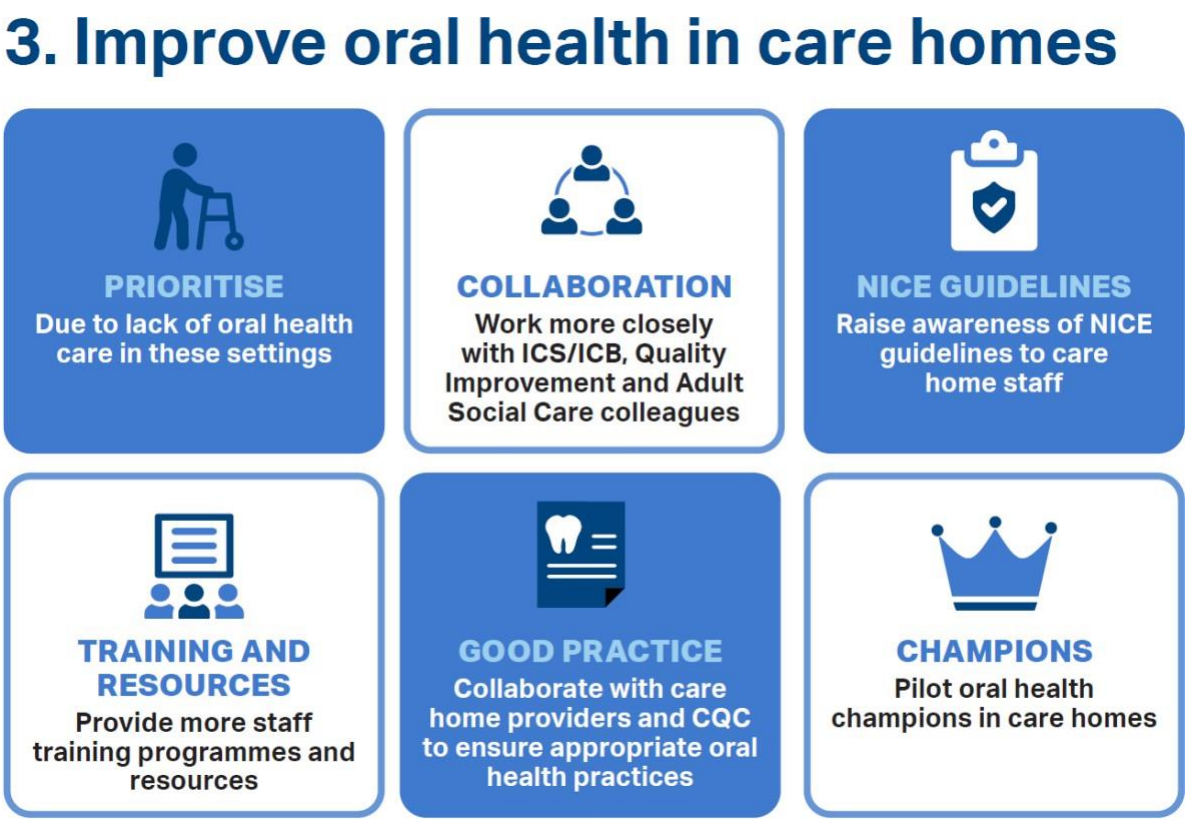


2. Broaden prevention strategies

To broaden the existing oral health promotion and improvement services, it is essential to:

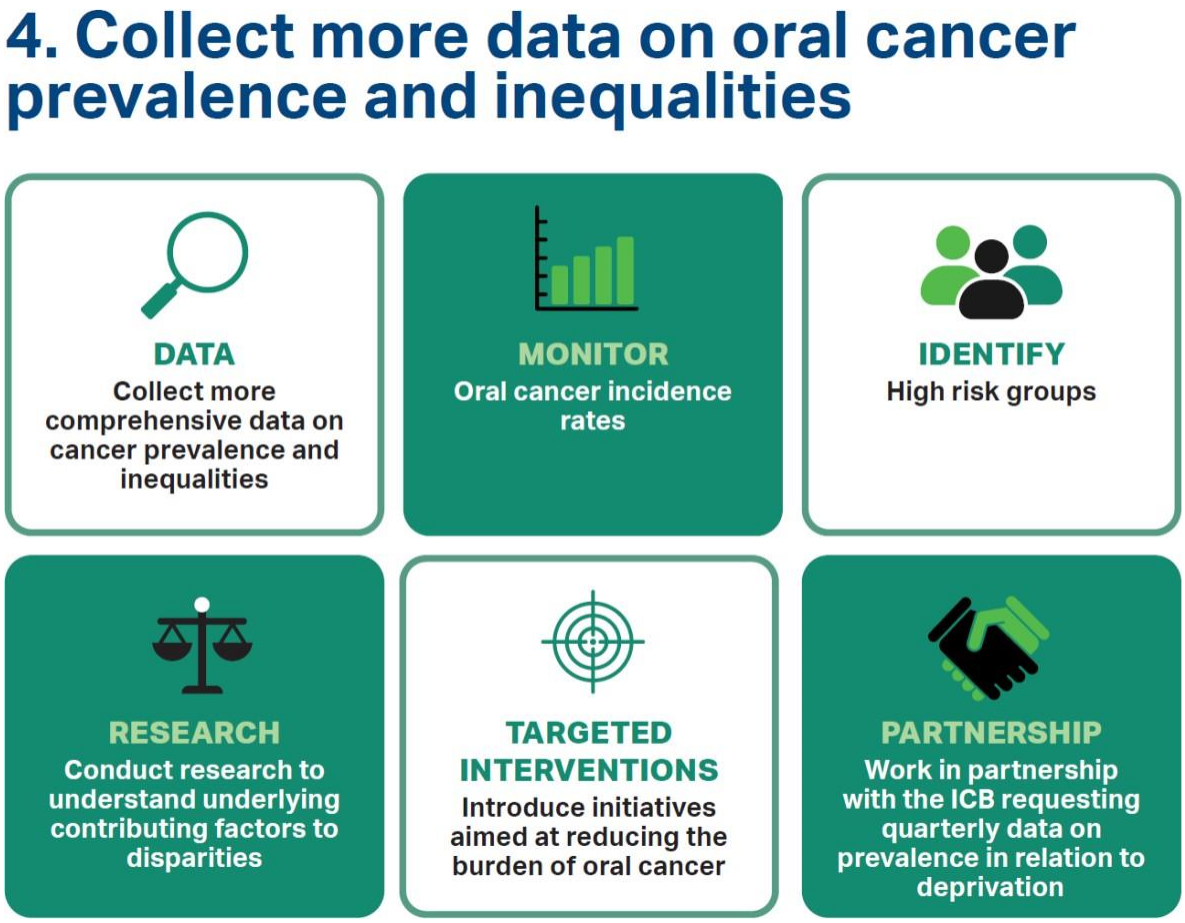
- Maintain and expand efforts focused on preventive measures
- Focus on addressing inequalities within the top ten most deprived areas in Oxfordshire
- Target children in care including care leavers and children at higher risk of poor oral health.

Interventions include awareness campaigns, educational programmes targeting health professionals and schools, social media campaigns and partnerships with community organisations. By emphasising prevention, the burden of dental disease can be significantly reduced. Consider introducing community-based fluoride varnish to children aged up to 11, especially targeting low-income individuals and families affected by the cost-of-living crisis.



3. Improve oral health in care homes

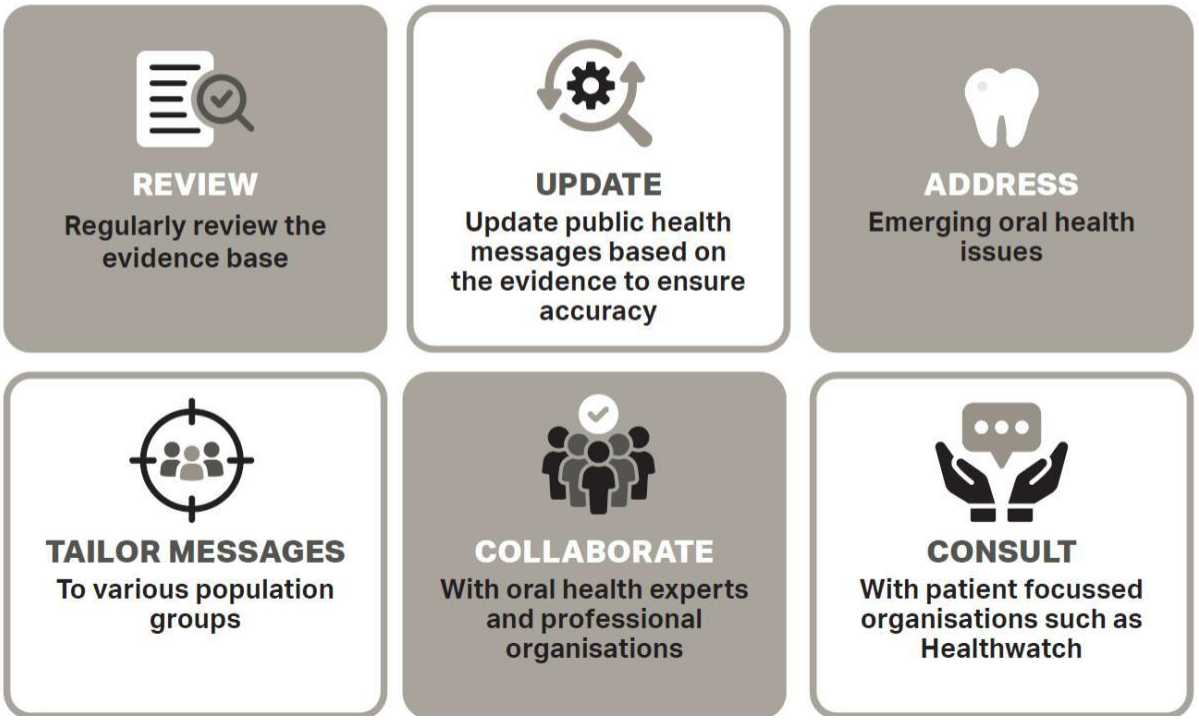
Given the concerning lack of oral health care in care homes, it is imperative to prioritise this population group. This involves raising awareness of NICE guidelines among care home staff, implementing staff training programmes and providing resources to support residents in maintaining good oral health. Collaboration with care home providers and CQC is also vital to ensure the implementation of appropriate oral care practices. Consider piloting oral health champions in care homes who will ensure quality oral health care is in line with CQC/NICE guidelines.



4. Collect more data on oral cancer prevalence and inequalities

To develop effective strategies for oral cancer prevention and management, it is crucial to gather more comprehensive data on cancer prevalence and inequalities in Oxfordshire. This includes monitoring oral cancer incidence rates, identifying high-risk populations and conducting research to understand the underlying factors contributing to disparities. This information will guide targeted interventions and support initiatives aimed at reducing the burden of oral cancer.

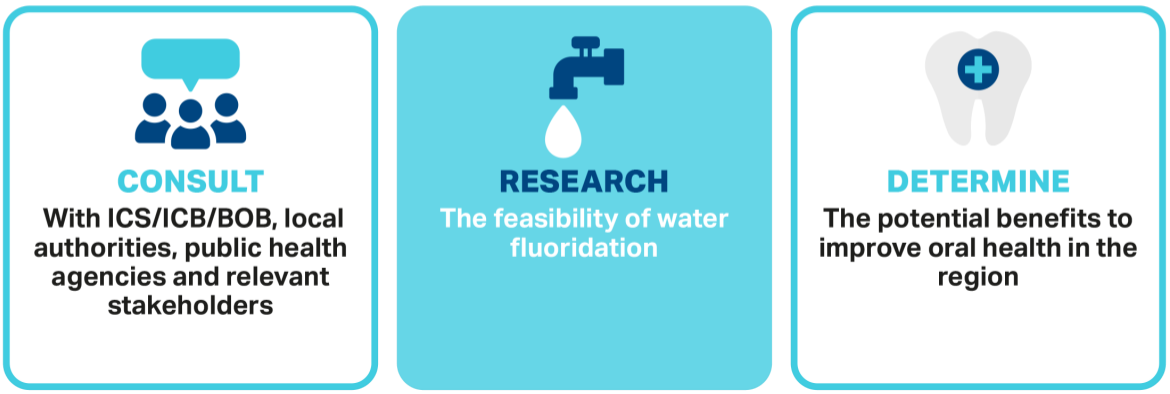
5. Review oral health research evidence to update health promotion initiatives



5. Review oral health research evidence to update health promotion initiatives

Regularly review the oral health research evidence to ensure the accuracy and relevance of oral health information provided to the public. This includes updating oral health promotion messages with the latest oral health research findings and tailoring the messages to various population groups. All system oral health partners should collaborate with oral health experts, professional oral health organisations and patient-focused organisations, such as Healthwatch, to facilitate this process.

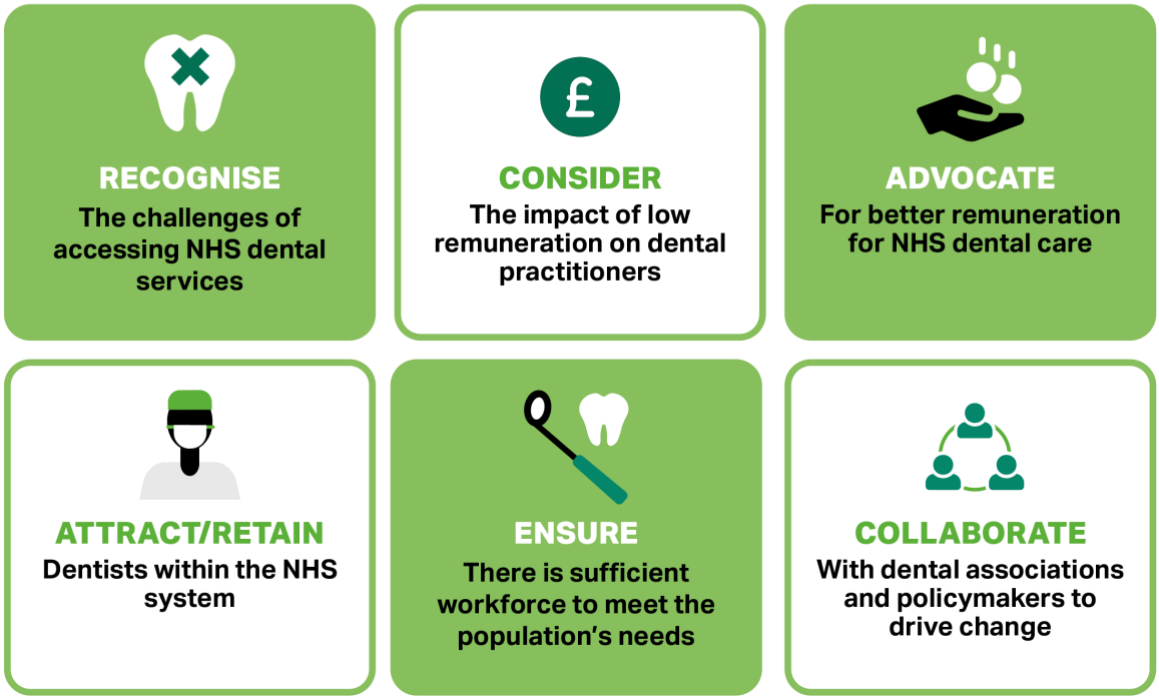
6. Explore the feasibility of regional water fluoridation



6. Explore the feasibility of regional water fluoridation

With all system oral health partners, explore the feasibility and potential benefits of water fluoridation to improve oral health outcomes in the region, particularly in deprived areas with limited access to dental care. It has been shown that water fluoridation is an effective, safe, equitable intervention to reduce the prevalence, severity and consequences of dental caries. The benefits are greatest in populations where dental decay levels are higher and it can reduce the need for dental care in the long term, thereby contributing to reducing dental health inequalities.

7. Collaboration for a financially sustainable model of NHS dentistry provision



7. Collaboration for a financially sustainable model of NHS dentistry provision

The system partners should review the challenges the Oxfordshire public are having in gaining access to NHS dental care. These include low remuneration and poorly defined career pathways for NHS dental practitioners. Collaboration with dental associations and policymakers is essential to drive positive change in this regard.

Conclusion

This oral health needs assessment has been undertaken as we are emerging from the COVID-19 lockdowns, which resulted in reduced access to dental services. The high response from the public survey illustrates the concern and dissatisfaction with current access to NHS dental services in England. The recent national survey for five-year-olds has illustrated the inequalities in children learning about oral health. The way that Oxfordshire's oral health services are currently focused on prevention, especially targeting areas of high deprivation, is highly relevant in this climate of inaccessible NHS dental care.

In conclusion, the oral health needs assessment in Oxfordshire highlights the importance of improving oral health services and reducing oral health inequalities in the region. By prioritising oral health, continuing preventive efforts, targeting vulnerable populations, addressing oral cancer, updating health promotion messages, considering fluoridation and advocating for better remuneration for NHS dental care, significant advancements can be made in oral health outcomes for the population. Implementing these recommendations will require collaboration between healthcare providers, local authorities, public health agencies and community organisations. Together, a comprehensive and equitable oral health system that improves the well-being of individuals across Oxfordshire can be created.

1 Oxfordshire Oral Health Needs Assessment

1.1 Aim

The aim of the Oxfordshire Oral Health Needs Assessment (OHNA) is to describe the oral health profile of people living in Oxfordshire and to provide an overview of the currently commissioned oral health promotion programme and dental care services in the area and identify any potential gaps in service provision. In addition, it aims to provide evidence to inform the commissioners and support the development of programmes to improve oral health and reduce inequalities.

1.2 Objectives

- Describe the demographic characteristics of the population
- Present the prevalence and incidence of oral diseases in Oxfordshire
- Describe the oral health promotion programme
- Describe the currently commissioned dental service provision
- Identify any potential gaps in service provision.

1.3 OHNA methodology

The PHAST methodology has been designed in line with both national and local oral health priorities, e.g., Applying All Our Health guidance[1,2] by the Office for Health Improvement and Disparities (OHID), Oxfordshire's Strategic Plan 2022-2025[3] and the Oxfordshire Joint Health and Wellbeing Strategy (JHWS)[4]. The methodology has been designed in accordance with OHNA NICE guidance[5]. The guideline states that many risk factors for oral health problems are same as for many chronic conditions and people with low socio-economic positions are at higher risk of poor oral health or have more difficulties in accessing dental services. It recommends that oral health should be improved by adopting a 'common risk factor' approach and by providing evidence-based oral health promotion programmes and targeted interventions for populations at higher risk of poor oral health. In addition, PHAST has also considered the impact of COVID-19.[6]

Project initiation

PHAST established an OHNA project steering group. It agreed the detailed evaluation methodology with the steering group and developed a project initiation document that offered a detailed overview of all draft documentation required, including details of the data requests, survey questionnaires, key stakeholder engagement list, communications/leaflets, format of the draft OHNA report, Risk Register and a draft Data Protection Impact Assessment.

[1] https://www.gov.uk/government/publications/child-oral-health-applying-all-our-health/child-oral-health-applying-all-our-health
[2] https://www.gov.uk/government/publications/adult-oral-health-applying-all-our-health/adult-oral-health-applying-all-our-health
[3] Strategic Plan 2022-2025 (https://www.oxfordshire.gov.uk/sites/default/files/file/about-council/OCCStrategicPlan2022.pdf)
[4] Oxfordshire Joint Health and Wellbeing Strategy (https://www.oxfordshire.gov.uk/sites/default/files/file/constitution/oxfordshirejointhwbstrategy.pdf)
[5] https://www.nice.org.uk/guidance/ph55
[6] https://www.gdc-uk.org/docs/default-source/research/gdc-covid-public-survey-2021.pdf?sfvrsn=a42b2420_5

Rapid evidence review

Website and online searches have been undertaken to identify relevant guidance from sources, such as the OHID, NHS England, Department of Health and Social Care, Scientific Advisory Committee on Nutrition, British Society of Paediatric Dentistry and the Care Quality Commission. Guidelines by the NICE have been searched for any available evidence for interventions that aim to improve the oral health of people. The evidence review focuses on current national guidance and best practice, including Child oral health[7] and adult oral health: applying All Our Health[8], Inequalities in oral health in England[9] and guidance indicated by the commissioners.

Data review and analyses

Data review and analyses include an epidemiological assessment, an evaluation of service activity, a comparative analysis and a review of the existing demand versus usage/access to current oral health services. PHAST has specifically sought out concerns/gaps in oral health services. It has:

- Reviewed and analysed the epidemiological data and the service activity data from a range of data sources to elicit activity, service user characteristics and outcomes
- Undertaken GIS mapping of oral health service provision in Oxfordshire in relation to demographic characteristics to identify any inequalities of access. The mapping incorporated a wide range of data sources whilst making appropriate comparisons with performance within Oxfordshire by ward level, with similar local authorities to Oxfordshire (e.g. CIPFA), South East Region and England
- Reviewed the data in terms of the demand of all oral health services including NHS Dental Statistics[10,] dental prescribing dashboard[11], National Dental Epidemiology Programme survey (oral health survey of adults attending general dental practices[12]). The under five oral health survey in Oxfordshire 2022 has been described in detail
- Reviewed other relevant data on oral health that addresses demand and unmet needs, including gaps in services, especially addressing the needs of people with relevant protected characteristics that may prevent them from accessing oral health services (e.g. adults with learning disabilities, looked after children, children in special support schools).
- Reviewed 2021/ 2022 GP Patient Survey Dental Statistics[13] and 2018 survey results by Healthwatch Oxfordshire.[14]

[7] https://www.gov.uk/government/publications/child-oral-health-applying-all-our-health/child-oral-health-applying-all-our-health
[8] https://www.gov.uk/government/publications/adult-oral-health-applying-all-our-health/adult-oral-health-applying-all-our-health
[9] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970380/Inequalities_in_oral_health_in_England.pdf
[10] https://digital.nhs.uk/data-and-information/publications/statistical/nhs-dental-statistics/2021-22-annual-report
[11] https://www.gov.uk/government/publications/dental-prescribing-dashboard-2018
[12] https://www.gov.uk/government/publications/oral-health-survey-of-adults-attending-dental-practices-2018
[13] https://www.england.nhs.uk/statistics/2021/07/08/gp-patient-survey-dental-statistics-january-to-march-2021-england/
[14] https://healthwatchoxfordshire.co.uk/wp-content/uploads/2017/12/Filling-the-Gaps-Access-to-NHS-Dentistry.pdf

The impact of COVID-19 on oral health services

- PHAST has reviewed and analysed data relating to changes in ways of delivering services that have been introduced as result of COVID-19 (e.g. appointments cancelled)
- PHAST has investigated via the evidence review, data review and online surveys how changes in delivering services during COVID-19 have impacted on service users with special attention paid to those with relevant protected or personal characteristics.

Key stakeholder consultation

PHAST has worked closely with the commissioners to identify a representative list of key stakeholders to inform the OHNA via an online survey. Stakeholders include:

- Commissioners and key individuals within relevant local services
- Stakeholders who have insights into oral health service delivery
- Stakeholders who work with people with relevant protected characteristics
- Service users and the public regarding their experience of current oral health services.

For a detailed list of the key stakeholders invited to complete the survey, see Appendix II.

The key stakeholder survey and public survey have addressed views on current services (structure/process/equity of access), ideas on whether any elements could be improved and how services could develop in the future.

2 Global, national and local context

2.1 Global burden of poor oral health

The World Health Organization (WHO) defines oral health as "a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, gum disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing".[15]

Another definition of oral health is as follows: "The standard of the oral and related tissues which enables an individual to eat, speak and socialise without active disease, discomfort or embarrassment and which contributes to general wellbeing."[16] Put simply, this means good oral health is an important aspect of overall health.

2.2 Causes and risk factors

The main oral diseases are dental caries (decay), gum disease, oral cancers, cleft lip and palate, tooth erosion and orthodontic disorders. Many of the risk factors that can lead to these conditions also contribute to other diseases, emphasising the need to include oral health in initiatives designed to promote health in general.[l2] These risk factors include but are not limited to:

- Diets high in sugary foods and drinks, including 'hidden' sugars in foods that may not be expected to contain sugars
- Inappropriate infant feeding practices (e.g. frequent snacking, fizzy drinks)
- Poor oral hygiene
- Dry mouth (often the side effect of certain medications, e.g. psychotropic medications)
- Smoking/use of tobacco and other carcinogenic substances
- Excessive alcohol consumption.

The long- term impacts of poor oral health cannot be underestimated, particularly when considering quality of life. Poor oral health can have a negative impact throughout life and can cause pain and infection, leading to difficulties with eating, sleeping, socialising and wellbeing. Amongst adults, it can result in time off work due to pain or for treatment.

2.3 Inequalities in oral health national picture

Oral diseases, including tooth decay, are largely preventable, but remain a major public health problem. As with other diseases, the greatest burden of poor oral health typically falls on disadvantaged and socially marginalised populations.

Tooth decay is still the most common reason for hospital admissions in the 6- to 10-year-old age group. In 2019-20, there were 35,190 hospital procedures for extraction of carious teeth in children aged 0 to 19 in England.[17] This means that around 102 children a day, some just a

[15] World Health Organisation; Oral health https://www.who.int/news-room/fact-sheets/detail/oral- health
[16] Department of Health (1994): An oral health strategy for England. London: HMSO
[17] Public Health England (2021): Hospital tooth extractions of 0- to 19-year-olds. Hospital tooth extractions of 0- to 19-year-olds - GOV.UK (www.gov.uk)

year old, are having teeth removed in hospital.[18] Extraction of teeth with general anaesthetic is often a child's first introduction to dental care and can lead to fear and anxiety with lifetime consequences.

Poor oral health in children can also affect school readiness and educational attainment by loss of concentration in class due to pain and infection. Furthermore, each episode of dental extraction under general anaesthesia (if required) would also necessitate at least three days of school absence with parents/carers also being obliged to take time off work. Limited function of the dentition may also restrict food choices compromising nutritional status.

Those of South Asian origin

Smokeless tobacco is predominantly used by those of South Asian origin. Professionals should:[1]

- Ask patients if they use smokeless tobacco, using the names that the various products are known by locally. It may be helpful to show a picture of what the products look like
- Ensure that those who use smokeless tobacco are aware of the health risks and provide them with very brief advice
- Refer patients who want to quit to specialist support services.

Underserved communities

- People experiencing homelessness
- Looked after children
- Vulnerable migrants.

Case study: Narrowing oral healthcare inequalities in Yorkshire and the Humber[19]

People experiencing homelessness, looked after children and vulnerable migrants are among those groups being supported by initiatives to improve access to dental services for underserved communities in Yorkshire and Humber.

Following publication of the paper *Inclusion Health: Applying All Our Health* which calls on health and care professionals to take action to reduce healthcare inequalities, local stakeholders identified a number of opportunities for targeted interventions to improve access, experience and outcomes for socially excluded and vulnerable groups known to have high dental needs in the area.

People Experiencing Homelessness

In Leeds, a programme supporting people experiencing homelessness to access dental care is helping to narrow healthcare inequalities in the area. In general, people experiencing homelessness have poorer dental health and experience higher levels of tooth decay and gum disease. Poor diet, alcohol and drug consumption and a high smoking prevalence also place this population at a higher risk of oral diseases, including mouth cancer.

[18] Public Health England (2021): Inequalities in oral health in England

[19] *https://www.england.nhs.uk/about/equality/equality-hub/case-studies/narrowing-oral-healthcare-inequalities-in-yorkshire-and-the-humber/*

However, it is well recognised that people experiencing homelessness face particular challenges in accessing healthcare, particularly dental care services. Barriers include stigma and cost as well as anxiety about dental treatment. The logistics of making and travelling to an appointment can also be prohibitive.
The dental public health and dental commissioning teams in West Yorkshire worked with dental care providers, local homelessness charities and other partners to establish two designated 'homeless friendly' dental practices offering dedicated sessions for those experiencing homelessness. As part of this, local charities worked with the practices to book appointments for patients and supported them to attend.

Looked after children

Dental services for looked after children in Yorkshire and Humber have also been transformed thanks to the development of a simple pathway and standardised assessment forms for use across a growing number of local authorities.
At the point a child is taken into care, carers of looked after children are now given advice and guidance on dental assessments, including paperwork for dentists to complete at the child's first appointment. This is then returned to the carer for them to share with the child's paediatrician, social worker and local looked after children's health team. This empowers everyone involved in caring for the child and recognises the vital role they have in ensuring that children's dental health needs are met.

Afghan evacuees

As part of the government's Afghan Citizens Resettlement Scheme around 400 Afghan evacuees, including children and families, were re-located to hotels across North Yorkshire. While the NHS put in place wraparound healthcare packages for this extremely vulnerable and traumatised group, many were finding it difficult to access urgent dental care. This was partly due to language barriers and a reliance on NHS 111 services.
Working together with the Refugee Council, Health Education England developed a pathway of care to support this under-served group and ensure those in need of urgent dental care were supported to receive this. This included a simple screening questionnaire, which was developed with the local authority and translated into Pashto and Dari – the two main Afghan languages. The Refugee Council gave the questionnaire to evacuees experiencing dental problems.

Mental health inpatients

Case Study: Implementing a mobile dental unit into a mental health inpatient ward[20]
People with severe and prolonged mental illness are at a much higher risk of early death, on average by 15-20 years. This represents one of the greatest health inequalities in England. A lack of access to physical healthcare for people with mental health problems is common which has serious consequences. A healthcare support worker at the Black Country Partnership NHS Foundation Trust introduced a mobile dentistry unit into an inpatient ward for older people with mental health needs. This has improved the experience of patients and staff as well as improving outcomes and the use of resources.

[20] *Case Study: Implementing a Mobile Dental Unit into a Mental Health Inpatient Ward. NHS England. Feb 2019*

2.4 Commissioning NHS dental services in England

Outlined below is an overview of NHS dentistry in England, including a discussion of current challenges facing providers and the government response.[21]

Responsibility for commissioning
From 1 April 2023, all Integrated Care Boards (ICBs) have taken on the delegated responsibility for commissioning dental services from NHS England. NHS guidance for ICBs requires dental funding to be ring-fenced.[22] Under the Health and Care Act 2022, every part of England is covered by an ICB, and an Integrated Care Partnership (ICP), in each of the 42 existing Integrated Care Systems (ICS) (prior to these changes, NHS England was responsible for commissioning dental care services to meet local needs and priorities, managed through its local area teams).

Primary care dentists
Primary care dentists are self-employed and can provide a mixture of private and NHS-funded care. Service delivery provided on the NHS is agreed under contract between the NHS and the dentist. Dental contracts require dentists to complete a set number of units of dental activity (UDAs) – these do not relate to the number of patients.

Funding
NHS dentistry in England is funded by a combination of payments from NHS England and NHS Improvement (via the NHS Business Services Authority) and patient charges. Some groups of patients are entitled to free dental treatment. Between 2010/11 and 2021/22, total funding for dental services in England fell by 8% in real terms (2021/22 prices), down from £3.36 billion in 2010/11 to £3.10 billion on 2021/22. Over this period the contribution of NHS England to total funding for dental services fell by 5% in real terms and income from patient charges fell by 17%.

Dental workforce
Over the past decade, the number of dentists providing NHS treatment per 100,000 population peaked in 2014/15 at a rate of 44.1 dentists per 100,000. In 2021/22 the figure was 42.9 per 100,000 population. Medical and dental school places are capped in each part of the UK. There have been calls to increase the number of training places available. NHS England and NHS Improvement (now NHS England) has previously said that whilst overall national workforce numbers appear adequate, it is aware of "certain geographic shortfalls limiting service provision". The uneven distribution of dentistry schools – six in the North, two in London, two in the South West, one in the Midlands and none in the East of England – has made it difficult to maintain the workforce in remote areas.

Concerns have also been expressed about the number of NHS dentists turning to private practice. In May 2022, the British Dental Association (BDA) reported 3,000 dentists had stopped providing NHS dental services since the start of the pandemic and its survey of high

[21] https://commonslibrary.parliament.uk/research-briefings/cbp-9597/
[22] https://www.england.nhs.uk/publication/2023-24-revenue-finance-and-contracting-guidance/

street dentists found nearly half (45%) reported reducing their NHS commitment since the onset of the pandemic. 75% said they were likely to reduce their NHS commitment in the next year.

Access to NHS dentistry

The Care Quality Commission (CQC) highlight that access to NHS dental care was an issue long before the pandemic, but there are 'clear signs' of problems having been compounded by COVID-19. Concerns about lack of access to NHS dentistry, particularly in more remote areas of the UK, have been the subject of several parliamentary debates and received widespread media coverage. Amongst these concerns have been media reports of people turning to "DIY dentistry" and others resorting to paying for private treatment.

In May 2021, Healthwatch reported examples of patients turning to private dentistry to access routine treatment. The article said "whilst some people were asked to wait an unreasonable time of up to three years for an NHS appointment, those able to afford private care could get an appointment within a week." In August 2022, the BBC reported 90% of dental practices in the UK were not taking on new adult patients.

The latest data from the GP Patient Survey shows a significant increase in the proportion of people who tried to get a dental appointment within the last two years but were unsuccessful. In 2020, 3.5% were unsuccessful, compared with 12.9% in 2022.

2.5 Local policies related to wider determinants of oral health

Local authorities are statutorily required to provide or commission oral health promotion programmes to improve the health of the local population, to the extent that they consider appropriate in their areas. They are also required to provide or commission oral health surveys to facilitate assessment, monitor oral health needs and plan and evaluate oral health promotion programmes and dental services.

There is guidance to help local authorities in providing their oral health function. In 2014, Public Health England published a toolkit to help local authorities fulfil their oral health responsibilities.[23] NICE also have a quality standard relating to oral health promotion in the community.[24] This NICE guidance describes improving oral health by developing and implementing a strategy that meets the needs of people in the local community; the NICE guidance makes 22 recommendations.

Oral diseases share many risk factors with other chronic diseases, i.e. excess sugar in the diet is a risk factor for tooth decay and obesity; alcohol is a risk factor in many cancers including oral cancer and smoking is the main cause of lung disease and periodontal (gum) disease. Therefore, improving oral health supports national strategies such as the

[23] https://www.gov.uk/government/publications/delivering-better-oral-health-an-evidence-based-toolkit-for-prevention

[24] https://www.nice.org.uk/guidance/qs139#:~:text=This%20quality%20standard%20covers%20activities,in%20priority%20areas%20for%20improvement.

government food strategy 2022 and smoke free England ambitions. It also supports and is supported by local strategies.

2.6 Core20PLUS5 – an approach to reducing health inequalities for children and young people

Core20PLUS5 is a national NHS England approach to support the reduction of health inequalities at both national and system level. The approach defines a target population cohort and identifies '5' focus clinical areas requiring accelerated improvement. The approach, which initially focused on healthcare inequalities experienced by adults, has now been adapted to apply to children and young people. The information below outlines the Core20PLUS5 approach for children and young people.

More information about the Core20PLUS5 approach for adults can be found on the website. https://www.england.nhs.uk/about/equality/equality-hub/national-healthcare-inequalities-improvement-programme/core20plus5/

Core20

Core20 is the most deprived 20% of the national population as identified by the national Index of Multiple Deprivation (IMD). The IMD has seven domains with indicators accounting for a wide range of social determinants of health. For children and young people, wider sources of data may also be helpful including the national child mortality data base and data available on the Fingertips platform.

PLUS

PLUS population groups include ethnic minority communities, inclusion health groups, people with a learning disability and autistic people, coastal communities with pockets of deprivation hidden amongst relative affluence, people with multi-morbidities and protected characteristic groups. Specific consideration should be taken for the inclusion of young carers, looked after children/care leavers and those in contact with the justice system. Inclusion health groups include people experiencing homelessness, drug and alcohol dependence, vulnerable migrants, Gypsy, Roma and Traveller communities, sex workers, people in contact with the justice system, victims of modern slavery and other socially excluded groups.

5 - five clinical areas of focus

The five areas of focus are part of wider actions for Integrated Care Board and Integrated Care Partnerships to achieve system change and improve care for children and young people. Governance for these five focus areas sits with national programmes. National and regional teams coordinate local systems to achieve the following aims:

1. Asthma – address over reliance on reliever medications and decrease the number of asthma attacks.
2. Diabetes – increase access to real-time continuous glucose monitors and insulin pumps across the most deprived quintiles and from ethnic minority backgrounds and increase proportion of those with Type 2 diabetes receiving recommended NICE care processes.

3. Epilepsy – increase access to epilepsy specialist nurses and ensure access in the first year of care for those with a learning disability or autism.
4. Oral health – reduce tooth extractions due to decay for children admitted as inpatients in hospital, aged ten years and under.
5. Mental health – improve access rates to children and young people's mental health services for 0 to 17-year-olds, for certain ethnic groups, age, gender and deprivation.

2.7 Oxfordshire local oral health strategies and policies

Key local strategies and policies that cover relevant priorities around improving health and wellbeing of residents include:

Oxfordshire Joint Health and Wellbeing Strategy[25]
This strategy focuses on an approach which covers all ages and stages of life – ensuring 'A Good Start in Life', enabling adults to continue 'Living Well' and paving the way for 'Ageing Well'. It states:
We aim to:

- Prevent ill health before it starts
- Give patients and service users a high-quality experience as they use our services
- Work with you on re-shaping your local services
- Tackle our chronic workforce shortages.

Oxfordshire Prevention Framework[26]
The framework states:
The main challenge in a relatively healthy population is to address inequalities by making sure we build on our assets to give the same access and outcomes to everyone. The framework lists the key inequalities including stating oral health is worse for children from deprived circumstances (who have three times the rate of dental caries than more affluent children nationally). Tooth decay is almost entirely preventable. It remains the most common single reason that children age five to nine require admission to hospital.

They recommend:

- Infants should not be given sugar-containing drinks and where possible, sugar should be consumed in a natural form through human milk, milk, unsweetened dairy products and intact fresh fruits. This is particularly important during the weaning process
- Introducing Sugar Smart as a local initiative which aims to reduce sugar in drinks and food. They report that this initiative has been making progress, but they are not sure whether the oral health of young children is improving yet
- Dentists should see more children from a young age to form good oral health habits in order to prevent tooth decay.

[25] https://www.oxfordshire.gov.uk/sites/default/files/file/constitution/oxfordshirejointhwbstrategy.pdf
[26] https://www.oxfordshire.gov.uk/sites/default/files/file/plans-performance-policy/OxfordshirePreventionFramework_.pdf

Oxfordshire County Council Strategic Plan[27]

The vision for the county is centred around strong local communities, healthy places to live, and a zero-carbon economy that benefits everyone. They wish to tackle inequalities in Oxfordshire and focus on equality and inclusivity – it has to work for everyone. They wish to prioritise the health and wellbeing of residents and create opportunities for children and young people to reach their full potential.

[27] https://www.oxfordshire.gov.uk/sites/default/files/file/about-council/OCCStrategicPlan2022.pdf

3 Evidence Base

3.1 Fluoride

Water fluoridation

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. Public Health England, and now 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 conclusions that drinking water fluoridation is an effective public health intervention for tackling dental health inequalities.[28]

Water fluoridation should be part of an overall oral health strategy – it is one intervention which should run alongside others, e.g. fluoride varnish application. 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.

- There is abundant evidence that increasing fluoride availability to individuals and communities is effective at reducing dental caries levels.[1]
    - Regular exposure to fluoride maintains a concentration in the plaque biofilm that encourages remineralisation of the tooth surface. This can be achieved by a range of methods, but similar principles apply to all
    - Fluoride delivery using vehicles that can be incorporated into aspects of everyday living are more likely to be effective and they avoid increasing inequalities
    - The risk of ingesting too much fluoride leading to fluorosis should be considered for young children during tooth formation.

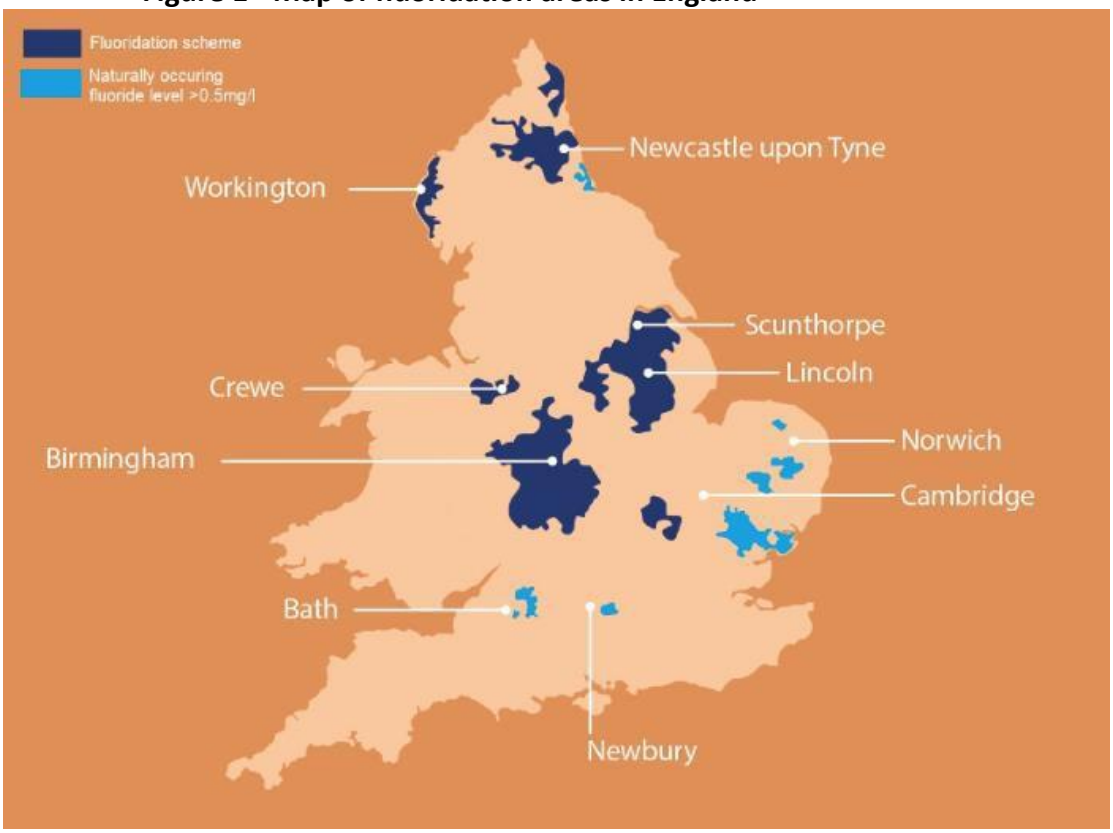
Fluoridation of water

- Currently, approximately 10% of England's population, or about six million people, have a fluoridated water supply. In terms of population coverage, the West Midlands is the most extensively fluoridated area, followed by parts of the North East of England[1]
- There are no fluoridation schemes in Scotland, Wales and Northern Ireland, however, there are some localised areas of naturally occurring fluoride in the water. To check if

[28] Iheozor-Ejiofor et al, 2015; PHE, 2018

the water supply in a given area is fluoridated, information can be obtained from the local water supplier by quoting the residential postcode. Many water companies have an online function to allow consumers to check the level of fluoride.

Figure 1 - Map of fluoridation areas in England



Source: Iheozor-Ejiofor et al, 2015; PHE, 2018

- Fluoride in water is recommended to reduce the likelihood of experiencing dental decay and minimise its severity.[29]
  - Evidence reviews confirm that fluoride in water is an effective, safe public health measure suitable for consideration in localities where levels of dental decay are of concern
  - The introduction of water fluoridation resulted in children having 35% fewer decayed, missing and filled baby teeth and 26% fewer decayed, missing and filled permanent teeth
  - Fluoridation led to a 15% increase in children with no decay in their baby teeth and a 14% increase in children with no decay in their permanent teeth.

[29] Iheozor-Ejiofor et al, 2015; PHE, 2018

Milk fluoridation

- There are a few community schemes in England which supply children with fluoridated milk at early years and school settings. They are provided in areas that are not fluoridated and where levels of dental caries are high[1]
- In 2016, an evidence review and guide for local authorities commissioning programmes, such as fluoridated milk, classified these as of limited value for oral health.[1]

Increasing fluoride availability

- There is moderate to high certainty evidence that fluoride toothpaste of 1,000 ppm fluoride or above prevents dental caries in both the permanent and primary dentition[1]
- For children at higher risk, 1,350 to 1,500 ppm is advocated and also for children aged seven and upwards.[1]

Fluoride toothpaste

- Brush with fluoride toothpaste[1]
  - It is important to brush at least twice a day with fluoride toothpaste, last thing at night or before bedtime and one other time
  - The formulation of fluoride in toothpaste varies and can take various forms, however, there is currently insufficient evidence to confidently recommend one over another
  - It is the strength in parts per million fluoride that is important
  - A combination of health behaviours (using higher fluoride paste, brushing twice a day and avoiding rinsing after brushing) appears to be associated with reducing dental caries increment in adolescents.

- Higher dose fluoride toothpaste[1]
  - The maximum concentration of fluoride-containing toothpaste that can be purchased over the counter in the UK is 1,500 ppm fluoride. Higher dose toothpastes are available on prescription from a dentist
  - Evidence on the efficacy of higher dose fluoride toothpastes is limited
  - Dentists may wish to consider higher concentration fluoride toothpastes for vulnerable young people and adults susceptible to dental caries.

Fluoride varnish

- 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[1].
  - 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 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.
  - Fluoride varnish for use as a topical treatment has several practical advantages. It is well accepted and safe for most patients
  - The application of fluoride varnish is simple and can be applied by trained and competent members of the oral healthcare team including dental nurses.

- Dental nurses can be trained to apply fluoride varnish to the prescription of a dentist and this use of team skill mix can assist a practice to become more preventively orientated (a detailed protocol for the application of fluoride varnish is currently available from the Scottish Childsmile manual)
- The use of fluoride varnish is contraindicated in patients with ulcerative gingivitis and stomatitis
- Whilst most of the focus on fluoride varnish use has been on dental caries prevention in children, it is increasingly important to consider its use with adults at higher risk, particularly frail older people, who have maintained their natural teeth. Fluoride varnish has the advantage of being professionally applied and does not have aesthetic challenges.

Fluoride mouthwashes

- Fluoride mouthwashes or mouth-rinses (0.05% w/v; 230 ppm) can be considered for patients aged eight and above, for daily use, in addition to twice daily brushing with toothpaste containing at least 1,350 ppm fluoride.[1]
  - Rinses require patient compliance and should be used at a different time to toothbrushing to maximise the topical effect which enhances the bioavailability of fluoride in the plaque biofilm
  - They are likely to be most useful in higher dental caries risk patients
  - There is moderate-certainty evidence that fluoride mouthrinses prevent dental caries in the permanent dentition, although the evidence is derived from supervised use at school
  - There are no trials of the effect of mouthrinses on the primary dentition
  - Overall, there is insufficient evidence to support daily (230ppm) versus weekly (circa 900ppm) mouthwash use as superior, in terms of dental caries prevention
  - The available evidence coming from school-based programmes where children are supervised suggests that regular use of fluoride mouthrinse results in a large reduction in tooth decay in the permanent teeth of children and adolescents. The benefit of fluoride mouthrinse is likely to be present even if children use fluoride toothpaste or live in water-fluoridated areas.

3.2 Targeted provision of toothbrushes and toothpaste

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.[30] However, children in more deprived areas are less likely to brush their teeth twice daily.[31] Targeted childhood settings, such as nurseries and schools, 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

[3030] 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.

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

and encourage support for home brushing.[32] There is evidence to support children aged three to six should brush their teeth at least twice, supervised by a parent or carer, in order to maximise caries prevention. 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 three, the evidence for toothpaste 500 to 1,000 ppmF is inconclusive, therefore a toothpaste containing at least 1,000 ppm fluoride should also be used but only a smear.

3.3 At a population, school, or early years level

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 a life-long behaviour to promote oral health.[33] It is also important that school-based toothbrushing activity should promote and support toothbrushing in the home as well as the school or early years setting.[34] NICE guidance[35] 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.

3.4 Return on investment of oral health improvement

In 2016, Public Health England (PHE) commissioned a review of the 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 1 shows the modelling tool and the return on investment for five interventions which are considered clinically effective. The figure illustrates 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.

Figure 2 - Return on investment of oral health improvement

[32] National Audit Office (2020), Dentistry in England: https://www.nao.org.uk/wp-content/uploads/2020/03/Dentistry-in-England.pdf
[33] 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.
[34] NICE (2016) QS139, Oral health promotion in the community: https://www.nice.org.uk/guidance/qs139
[35] NICE (2016) QS139, Oral health promotion in the community: https://www.nice.org.uk/guidance/qs139

Reviews of clinical effectiveness by NICE (PH55) and PHE (commissioning Better Oral Health for Children and Young People, 2014) have found that the following programmes effectively reduced tooth decay in five-year-olds.

* All targeted programmes modelled on population decayed, missing or filled teeth (dmft) index of 2, and universal programme on dmft for England of 0.8. The modelling has used the PHE Return on Investment Tool for oral health interventions (PHER, 2016). The best available evidence has been used in this tool and where assumptions are made these have been clearly stated. PHE Publications gateway number: 2016321.

3.5 Development of the workplace and dental career training

Implementing a Making Every Contact Count (MECC) approach can give professionals an opportunity to provide brief advice to improve overall health and wellbeing. This can be supported through training and development to deliver appropriate evidence informed brief advice across the life course. Oral health messages can be integrated into currently commissioned programmes, e.g. into the Healthy Child Programme whereby health visitors can deliver advice on breastfeeding being beneficial to oral health along with general healthy eating messages and advice on oral hygiene. Current evidence suggests that breastfeeding up to 12 months of age is associated with a decreased risk of tooth decay.[36] Another example is to support teachers or school nurses to provide an oral health session as part of the Personal, Social, Health and Economic (PSHE) curriculum.

Working together to safeguard children is everyone's responsibility. Dental neglect is an important child protection issue. Signs include visible tooth decay, untreated trauma and multiple hospital admissions for dental care. All staff across healthcare, social care and education should have sufficient knowledge and understanding to recognise signs of poor oral health and neglect and take appropriate action. It is important to develop and offer a range of training packages to tackle these issues and enable staff to deliver oral health advice to individuals of all ages.

It is important to address the career development of dentists and encourage them to work for NHS dentistry. According to the BDA, the problem is that there is a lack of financial incentives and demand for NHS dentistry that cannot be met.[37]

"Recent research also shows three-quarters of dentists say they are now likely to reduce – or further reduce – their NHS commitment in the next 12 months, with 45% saying they are likely to go fully private. They want to provide the level of care they believe their patients deserve. Many colleagues have simply given up hope that government is willing to deliver the change we need. These dentists can't see a light at the end of the tunnel and are voting with their feet."

[36] https://www.gov.uk/government/publications/breastfeeding-and-dental-health/breastfeeding-and-dental-health
[37] https://bda.org/news-centre/blog/Pages/england-the-end-of-nhs-dentistry-as-we-know-it.aspx

3.6 NICE guidance – early years, older adults and vulnerable adults

The following adult and care home publications are available from the NICE website:

- Improving Oral Health for Adults in Care Homes — A Quick Guide for Care Home Managers (2018) NICE and the Social Care Institute for Excellence
- NG30: Oral Health Promotion: General Dental Practice (December 2015), National Institute for Health and Care Excellence (NICE)
- NG48: Oral Health for Adults in Care Homes (July 2016), National Institute for Health and Care Excellence (NICE)
- PH55: Oral Health: Local Authorities and Partners (October 2014), National Institute for Health and Care Excellence (NICE)
- QS139: Oral Health Promotion in the Community (December 2016), National Institute for Health and Care Excellence (NICE)
- QS151: Oral Health in Care Homes (June 2017), National Institute for Health and Care Excellence (NICE)

3.7 Relevant national standards

The Oral Health Service is expected to keep up-to-date using the best available evidence. This includes – Commissioning Better Oral Health[38] and Delivering Better Oral Health[39].

The Service is expected to keep up-to-date with oral health promotion policies and local guidelines, incorporating recommendations from:

- Department of Health
- UK Health Security Agency (UKHSA)
- NHS England
- Faculty of Public Health
- Royal College of Surgeons
- Faculty of General Dental Practice UK
- Faculty of Dental Surgery
- British Society for Disability and Oral Health
- British Dental Association
- British Society of Paediatric Dentistry
- British Association of Disability and Oral Health
- The National Institute for Health and Care Excellence.

[38] Public Health England. Local authorities improving oral health: commissioning better oral health for children and young people. An evidence-informed toolkit for local authorities. June 2014.
[39] Department of Health. Improving Outcomes and Supporting Transparency: Part 1: A Public Health Outcomes Framework for England, 2016-2019.

4 Oral health in children

4.1 Tooth formation

- Maternal diet and nutritional status before and during pregnancy can directly influence the formation and structural integrity of both the primary and permanent dentition during fetal growth[40]
- Exposure to teratogens during pregnancy or severe maternal nutrient deficiencies can impact on the development of the primary teeth and those permanent teeth that start to form during pregnancy
- There is no evidence that consumption of fluoride supplements (such as tablets, drops, lozenges or chewing gum) by women during pregnancy is effective in preventing dental caries in the primary teeth of their children
- The oral microbiome of infants is influenced by mode of delivery[1] – infants delivered vaginally are exposed to different microorganisms than those delivered by C-section and this may affect colonisation patterns in the oral cavity
- The nutritional composition of the infant diet can have a direct effect on tooth development pre-eruption[1]
- Both the nutritional composition and the erosive characteristics of the infant diet can affect tooth tissue post-eruption.[1]

4.2 Dental caries in children

- Dental caries is a preventable disease, or is readily treatable with early diagnosis and good behaviour management[8]
- Poor oral health is associated with material deprivation with children living in deprived communities having poorer oral and general health when compared with their more affluent peers[41]
- As dental caries takes a finite time to develop once the teeth have erupted. Any feeding practices that increase the risk of dental caries are likely only to show effects (in terms of dental caries) after the age of twelve months[1]
- The evidence relating to infant feeding and dental decay is inconsistent. Factors that have been explored include: [1]
    - The carbohydrate content of breast milk or infant formula
    - Factors which determine the length of contact between breast milk or infant formula and the erupted dentition
    - Age of colonisation and levels of cariogenic bacteria in an infant's mouth
    - The growth and adhesion of cariogenic bacteria, particularly oral Streptococci, are inhibited by breast-specific Lactobacilli and substances including human casein and secretory IgA in breast milk which are not found in infant formula.

[40] *SACN report on feeding in the first years of life. sacn. 2018*
[41] *Marmot & Bell, 2011*

4.3 Breastfeeding

- Breastfed babies experience less tooth decay and breastfeeding provides the best nutrition for a baby's overall health. It is strongly recommended to support mothers to:[42]
  - Breastfeed exclusively for around the first six months of a baby's life
  - Continue breastfeeding while introducing solids from around the age of six months.
- Mode of feeding (breastfeeding versus infant formula feeding) has been found to influence the infant oral microbiome and this may have implications for child health and long-term human health[43]
- Studies demonstrate a protective effect of breastfeeding when considering dental caries compared with other feeding[1]
- infants who were breastfed in the first 12 months of life had fewer carious teeth compared with formula fed babies
- Regarding tooth alignment, breastfed children may be less likely to develop malocclusions compared with never breastfed children up to 12 years of age.[1]

4.4 Bottle-feeding and free-flow cups

- The early onset of dental caries suggests poor infant feeding practices.[44]
- From around six months of age, infants should be introduced to drinking from a free-flow cup, and from age one year, feeding from a bottle should be discouraged[3]
- Parents and carers should be encouraged to offer drinks in a non-valved, free-flowing cup from age six to 12 months[45]
- Parents and carers should be discouraged from bottle feeding from one year onwards[4]
- Parents and carers should be providing milk and water to drink between meals[4]
- Free-flow cups (or beakers) are recommended because these enable the child to learn the skill of sipping, which is important in the development of the muscles used in talking.[46]

4.5 Promoting brushing teeth to children and their carers

- The early onset of dental caries suggests the delayed commencement of toothbrushing and/or lack of fluoride toothpaste may be associated with the development of dental caries[3].
- It is strongly recommended that parents or carers should brush their children's teeth (and as the child gets older assist them to brush their own teeth)[1]:
  - As soon as they erupt
  - On all tooth surfaces
  - Twice daily
  - Last thing at night and on one other occasion
  - With a toothpaste containing at least 1,000 ppm fluoride

[42] *Delivering Better Oral Health: An Evidence-Based Toolkit for Prevention, Office for Health Improvement and Disparities, Updated November 2021*
[43] *SACN report on feeding in the first years of life. sacn. 2018;* Holgerson et al, 2013
[44] *Delivering better oral health – an evidence-based toolkit for prevention. Public Health England. 2014*
[45] NICE, 2014
[46] American Dental Association, 2004

- Use toothpaste containing 1,350 to 1,500 ppm fluoride for children six and under giving concern because of dental caries risk, or children over seven years
- Use only a smear of toothpaste (up to three years), a pea sized amount (aged three to six years)
- Spitting out after brushing rather than rinsing, to avoid diluting the fluoride concentration.

4.6 Sugar consumption

- Sugars should not be added to foods or drinks[3]
- It is strongly recommended to minimise amount and frequency of consumption of sugar-containing foods and drinks[1]
- Avoid sugar-containing foods and drinks at bedtime when saliva flow is reduced and buffering capacity is lost[1]
- Parents and carers should be discouraged from offering baby juices or sugary drinks at bedtime.[4]

4.7 Paediatric dentistry /professional intervention

- Paediatric dentistry covers all aspects of oral health care for children including restorative care, minor oral surgical procedures and interceptive orthodontics.[47]
- Recommended professional intervention includes:[1]
  - Strongly recommend assigning a recall interval from 3-12 months based on oral health needs and disease risk
  - Strongly recommend applying fluoride varnish (2.26% NaF) to teeth twice a year
  - Strongly recommend applying resin sealant to permanent teeth on eruption
  - Good practice to investigate diet and assist adoption of good dietary practice in line with the Eatwell Guide
  - Conditionally recommend for children with active dental caries:
    - eight years and above consider daily fluoride mouth rinse (0.05% NaF; 230ppm F), to be used at a different time from brushing
    - ten years and above consider prescribing 2,800ppm fluoride toothpaste
    - 16 years and above consider either 2,800ppm or 5,000ppm fluoride toothpaste.
- It is recommended to see a dentist as soon as the first tooth appears and no later than the first birthday[48]
- Dental and facial injury, disturbances of tooth formation (structure, position and number), periodontal disease and oral manifestations of underlying systemic disease are some of the conditions that are commonly seen[8]
- Adequate dental care for children is not being provided in the primary care setting at present. Introduction of Dentists with a Special Interest (DwSI) in Paediatric Dentistry, working in partnership with specialist and consultants both in primary and secondary care will raise the standard of care.[8]

[47] *National Guidelines for the appointment of Dentists with a Special Interest (DwSI) in Paediatric Dentistry. British Society of Paediatric Dentistry. 2010*
[48] British Society of Paediatric Dentistry, 2018

4.8 Children with complex medical problems

- Paediatric dentists work closely with paediatricians, surgeons and anaesthetists as part of a team in the overall care of children with complex medical problems.[8]

4.9 Vulnerable children

- Paediatric dentists work with other agencies, such as health visitors and social workers, in managing vulnerable children. Groups requiring specialist paediatric dental care may include:[8]
    - Children with special needs and learning difficulties
    - Anxious children
    - Children with oral and dental developmental problems
    - Children who have sustained damage to the teeth and mouth following trauma
    - Children with complex problems requiring multidisciplinary input, e.g. cleft lip and palate, hypodontia, etc.
    - Children with medical conditions that oral disease could impact upon
    - Vulnerable children.

4.10 Non-pharmacological behavioural management by dentists

- The aim of behaviour management is to instil a positive dental attitude and create a long-term interest on the patient's part so as to facilitate ongoing prevention and improved dental health in the future. To do this, the dentist must establish a relationship based on trust with the child and accompanying adult to ensure active involvement with preventive regimes and treatment[49]
- Children's behaviour may be characterised in three ways – co-operative, potentially co-operative and lacking co-operative ability[9]
- Good communication is essential with all patients if an effective treatment alliance is to be formed[9]
- Dental anxiety is a reaction to an unknown danger. Anxiety is extremely common, especially when treatment never experienced before is proposed. Strategies used to decrease anxiety include:[9]
    - Preparatory information
    - Non-verbal communication
    - Voice control
    - Tell-show-do
    - Enhancing control ("stop signal")
    - Behavioural shaping and positive reinforcement
    - Modelling
    - Distraction
    - Systematic desensitisation
    - Negative reinforcement removal
    - Empathy
    - Coping strategies.

[49] *Non-pharmacological behavioural management guidelines for Dentists. British Society of Paediatric Dentistry. 2011*

4.11 Prevention of periodontal disease

Interdental plaque control

- In young people (age 12-17 years) with evidence of periodontal disease, interdental plaque control:[1]
  - Clean daily between the teeth to below the gum line before toothbrushing
  - Where there is space for an interdental or single-tufted brush, this should be used
  - For small spaces between teeth, use dental floss or tape.

4.12 Prevention of oral cancer

Smoking

- Encourage children and young people not to start smoking or using tobacco.[1]

5 Oral health in adults

5.1 Prevention of dental caries

Brushing teeth and mouthwash

- It is strongly recommended that adults should brush their teeth at least twice daily:[1]
  - Last thing at night and on at least one other occasion
  - With toothpaste containing 1,350 to 1,500ppm fluoride
  - Spitting out after brushing rather than rinsing with water, to avoid diluting the fluoride concentration.
- In adults giving concern about dental caries, it is conditionally recommended to:[1]
  - Support toothbrushing where required (e.g. carer assistance, specialised brush, non-foaming toothpaste)
  - Use a fluoride mouth rinse daily (0.05% NaF; 230 ppmF) at a different time to toothbrushing.

Sugar consumption

- It is strongly recommended to minimise the amount and frequency of consumption of sugar-containing foods and drinks[1]
- Conditionally recommended to avoid sugar-containing foods and drinks at bedtime when saliva flow is reduced and buffering capacity is lost.[1]

Professional intervention

- Recommended professional intervention includes:[1]
  - Conditionally recommend assigning a recall interval from 3-24 months based on oral health needs and disease risk
  - In adults giving concern about dental caries, it is recommended to:
    - Apply fluoride varnish to teeth twice a year (2.26% NaF)
    - For those with active coronal or root caries, consider recommending or prescribing daily fluoride rinse (0.05% NaF; 230 ppmF, to be used at a different time from toothbrushing)
    - For those with obvious active coronal or root caries, consider prescribing 2,800 or 5,000ppm fluoride toothpaste.

5.2 Plaque removal

Self-care plaque removal is recommended:[1]

- Daily, effective plaque removal is critical to periodontal health
- Remove plaque effectively using methods shown by the dental team. This will prevent gingivitis (gum bleeding or redness) and reduces the risk of periodontal disease
- Toothbrushing and toothpaste: brush gum line and each tooth at least twice daily (last thing at night or before bedtime and on at least one other occasion)
- Toothbrush type: use a manual or powered toothbrush with a small toothbrush head, medium texture

- Around orthodontic appliances and bridges, plaque control should be undertaken using the aids suggested by the orthodontic or dental team.

Professional intervention

- Recommended professional intervention includes:[1]
  - Advise best methods of plaque removal to prevent gingivitis and achieve lowest risk of periodontitis and tooth loss
  - Use behaviour change methods with oral hygiene instruction
  - Correct factors that impede effective plaque control
  - For people with extensive inflammation, start with toothbrushing advice, followed by interdental plaque control
  - Assess patient's preferences for plaque control.

Interdental plaque control

- In adults with evidence of periodontal disease, interdental plaque control:[1]
  - Clean daily between the teeth to below the gum line before toothbrushing
  - Where there is space for an interdental or single-tufted brush, this should be used
  - For small spaces between teeth, use dental floss or tape.
- Recommended professional intervention includes assessing patient's preferences for interdental plaque control:[1]
  - Decide on appropriate interdental aids
  - Demonstrate methods and types of aids
  - Assess plaque removal abilities and confidence with aids
  - Patient sets smart goals for interdental plaque control.

Dental implants

- Dental implants require the same level of oral hygiene and maintenance as natural teeth. All adults with dental implants should:[1]
  - Clean around and between implants carefully with interdental aids and toothbrushes
  - Attend for regular checks of the health of gum and bone around implants.

5.3 Diabetes

- Patients with diabetes should try to maintain good diabetes control as they are at greater risk of developing serious periodontitis and less likely to benefit from periodontal treatment if the diabetes is not well controlled[1]
- People with Type 2 and Type 1 diabetes are at greater risk of developing periodontitis and people with periodontitis are at greater risk of developing Type 2 diabetes[50]
- People with diabetes need to access effective dental care and local pathways should be developed to support this. This will require local engagement between providers and commissioners of dental services and diabetes services, and the commissioning of dental services with the appropriate skills and competences to deliver the care required.[2]

Medication

- Some medications can affect gingival health.[1]

[50] *Commissioning Standard: Dental Care for People with Diabetes. NHS England. August 2019*

Professional Interventions

- Recommended professional intervention includes: [1]
  - Advising on best methods for self-care plaque control, both toothbrushing and interdental cleaning
  - At every opportunity, ask patients if they smoke and record smoking status, advise on the most effective way of quitting and act on patient response, such as refer to local stop smoking support
  - For patients with diabetes, explain risk related to diabetic control; ask about hba1c (glycated haemoglobin) levels and assess and discuss clinical management
  - For patients who use medications that cause dry mouth or gingival enlargement, explain oral health findings and risk related to medication and assess and discuss clinical management.

5.4 Prevention of dental decay

Tooth wear

- Prevent tooth wear by:[3]
  - Maintain standard oral hygiene practices
  - Maintain good dietary practice including avoiding or minimising sugar-sweetened drinks (especially carbonated) and fruit juice and/or smoothies (limited to 150ml per day)
  - Recommended professional intervention includes assessing tooth wear using validated tool at the start of any new course of treatment
  - In patients at higher risk, identify possible source of risk (intrinsic, extrinsic and mechanical) and support patients in risk reduction and management.

5.5 Prevention of oral cancer

Tobacco

- Use of tobacco, both smoked (e.g. cigarettes, pipes, waterpipes or shisha) and smokeless (e.g. paan, chewing tobacco, gutkha), seriously affects general and oral health. The most significant risk is for oral cancer and pre-cancers. The combined use of tobacco and alcohol further increases the risk of oral cancer[1]
- Recommended professional intervention includes offering Very Brief Advice (VBA):[1]
  - For adults and young people, it is strongly recommended that professional intervention should include asking at every opportunity if they smoke and recording smoking status
  - For those who smoke advise that a combination of behavioural support and medication, or short-acting with long-acting Nicotine Replacement Therapy, are likely to be most effective.
  - Act on patient response by referring people who want to stop smoking to local support, preferably where behavioural support and prescribed stop smoking medicines are available

- Acknowledge that e-cigarettes may be helpful for some smokers for quitting or reducing smoking.

Alcohol

- Regularly drinking more than 14 units of alcohol per week can adversely affect general and oral health, with the most significant oral health impact being the increased risk of oral cancer. The combined use of tobacco and alcohol further increases the risk of oral cancer[1]
- Recommended professional intervention includes using the AUDIT-C tool (or similar) to ask and assess risk of alcohol harm and provide advice.[1]

Diet

- Increasing fruit and vegetable intake reduces the risk of cancers in general and contributes to overall health. Promote increased consumption of non-starchy vegetables and fruit.[1]

Early detection

- Oral cancer survival rates are strongly associated with the stage at diagnosis. Early detection is key to improving oral cancer survival rates and quality of life[1]
- Recommended professional intervention includes:[1]
  - Obtaining an updated medical, social and dental history and perform an intraoral and extra-oral visual and tactile examination for all patients at each oral health assessment visit
  - In line with national referral recommendations, patients should be referred on an urgent or suspected cancer pathway
  - It's not recommended to use vital staining, oral cytology or light-based detection and/or oral spectroscopy for evaluating lesions for malignancy.

5.6 Urgent dental care

Urgent dental care necessitates the need for simple, rapid access to a dental professional within and outside of normal working hours.

NHS England's *Clinical Standards for Urgent Dental Care* [51] is designed to support commissioning teams to work with the dental profession locally to commission urgent dental and out-of-hours care systems:

- The care patients receive should be timely, safe and effective while being tailored to meet the needs of the individual
- Care decisions should be reached via a process of shared decision making
- Care needs will range from remote triage and advice, to delivery of face-to-face care and it is therefore important local systems have the infrastructure, workforce and capability to readily meet these needs
- It is important local urgent dental care systems are capable of adapting to changing local and national situations.

[51] *Clinical Standards for Urgent Dental Care. NHS England. January2023*

Key topics covered by the standards include:

Remote prescribing

- In some situations, there may be a requirement for remote prescribing
- Video consultation may support the decision to prescribe where a face-to-face assessment is not possible and should ideally form part of the patient's clinical records
- Where possible, remote prescribing should form part of urgent dental care provision and contingency planning
- Engagement and collaboration with local pharmacies will be essential when considering how this will be implemented.

Emergency preparedness

- Commissioning teams must ensure urgent dental care (UDC) services have the flexibility to adapt to changes in demand. The ability to increase capacity, in response to local, regional and national incidents, is paramount in maintaining a constant provision of urgent dental care.

Quality improvement

- Providers of urgent dental care service should be encouraged to improve continuously the quality of care delivered to service users. This should include monitoring of significant events, annual antimicrobial audits and seeking feedback to improve the quality of services.

6 Oral health in older adults

6.1 Oral health status

- Poor oral health can affect the general health and wellbeing of older adults through its influence on nutrition.[52]
- Factors associated with the variety of food and nutrient intake in older adults include: [11]
    - Dental status
    - Number of teeth
    - Bite force
    - Chewing problems.
- Older adults may avoid foods that are hard to chew (including some fruit, nuts, vegetables, meat, bread) decreasing intake of fibre and micronutrients[11]
- Well-nourished older adults have a higher number of 'functional teeth units' in comparison to individuals with or at risk of malnutrition[11]
- There have been significant changes in the oral health of the population over the last 50 years with many older people retaining some natural teeth rather than relying on dentures for function:[11]
    - In 1968, nearly 90% of people aged 75 and over had no teeth
    - 2009 data showed this reduced to 30%, with a continued trend for reduction since.
- Changes in oral health status are not distributed evenly within the population. Edentulism (having no teeth) is found amongst:[11]
    - A greater proportion of women compared to men
    - A greater proportion of people from less affluent socio-economic groups compared with the more affluent
    - Edentulism is much more common in Scotland and the North of England than it is in the South.

6.2 Oral health in care homes

- Good oral care for people in care homes is important[53]
- Oral health not only enhances people's quality of life, but it is vital to making sure they can eat, drink, take medication and stay healthy. This preventive approach should mean that care home staff are making fewer reactive interventions and relieves pressure on primary and secondary healthcare[54]
- More still needs to be done to make sure that people living in care homes are supported to maintain and improve their oral health. To improve collaboration in planning for the health and wellbeing of people in their area, we suggest that commissioners:[14]
    - Promote cross-sector integration between care home and dental professionals

[52] *SACN statement on nutrition and older adults living in the community. SACN. 2021*

[53] *NICE guideline NG48. July 2016*

[54] *Smiling matters: Oral health in care homes – progress report. Care Quality Commission. May 2023*

- Use funding to improve oral health in care homes through local initiatives e.g. peer-to-peer support schemes or increasing dental access and training.

7 Oral health - addressing relevant protected characteristics

7.1 Inclusion health: applying "All Our Health"

'All Our Health' inclusion health information has been created to help all health and care professionals:[55]

- Understand how the concepts of inclusion health and social exclusion can be useful for their professional practice
- Know about the health issues that socially excluded people living in their area are more likely to encounter
- Understand specific activities and interventions that all health and care professionals can do to support the health and wellbeing of inclusion health groups
- Consider the resources and services available in their area that can help people from inclusion health groups.

Senior or strategic leaders can have an impact by providing leadership and supporting services in the area of inclusion health by:[4]

- Being aware of the characteristics and needs of inclusion health groups in their area
- Raising the profile of inclusion health and social exclusion as an important determinant of health and health inequalities among key partners
- Ensuring that the characteristics and needs of inclusion health groups are clearly defined in their local joint strategic needs assessments (JSNAS)
- Promoting a coherent local approach to inclusion health, ensuring all partners are aware of the issue and working towards the same goals; this should include partners from outside the social and health care sectors, such as police forces, the prison workforce, probation, job centre, schools, voluntary sector organisations, and others.
- Challenging current ways of working and advocating for the consideration of inclusion health groups in service design and commissioning, for example by ensuring integrated commissioning boards have a clear direction on inclusion health
- Ensuring frontline staff and team leaders have the appropriate tools, skills and knowledge to support socially excluded people in their work
- Commissioning a single point of contact housing and health referral service, as recommended in nice guidance NG6, or strengthening an existing service to better serve people who experience social exclusion.

[55] *Inclusion Health: Applying 'All Our Health". Public Health England. Updated May 2021*

Example of a single point of contact housing and health referral service.

Case Study: Wigan Council AWARM

Wigan Council's Affordable Warmth Access Referral Mechanism (AWARM) began operating in the Wigan borough in 2008. AWARM delivers NICE guidance NG6 on excess winter deaths and illness and the health risks associated with cold homes, Recommendation 2 – to ensure there is a single-point-of-contact health and housing referral service for people living in cold homes.

A successful business case was made to Wigan Council and Wigan Borough Joint Commissioning Group (CCG) for £200,000 to upscale AWARM and target it at a cohort of 2,000 people in fuel poverty who were likely to have unplanned hospital admissions due to illnesses caused or exacerbated by living in a cold home.

The link below provides further details of predicted savings:
https://www.nice.org.uk/sharedlearning/wigan-council-s-affordable-warmth-access-referral-mechanism-awarm---the-original-single-point-of-contact-health-and-housing-referral-service-for-people-living-in-cold-homes-as-recommended-by-nice-guidelines-ng6

A 2011 AWARM economic evaluation report concluded that warm housing interventions in targeted populations are almost certainly cost effective and that they can be considered a good use of public resources. The benefits gained in the UK are likely to be mainly from comfort taking and a consequent improvement in mental wellbeing.

The full economic evaluation findings can be found here:
https://beatcold.org.uk/wp-content/uploads/2011/09/Awarm-evaluation-final-report.pdf

7.2 Child oral health: applying "All Our Health"[56]

Tooth decay is the most common oral disease affecting children and young people in England, yet it is largely preventable.

Frontline healthcare professionals should:[5]

- Familiarise themselves with the evidence-based advice and treatment that should be given
- Understand how to help people change their behaviour
- Encourage early intervention and evidence-based advice

[56] *Child Oral Health; applying All Our Health. Office for Health Improvement and Disparities. Updated March 2022*

- Find out about, and refer patients or the public to community oral health improvement programmes in their area.

Team leaders or managers should:[5]

- There are practical actions that managers (health and social care) can take to enable them to ensure all staff promote good oral health and access relevant training that is regularly updated including e-learning resources to support early years and health and care professionals
- Embed oral health in all children's services at a strategic and operational level
- Consider the training needs of the workforce, to enable them to deliver high-quality oral health advice and interventions.

Senior strategic leaders should:[5]

- Work to ensure that oral health is included and promoted within commissioned healthcare services
- Advocate for oral health, ensuring it is included in the health and wellbeing board's joint strategic needs assessments
- Make sure that oral health is also included in other policies, such as food policies
- Support policies to reduce sugar consumption and access to fluoride.

Further relevant Department of Health and Social Care docs

- Adult Oral Health I Care Homes: Toolkit[57]
- Commissioning Better Oral Health for Vulnerable Older People[58]
- Oral Health for Older People in England & Wales[59]
- Improving the Oral Health of Children: Cost Effectiveness Commissioning[60]

7.3 Key recommendations

- Continue to support breastfeeding – breastfed babies up to the age of one are less likely to have tooth decay
- Support health visitors in delivering key oral health messages to families
- Develop local family hubs and support family hubs focused on embedding oral health in the services they provide
- Set up Supervised Toothbrushing Schemes in early years settings in the most deprived areas
- Engage with schools, particularly SEN schools, to explore how best to support them to improve the oral health of children
- Engage with groups who support children with learning disabilities to ensure they receive specialised oral health advice.

[57] https://www.gov.uk/government/publications/adult-oral-health-in-care-homes-toolkit/oral-health-toolkit-for-adults-in-care-homes
[58] https://www.gov.uk/government/publications/commissioning-better-oral-health-for-vulnerable-older-people
[59] https://www.gov.uk/government/publications/oral-health-of-older-people-in-england-and-wales
[60] https://www.gov.uk/government/publications/improving-the-oral-health-of-children-cost-effective-commissioning

7.4 The Impact of COVID-19 on oral health services

Access to dental services was severely impacted by COVID-19

The impact of COVID-19 has been felt more severely by those who were already more likely to have poorer health outcomes, including people from ethnic minority backgrounds, people with disabilities and those living in more deprived areas. Many community-based interventions were suspended during lockdown and it is taking time to re-establish these, particularly as there are so many competing priorities whilst recovering from the impact of the pandemic.

It is likely to take some time to deal with the backlog of patients in need of oral treatment and care due to reduced capacity in the system. The pandemic caused a range of issues that led to greater uncertainty and anxiety among dental professionals. This could lead to more people leaving the profession and further strains on the system.[61]

Integrated Care Systems (ICS)

The Health and Care Act (2022) has seen the formation of Integrated Care Systems (ICS) across England on a statutory basis from 1 July 2022. The aims of this new way of more integrated working and operating will be to improve outcomes in population health and healthcare, tackle inequalities in outcomes, experience and access, enhance productivity and value for money and help the NHS support broader social and economic development. How this will affect NHS dental practice remains unclear at this stage, however, the vital role dentists play in preventive health and wellbeing should be acknowledged.

2021 CQC COVID-19 Report

The 2021 CQC COVID-19 Report: Insight 10: Dental Access During the Pandemic highlighted access to NHS dental care was an issue pre-pandemic but there are “clear signs” the problems had been compounded by COVID-19. Data was extracted from feedback to CQC’s Give Feedback on Care service, Healthwatch and data from the NHS Business Services Authority around NHS dental activity and Provider Collaboration Reviews.

Findings revealed many dental care providers worked to meet the needs of those vulnerable to COVID-19 and systems were implemented to identify those with disability, physical or mental health conditions and older people. However, dental providers responded as: “not applicable” when asked about relationships with care homes and an additional 32% reported such relationships as “limited, inconsistent or non-existent”, reiterating findings from CQC’s Smiling Matters report.

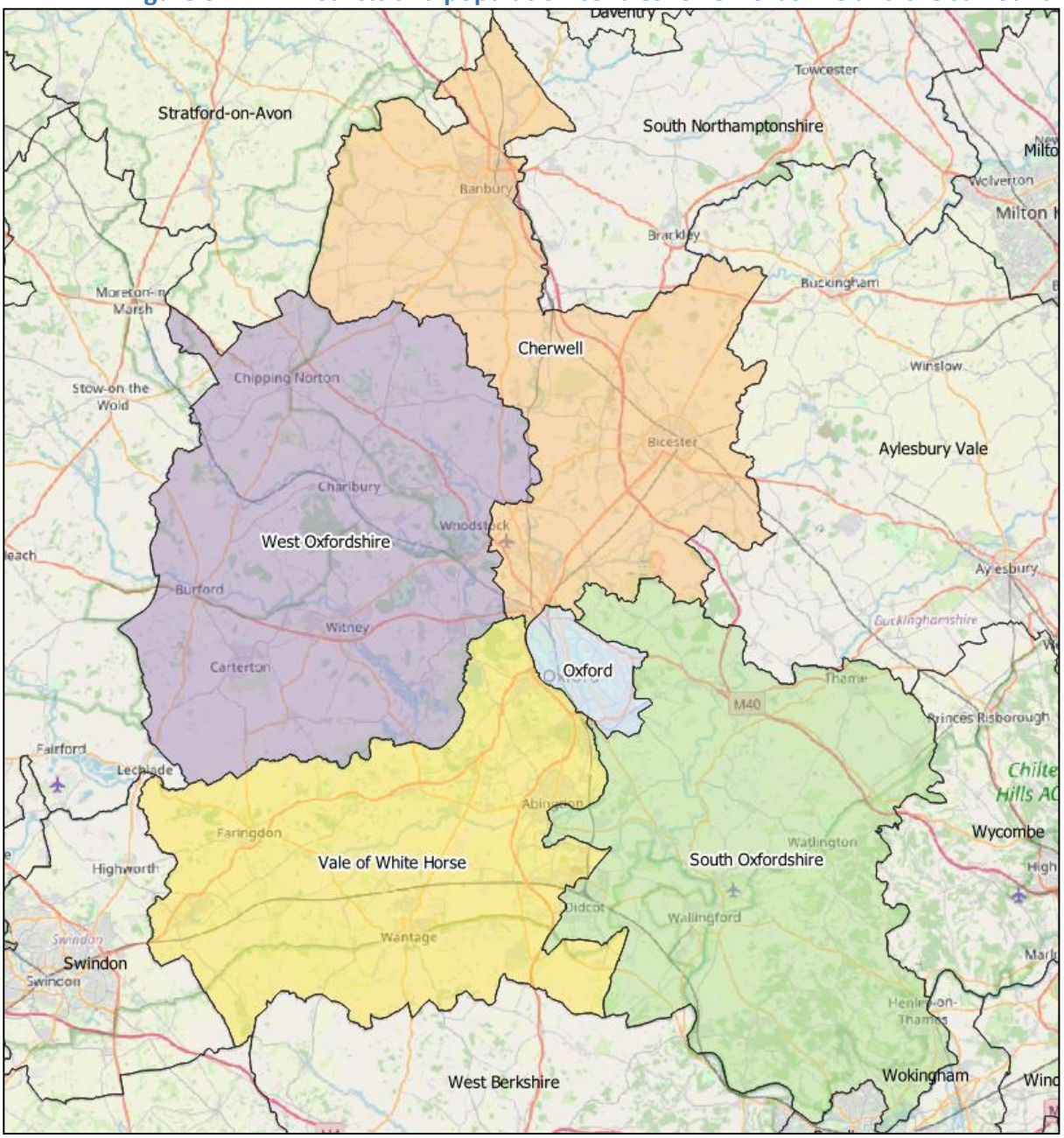
CQC Provider Collaboration Reviews disclosed dental services were not generally included for shared planning and system-wide governance. Consequently, dental services were excluded from collaborative technology initiatives, including electronic prescribing services and access to NHS email. Dental services did not have access to summary care records which created further barriers to individuals moving effectively through the health and care system. The report was updated in 2022, and can be accessed via the CQC website.

[61] https://www.gdc-uk.org/standards-guidance/covid-19/the-impacts-of-covid-19/limited-access-to-dental-services

8 Oral health status in Oxfordshire

8.1 Oxfordshire population summary demographics mapping deprivation with location of dental services

Figure 3 Districts and population centres for Oxfordshire and the surrounding area



Oxfordshire Council was established as a county council in 1889. It is comprised of five district councils: Cherwell District Council, Oxford City Council, South Oxfordshire District Council, Vale of White Horse District Council and West Oxfordshire District Council. The area borders Greater London, Berkshire, Buckinghamshire, Northamptonshire, Bedfordshire and Hertfordshire.

The majority (60%) of Oxfordshire's population are resident in Oxford City and the county's main towns. The remaining 40% live in smaller towns and villages.

8.2 Population estimates

Figure 4 Population estimates by area for Oxfordshire

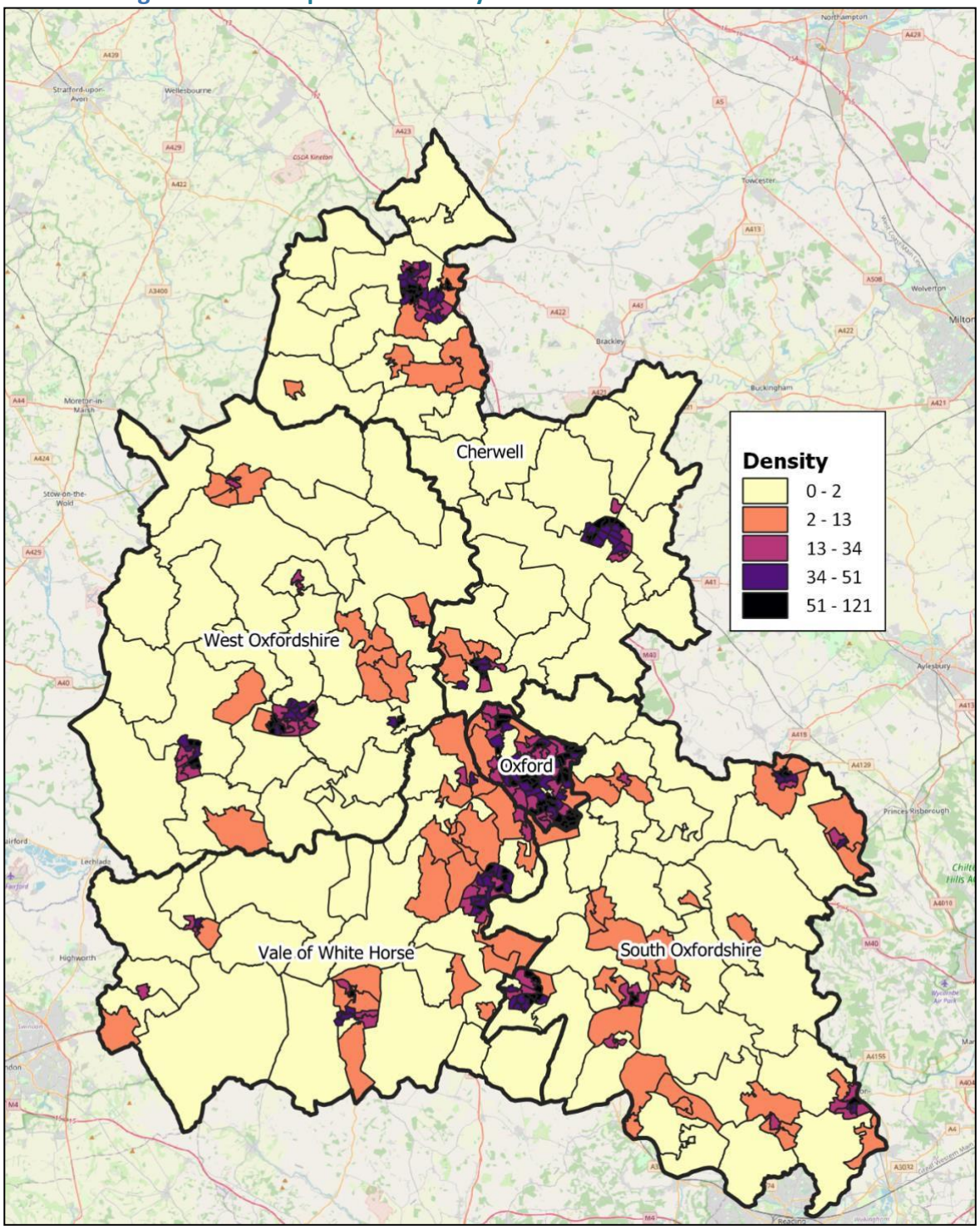
2021 Census					
Name	Population		Area (Hectares)		Density
Cherwell	161,016	22.2%	58,877	22.6%	2.73
Oxford	162,041	22.3%	4,560	1.8%	35.54
South Oxfordshire	149,085	20.6%	67,853	26.0%	2.20
Vale of White Horse	38,913	5.4%	57,762	22.2%	0.67
West Oxfordshire	114,237	15.8%	71,440	27.4%	1.60
Oxfordshire	**725,291**		**260,492**		**2.78**

Source: ONS Crown Copyright Reserved [from Nomis on 26 February 2023]

The total 2021 population estimate for Oxfordshire is 725,000 people, 22.6% in Cherwell, 22.3% in Oxford, 20.6% in South Oxfordshire, 5.4% in Vale of White Horse and 15.8% in West Oxfordshire.

- West Oxfordshire accounts for 27.4% of Oxfordshire's total area with a low population density of 1.60
- South Oxfordshire accounts for 26% of Oxfordshire's total area with a high population density of 2.20
- Cherwell accounts for 22.6% of Oxfordshire's total area with a low population density of 2.73
- Vale of White Horse accounts for 22.2% of Oxfordshire's total area with a low population density of 0.67
- Oxford City has the highest population of all districts and has over a third of the county's population density compared to the other four districts.

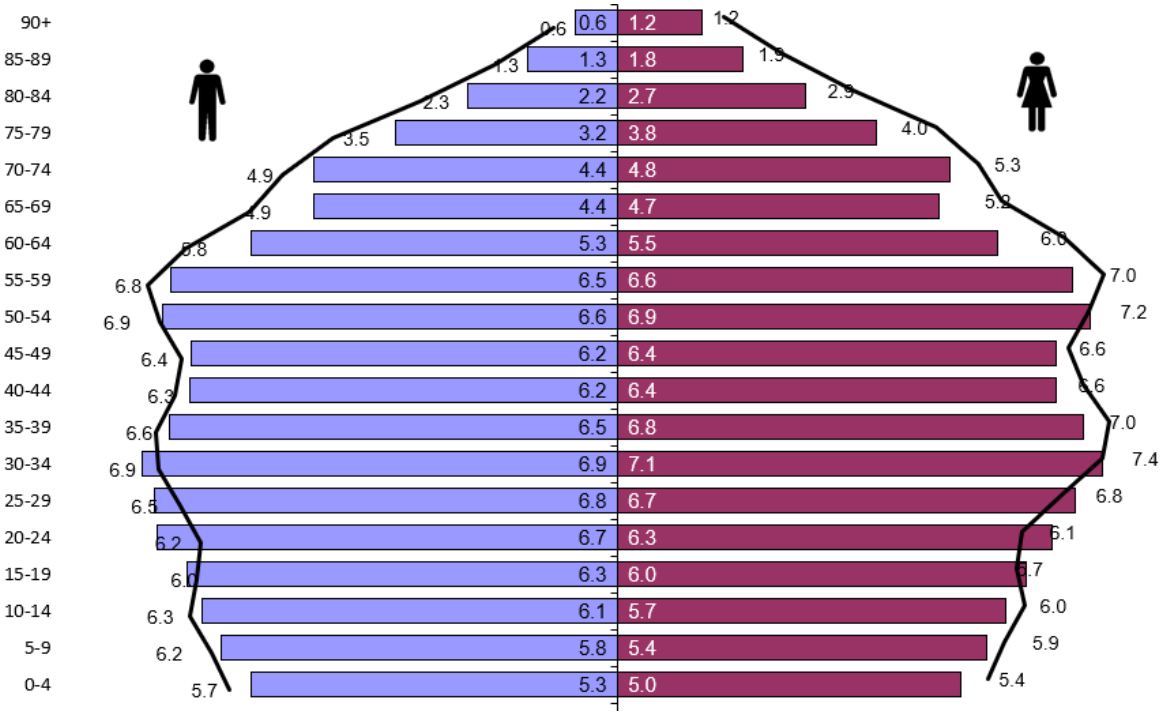
Figure 5 Population density for Oxfordshire



Source: 2021 Census and Annual Small Area Population Estimates, ONS © Crown Copyright 2021

The population density of Oxfordshire is more concentrated in the urban centres of Banbury, Bicester and Kidlington, Oxford City, Didcot, Thame and Henley-on-Thames, Abingdon and Wantage & Grove and Carterton and Witney.

Figure 6 2021 population by age and gender for Oxfordshire compared to England

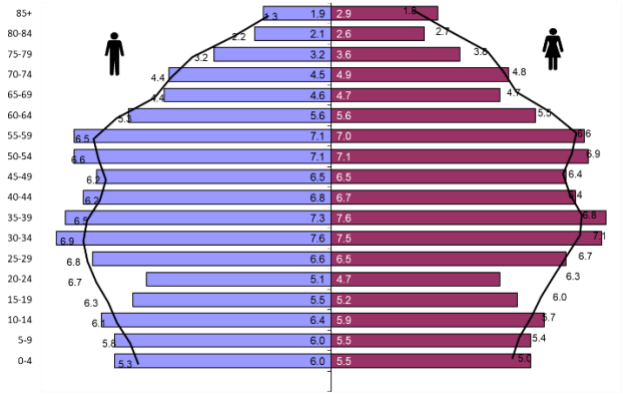


Source: 2021 Census and Annual Small Area Population Estimates, ONS © Crown Copyright 2021

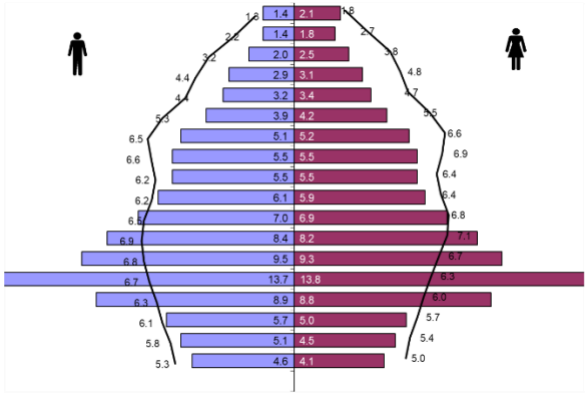
Oxfordshire has a very similar age profile to the England average. Both England and Oxfordshire have approximately 20% of its population in the 20-34 age range.
Overall, 50.6% of the Oxfordshire population are female and 49.4% of the population are male.

Figure 7 2021 population by age and gender for Oxfordshire 5 Local Authorities

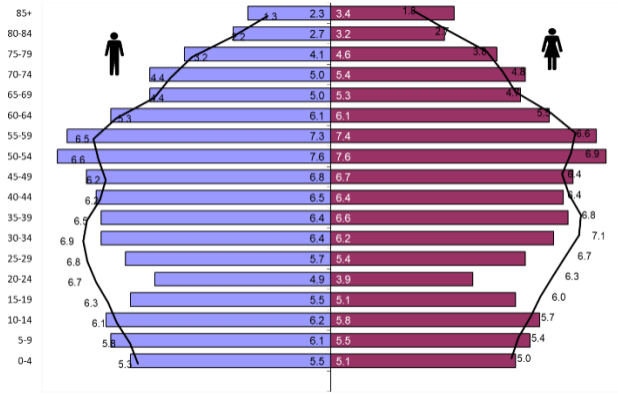
Cherwell



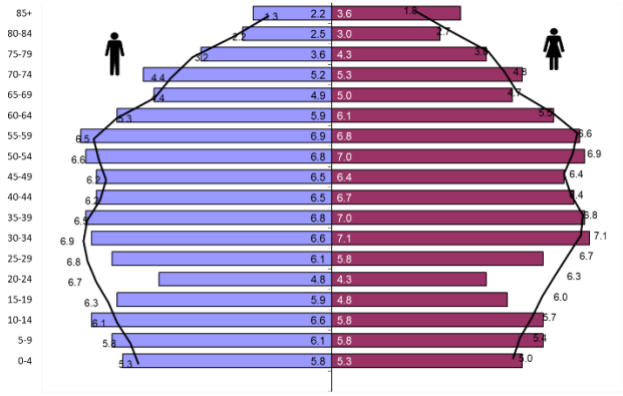
Oxford City



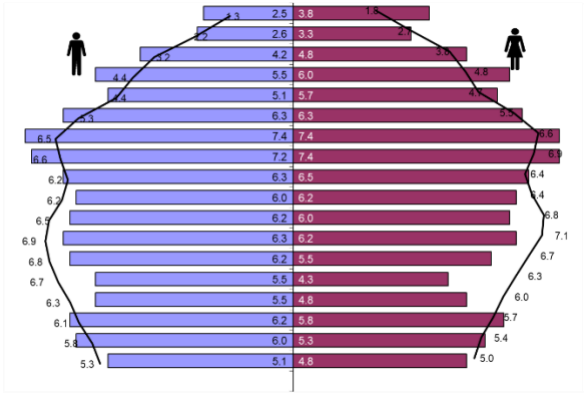
South Oxfordshire



Vale of White Horse



West Oxfordshire



The black line shows the Oxfordshire average values.

Source: 2021 Census and Annual Small Area Population Estimates, ONS © Crown Copyright 2021

The 20-35 age range is considerably higher in Oxford City compared to the other four local authorities likely due to Oxford City having two universities.

Figure 8 Oxfordshire population projections by local authority based on 2021 data

Name	2021	2023 Value	2023 Change 2021	2025 Value	2025 Change 2021	2027 Value	2027 Change 2021	2029 Value	2029 Change 2021
Cherwell	152,976	155,237	2,260	157,132	4,155	158,776	5,799	160,299	7,322
Oxford	152,089	150,425	-1,664	149,379	-2,709	149,044	-3,044	148,946	-3,143
South Oxfordshire	142,583	143,829	1,246	144,718	2,135	145,383	2,800	145,972	3,389
Vale of White Horse	140,289	143,968	3,679	147,105	6,816	149,839	9,550	152,278	11,989
West Oxfordshire	111,658	112,730	1,072	113,689	2,031	114,494	2,836	115,235	3,577
Oxfordshire	**699,595**	**706,188**	**6,594**	**712,023**	**12,428**	**717,536**	**17,941**	**722,729**	**23,135**

From 2021 to 2029, the local authority population is expected to change in the following ways:

- Vale of White Horse increase by 12,000 (+8.5%)
- Oxford City decrease by -3,000 (-2.1%)
- Cherwell increase by 7,000 (+4.8%)
- West Oxfordshire increase by 3,500 (+3.2%)
- South Oxfordshire increase by 3,000 (+2.4%)

Key Result: Overall, from 2021 to 2029 Oxfordshire's population is expected to increase by 23,100 (+3.3%), the majority of this population increase will take place in Vale of White Horse.

Figure 9 Oxfordshire population projections by age range based on 2021 data

Age	2021	2023 Value	2023 Change 2021	2025 Value	2025 Change 2021	2027 Value	2027 Change 2021	2029 Value	2029 Change 2021
Age 0 - 4	37,519	36,480	-1,039	36,058	-1,461	35,822	-1,697	35,745	-1,774
Aged 5-9	42,333	41,246	-1,087	40,020	-2,313	38,568	-3,765	37,873	-4,460
Aged 10-14	43,599	44,500	901	44,471	872	43,288	-311	42,226	-1,373
Aged 15-19	41,739	44,451	2,712	46,390	4,651	48,468	6,729	48,724	6,985
Aged 20-24	48,330	47,284	-1,046	47,595	-735	49,720	1,390	52,166	3,836
Aged 25-29	44,626	44,010	-616	43,037	-1,589	41,606	-3,020	41,111	-3,515
Aged 30-34	42,473	42,733	260	42,764	291	42,203	-270	41,566	-907
Aged 35-39	44,951	43,842	-1,109	43,303	-1,648	43,506	-1,445	43,501	-1,450
Aged 40-44	43,591	45,225	1,634	45,254	1,663	44,560	969	43,814	223
Aged 45-49	43,440	41,925	-1,515	42,653	-787	44,404	964	45,315	1,875
Aged 50-54	47,343	46,400	-943	44,800	-2,543	42,570	-4,773	42,201	-5,142
Aged 55-59	47,081	47,441	360	46,756	-325	46,123	-958	44,868	-2,213
Aged 60-64	39,842	42,538	2,696	44,866	5,024	46,141	6,299	45,886	6,044
Aged 65-69	33,170	34,810	1,640	36,995	3,825	39,436	6,266	42,014	8,844
Aged 70-74	34,588	32,140	-2,448	31,537	-3,051	32,504	-2,084	34,163	-425
Aged 75-79	26,841	30,553	3,712	31,595	4,754	30,531	3,690	29,461	2,620
Aged 80-84	18,644	19,901	1,257	21,983	3,339	25,184	6,540	26,978	8,334
Aged 85+	19,490	20,700	1,210	21,941	2,451	22,906	3,416	25,115	5,625
Aged 90+	7,404	7,823	419	8,253	849	8,898	1,494	9,556	2,152
All Ages	**699,594**	**706,188**	6,594	**712,023**	12,429	**717,536**	17,942	**722,729**	23,135

Source: Office for National Statistics © Crown copyright 2021

From 2021 to 2029, it is estimated that Oxfordshire's total population will increase at a steady rate by approximately 5,500 each year (0.8%) up to a population of 722,729 in 2029.

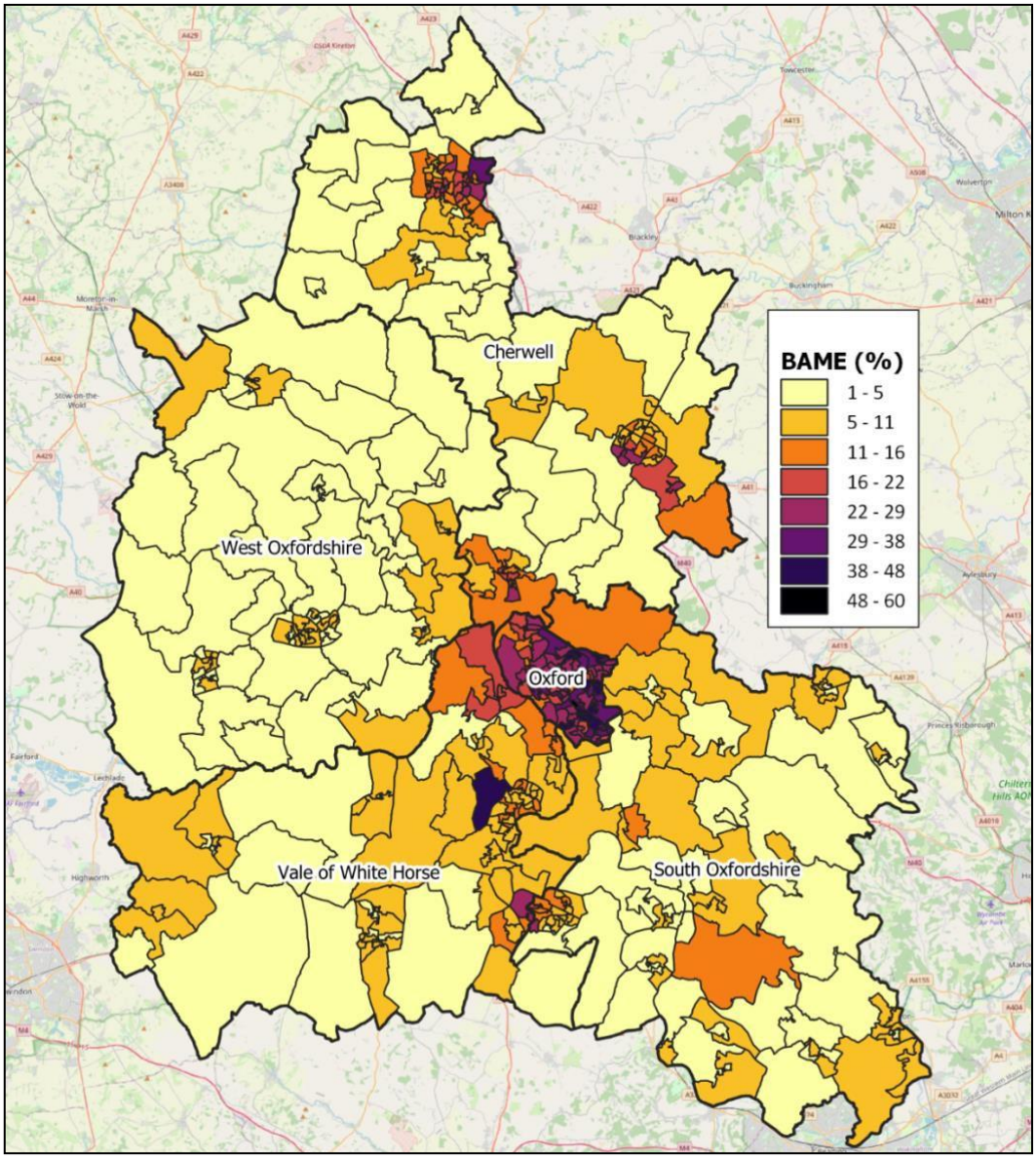
Figure 10 2021 to 2029 estimated changes to take place in different age ranges

Age	0-9	10-19	20-34	35-44	45-54	55-69	70-74	75-90+
Change 2021-29	-6,200	5,600	-580	-1,200	-3,300	12,700	-400	18,700
	-8%	7%	0%	-1%	-4%	11%	-1%	26%

Key Result: Any new changes to the OH services should take account of these population projections and ensure adequate provision is available especially in Oxford City and for the increasing younger population aged 10-19.

8.3 Oxfordshire ethnicity

Figure 11 Oxfordshire ethnicity by lower-layer super output area 2021

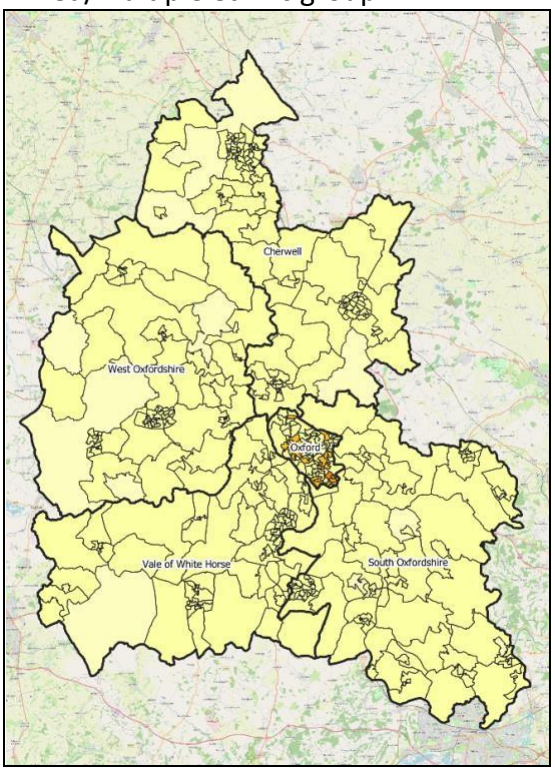


Source: ONS Crown Copyright Reserved [from Nomis on 26 February 2023].

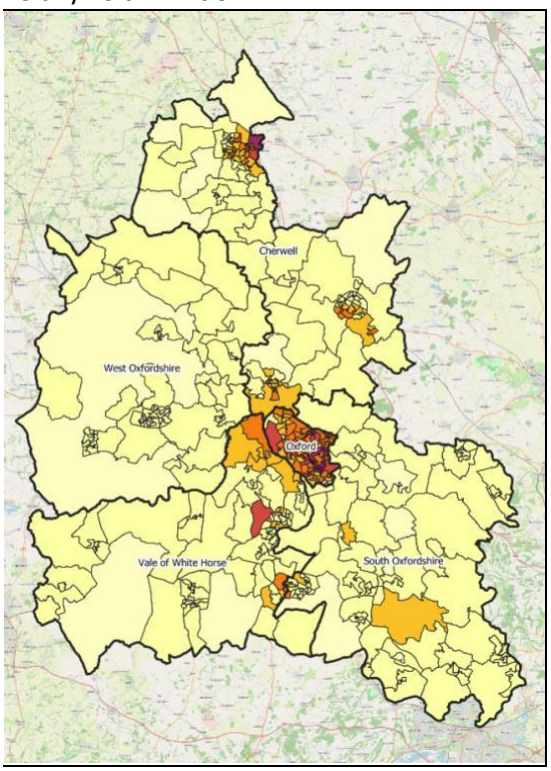
The majority of the ethnic minority population in Oxfordshire is based in urban areas of Oxford City and Banbury. Oxford City has a very diverse range of ethnic minority groups.

Figure 12 Oxfordshire ethnicity 2021 census data

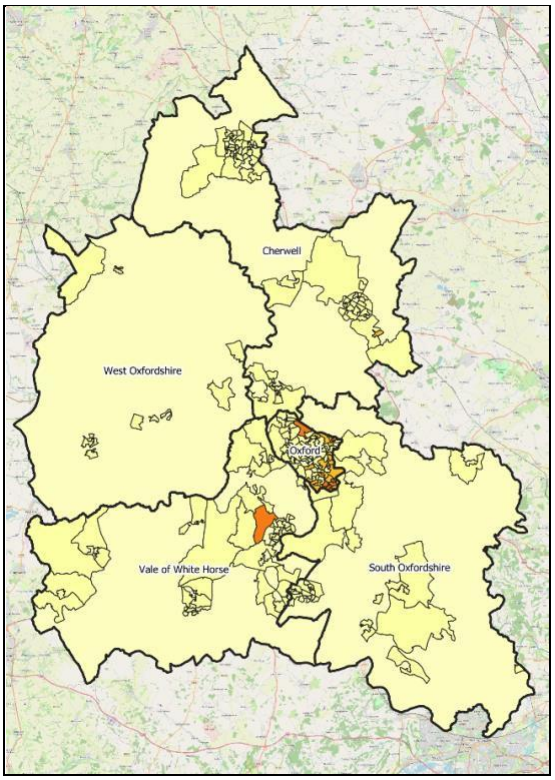
Mixed/multiple ethnic group



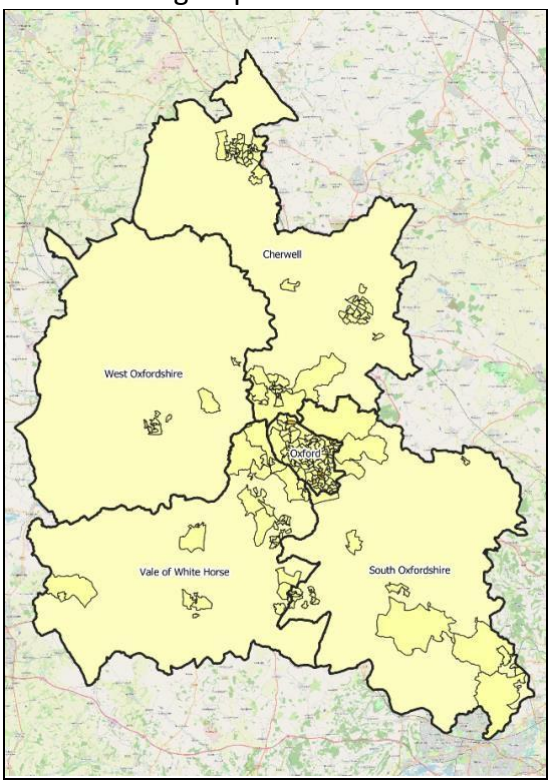
Asian/Asian British



Black/African/Caribbean/Black British



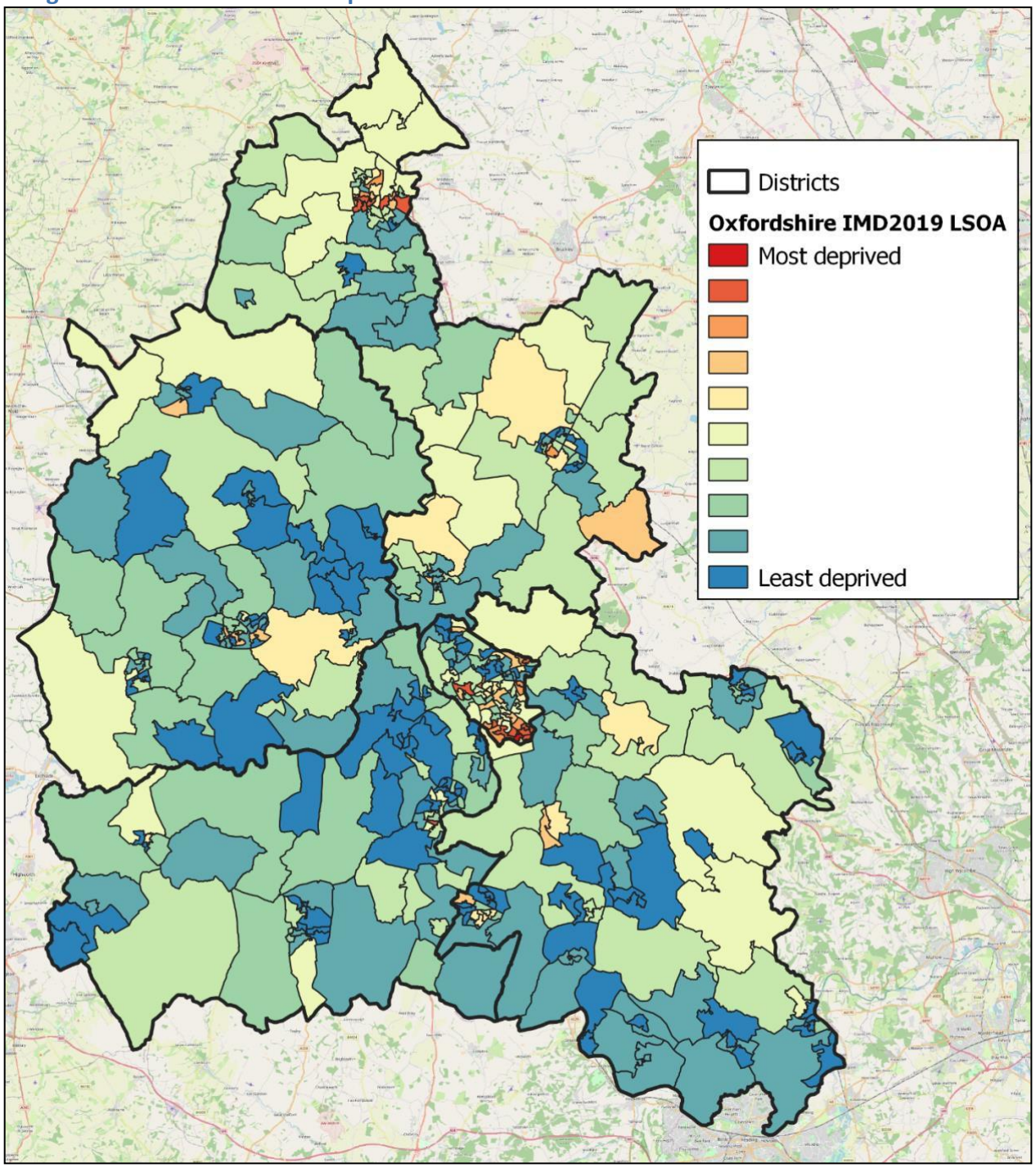
Other ethnic groups



Some OH indicators adversely affect ethnic minorities and so any initiatives to combat these indicators should be targeted at the above locations. These may be outreach or in clinics.

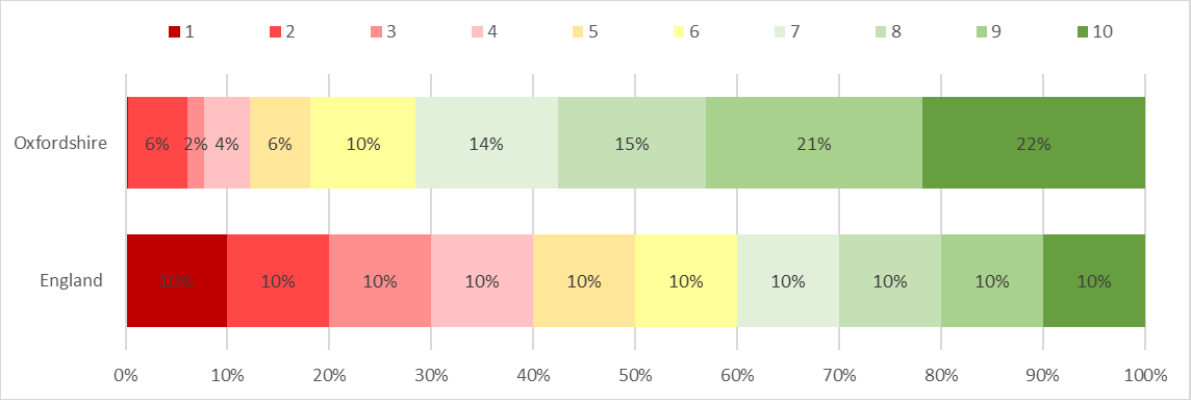
8.4 Oxfordshire deprivation

Figure 13 Oxfordshire deprivation decile 2019



Oxfordshire has relatively small pockets of deprivation centred around Oxford City, Banbury and a small part of Abingdon.

Figure 14 Oxfordshire deprivation decile 2019



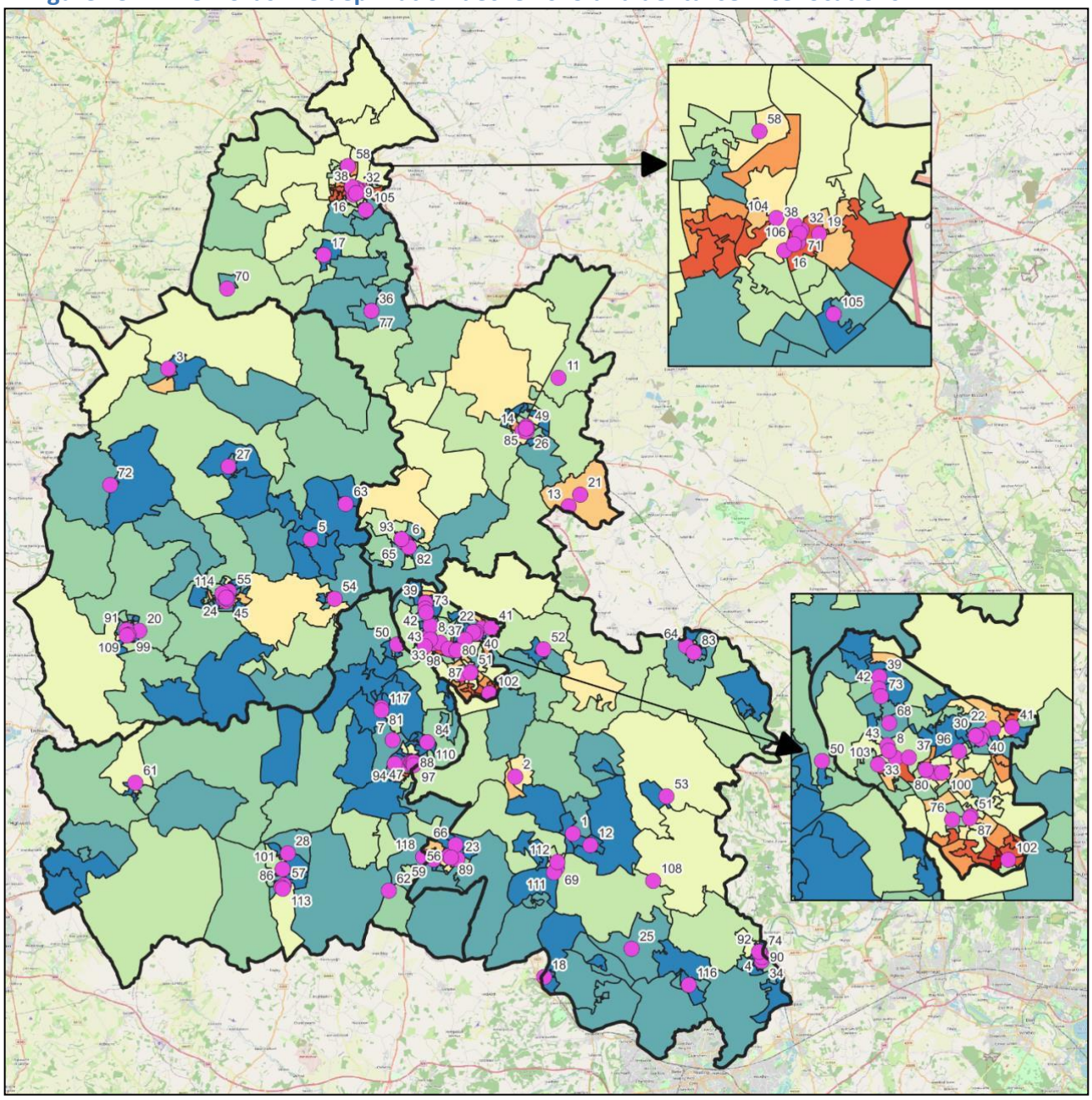
Source: https://imd-by-geo.opendatacommunities.org/imd/2019

Oxfordshire is the tenth least deprived upper tier local authority in England out of 151.

6.1% of Oxfordshire's population lived in the 20% most deprived areas in England (2019).
12.2% of Oxfordshire's population lived in the 40% most deprived areas in England (2019).

43.0% of Oxfordshire's population lived in the 20% least deprived areas in England (2019).
21.8% of Oxfordshire's population lived in the 10% least deprived areas in England (2019).

Figure 15 Oxfordshire deprivation decile 2019 and dental service locations



NB: Please refer to Appendix III for the full listing of Oxfordshire Dental Services

Oxfordshire has a few small areas of relatively high deprivation located around the two main population centres of Oxford City and Banbury.

8.5 Epidemiology of oral health of adults in England

The Adult Dental Health Survey gathers information about dental health of adults as well as their dental experiences, knowledge of and attitudes towards dental care and oral hygiene. The survey is carried out every ten years and helps the NHS to understand the changes in dental health amongst adults in the UK, however, these surveys do not offer a complete picture of oral health needs amongst adults. In addition, the 2019 survey was unable to be completed.

The monitoring of oral cancer related admissions and mortality is an important dataset to monitor oral health amongst adults. The figure below provides some indication of the oral health levels amongst adults in Oxfordshire. Of particular concern is the oral cancer mortality rate per 100,000 population amongst Oxfordshire adults.

Figure 16 Oxfordshire and England oral health comparisons (OHID 2022)

Oral health indicator	Oxfordshire	England
Mortality rate from oral cancer (per 100,000 population, all ages) 2017-19	4.0	4.7
Oral cancer registrations (per 100,000 population) 2017-19	12.2	15.4
Access to NHS dental services – successfully obtained a dental appointment (2020/21)	81.2%	77.0%

Significantly worse than England	*Similar to England*	*Significantly better than England*

Older people are also at increased risk of dental disease. Compounded with this increased risk, they are also more likely to have general health complications that make dental treatment planning more difficult and may require modification of dental services. Little is known about the oral health of older people who are living independently at home or being cared for by friends, family or carers but PHE[62] had undertaken a review of data on oral health of older people who live in residential and nursing care homes in order to gain an insight into their oral health needs[63].

The main findings are as follows:

- A third of participants reported not seeing a dentist in the last two years. Reasons for this included difficulty in getting to and from the dentist, not being able to afford NHS charges, and also not finding an NHS dentist

[62] Public Health England, What is Known About the Oral Health of Older People in England and Wales (2015) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/489756/What_is_known_about_the_oral_health_of_older_people.pdf

[63] Public Health England, Oral health survey of mildly dependent older people 2016 (2019). https://www.gov.uk/government/publications/oral-health-survey-of-mildly-dependent-older-people-2016

- Signs of severe untreated dental decay appear to be more common across all settings and current pain also appears to be slightly higher than in the general adult population
- Older adults are less likely to rate their oral health as good, and appear to have poorer oral health related quality of life than the general adult population
- Care home managers experience much more difficulty in accessing dental care for their residents compared to household resident older adults
- For older adults living in care homes, dental services are patchy and often no regular or emergency dental care arrangements exist.

The Care Quality Commission have also reported on the state of oral health care in care homes across England in 2019. The report reveals an extensive lack of awareness of NICE guidelines. It concludes that residents are not supported to maintain and improve their oral health.[64] Dental professionals accompanied adult social care inspectors on 100 routine inspections.
Among the homes visited:

- Most had no policy to promote and protect people's oral health (52%) and nearly half were not training staff to support daily oral healthcare (47%)
- 73% of care plans reviewed only partly covered or did not cover oral health
- It could be difficult for residents to access dental care
- 10% of homes had no way to access emergency dental treatment for residents.

It is important to note that this CQC review occurred before the pandemic and given the significant challenges COVID-19 has posed for care homes, the reality of oral health care in care homes may have further deteriorated.

8.6 Surveys addressing the oral health of adults in Oxfordshire

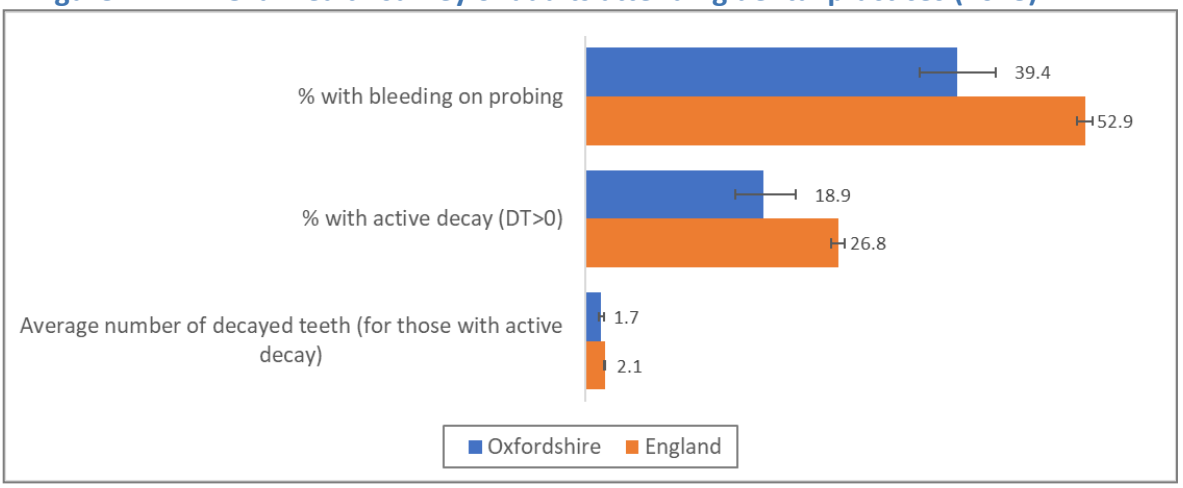
Adults attending general dental practices for any reason, aged 16 years and over, were recruited to take part in the National Dental Epidemiology Programme 2018 Oral Health Survey. Whilst most participants surveyed (84%) reported that it had been 12 months or less since their last dental visit, it should be noted that participants with no natural teeth may be underrepresented in this survey due to less frequent visits to the dentist.[65] Therefore, this survey will underestimate the true extent of oral health needs amongst Oxfordshire adults.

National results show more than a quarter of participants (27%) had tooth decay, having on average 2.1 decayed teeth, and more than half (53%) had gingival (gum) bleeding. Local authority data is less comprehensive and incomplete. In Oxfordshire there were 549 complete questionnaires and clinical examination. This sample may therefore not reflect the true extent of oral health issues amongst adults in Oxfordshire.

[64] Care Quality Commission (2019) Smiling Matters: Oral health care in care homes. Smilingmatters:oralhealth carein care homes | Care Quality Commission (cqc.org.uk)
[65] Public Health England, Oral health survey of adults attending dental practices 2018 (2020). https://www.gov.uk/government/publications/oral-health-survey-of-adults-attending-dental-practices-2018

The figure below reveals that Oxfordshire adults surveyed were significantly less likely to have active decay and significantly less likely to have gum bleeding.

Figure 17 Oral health survey of adults attending dental practices (2018)



Source: Public Health England, Oral health survey of adults attending dental practices 2018 (2020).

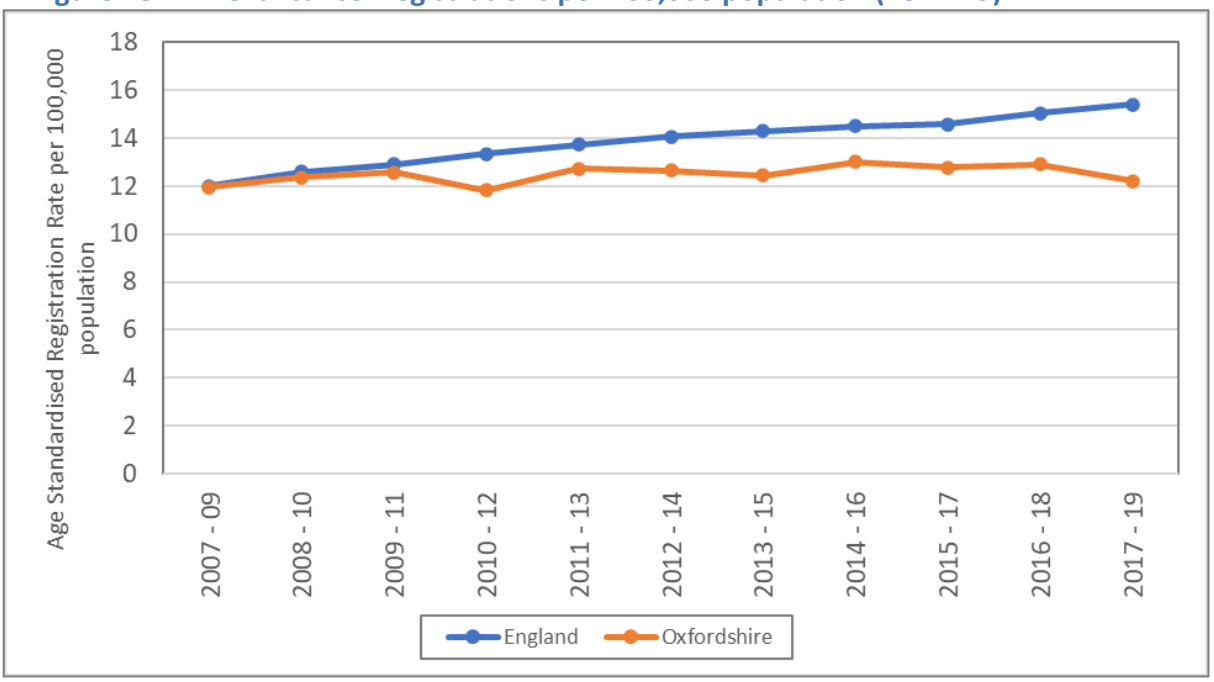
Oral cancer

Oral cancer is one of the ten most common malignancies in the world and accounts for 2% of all cancers in the UK. 50% of all oral cancers in the UK are considered preventable and are linked to lifestyle factors, e.g. tobacco, alcohol and diet. Smoking is the main avoidable risk for oral cancer and is linked to 65% of oral cancer cases.[66] The prevalence of smoking in Oxfordshire is 10.1%, which is significantly lower than the England average of 14.4%[67]. Smokeless tobacco is also a risk factor, particularly in Oxfordshire, due to its population demographic profile, however, further data is needed to fully understand this issue. Smokers have seven times increased risk of developing oral cancer, while regular smokeless tobacco users are at an 11 times increased risk. Furthermore, alcohol dehydrates the mouth and potentiates the effects of tobacco. People who regularly drink excessive amounts of alcohol and are smokers are at a 38 times increased risk of developing oral cancer.

The trend of oral cancer registrations across Oxfordshire has remained consistently below that of England's rate of cancer registrations since 2009-11 and the latest data for 2017-19 shows that Oxfordshire's rate is significantly lower than the national rate.

[66] Cancer Research: Oral Cancer Statistics; http://www.cancerresearchuk.org/cancer-info/cancerstats/types/oral/uk-oral-cancer-statistics [last accessed May 2023]
[67] Oxfordshire JSNA Bitesize 2019: https://insight.oxfordshire.gov.uk/cms/new-jsna-bitesize-smoking-prevalence

Figure 18 Oral cancer registrations per 100,000 population (2017-19)



When comparing Oxfordshire's oral cancer registrations, Oxfordshire ranks the best across its other 15 CIPFA nearest neighbours.

Figure 19 Oral cancer registrations (2017-19)

Better 95% | Similar | Worse 95% | Not compared

Recent trends: – Could not be calculated | → No significant change | ↑ Increasing & getting worse | ↑ Increasing & getting better | ↓ Decreasing & getting worse | ↓ Decreasing & getting better

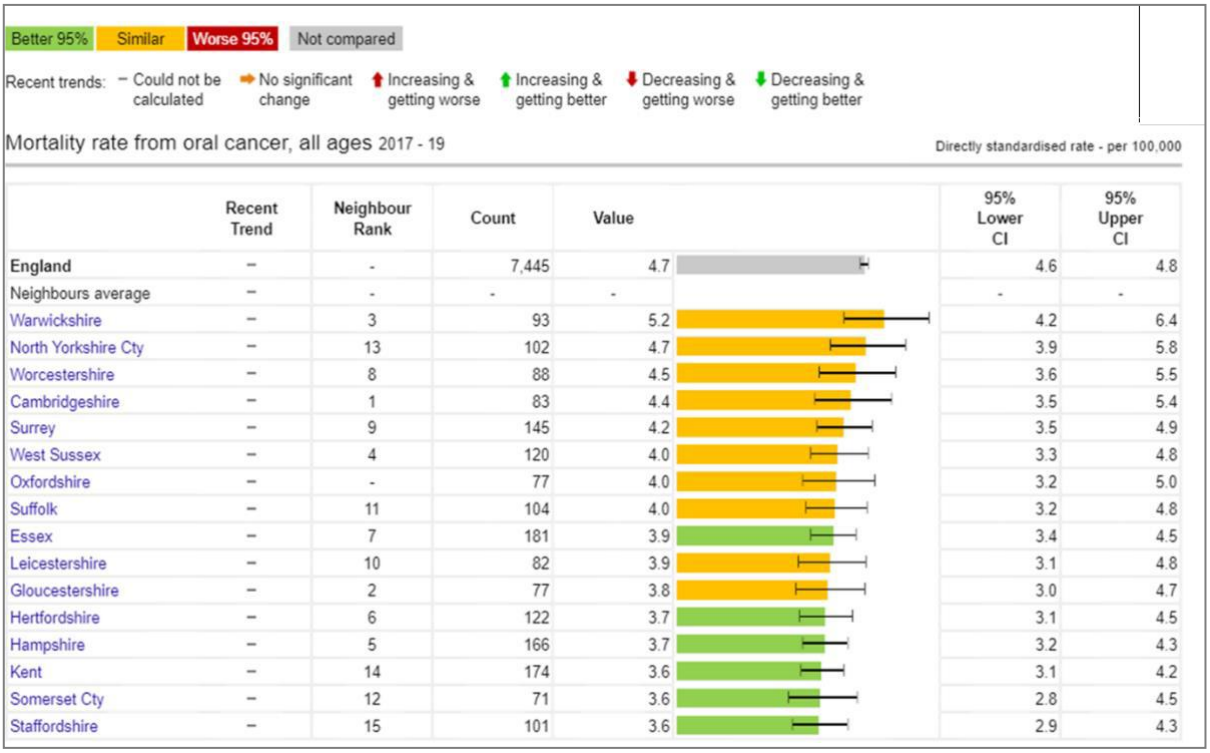
Oral cancer registrations 2017 - 19

Directly standardised rate - per 100,000

	Recent Trend	Neighbour Rank	Count	Value	95% Lower CI	95% Upper CI
England	–	-	24,115	15.4	15.2	15.6
Neighbours average	–	-	-	-	-	-
Somerset Cty	–	12	299	16.2	14.4	18.2
Warwickshire	–	3	263	15.0	13.3	17.0
Worcestershire	–	8	284	14.8	13.1	16.6
West Sussex	–	4	405	14.8	13.3	16.3
Surrey	–	9	502	14.5	13.3	15.9
Kent	–	14	662	14.3	13.2	15.4
North Yorkshire Cty	–	13	292	13.9	12.4	15.6
Essex	–	7	622	13.9	12.9	15.1
Gloucestershire	–	2	275	13.8	12.2	15.5
Cambridgeshire	–	1	252	13.5	11.9	15.3
Leicestershire	–	10	284	13.4	11.9	15.1
Hampshire	–	5	575	13.3	12.2	14.4
Staffordshire	–	15	362	13.1	11.8	14.5
Suffolk	–	11	320	13.0	11.6	14.5
Hertfordshire	–	6	401	12.5	11.3	13.8
Oxfordshire	–	-	230	12.2	10.6	13.8

Oxfordshire has similar rates of mortality when compared to England and when compared across its CIPFA nearest neighbours, Oxfordshire ranks the seventh highest out of a total of 16 neighbours.

Figure 20 Mortality rate from all oral cancer, all ages (2017-19)



	Recent Trend	Neighbour Rank	Count	Value	95% Lower CI	95% Upper CI
England	–	-	7,445	4.7	4.6	4.8
Neighbours average	–	-	-	-	-	-
Warwickshire	–	3	93	5.2	4.2	6.4
North Yorkshire Cty	–	13	102	4.7	3.9	5.8
Worcestershire	–	8	88	4.5	3.6	5.5
Cambridgeshire	–	1	83	4.4	3.5	5.4
Surrey	–	9	145	4.2	3.5	4.9
West Sussex	–	4	120	4.0	3.3	4.8
Oxfordshire	–	-	77	4.0	3.2	5.0
Suffolk	–	11	104	4.0	3.2	4.8
Essex	–	7	181	3.9	3.4	4.5
Leicestershire	–	10	82	3.9	3.1	4.8
Gloucestershire	–	2	77	3.8	3.0	4.7
Hertfordshire	–	6	122	3.7	3.1	4.5
Hampshire	–	5	166	3.7	3.2	4.3
Kent	–	14	174	3.6	3.1	4.2
Somerset Cty	–	12	71	3.6	2.8	4.5
Staffordshire	–	15	101	3.6	2.9	4.3

8.7 Epidemiology of oral health of children and young people in England

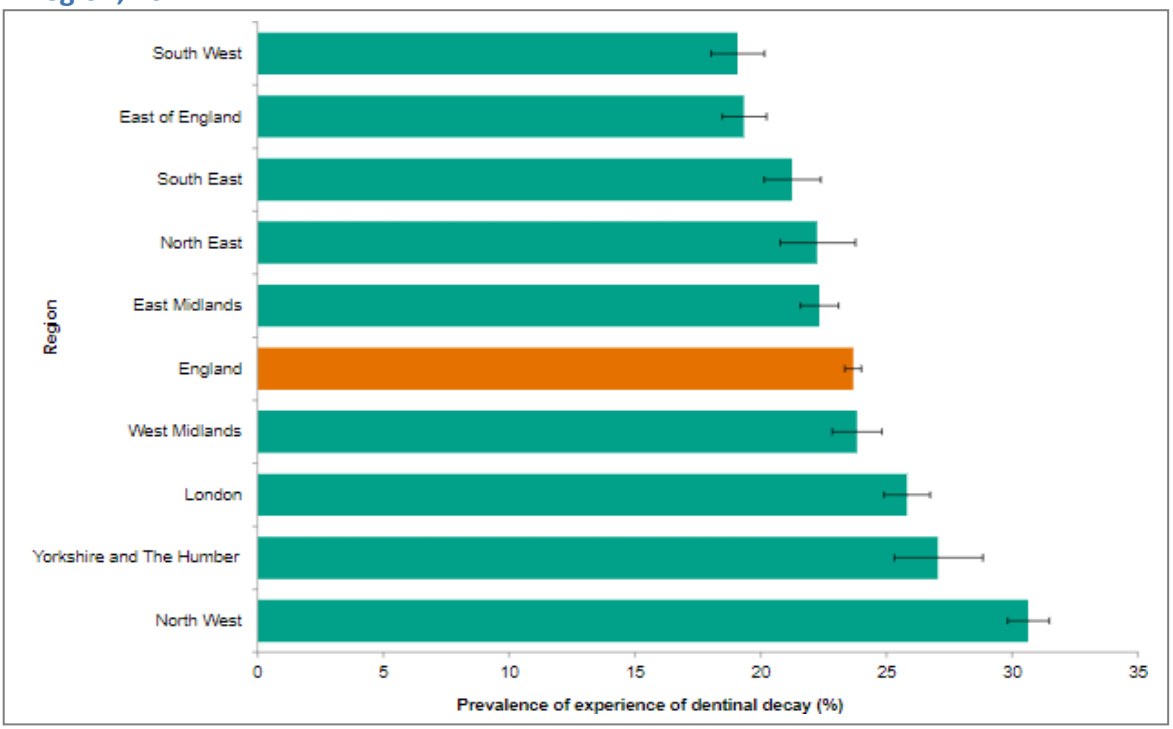
Although oral health is improving in England, the National Dental Epidemiology Programme (NDEP) for England Oral Health Survey of five-year-old children 2022 showed that 23.7% had experience of obvious tooth decay.[68] This was similar to the finding of the previous survey of five-year-olds in 2019, where 23.4% of the surveyed children had experience of tooth decay.

The data was collected during the 2021 to 2022 school year and takes place every two years to collect oral health information of five-year-olds who attend mainstream, state-funded schools across England.

In the survey of five-year-olds in England, the national prevalence of children with enamel and/or dentinal decay was 29.3% and showed disparities at a regional level, where it ranged from 23.3% in the South West to 38.7% in the North West, as well as disparities on a local authority level. This was the first time that the prevalence of children with enamel decay was presented which is an important threshold to highlight as children who are found to have early-stage decay would have previously been counted as being free of obvious decay.

[68] Oral health survey of 5 year old children 2022 (2023). https://www.gov.uk/government/statistics/oral-health-survey-of-5-year-old-children-2022/national-dental-epidemiology-programme-ndep-for-england-oral-health-survey-of-5-year-old-children-2022

Figure 21 Prevalence of experience of dentinal decay in five-year-olds in England by region, 2022



Hospital tooth extractions in 0 to 19-year-olds 2022

For the financial year 2021 to 2022, there were 42,180 episodes of tooth extractions in NHS hospitals for 0 to 19-year-olds.[69]

There were 26,741 episodes of tooth extractions with a primary diagnosis of dental caries (tooth decay) for 0 to 19-year-olds. This represents 63% of all tooth extractions for this age group.

There has been an 83% increase in the number of episodes of caries-related tooth extractions in hospital for 0 to 19-year-olds compared to the previous financial year of 2020 to 2021. This increase is likely to reflect a partial recovery of hospital services following the COVID-19 pandemic.

The caries-related tooth extraction episode rate for children and young people living in the most deprived communities was nearly three and a half times that of those living in the most affluent communities.
Tooth decay was still the most common reason for hospital admission in children aged between six and ten years.

[69] https://www.gov.uk/government/statistics/hospital-tooth-extractions-in-0-to-19-year-olds-2022/hospital-tooth-extractions-in-0-to-19-year-olds-2022

Figure 22 Trends in hospital tooth extraction episodes, England
Number of tooth extraction episodes in the last ten years by extraction category

Financial year	Caries extractions episodes	Non-caries extractions episodes	Total
2012 to 2013	39,888	20,795	60,683
2013 to 2014	41,282	21,320	62,602
2014 to 2015	42,209	20,987	63,196
2015 to 2016	39,278	21,083	60,361
2016 to 2017	39,346	21,955	61,301
2017 to 2018	38,385	20,929	59,314
2018 to 2019	37,404	21,607	59,011
2019 to 2020	35,190	19,947	55,137
2020 to 2021	14,645	7,904	22,549
2021 to 2022	26,741	15,439	42,180

The caries-related tooth extraction rate for children and young people living in the most deprived communities was nearly three and a half times that of those living in the most affluent communities.

Figure 23 FCE tooth extraction rate (all diagnoses) per 100,000 target population, 2021/22 across Oxfordshire

	Age 0 to 5years	Age 6 to 10 years	Age 11 to 14 years	Age 15 to 19 years	Total 0 to 19 years
Cherwell	311.5	629.7	321.1	174.7	363.5
Oxford City	412.6	810.5	219.3	105.6	359.5
South Oxfordshire	308.5	449.6	277.8	251.4	325.7
Vale of White Horse	265.1	471.8	218.2	264.8	293.8
West Oxfordshire	215.6	296.3	182.1	*	199.3

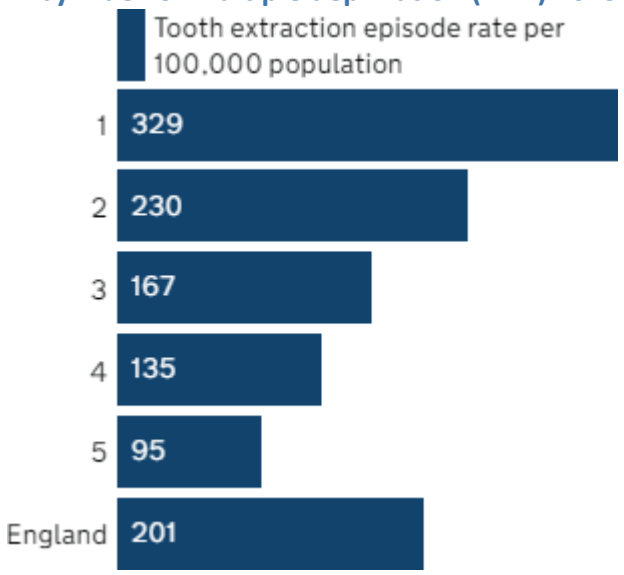
Rates of tooth extractions are higher in children resident in Oxford City, but with significantly higher rates in those aged six to ten. Overall, West Oxfordshire had lower rates across all age subgroups.

Figure 24 FCE tooth extraction rate with caries as primary diagnosis per 100,000 target population, 2021/22 across Oxfordshire

	Age 0 to 5years	Age 6 to 10 years	Age 11 to 14 years	Age 15 to 19 years	Total 0 to 19 years
Cherwell	222.5	524.7	*	*	228.9
Oxford City	353.7	748.1	146.2	*	293.0
South Oxfordshire	257.1	337.2	138.9	*	177.6
Vale of White Horse	212.1	412.8	145.5	*	216.5
West Oxfordshire	143.7	222.2	*	*	119.6

Oxford City has higher rates of caries as a primary diagnosis with West Oxfordshire having lower rates.

Figure 25 Tooth extraction episode rates per 100,000 population of 9- to 19-year-olds by index of multiple deprivation (IMD) 2019 quintiles, 2021/22



Nb: 1 = most deprived

8.8 National survey addressing the oral health of five-year-old children 2022

Survey data limitations

It is important to consult the specific methodology, report or documentation of the 2022 Oral Health Survey for five-year-olds to obtain accurate information on the data limitations associated with this particular survey. Limitations may include:

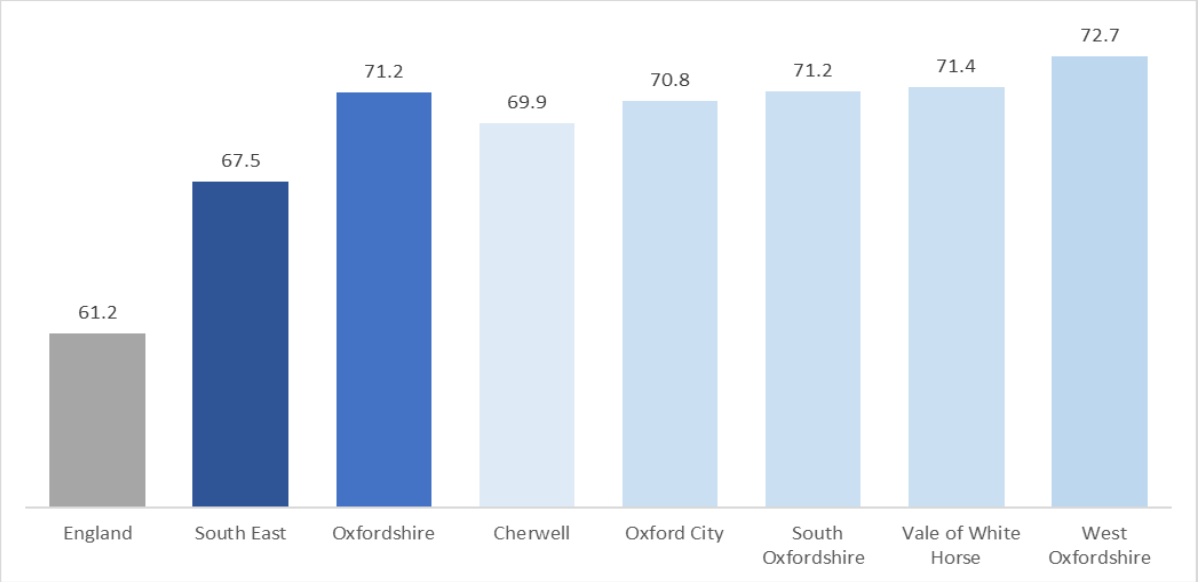
- **Sample size: The survey's findings may be limited by the number of participants involved. If the sample size is small, it may not be representative of the entire population, and the results may not accurately reflect the oral health status of five-year-olds in the UK.**
- **Non-response bias: Non-response bias occurs when a significant portion of the selected participants does not respond to the survey. If there is a high non-response rate, the data collected may not be fully representative of the target population, leading to potential biases in the results.**
- **Limited examination scope: Oral health surveys for young children may have limitations in terms of the extent of the oral examination performed. Due to time constraints or other factors, only certain aspects of oral health may be assessed, potentially overlooking specific conditions or factors that could affect the overall oral health status of five-year-olds.**

In total, 134 out of 152 upper-tier local authorities across England commissioned the survey. The figure below shows the trend of percentage of five-year-old children participating in the National Dental Epidemiology survey with decay experience in Oxfordshire compared with the South East and England.

Of the sample of five-year-old children who were surveyed in Oxfordshire, a total of 71.2% were examined compared to 61.2% for England. It is to be acknowledged that this is not a true reflection of all five-year-olds and therefore results are to be used with caution.

It should be noted that the South East (9 out of 18) regional estimates included data for approximately half of their upper-tier local authorities hence their regional level findings should be interpreted with this in mind.

Figure 26 Percentage of sampled five-year-olds examined as part of the NDEP survey 2022



Overall, the distribution of five-year-olds examined as part of the of survey was fairly evenly distributed across the five districts, with approximately 71% across all of Oxfordshire.

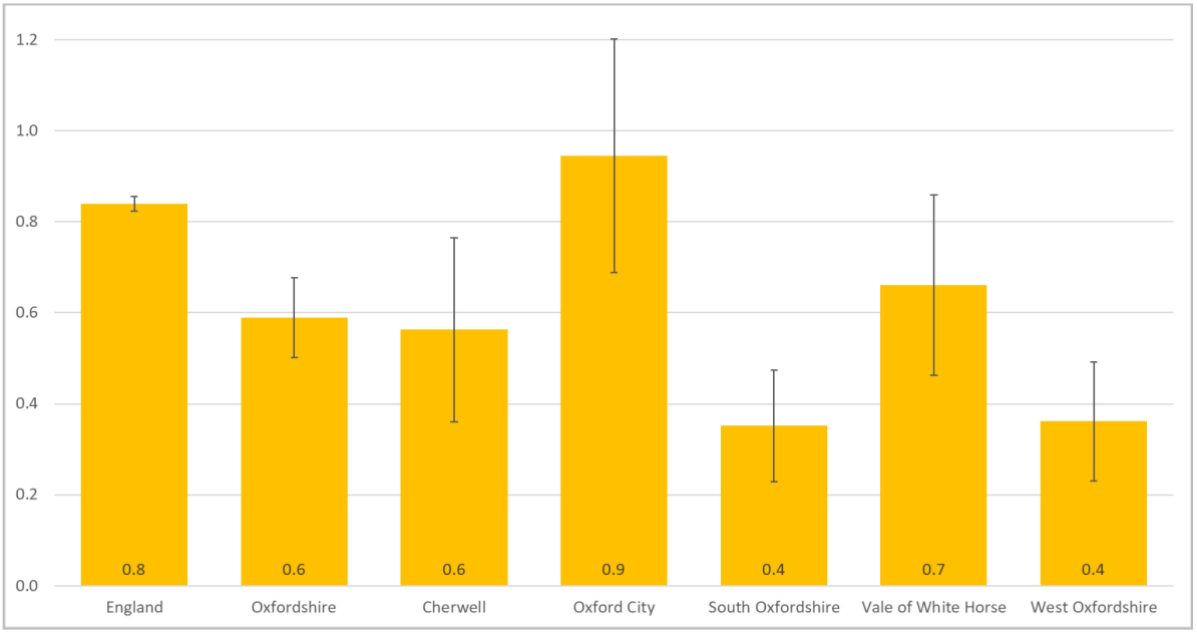
Comparisons have been made between the results of 2019 and 2022 of which we can see the results below:

- 2019 data – prevalence of experience of dental decay in five-year-olds
  - England – 23.4%
  - South East – 17.6%
- Comparison to 2022 – England has increased to 23.7%, South East increased to 21.2%. In 2019, South East was the lowest region, now South West and East of England have a lower rate.

	Average number of dentinally decayed (d3), missing due to dental decay (m) and filled (f) teeth (t)		Average number of obvious untreated dentinally decayed teeth		Percentage of children with any decay experience	
	2018-19	**2021-22**	**2018-19**	**2021-22**	**2018-19**	**2021-22**
England	0.8	0.8	0.6	0.7	23.4	23.7

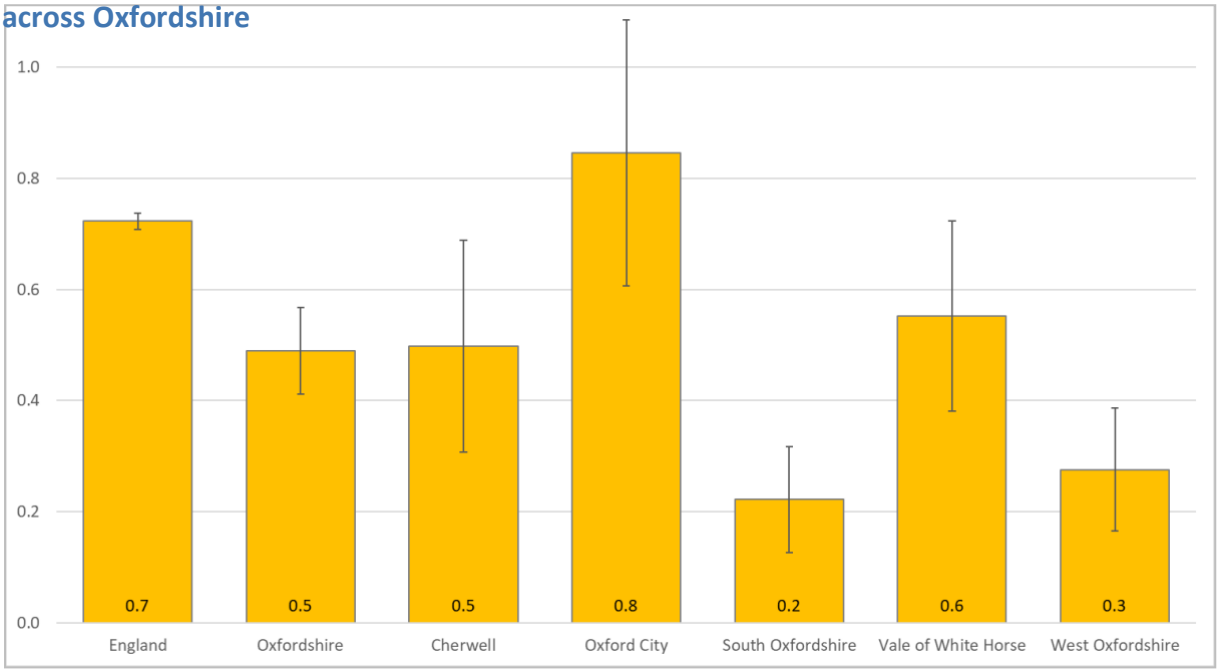
South East	0.7	0.7	0.4	0.6	17.6	19.3
Oxfordshire	**0.7**	**0.6**	**0.5**	**0.5**	**17.9**	**18.4**
Cherwell	0.8	0.6	0.6	0.5	16.6	16.5
Oxford City	1.1	0.9	0.7	0.8	24.1	26.3
South Oxfordshire	0.4	0.4	0.4	0.2	15.4	13.6
Vale of the White Horse	0.5	0.7	0.4	0.6	16.3	21.3
West Oxfordshire	0.5	0.4	0.2	0.3	14.8	13.0

Figure 27 Average number of dentinally decayed (d3), missing due to dental decay (m) and filled (f) teeth (t), 2021/22 across Oxfordshire



Oxfordshire had significantly lower average dentinally decayed missing due to dental decay and filled teeth compared to the England average. South Oxfordshire had significantly lower levels compared to the county average.

Figure 28 Average number of obvious untreated dentinally decayed teeth, 2021/22 across Oxfordshire



Oxfordshire had significantly lower average number of obvious untreated decayed teeth compared to England. Both South Oxfordshire and West Oxfordshire had significantly lower averages when compared to Oxfordshire County average.

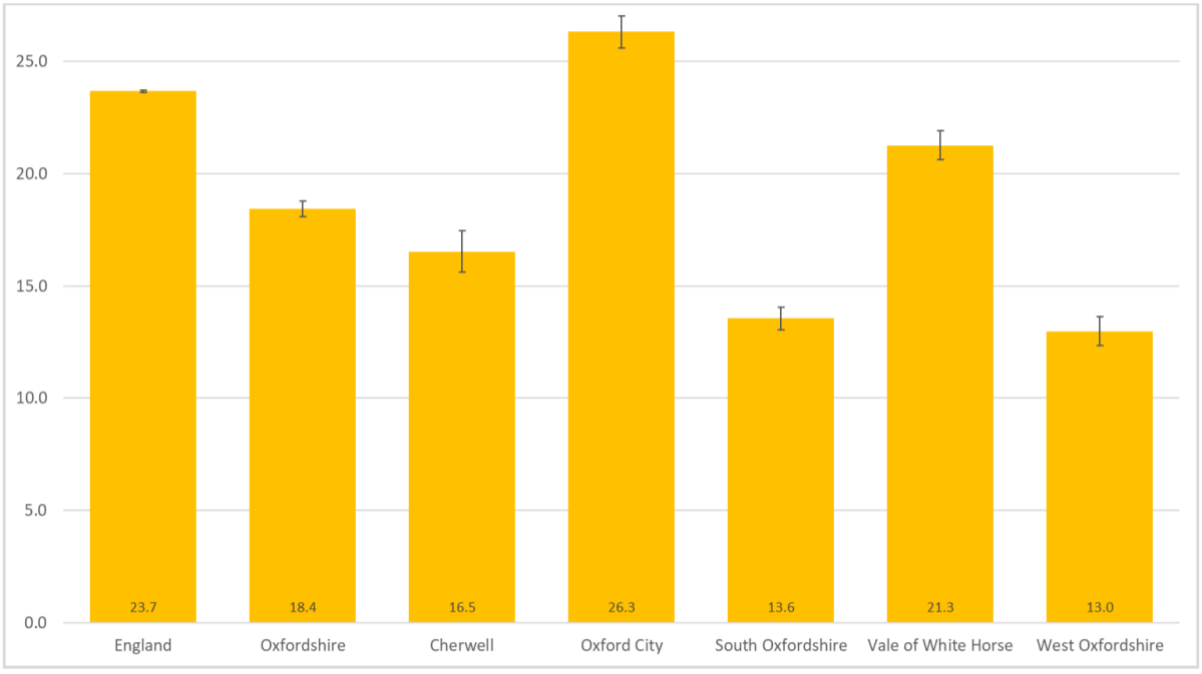
Figure 29 Comparison of average number of missing and filled teeth indicators

Area	ENGLAND	Oxfordshire	Cherwell	Oxford City	South Oxfordshire	Vale of White Horse	West Oxfordshire
Average number of missing teeth (extracted due to dental decay)	0.05	**0.03**	0.01	0.02	**0.07**	0.03	**0.04**
Average number of teeth filled	0.06	**0.07**	0.05	**0.08**	0.06	**0.08**	0.05
Average number of missing (extracted due to decay) teeth among those with decay experience	0.2	**0.2**	0.1	0.1	**0.5**	0.1	**0.3**
Average number of	3.3	**2.4**	1.2	1.3	**2.8**	3	**3.8**

missing (extracted due to decay) teeth among those with missing teeth							
Average number of dentinally decayed teeth among those with decay experience	3.1	**2.7**	3.0	**3.2**	1.6	2.6	2.1
Average number of dentinally decayed teeth among those with untreated decay	3.3	**3.1**	**3.4**	**3.5**	2.4	2.8	2.6

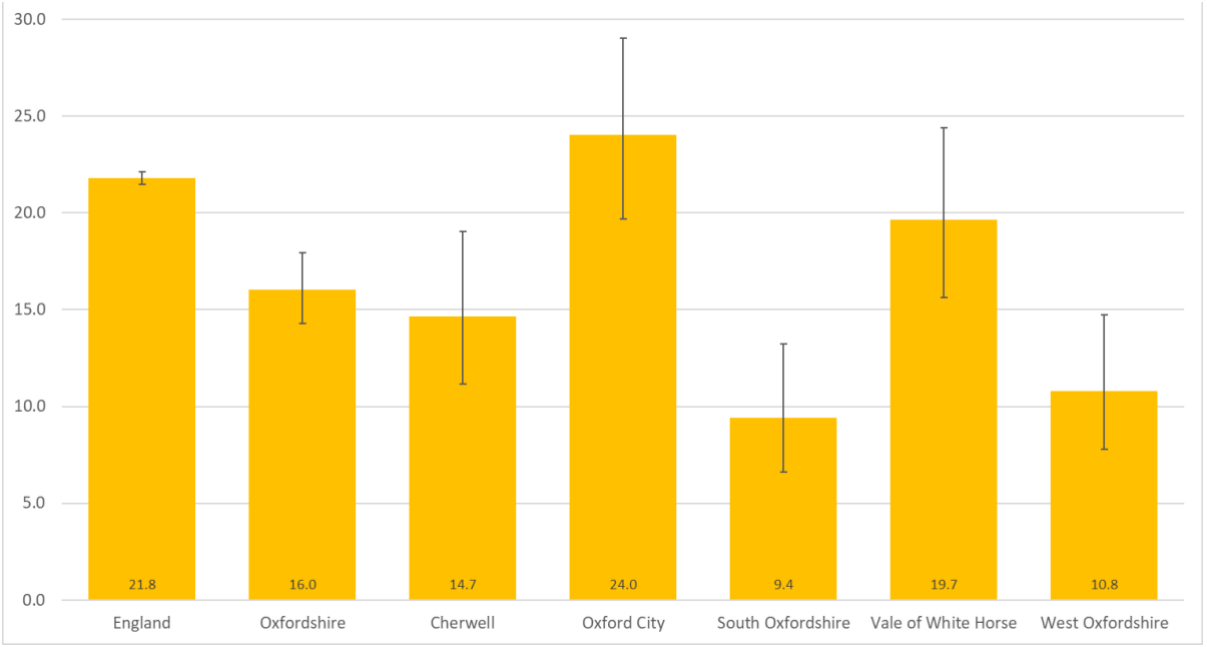
The table above shows the variance across Oxfordshire districts when comparing a number of indicators from the five-year-old dental survey relating to the average number of teeth decayed or missing.

Figure 30 Percentage of children with any decay experience, 2021/22 across Oxfordshire



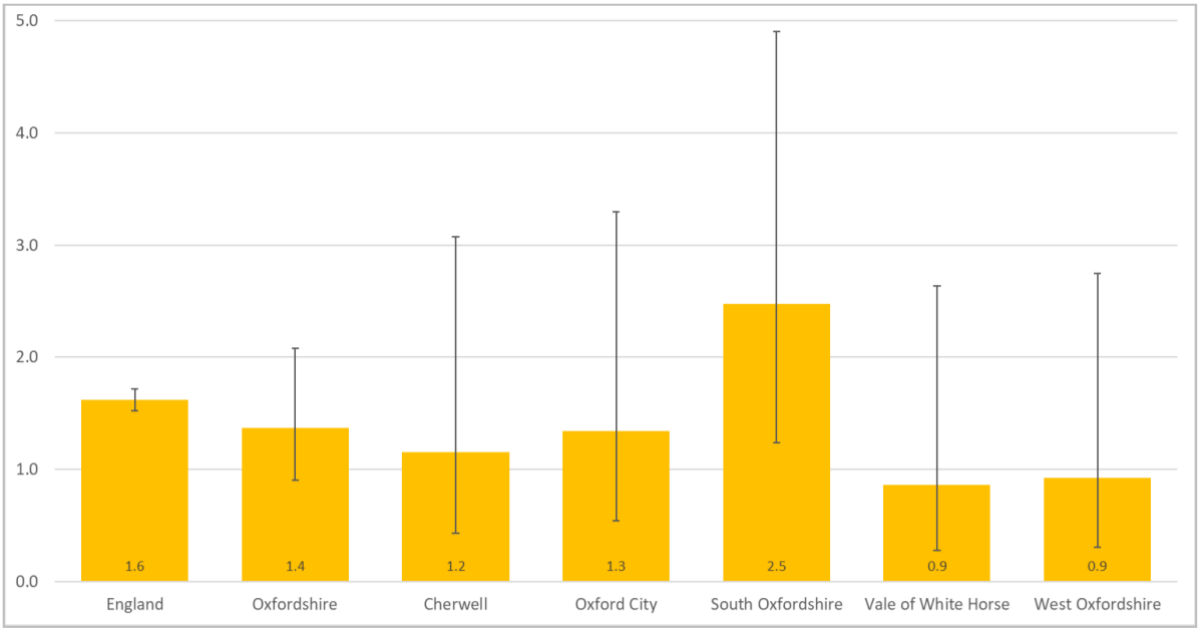
Oxford City had significantly more children with any tooth decay experience when compared to the Oxfordshire and England average.

Figure 31 Percentage of children with one or more obvious untreated dentinally decayed teeth, 2021/22 across Oxfordshire



Oxford City had a significantly higher proportion of children with one or more obvious untreated decayed teeth when compared to the Oxfordshire average. South Oxfordshire was lower.

Figure 32 Percentage of children who have had one or more teeth extracted due to dental decay (missing teeth), 2021/22 across Oxfordshire



There was no statistical significance when comparing the districts to Oxfordshire or England, however, South Oxfordshire had a higher percentage of children who had missing teeth.

Figure 33 Percentage of children with plaque covering more than two-thirds of the exposed labial tooth surfaces of the upper anterior sextant, 2021/22 across Oxfordshire

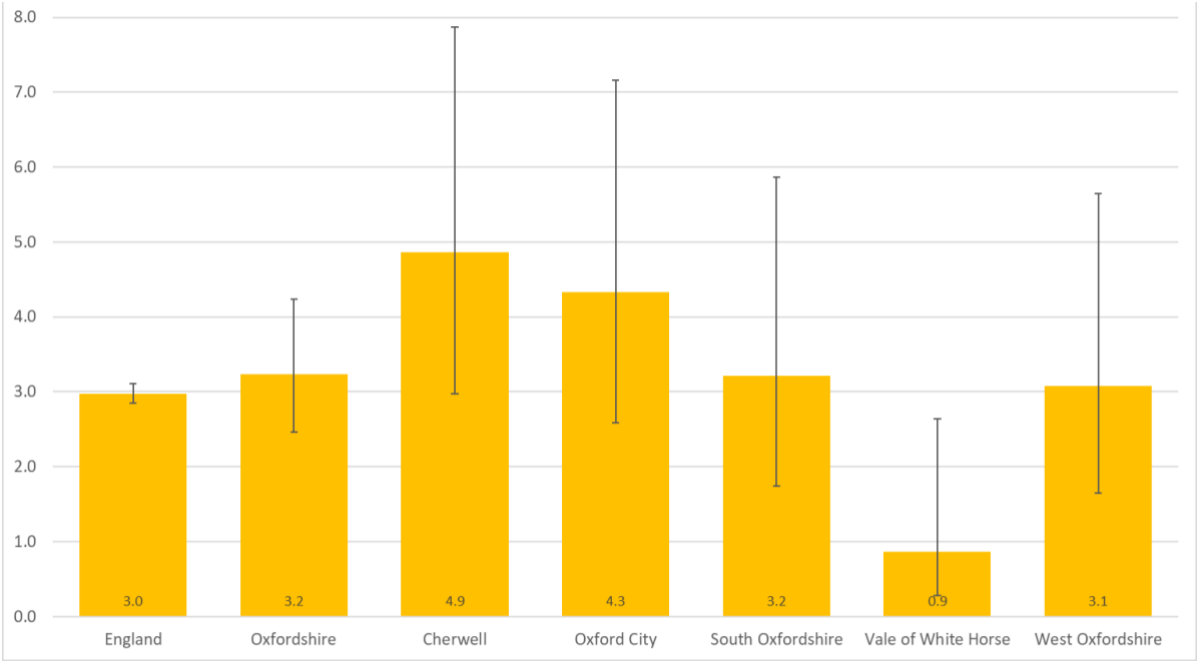


Figure 34 Pufa is an index used to assess the presence of oral conditions resulting from untreated caries. The index is recorded separately from dmft and indicates the presence of either a visible pulp, ulceration, fistula or abscess, 2021/22 across Oxfordshire

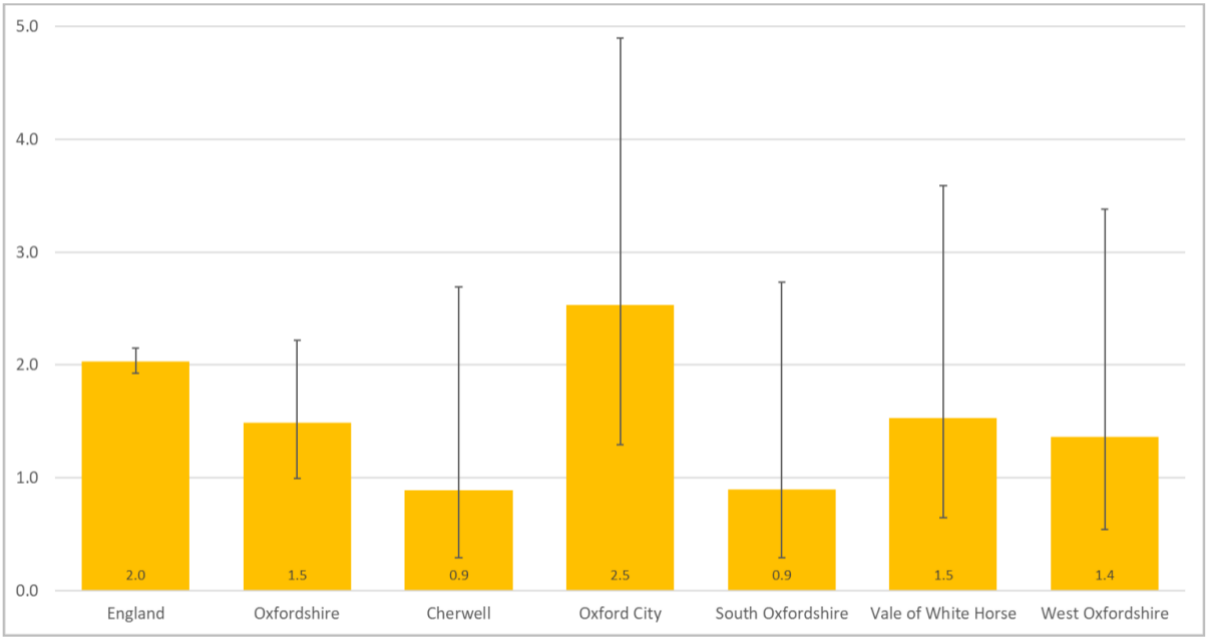
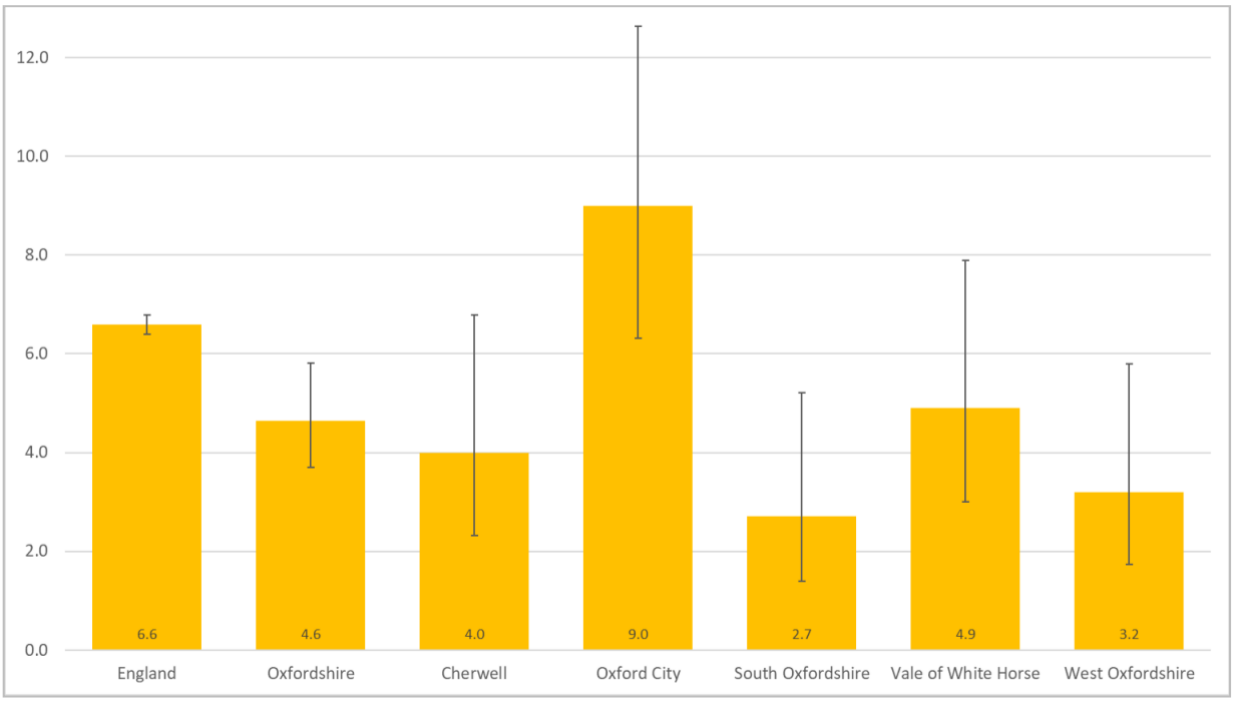


Figure 35 Percentage of children with dentinal decay affecting incisors, 2021/22 across Oxfordshire



Oxford City had statistically significantly higher percentage of children with decayed incisors compared to Oxfordshire and the national average.

Figure 36 Percentage of children with one or more teeth coded as having decay involving the pulp, 2021/22 across Oxfordshire

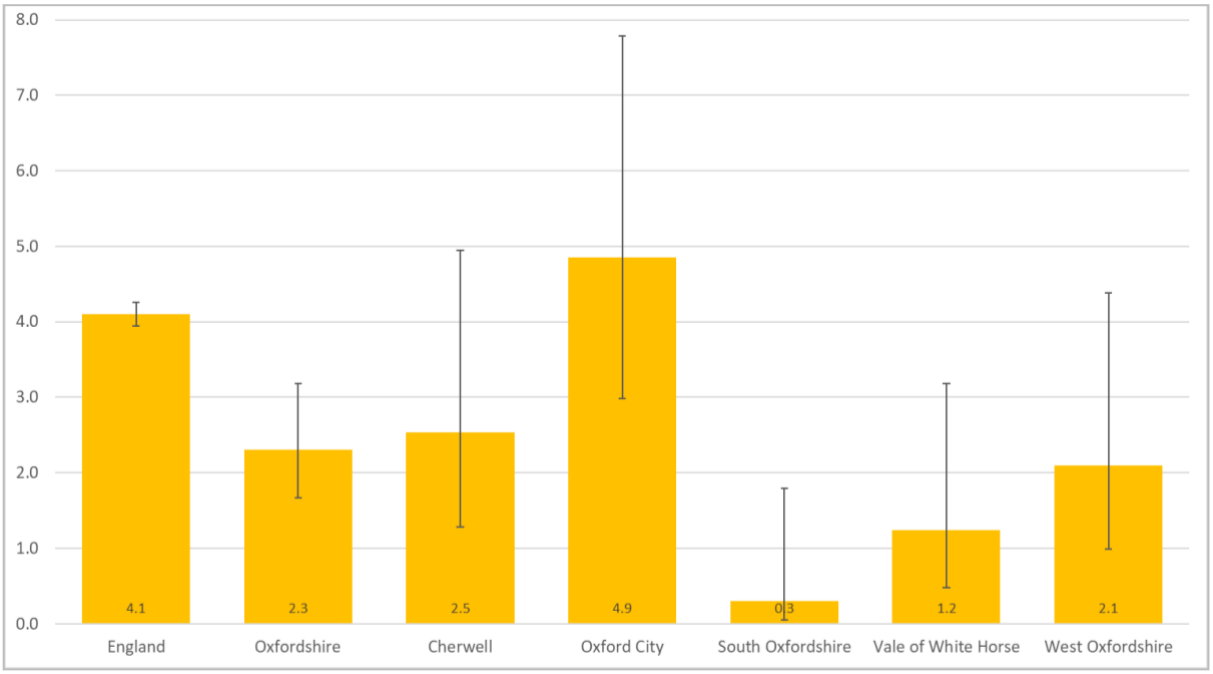
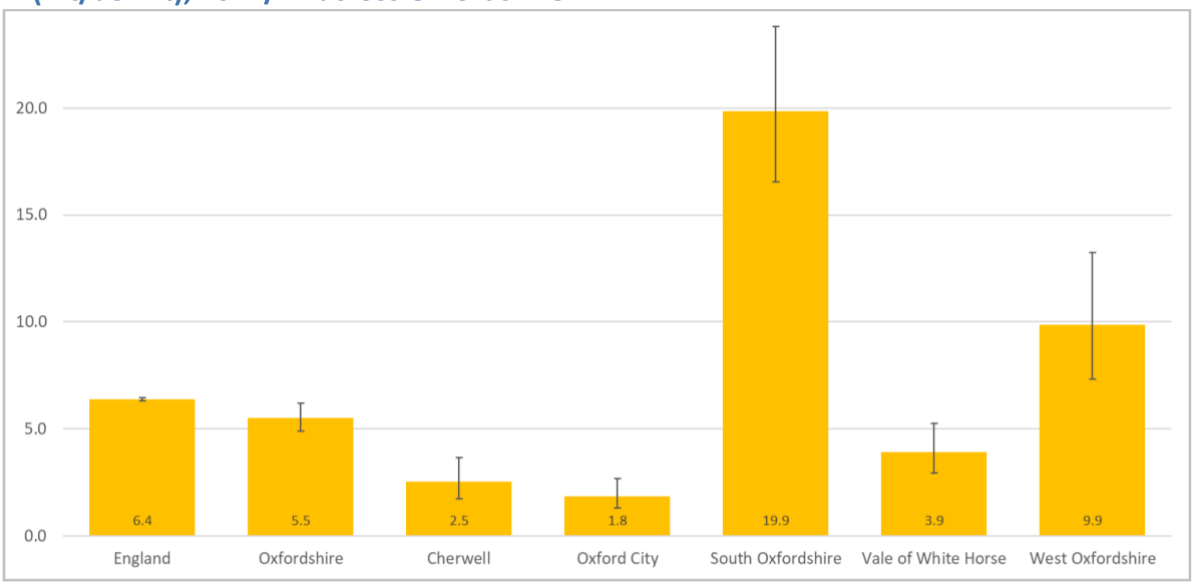


Figure 37 Proportion of d3mft score relating to missing (extracted due to decay) teeth (mt/d3mft), 2021/22 across Oxfordshire



South Oxfordshire had a statistically significantly higher proportion of children with a high d3mft score that related to missing teeth which were extracted due to decay.

8.9 Key findings – National Oral Health five-year-old survey 2022

The National Oral Health five-year-old survey 2022, showed that in Oxfordshire:

- 71.2% of five-year-old children were examined, compared to 61.2% for England
- The survey revealed that 23.7% of the sampled five-year-olds in England had experienced obvious tooth decay
- This finding was consistent with the previous survey in 2019, where 23.4% of surveyed children had experienced tooth decay
- Oxfordshire had a significantly lower average number of obvious untreated decayed teeth compared to England
- Both South Oxfordshire and West Oxfordshire had significantly lower averages compared to the overall average for Oxfordshire County
- Oxford City had a significantly higher proportion of children with one or more obvious untreated decayed teeth compared to the Oxfordshire average, while South Oxfordshire had lower rates.

For hospital data on tooth extractions:

- Hospital data showed an 83% increase in the number of episodes of caries-related tooth extractions for 0 to 19-year-olds compared to the previous financial year
- This increase is likely due to the partial recovery of hospital services following the COVID-19 pandemic
- Tooth decay remained the most common reason for hospital admission in children aged between six and ten years
- Rates of tooth extractions were higher among children residing in Oxford City, with significantly higher rates observed in the six to ten age group
- Overall, West Oxfordshire had lower rates of tooth extractions across all age subgroups.

These findings highlight the prevalence of tooth decay among young children in England and Oxfordshire. While there is some improvement in oral health, a significant proportion of children still experience tooth decay. The variations in oral health outcomes across different areas within Oxfordshire indicate the need for targeted interventions and preventive measures, particularly in areas with higher rates of untreated decayed teeth. Additionally, the increase in hospital admissions for tooth extractions underscores the importance of accessible and comprehensive dental care services to prevent the progression of dental issues in children.

9 Oxfordshire Oral Health Improvement Service

9.1 Aims of the service

The service aims to coordinate, facilitate, support and provide a range of evidence-based interventions[70] to improve oral health and reduce oral health inequalities in Oxfordshire by:

- Improving oral health promotion
- Improving diet choices
- Reducing consumption of sugary food and drinks, alcohol and tobacco
- Improving oral hygiene
- Collaborating with NHS England, dental practices, other healthcare professionals, early years settings, schools, community groups and other organisations to increase access to, and improve patient awareness of, NHS dental services
- Identify and target vulnerable groups, including but not limited to:
  - Early years settings and school children
  - Children and older adults in care facilities
  - Children and adults with special needs
  - Homeless
  - Travellers
  - Drug and alcohol misusers
  - Global Majority groups.

9.2 Objectives of the service

The oral health Improvement team in Oxfordshire delivers a range of services across the county. The objectives of the services are:

- To promote and deliver evidence-based training to health and non-health professions working with children, vulnerable adults and older adults
- To promote and deliver evidence-based accreditation programmes, to improve oral health, within settings for young children and for older adults
- To share evidence-based oral health advice and support to the local community, via resources, leaflets, website and social media
- To promote oral health campaigns to raise awareness of key oral health issues.
- To deliver evidence-based direct oral health education and outreach within the community, focusing on young children and older adults
- To ensure that all training and programmes are regularly reviewed in-line with evidence, evaluated and updated when needed via suggestions and user surveys
- To ensure the service is active in reducing health inequalities by focusing work in areas of deprivation and greater need.

[70] Department of Health. Improving Outcomes and Supporting Transparency: Part 1: A Public Health Outcomes Framework for England, 2016-2019. 2012.

9.3 Oral health services for children and young people

Oral health promotion interventions aimed at children - activities may include, but are not limited to, the following:

- Accredit settings as oral health promoting settings for early years and primary school children
- Train the trainer activities to reach a wider audience
- Direct training for health and non-health professionals who work with children about the importance and promotion of oral health
- Advocate integration of oral health into targeted home visits by health/social care workers
- Provide oral health information and advice through early years (children aged 0-5 years) services, whilst providing tailored information and advice in areas where there is a higher risk of poor oral health
- Promote supervised tooth brushing schemes in early year settings and primary schools based in areas where children are at higher risk of poor oral health
- Promote oral health in the primary and secondary school curricula
- Promote a 'whole-school' approach to oral health in primary education, such as through making plain drinking water freely available, providing a choice of food, drinks and snacks that are sugar-free or low in sugar and form part of a healthier diet (including those offered in vending machines), and displaying and promoting evidence-based, age-appropriate, oral health information for parents, carers and children, including details on how to access local dental services.

9.4 Oral health services for adults

Oral health promotion interventions aimed at adults

- Promote oral health in the workplace
- Deliver targeted services for adults at higher risk of poor oral health, including peer (lay) support groups or peer oral health workers
- Train the trainer activities to reach a wider audience. Sessions shall cover the following topics (as a minimum):
  - Oral hygiene, including denture hygiene
  - Healthy eating
  - Specific oral health needs of target group
  - Impacts of poor oral health
  - Oral cancer awareness and prevention
  - Oral health assessment tool
  - Safeguarding adults in relation to oral and facial injuries
  - Mental capacity and gaining consent for delivery of oral care
  - Signposting to NHS dental services
  - Link oral health care to relevant CQC standards
  - Sugar free medicines (where relevant)
  - Risk factors for common chronic diseases, including tobacco use and alcohol misuse.
- Directly train health and non-health professionals who work with adults from deprived populations and those who do not attend dentist regularly, as well as

adults with additional needs (i.e. adults who rely on others for care), about the importance and promotion of oral health
- Provide information about what services are available to the public and how to access them
- Work with partners to promote oral health and oral health services in residential care homes.

9.5 Oral health services for selected vulnerable groups - identify and target vulnerable groups

- Early years settings and school children – accreditation of settings for early years and primary school age children
- Offer customised support and/or training to childcare and educational settings aimed at all early years and primary school children, prioritising Oxfordshire County Council preschool settings in the most deprived areas.
- Children and older adults in care facilities
- Children and adults with special needs
- Homeless
- Travellers
- Drug and alcohol misusers
- Global Majority groups.

9.6 Oral Health Improvement training and services

Oxfordshire Oral Health Improvement (OHImp) Community Dental Services (CDS) training and community work 2021-2022

Training and evaluations

- Train the trainer is an important aspect to OHImp services. From April 2021-March 2023 they trained more than 2,000 professionals. They were very successful with their training aimed at children and in particular Early Years Foundation Stage (EYFS) professionals, due to oral health being included in the mandatory framework. This resulted in an increased request for training and accreditation. They also engaged with new teams, for example those linked to mental health, social prescribers and newly commissioned smoking prevention and weight management teams
- In addition, they have ensured that health visitors, midwives and school health nurses received an annual update of oral health information and key messages. They have continued to promote the online toolkit for carers and have recorded an increased interest in the update to the website including the new video content
- All of the training was delivered remotely via Teams or Zoom. Some sessions were interactive and discussions were held during the sessions. Other sessions were similar to a webinar with questions postponed until the end. They aim to be as flexible as possible for different teams and have delivered evening and weekend sessions when requested.

97 = online training sessions
1342 = professionals trained
993 = professionals working with children
215 = Carers Toolkit course
134 = Health and non-health professionals working with adults
12,000 = service users impacted

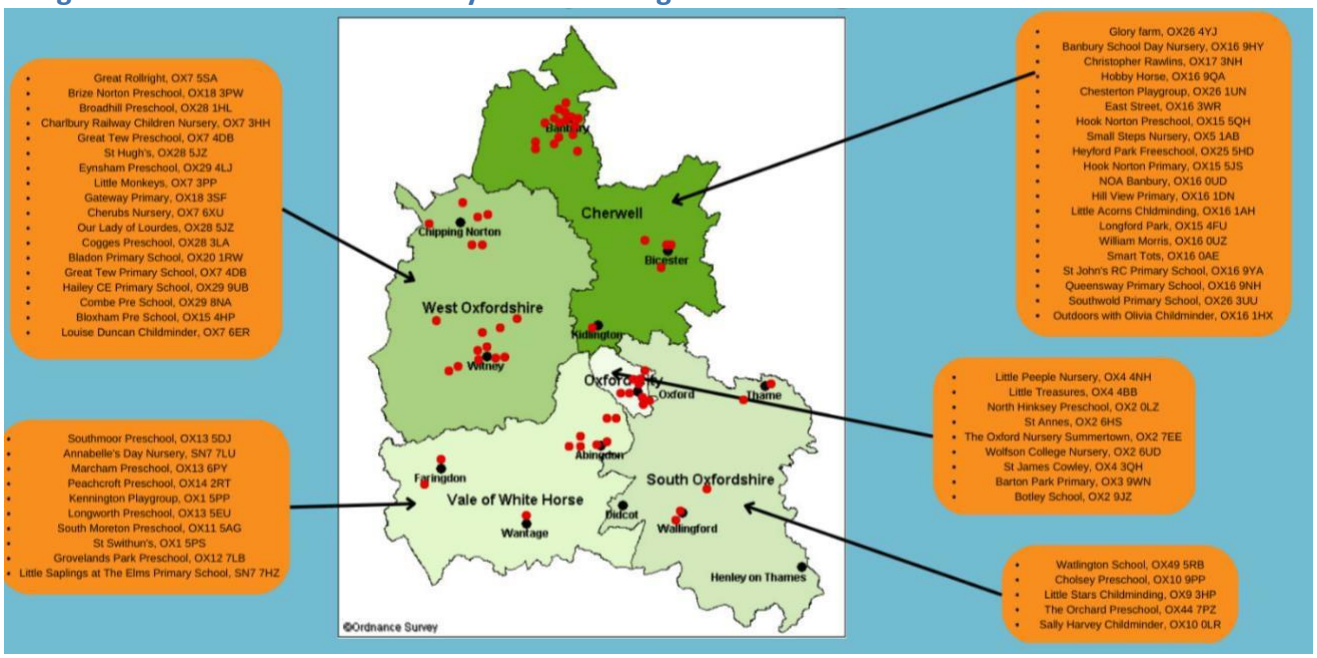
898 = professionals trained
689 = professionals working with children
105 = Carers Toolkit course
104 = Health and non-health professionals working with adults
71 = online training sessions

Evaluations were completed following the completion of each training session. Participants were asked to record what new knowledge they had gained, skills learnt, confidence and an overall rating of the session. These evaluations were all recorded within the Oral Health Improvement team's evaluation records to identify which information is of the most value. The majority of the questions and answers centred around requesting information about fluoride including the correct amount needed in toothpaste and informing individuals not to rinse following brushing. Additional questions were linked to diet – reducing sugar and making snacks tooth friendly. An excellent outcome reported was that many professionals felt they were able to promote oral health in their setting and to pass on key oral health messages as well as making changes to their current policies. This illustrates measurable impact. All Healthy Smiles accredited settings will have also achieved these improvements in order to pass. All of the evaluations were delivered online either via a link, a participant's email or QR code. The QR code has allowed participants to immediately open and complete the evaluation and has increased the rates of feedback. In 2021, 73% of training participants to returned an evaluation form.

Participants were asked on the evaluation form to indicate how confident they felt in delivering oral health messages in their setting before, and then after, the training. On average, people's score increased from six out of ten before training to nine out of ten after. An overall increase in confidence by 30%.

The evaluation form included a satisfaction rating. Participants were asked to rate the training as excellent, good, average or poor. Overall, 98% of people rated the training as either good or excellent.

Figure 38 Accredited Healthy Smiles settings 2021-2023



The locations of Accredited Healthy Smiles can be seen to be fairly widespread across the county with Cherwell and West Oxfordshire having more locations than other parts of Oxfordshire.

9.7 Oral health services for individuals in care homes

The Community Dental Services (CDS) team is driven by training. They have collaborated with OCC to make a level 1 toolkit for all carers to complete before moving onto level 2 training. The level 2 training is delivered to each care home and to as many staff as possible. The training ensures that all staff are aware of NICE/CQC guidelines and expectations and that they understand how to improve residents' oral health. This training can support the setting to complete Lifelong Smiles, which is a level 3 accreditation programme for care homes.

9.8 The impact of COVID-19 on the delivery of oral health improvement by CDS in Oxfordshire 2020-2022

2019-2020 Due to the COVID-19 outbreak in March, the usual services of the CDS Oral Health Improvement team (OHIMP) were paused. During that time, they joined with all other OHIMP teams across CDS to form a mini forum. They used this one team approach to work towards new ways in which they could all work together and provide a service to each local area. They also developed and worked on using digital technologies and resources to reach out to professional groups. They carried out the following activities:

- Supported national and local campaigns – National Smile Month (NSM) was promoted online only. The CDS supported the main campaign whilst also running two mini campaigns – 30 Reasons to Make You Smile and We Challenge You … for NSM
- Developed online training for vulnerable groups
- Created video, webinar and podcast content to support a range of service users via social media, partners and website
- Maintained contact with service users, providing advice and support via text messaging and the Oxfordshire oral health website.

These initiatives allowed them to still pass on key messages and resources for improving oral health whilst maintaining social distancing according to government guidelines. The team also created a new 'Family Fun' webpage on the Community Dental services website, which provided families, carers and nurseries/schools with some valuable resources and ideas for promoting oral health during lockdown.

During 2020-2021, they focused on delivering training to both known and new groups of professionals. They also used the time to further develop the CDS mini forum to share ideas and learn from each other. They carried out the following activities:

- Refined their online presentations and created new ones for specific groups – neglect, stroke, palliative care
- Created SOPS for attending sessions
- Developed new guidelines for Supervised Toothbrushing (STB) in line with PHE advice
- Created and shared a series of oral health videos using PowToon.

- Attended wider network meetings to raise the profile of oral health.
- Were involved in new projects: neglect training, talking together in Banbury project, joined stakeholder and steering groups for 50 things app and set targets for brighter futures in Banbury, planned how to use £1,000 Tesco money in Banbury for STB
- Planned two sessions with OUH colleagues here4health.
- Raised the most money for Mouth Care Matters (MCAM).

They continued to develop ideas, maintain links with service users and work towards a plan regarding how to deliver services safely and effectively once lockdown restrictions changed.

During 2021-2022, they were still restricted regarding the number of groups they could attend. They focused on delivering training to known and new groups of professionals and this number nearly quadrupled to that achieved in the year 2018-2019.
They worked more strategically within Oxfordshire; they attended school readiness groups, neglect forums, men's health partnership, and health and wellbeing groups in deprived areas. They continued to create website content for partners which could be used online and monitored, including new leaflets and videos.
They all worked from home and they no longer had an office in Oxfordshire. They found the transition easy and in line with the new hybrid way of working.
During this year the following activities were completed:

- Created SOPs for attending sessions and loaning resources
- Created and shared additional oral health videos using PowToon and Inshot
- Attended lots of wider network meetings to raise profile of OH
- Competed online sessions with OUH colleagues Here4Health, parent sessions and online groups
- Raised the most money for MCAM!
- Created new online video resource for OCC for the online toolkit website training course
- Received funding from OCC to purchase denture kits for care homes receiving training at level 2.

Direct oral health sessions and outreach aimed at children and adults

While there has been limited uptake for CDS to attend face-to-face groups and outreach opportunities since the pandemic, the team have regularly offered their services proactively, particularly in Oxfordshire's ten most deprived wards. From April 2021 to March 2023, these are the kinds of settings/groups they have visited:

- Parent session at primary school
- Banbury Mosque
- Health walks
- Dementia support group (online)
- Didcot Community Hub
- Food banks/food larders
- Natterbugs session
- Rhyme Time
- Stay and play sessions
- Weight management groups

- Cleft clinic at John Radcliffe
- Asda Wheatley
- Health on the Move Bus at Turning Point Oxford
- Movement and Mind sessions.

With less opportunity for in-person outreach, CDS have developed their online presence and promotion of national campaigns linked to oral health including National Smile Month and Mouth Cancer Action Month. The messages, advice and resources that they shared between April 2022 and March 2023 have been used, seen and accessed over two and half million times.

The team also produce a free monthly newsletter which contains social media content around oral health to encourage partners to also share their content. At the time of writing the newsletter has 157 subscribers.

9.9 The National Dental Epidemiology Programme for England

Oxfordshire contributes to the National Dental Epidemiology Programme (NDEP) for England. It is a national programme of dental surveys co-ordinated by the Office for Health Improvement and Disparities (OHID). The NDEP surveys are conducted annually, usually over academic years, and are carried out on randomised stratified samples or commissioning organisations can opt to conduct wider surveys e.g. census surveys. The surveys are conducted according to a national standard protocol and examiners are trained and calibrated to a national standard. Oral health survey guidance can be found here: https://www.gov.uk/government/publications/oral-health-survey-guidance

10 Oxfordshire dental health services

10.1 NHS dental services in England

NHS dental services are available for when children and adults require general, community and specialist care, and hospital and out-of-hours urgent dental care. This could be via a high street dental practice, community dental services (for those with additional needs e.g. learning or physical disabilities, mental health issues and those who require special dental care including orthodontics) or hospital dental services. In Oxfordshire, Buckinghamshire, Oxfordshire and Berkshire West Integrated Care Board (BOB ICB) have responsibility for commissioning NHS dental services.

10.2 Services commissioned by Oxfordshire County Council Public Health

Oxfordshire County Council Public Health currently commission a range of oral health promotion/improvement services locally, currently delivered by the Oral Health Improvement team and the Oxfordshire Community Dental Service.

In addition, it is also commissioned to carry out surveys annually. This involves completing clinical examinations on an agreed population in settings located within Oxfordshire. This is described in section 11.4.

The services aim to:

- Share relevant information/advice to improve oral health
- Raise awareness of preventative oral health care through professionals and the community
- Improve knowledge of how to access NHS dental services.

Their work currently includes training of health and non-health professionals, information and training for early years and primary schools, social media campaigns, signposting and partnership working.

10.3 Oxfordshire Community Dental Service (OCDS)

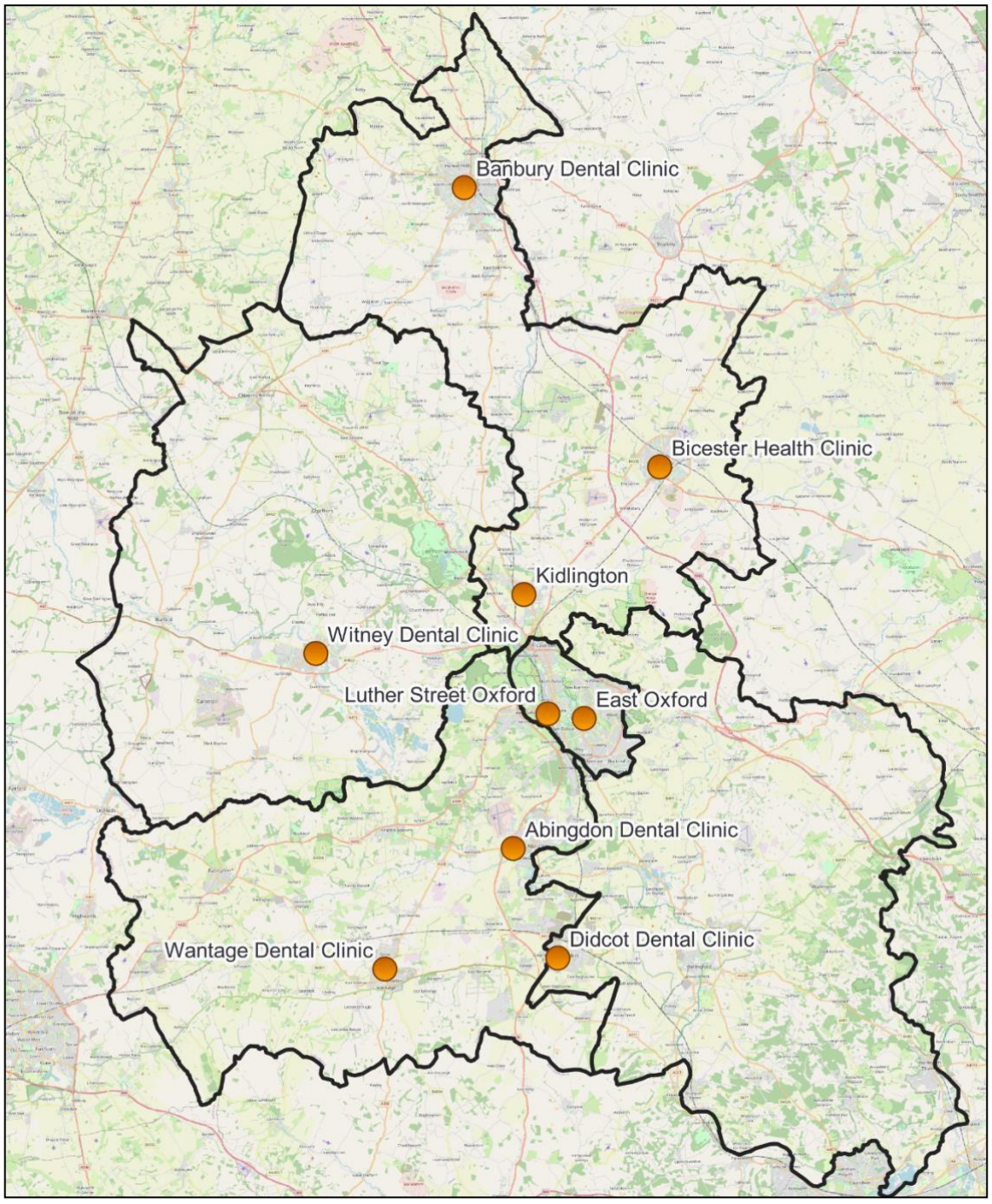
OCDS is a dental service based across Oxfordshire, providing specialised dental care to a wide range of patients, both children and adults, who are unable to receive care from a general dental practitioner, but do not necessarily need to be seen in a hospital, such as those with medical conditions, learning or physical disabilities, anxiety or phobia, or mental health issues.

OCDS clinics

The OCDS has nine clinics across Oxfordshire providing a comprehensive range of dental treatment to patients of all ages. Some of the clinics are able to provide treatment with sedation (inhalation and intravenous). Patients requiring a general anaesthetic are treated at the Horton and John Radcliffe hospitals. Disabled access and limited parking are available at all clinics. For patients with mobility issues, there is a hoist available in the clinic at East

Oxford Health Centre. Dental care and treatment can be provided in the patient's home for those who are eligible. Patients who require special care dentistry can be referred to OCDS by the patient's regular dentist or another health professional working with the individual. The OCDS also operates nurse-led clinics, which provide additional individual oral health support for individuals. Patients are referred to these clinics by one of the OCDS dentists.

Figure 39 -Map showing location of nine specialised dental clinics across Oxfordshire and OCDS nurse-led clinics



Training and support

The OCDS has their own Oral Health (OH) team who provide training, information and support to staff across Oxfordshire, who work with both adult and child patients with enhanced care needs, such as learning, medical and mental health needs. The OH team also provide information for service users and support the Special Educational Settings (SES schools) in Oxfordshire through staff training, interactive information sessions for students and school dental visits. These special school health nurses are different from the other school nurses as they have specialist training to work with individuals attending SES schools. The OH team work in collaboration with school health nurses to provide a holistic approach to supporting students in a SES.

Thames Valley Community Dental Services

The OCDS is part of the Thames Valley Community Dental Service (TVCDS), a collaborative partnership of Oxford Health NHS Foundation Trust, Berkshire Healthcare NHS Foundation Trust, and Central and North West London NHS Foundation Trust. The TVCDS is working on some larger cross trust projects such as environmental sustainability, patient empowerment and involvement, digital innovation and much more.

The TVCDS is keen to build relationships with local councils and voluntary groups to create place-based partnerships to improve and align a patient's experience in oral health, and have already had discussions with BOB ICB around this considering the NHS priorities around oral health. https://www.england.nhs.uk/about/equality/equality-hub/national-healthcare-inequalities-improvement-programme/core20plus5/core20plus5-cyp/

10.4 National outcomes

The Epidemiology Fieldwork Survey currently supports the Public Health Outcomes Framework (2016-2019. The most recent five-year-old children survey was published in May 2023.

Local authorities will need to have access to dental epidemiological data for them to be able to monitor progress in relation to this indicator. Participation in the NDEP survey enables local authorities to collect these data and provide data for the Public Health Surveillance Dashboard co-ordinated by OHID.

10.5 Local outcomes

The aim of the local service is to carry out the dental epidemiological surveys across Oxfordshire in line with the NDEP survey programme and in accordance with the survey protocol and timescales.

The survey involves the service provider carrying out clinical examinations on an agreed population, usually children in settings within Oxfordshire. The service provider is required to liaise with the relevant settings and work with them to encourage participation in the surveys and in obtaining consent from parents and carers. This may involve the service provider visiting the settings and communication with governors, parents and teachers. Suitable clinical examiners are identified by the provider along with support staff for administration, recording and data entry. The field work team ensures that anonymised survey data is available to the epidemiology coordinator. The process is planned, executed and completed within the nationally agreed time frames.

Since the current contract started in 2019, CDS have delivered the following surveys in Oxfordshire as part of the National Dental Epidemiology Programme:

Academic year	Age group sampled	% consent rate achieved of sample
2019-20	three-year-olds	37% (survey was disrupted due to COVID-19 pandemic)
2020-21	NA – No survey due to COVID-19 pandemic	NA – No survey due to COVID-19 pandemic
2021-22	five-year-olds	71.2%
2022-23	Year 6 pupils	Data collection not yet complete

The National 5-year-olds 2021-2022 survey results are described in section 9.8

10.6 Oral cancer prevention services in Oxfordshire

The CDS support the oral cancer prevention campaign throughout November every year. This involves raising awareness of oral cancer and encouraging people to know the signs, symptoms, risk factors for oral cancer and how to self-check. The campaign is always supported with social media posts and content. All training for health and non-health professionals working with adults uses up-to-date data on prevalence of mouth cancer and the key messages.

10.7 Early detection of oral cancer services in Oxfordshire

The people who are most at risk of oral cancer used to be smokers, heavy drinkers and anyone over 40, however, this has now changed and the fastest growing segment of the oral cancer population are the healthy, non-smokers between 25 and 50 years old. This is due to the spread of the HPV16 virus. It is recommended that all patients aged over 17 should have an annual check-up that includes oral cancer screening.

11 Stakeholder engagement

11.1 Oxfordshire key stakeholder oral health survey

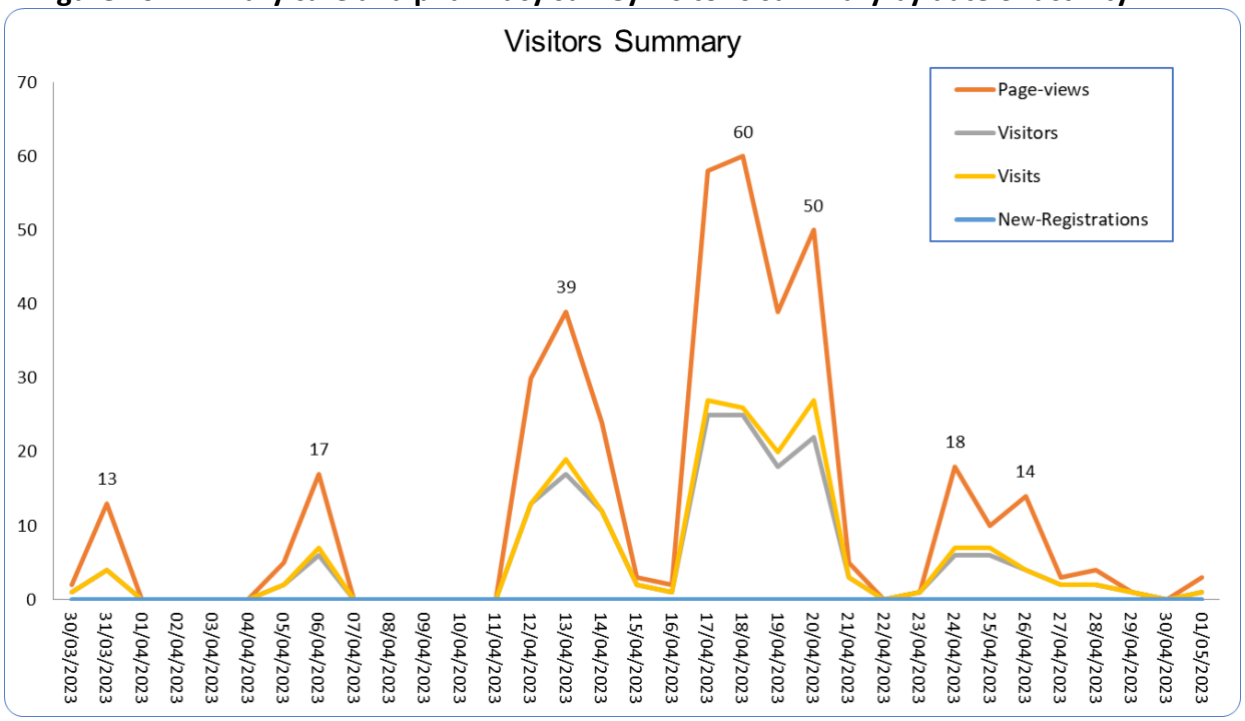
Survey summary

The key stakeholder survey was open to respondents between 30 March 2023 and 1 May 2023, a total of 32 days.

189 people visited the survey website, of which:

- Engaged participants = 30.1% (n=58); participants who completed the survey
- Informed participants = 63.5% (n=120); 42 participants visited multiple project pages and 27 contributed to a tool
- Aware participants = 85.2% (n=161); participants who visited at least one page

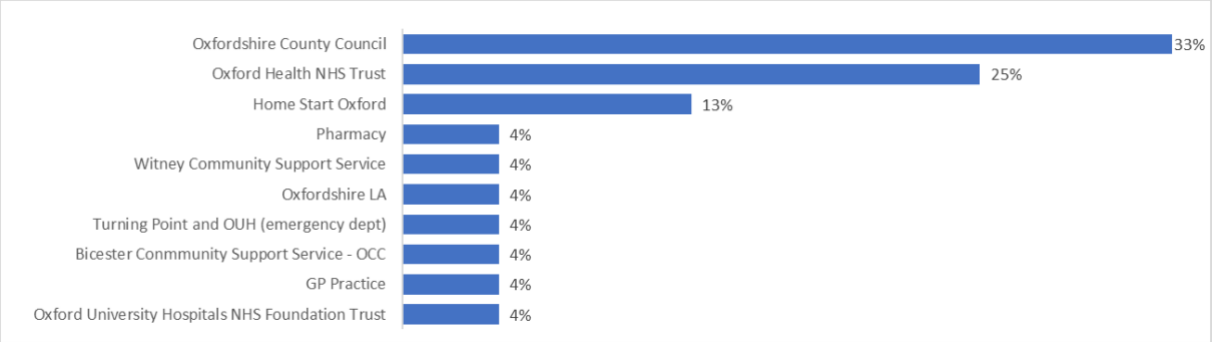
Figure 40 - Primary care and pharmacy survey visitor's summary by date of activity



There were dates during the 32-day period that the survey was active where clear peaks of activity can be seen. These occurred on 13, 18 and 20 April.

The majority of traffic sources came directly from the survey link. Only a very small portion were directed to the survey as part of a referral (6.3%), search engine (5.3%) or through the GOV sites (38.1%).

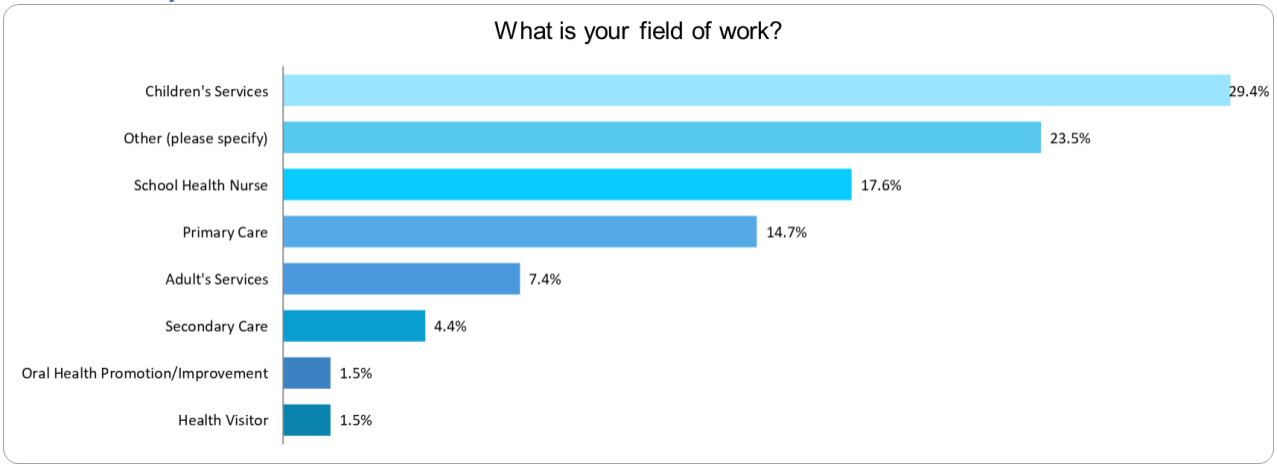
Q1. What is the name of your organisation?



A third of respondents were from Oxfordshire County Council with a quarter working at Oxford Health NHS Trust. 13% were from Home-Start.

Q2. What is your job title?

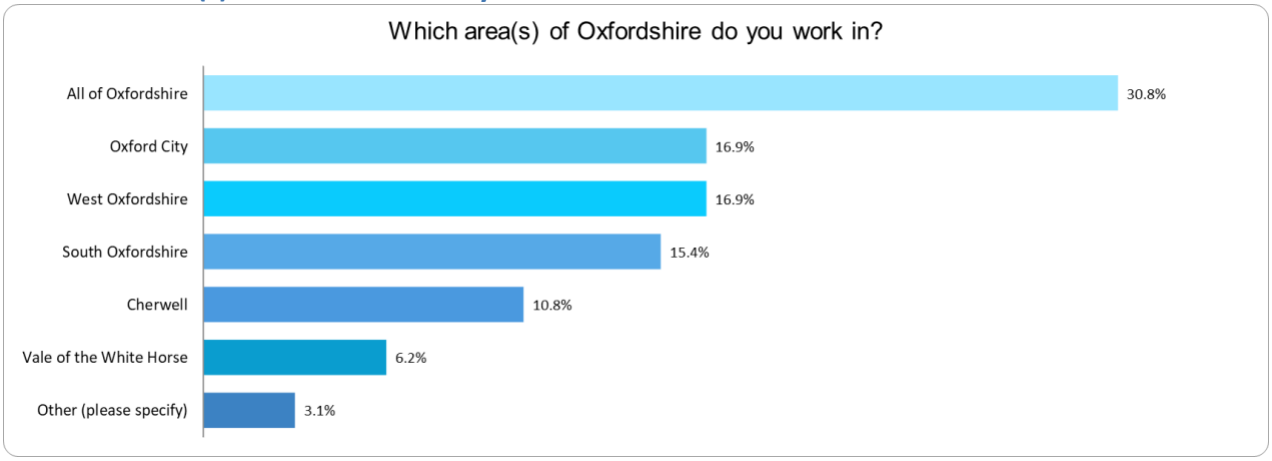
Q3. What is your field of work?



The majority of respondents worked in the field of children's services (n=36) or children-related areas which were picked up in the 'other' category.
'Other' includes:

- Early years (0 to 5-year-olds) and their families
- Education and childcare
- Family support/school readiness
- Safeguarding
- Childcare
- Early Years
- Nursery
- Food Insecurity
- Teaching
- BOBICB
- Community Association
- Pre-school (2 to 4-year-olds)
- Children We Care for Health Team

Q4. What area(s) of Oxfordshire do you work in?



A third of respondents worked across all of Oxfordshire (n=20), whilst the remainder were split across the districts.

Those who responded 'other' referred to work setting rather than geographical location

- Early years (0 to 5-year-olds) and their families
- Education and childcare
- Family support/school readiness
- Safeguarding
- Childcare
- Nursery
- Food insecurity
- Teaching
- BOB ICB clinical lead for POD
- Community association
- Community
- Pre-school (2 to 4-year-olds)

- Children We Care for Health Team

Q5. Do you currently work with, or have you previously worked with any of the following groups?

	Always	Very Often	Sometimes	Rarely	Never
Black and Minority Ethnic Groups	19%	20%	**54%**	6%	2%
Drug and/or alcohol users	4%	22%	**37%**	12%	24%
Homeless/rough sleepers	0%	4%	25%	25%	**46%**
Looked after children/care leavers	18%	**30%**	24%	18%	10%
Offenders including young offenders	2%	10%	31%	20%	**37%**
Gypsy, Roma and Traveller	2%	8%	**40%**	32%	18%
Young people under the age of 25	**52%**	17%	13%	8%	10%
Children under 5	**44%**	11%	16%	13%	16%
Children 5-12	**39%**	20%	24%	6%	10%
People with physical disabilities	7%	28%	**46%**	11%	7%
People affected by mental illness	9%	**51%**	19%	11%	9%
People with hearing or sight impairments	8%	15%	**42%**	29%	6%
People with learning disabilities	16%	20%	**47%**	11%	5%
Vulnerable migrant groups, including refugees and asylum seekers	8%	23%	**34%**	28%	8%
People living in care homes	4%	6%	18%	16%	**56%**
People over the age of 75	10%	6%	18%	10%	**56%**

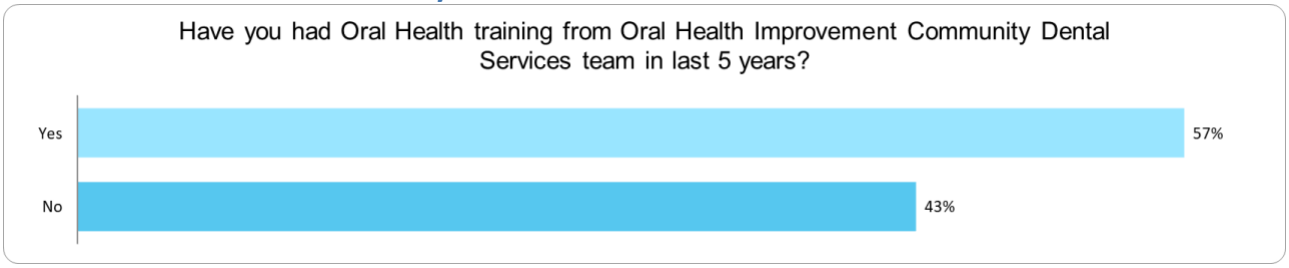
Half of the stakeholders who responded work with or have previously worked with children and young people. Over 50% of respondents had never worked with people living in care homes or people over the age of 75.

Q6. Please suggest any other individuals with relevant protected characteristic that you work with or have previously worked with.

Responses included:

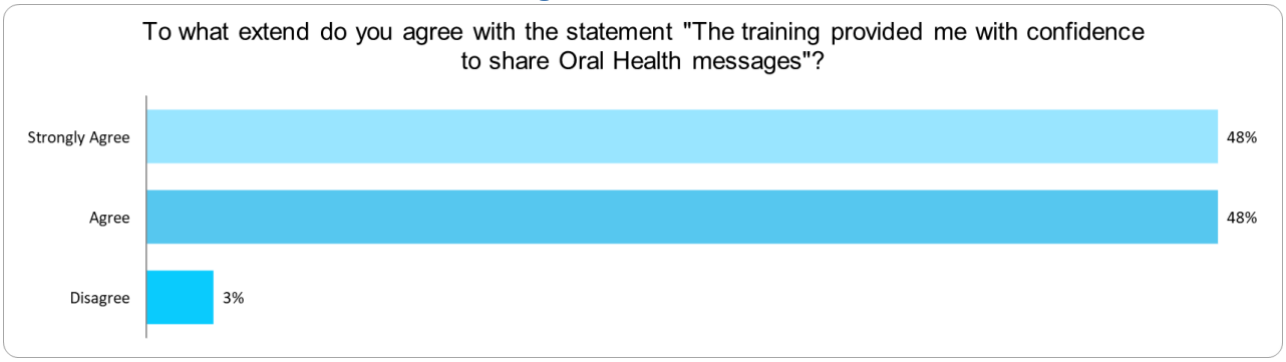
- Many of our families have children with ADHD and ASD and other learning delays
- LGBT
- Unpaid carers
- Service pupils and their families
- I support early years settings who have these individuals in their settings
- Vulnerable children supported under child protection/ TAF
- Families on a child protection/CIN plan. SEND children
- Child protection, social services
- The children I work with are all looked after or cared for by the local authority
- Children at risk of or being exploitation.

Q7. Have you had oral health training from the Oral Health Improvement Community Dental Services team in last five years?



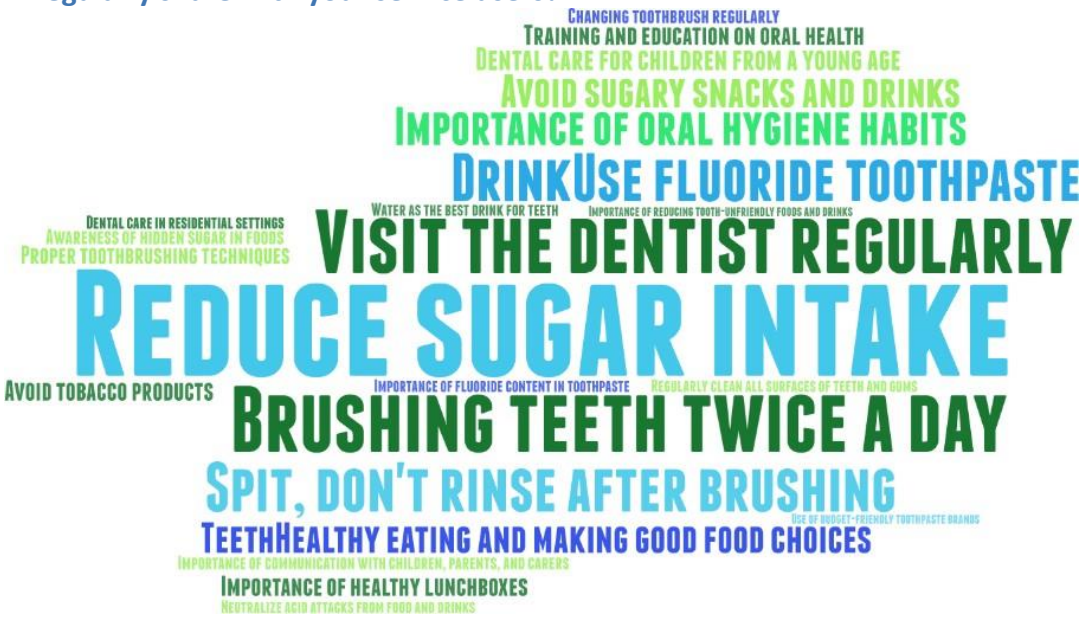
33 out of 58 (57%) respondents had received training from Oral Health Improvement Community Dental Services team compared to 43% (n=25) who had not.

Q8. To what extend do you agree with the statement "The training provided me with confidence to share oral health messages"?

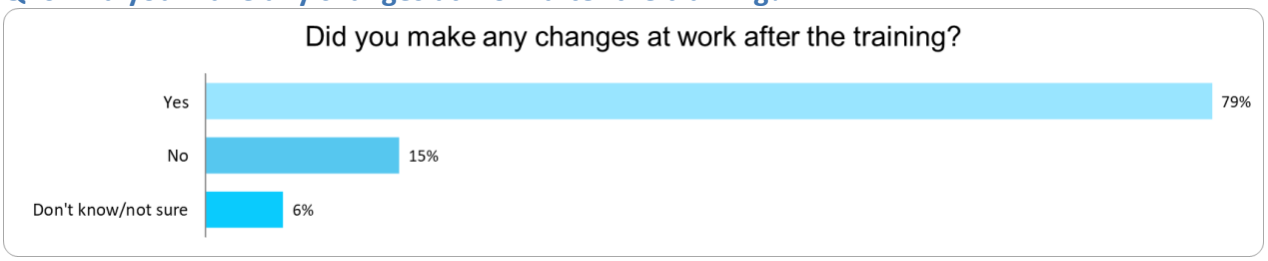


Of those who had received training, 97% of respondents (n=32) either agreed or strongly agreed that the training they received gave them the confidence to share oral health messages. Only one individual disagreed.

Q9. What are the key preventative oral health messages from the training that you regularly share with your service users?



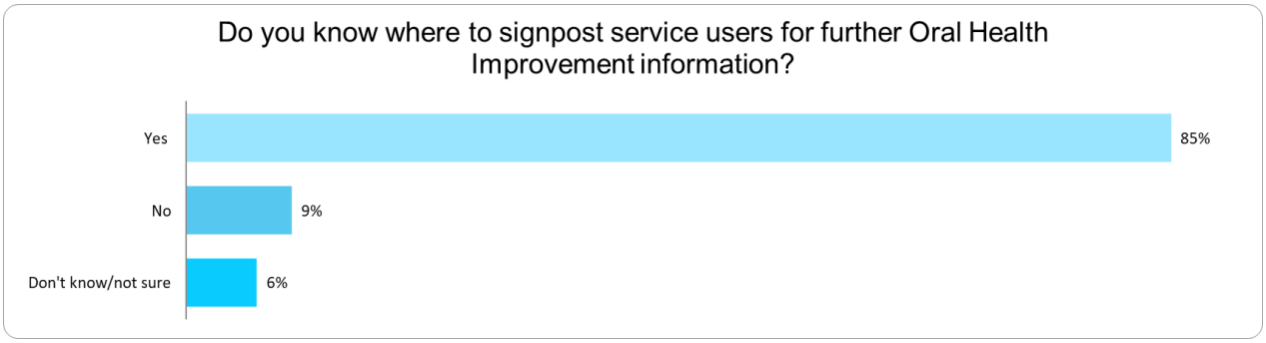
Q10. Did you make any changes at work after the training?



79% (n=26) made changes following the training. The word chart below lists the changes that stakeholders made.

Please describe in a little more detail

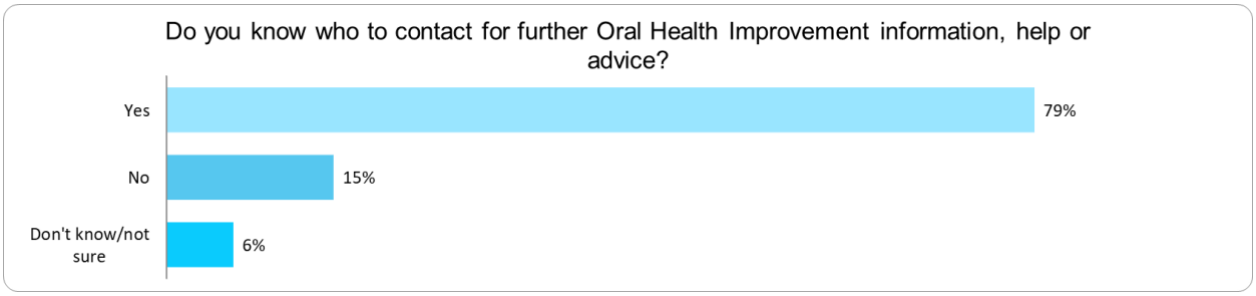
Q11. Do you know where to signpost service users for further Oral Health Improvement information?



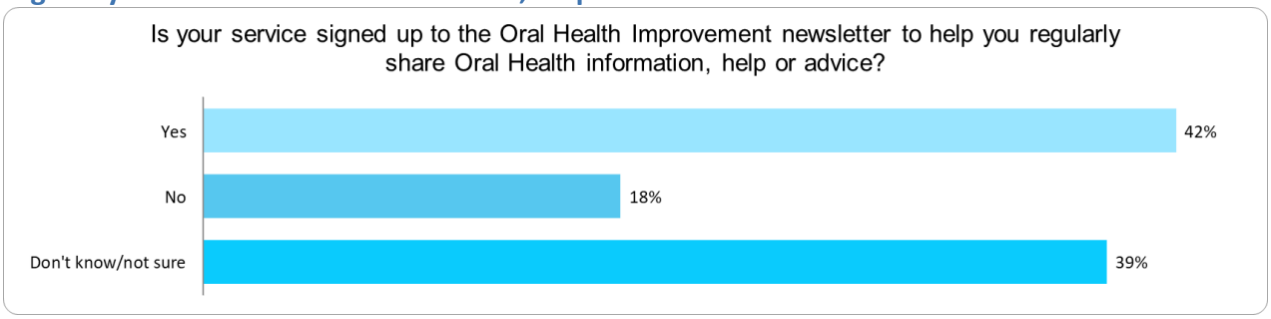
Q12. Have you shared Oral Health Improvement Community Dental Services resources with service users?

	Leaflets	Videos	Social media posts	Website
Yes	**63%**	43%	47%	**70%**
No	30%	**50%**	**53%**	27%
Don't know/not sure	7%	10%	7%	10%

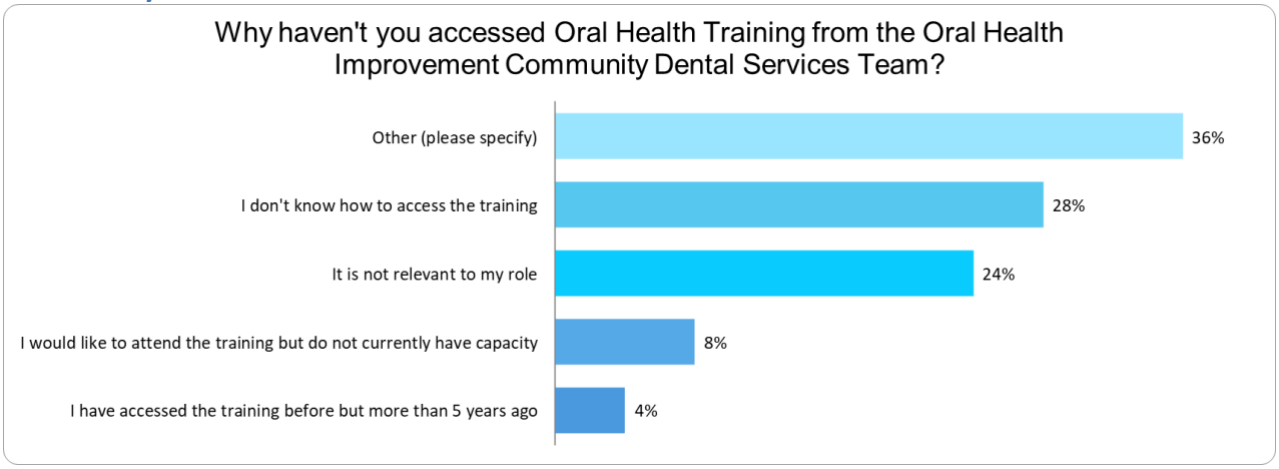
Q13. Do you know who to contact for further Oral Health Improvement information, help or advice?



Q14. Is your service signed up to the Oral Health Improvement newsletter to help you regularly share oral health information, help or advice?



Q15. Why haven't you accessed oral health training from the Oral Health Improvement Community Dental Services Team?

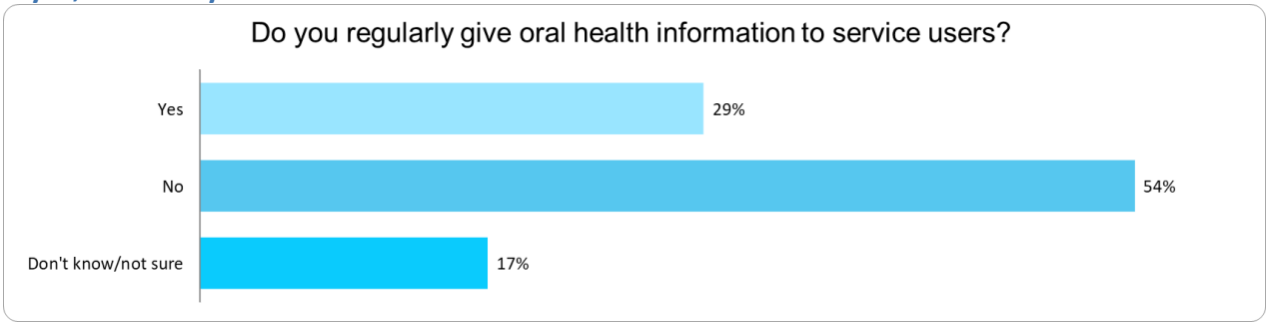


36% (n=16) stated that there were other reasons in addition to those already listed as to why they had not accessed the oral health training.

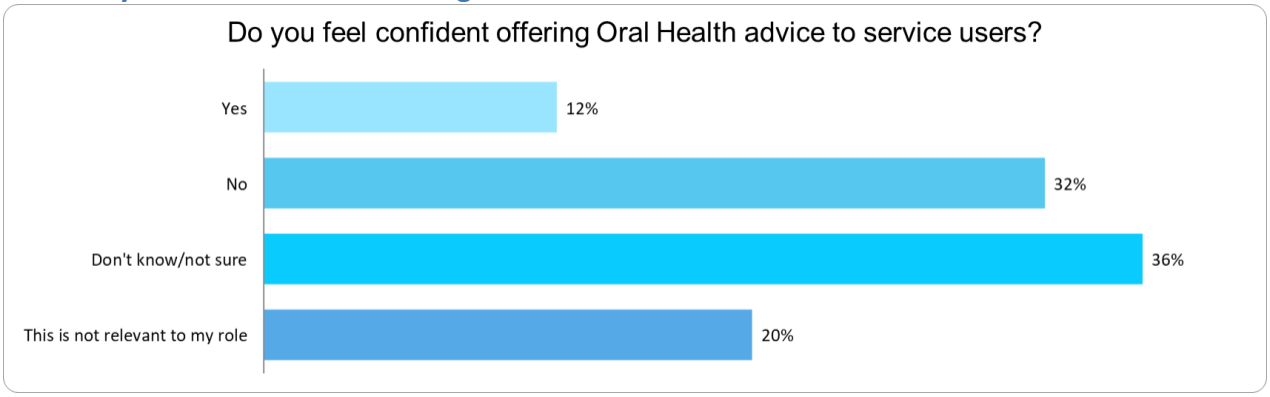
Other responses included:

- We work with the Oral Health Improvement Manager to support her in delivering the training to Early Years settings
- We have had oral professionals into the service in the past to speak to the people we support
- We had a professional booked to come and speak at a group but no one signed up for the talk. I would like to be trained at some point in the future
- This should soon be relevant to my role, therefore, I will access the service
- Never heard of it before
- I wasn't aware of the training
- I usually help families to access dentists
- Didn't know there was any
- Did not know it existed.

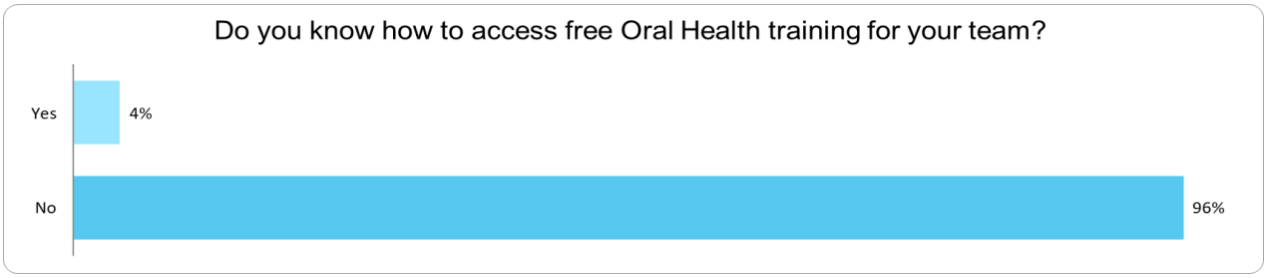
Q16. Do you regularly give oral health information to service users? If yes, what do you share?



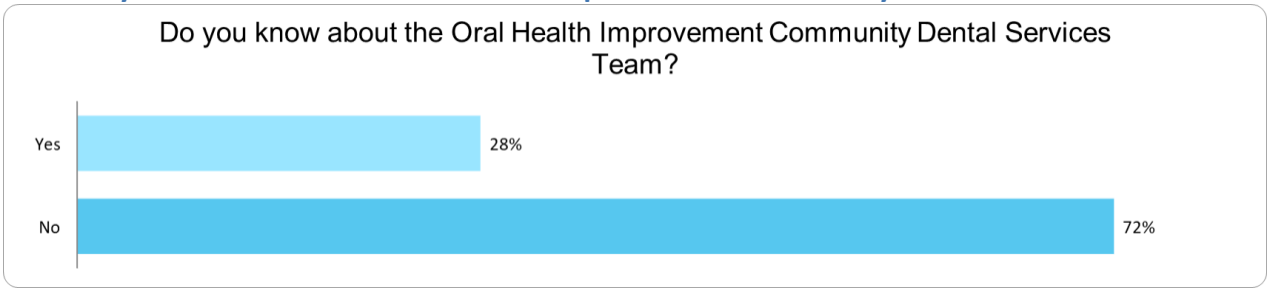
Q17. Do you feel confident offering oral health advice to service users?



Q18. Do you know how to access free oral health training for your team?



Q19. Do you know about the Oral Health Improvement Community Dental Services Team?



Q20. What is the most common question or query service users ask related to oral health?

Q21. Thinking about all oral health promotion/improvement services in Oxfordshire, do you feel that there are any groups listed below whose needs are not adequately met by current oral health promotion/improvement services?

	Needs adequately met	Needs somewhat met	Needs not met	Don't know/not sure
Black and Minority Ethnic Groups	9%	16%	11%	**64%**
Drug and/or alcohol users	2%	9%	14%	**74%**
Homeless/rough sleepers	2%	7%	19%	**72%**
Looked after children/care leavers	9%	22%	9%	**61%**
Offenders including young offenders	2%	12%	9%	**77%**
Gypsy, Roma and Traveller	3%	5%	13%	**79%**
Young people under the age of 25	5%	31%	12%	**52%**
Children under 5	23%	30%	14%	**33%**
Children 5-12	17%	31%	14%	**38%**
People with physical disabilities	10%	17%	10%	**63%**
People affected by mental illness	7%	15%	12%	**66%**
People with hearing or sight impairments	8%	10%	8%	**75%**
People with learning disabilities	7%	20%	16%	**57%**
Vulnerable migrant groups, including refugees and asylum seekers	5%	7%	23%	**65%**
People living in care homes	2%	14%	12%	**71%**
People over the age of 75	5%	11%	14%	**70%**

Q22. If you have indicated any of the groups above whose needs are not adequately met, please could you explain your answer in a little more detail, including ways in which we could better meet their needs.

Q23. What are the strengths of the current oral health promotion/improvement services in Oxfordshire? Please list up to three things.

Q24. Please describe any areas you would like to see work better regarding current oral health

Q25. Please describe any ways that COVID-19 has impacted on the way current oral health promotion/improvement services are delivered in Oxfordshire.

Q26. Do you have any other comments regarding how you would like to see oral health promotion/improvement services delivered in the future in Oxfordshire?

Q27. Thinking about NHS Dental Services in Oxfordshire (not just high street dental practices), do you feel that there are any groups listed below whose needs are not adequately met by current NHS dental services?

	Needs adequately met	Needs somewhat met	Needs not met	Don't know/not sure
Black and Minority Ethnic Groups	5%	9%	14%	**73%**
Drug and/or alcohol users	2%	2%	16%	**79%**
Homeless/rough sleepers	2%	0%	21%	**77%**
Looked after children/care leavers	9%	13%	16%	**62%**
Offenders including young offenders	2%	5%	16%	**77%**
Gypsy, Roma and Traveller	2%	5%	10%	**83%**
Young people under the age of 25	9%	16%	21%	**53%**
Children under 5	9%	15%	24%	**52%**
Children 5-12	9%	14%	26%	**51%**
People with physical disabilities	2%	5%	14%	**79%**
People affected by mental illness	2%	9%	14%	**75%**
People with hearing or sight impairments	2%	2%	12%	**83%**
People with learning disabilities	2%	11%	14%	**73%**
Vulnerable migrant groups, including refugees and asylum seekers	7%	2%	16%	**75%**
People living in care homes	2%	7%	12%	**79%**
People over the age of 75	2%	9%	9%	**79%**

Q28. If you have indicated any of the groups above whose needs are not adequately met, please could you explain your answer in a little more detail, including ways in which we could better meet their needs.

Q29. What are the strengths of the current NHS dental services in Oxfordshire? Please list up to three things.

Based on the free text responses, the top three key strengths of the current NHS dental services in Oxfordshire are:

1. **Accessibility and availability:** The dental surgeries are accessible and readily available in the area. Patients can register with dentists, and the service provided is generally good when able to access it. There is also frequent liaison with community clinics and supportive staff.

2. **Focus on children and additional needs:** The NHS dental services offer free care and treatment for children under 18. Dental health is promoted, and there is support for families, especially those with children who have learning difficulties and disabilities. The services aim to prevent tooth decay and meet the needs of children.

3. **Supportive and caring staff:** The staff in NHS dental practices are described as friendly, caring, and helpful within the constraints of the available services. There is occasional access to safeguarding dentists, and the one-hour training provided is appreciated.

Q30. Please describe any areas you would like to see work better regarding current NHS dental services in Oxfordshire?

The top themes from the provided free text responses regarding areas that need improvement in current NHS dental services in Oxfordshire are:

1. **Access to NHS dentists**: Many respondents mentioned the need for better access to NHS dentists, including the ability to register with a dentist locally and the availability of routine dental services. There is a demand for more dentists, increased capacity, and more appointments for both children and adults.

2. **Cost and affordability**: Affordability was highlighted as a barrier, particularly for individuals who are not eligible for specific benefits. Some respondents expressed concerns about the expenses associated with dental care.

3. **Provision and recruitment**: Respondents mentioned the need for increased provision, including more dental placements and hygienist provision. There were also calls for improved recruitment efforts, considering population growth and the current shortage of NHS dentists.

Other themes that emerged but to a lesser extent included the need for dental checks for specific age groups (such as under fives), the desire for a priority service for looked-after children and care-experienced young people, and the importance of proactive dental hygiene and prevention.

Q31. Please describe any ways that COVID-19 has impacted on the way current NHS dental services are delivered in Oxfordshire.

The top themes from the provided free text responses regarding the impact of COVID-19 on the delivery of current NHS dental services in Oxfordshire are:

1. **Limited access/appointments**: Many respondents mentioned difficulties in obtaining NHS dental appointments, long waiting lists and limited availability of services due to COVID-19 restrictions.

2. **Dentists not taking new NHS patients**: Several responses highlighted that some private dental practices have stopped accepting new NHS patients, leading to challenges in accessing dental services.

3. **Staff recruitment and retention**: Some respondents mentioned staff recruitment and retention issues, which may have impacted the delivery of NHS dental services during the pandemic.

4. **Disruption and cancellations**: COVID-19 lockdowns and restrictions resulted in the cancellation of dental appointments, causing a disruption in regular dental care.

5. **Shortage of dentists and hygienists**: The shortage of dentists and dental hygienists

was mentioned as a factor affecting the delivery of NHS dental services in Oxfordshire.

6. **Increased demand**: Some respondents noted that the dental service has become busier and that there is a higher demand for appointments following the COVID-19 lockdowns.

7. **Lack of awareness/understanding**: A few respondents expressed uncertainty or lack of awareness about the impact of COVID-19 on dental care delivery.

Q32. Do you have any other comments regarding how you would like to see NHS Dental services delivered in the future in Oxfordshire?

The top themes from the provided free text responses regarding how respondents would like to see NHS dental services delivered in the future in Oxfordshire:

1. **Access**: Respondents emphasised the need for better access to NHS dentists, including easier registration, more options, and increased capacity to meet the demand for dental services.

2. **Outreach and mobile services**: There were suggestions for mobile dentistry units and clinics that can reach communities, including schools, children's centres and parks, to provide easy access to dental care.

3. **Awareness and education**: Respondents highlighted the importance of local media campaigns and partnership work with children's social care services to promote oral health awareness and emphasise the need for regular brushing and dental care.

4. **Addressing vulnerable groups**: There were concerns expressed for vulnerable families and children, urging the provision of urgent dental services for patients in need and ensuring that dental care is accessible to all members of the community.

5. **More NHS dentists**: Many respondents emphasised the need for an increase in the number of NHS dentists in the area, particularly in locations where new housing is being built, and the importance of preventing reliance on private practices for treatment.

11.2 Summary findings – Oxfordshire key stakeholder oral health survey

- The key stakeholder survey took place in April 2023
- 58 individuals completed the survey of these 36 worked in the field of children's services
- 19 respondents were from Oxfordshire County Council with 15 working at Oxford Health NHS Trust; 8 were from Home Start
- 33 respondents had received training from the Oral Health Improvement Community Dental Services team compared to 25 who had not
- Of the 33 respondents who had received training, 32 (97%) either agreed or strongly agreed that the training they received gave them the confidence to share oral health messages.

Based on the free text responses, the top key strengths of the current NHS dental services in Oxfordshire are:

- Dental surgeries are accessible and readily available in the area, and the service provided is generally good when able to access it
- Services offer free dental health promotion and treatment for children under 18; there is support for families, especially those with children who have learning difficulties and disabilities
- The staff in NHS dental practices are described as friendly, caring, and helpful within the constraints of the available services and the one-hour training provided is appreciated.

The top themes regarding areas that need improvement in current NHS dental services in Oxfordshire are:

- The need for better access to NHS dentists, including the ability to register with a dentist locally and the availability of routine dental services
- There is a demand for more dentists, increased capacity, and more appointments for both children and adults; affordability was highlighted as a barrier, particularly for individuals who are not eligible for specific benefits
- The need for increased provision, including more dental placements and hygienist provision; improved recruitment efforts, considering population growth and the current shortage of NHS dentists
- The need for dental checks for specific age groups (such as under fives); the desire for a priority service for looked after children and care-experienced young people, and the importance of proactive dental hygiene and prevention.

The top themes regarding the impact of COVID-19 on the delivery of current NHS dental services in Oxfordshire are:

- Difficulties in obtaining NHS dental appointments, long waiting lists, dentists not taking new NHS patients
- The dental service has become busier and that there is a higher demand for appointments following the COVID-19 lockdowns.

The top themes regarding how respondents would like to see NHS dental services delivered in the future included:

- Better access to NHS dentists, including easier registration

- Suggestions for mobile dentistry units and clinics that can reach communities, including schools, children's centres, and parks, to provide easy access to dental care
- The importance of local media campaigns and partnership work with children's social care services to promote oral health awareness and emphasise the need for regular brushing and dental care
- Concerns were expressed for vulnerable families and children, urging the provision of urgent dental services for patients in need and ensuring that dental care is accessible to all members of the community, and many respondents emphasised the need for an increase in the number of NHS dentists in the area, particularly in locations where new housing is being built, and the importance of preventing reliance on private practices for treatment.

The top themes regarding how respondents' views to oral health promotion/improvement included:

- Majority (85%) know how to signpost service users for further oral health improvement information
- Over half of stakeholders who responded (54%) did not regularly give oral health information to service users, but instead would work with other oral health professionals in the service to do this
- 72% of respondents did not know about the Oral Health Improvement Community Dental Services Team
- Stakeholders felt that the main strengths of the current oral health promotion/improvement services were:
    - The availability of specialised dental surgery for people with learning disabilities
    - Community dental services for children and the promotion of oral health in primary schools
    - Overall accessibility to training updates and current advice.
- The top suggested improvements to the oral health promotion/improvement services included having more school visits and offering dental hygiene education e.g. the positive effects of personal dental hygiene.

11.3 Oxfordshire public oral health survey

Survey summary

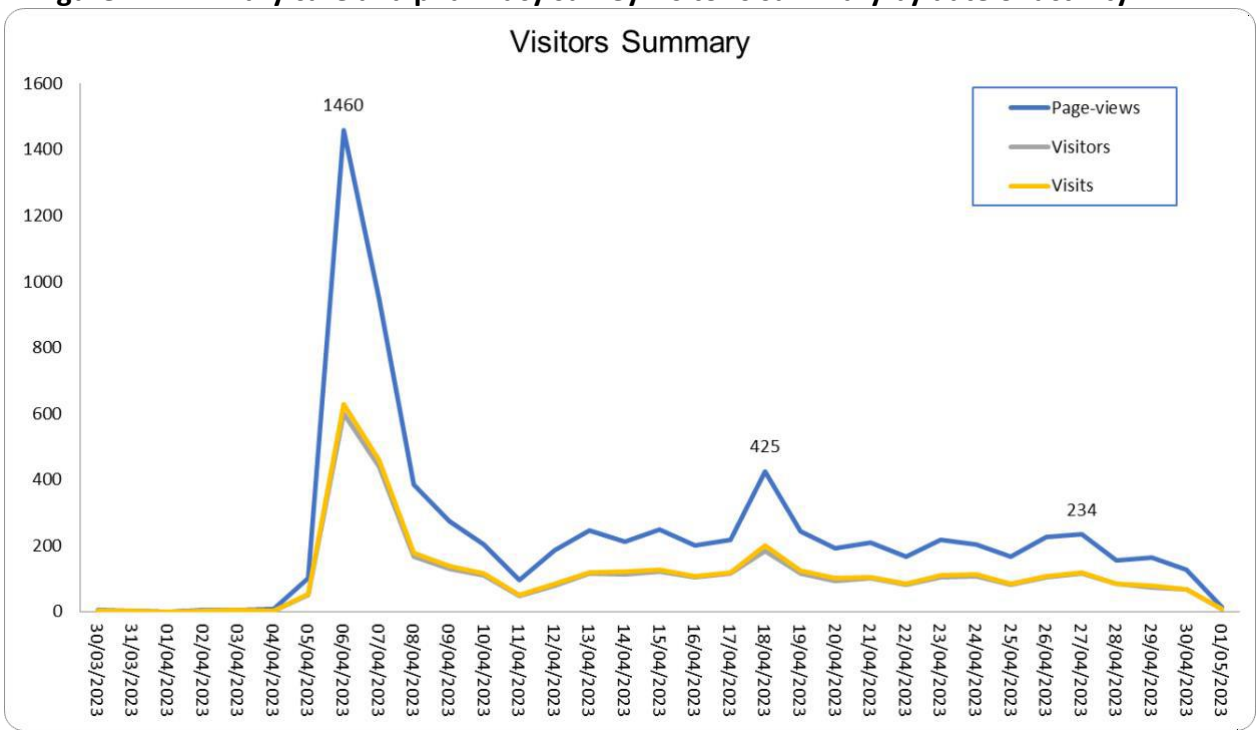
The key stakeholder survey was open to respondents between 30 March 2023 and 1 May 2023, a total of 32 days.

The response was excellent with 1,242 completing the survey

1,979 people visited the survey website, of which:

- Engaged participants = 33.7% (n=1,242); participants who completed the survey
- Informed participants = 55.0% (n=2,027); 789 participants visited multiple project pages and 1,242 contributed to a tool
- Aware participants = 89.9% (n=3,313); participants who visited at least one page

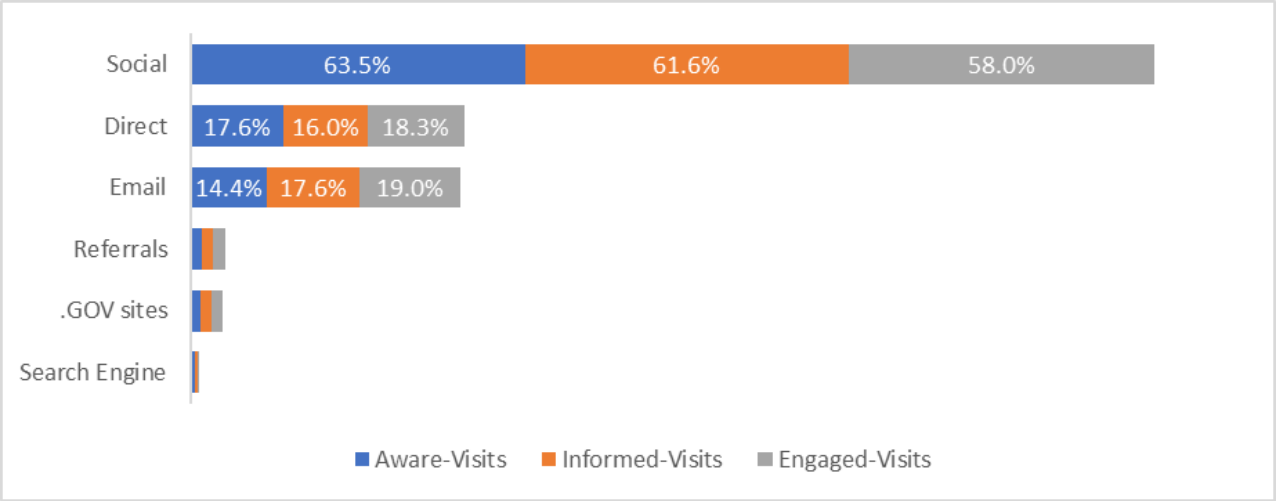
Figure 41 - Primary care and pharmacy survey visitor's summary by date of activity



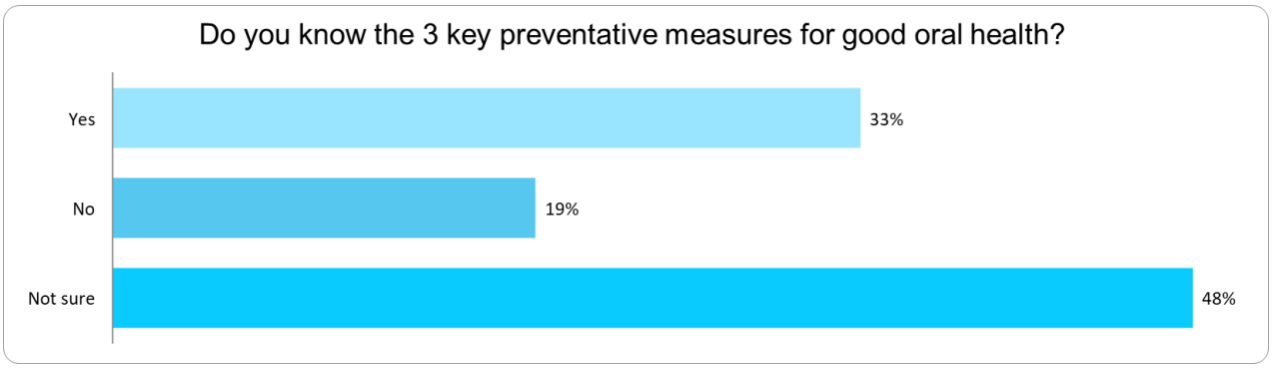
There were dates during the 32-day period that the survey was active where clear peaks of activity can be seen. These occurred on 6, 18 and 27 April.

The majority of traffic sources came directly from social media (98% through Facebook, 2% through Instagram and Twitter).

Figure 42 - Traffic-channel of stakeholders' survey



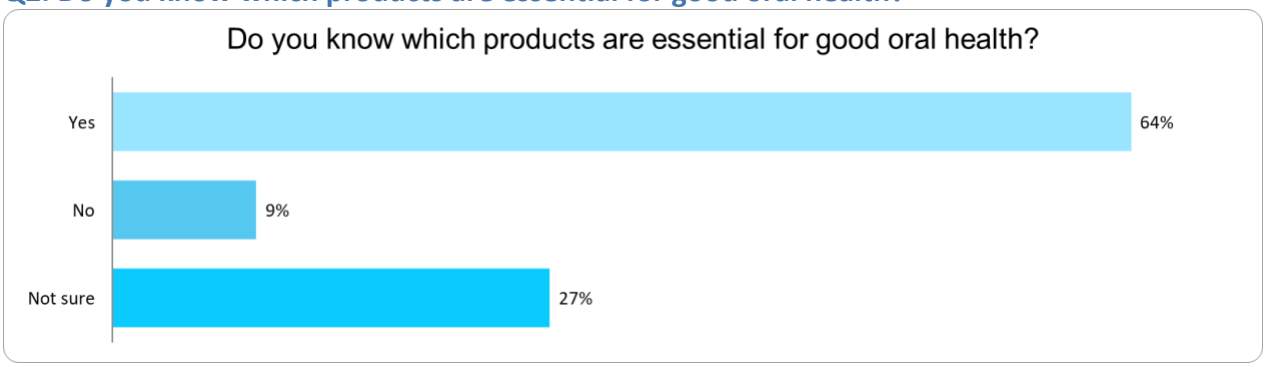
Q1. Do you know the three key preventative measures for good oral health?



Nearly half (48%, n=598)) of respondents from the public were not sure as to what the three key preventative measures for good oral health were. Over a third did know (n=414), compared to 19% (n=234) who did not.

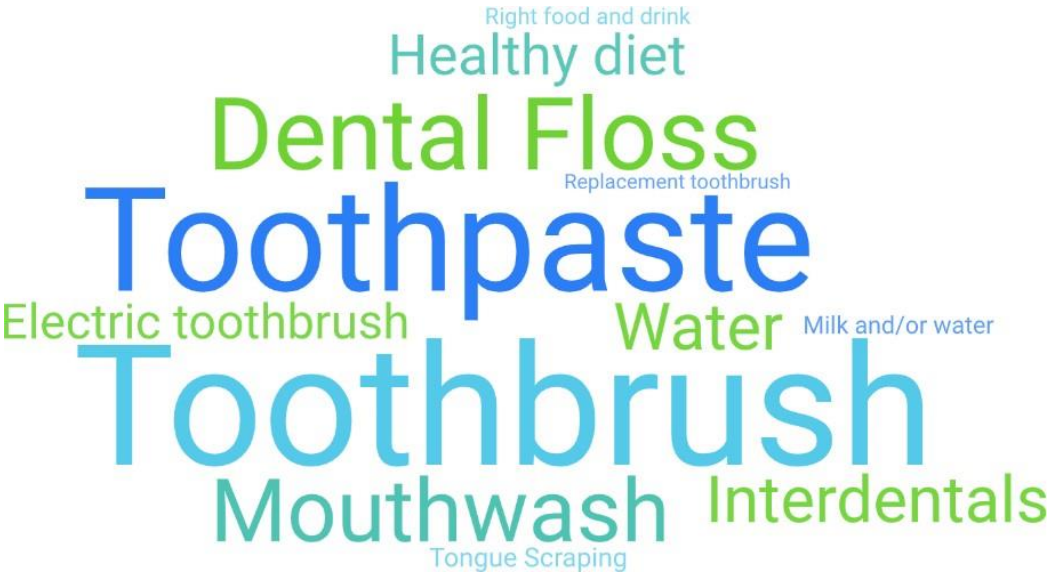
For those that responded 'yes' to the above question, the main responses were regular brushing, regular flossing and frequent dental checks. Other responses included avoiding sugar and fizzy drinks and using mouthwash between meals.

Q2. Do you know which products are essential for good oral health?

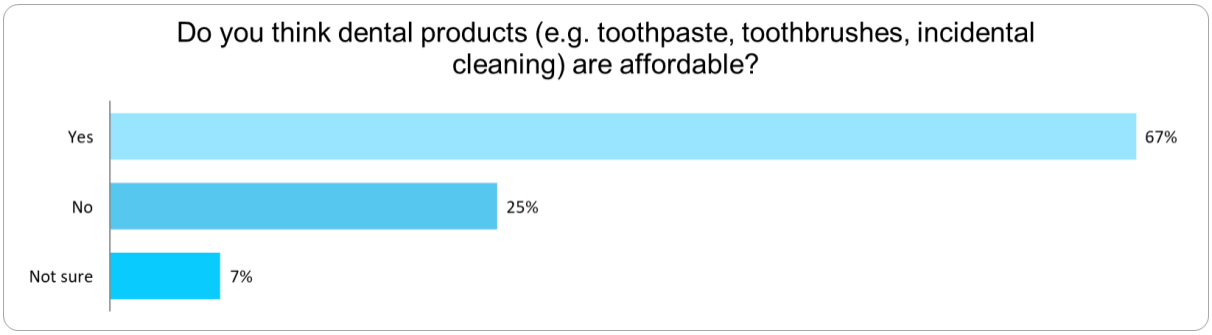


Nearly two thirds (n=788) of respondents knew which products are essential for good oral health. 27% (n=338) were unsure compared to 9% (n=111) who did not.

Q2.1 If yes, please can you list them?



Q3. Do you think dental products (e.g. toothpaste, toothbrushes, incidental cleaning) are affordable?



811 respondents (67%) felt that dental products are affordable compared to 306 (25%) that did not. 87 (7%) were unsure.

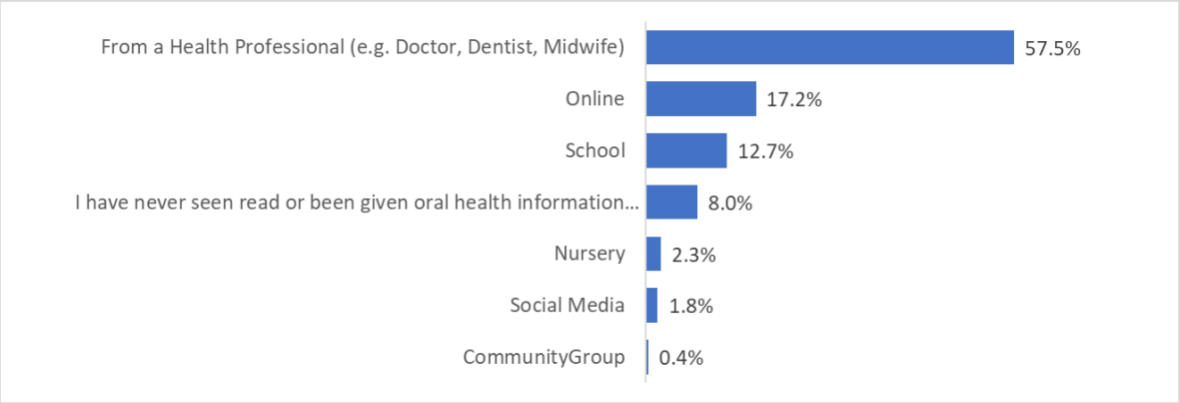
Q4. Do you know how your diet - the food and drink you have, can affect your oral health?

994 respondents (83%) know how diet can affect their oral health compared to 56 (5%) who did not. 150 respondents (13%) were unsure.

If yes, please can you briefly explain how?

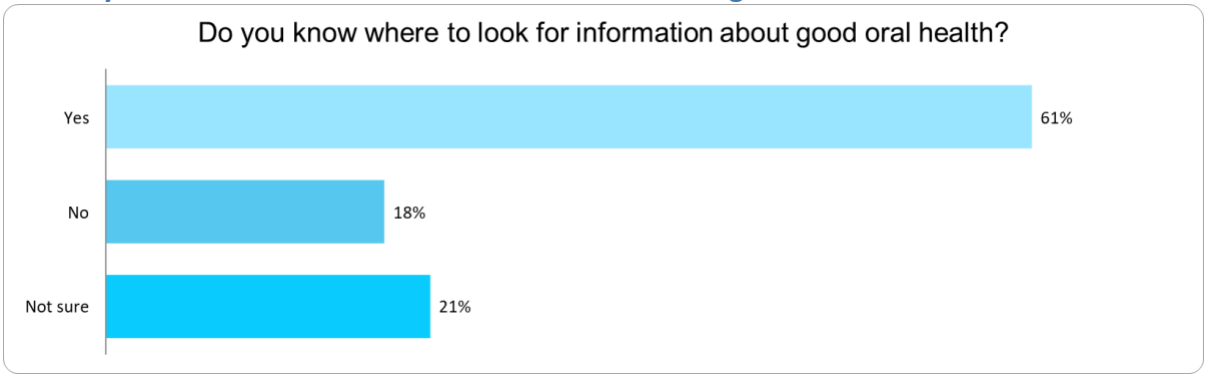
The majority of answers from those respondents who knew how diet can affect their oral health were around high levels of sugar and acid affecting teeth enamel as well as staining from other products such as drinking too much caffeine and red wine as well as smoking.

Q5. Where have you seen, read or been given oral health information or advice? Please select all that apply.



The most frequent response was 'From a Health Professional'. Only seven individuals had seen, read or been given oral health information via a 'Community Group'.

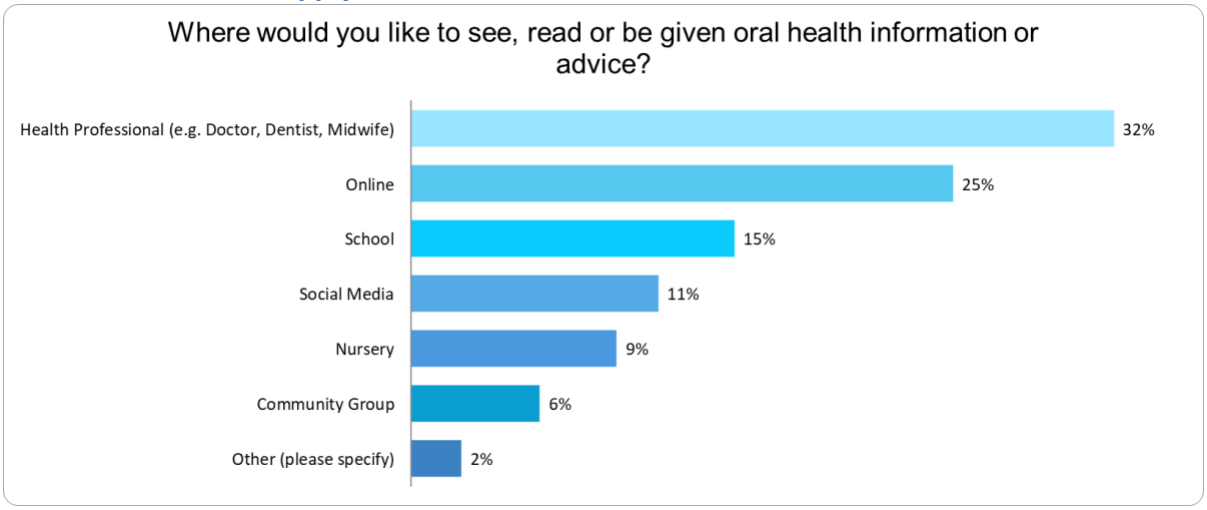
Q6. Do you know where to look for information about good oral health?



Nearly two-thirds (n=725) of respondents know where to look for information about good oral health, compared to 18% (n=218) who did not know and 21% of respondents who were unsure (n=254).

If yes, where?

Q7. Where would you like to see, read or be given oral health information or advice? Please select all that apply.



952 respondents (32%) would like to see, read or be given oral health from a health professional compared to 25% (n=734) who would like to receive this information online. 15% (n=438) would like to see this in schools and 11% (n=335) responded with 'Social Media'.

2% (n=68) responded to 'other' and suggested:

- Everywhere
- Bus stops
- Supermarkets
- Libraries
- Magazines
- Radio
- Government (getting to the root cause and improving policy).

Q8. Are there any other ways that we could help you to gain access to better oral health information and/or advice?

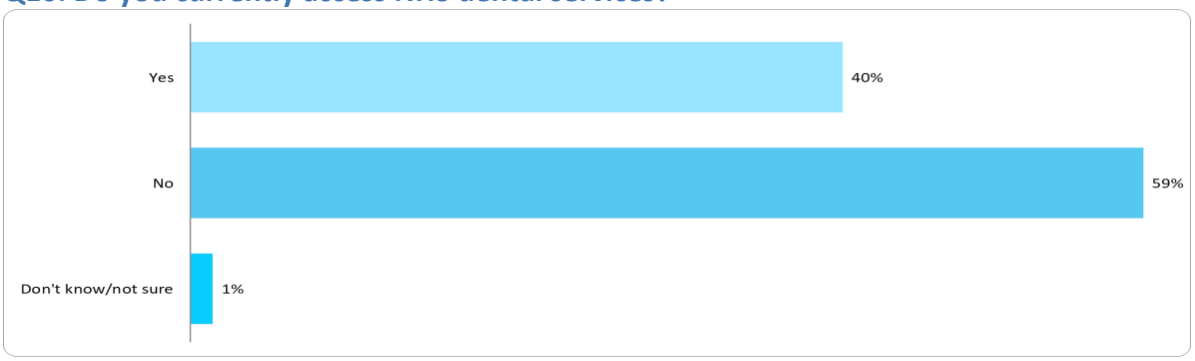
The majority of respondents wished to have improved access to NHS dental care as it was felt that there is limited/no NHS dental service available across the county. Other comments included:

- More appointment availability at dental surgeries
- Clearer information about dental services that are not covered by the NHS
- Affordable dental care
- More NHS dentists
- Bigger social media presence
- More advertising across the county to dental services that are available.

Q9. Is there anything else that you would like to share about oral health promotion /improvement services delivered in Oxfordshire?

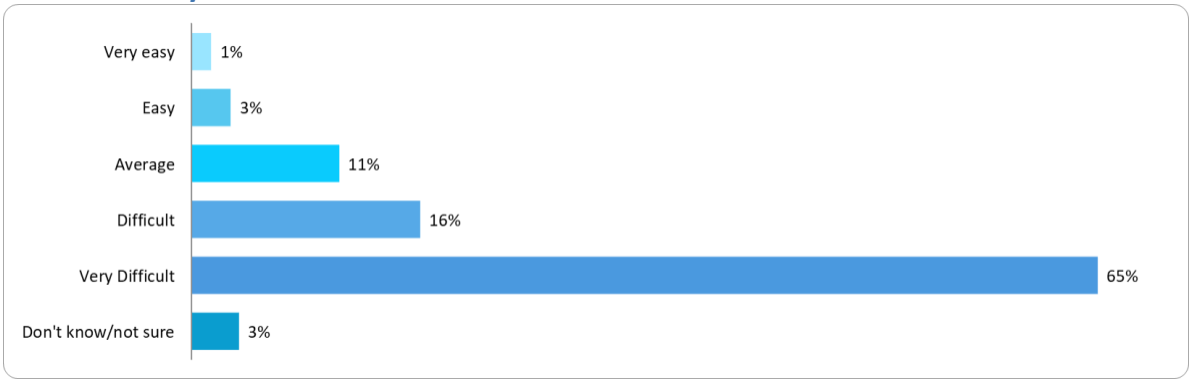
639 people responded to this question of which the overarching theme was that there is a desperate need for more dentists across the county. The other main topics can be found in the word cloud below:

Q10. Do you currently access NHS dental services?



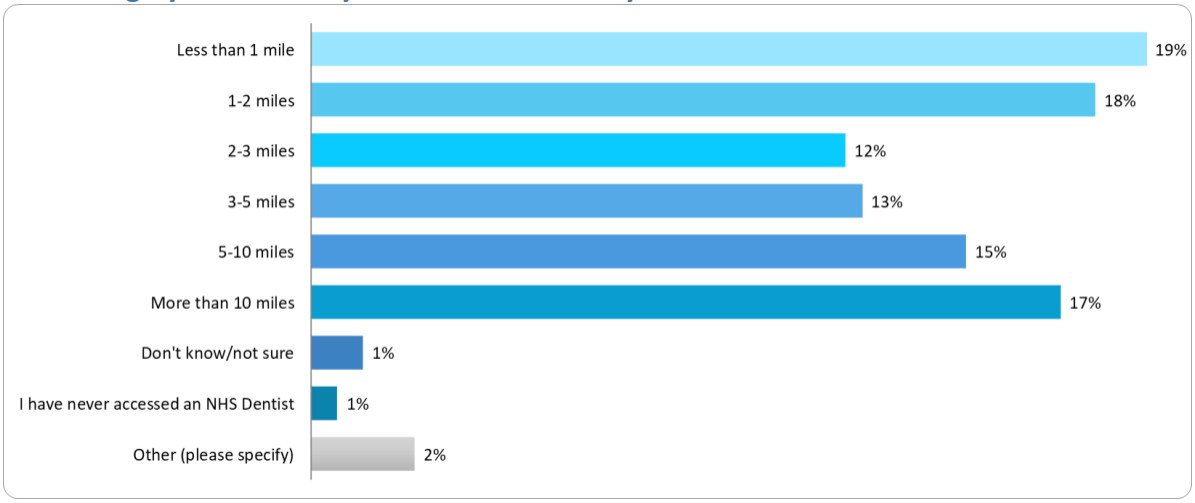
59% (n=729) respondents reported that they did **not** access NHS dental services in Oxfordshire, compared to 40% (n=499) who said they did.

Q11. How easy is it to access an NHS dentist in Oxfordshire?



81% (n=407) of those who answered this question (total number of respondents = 498) felt that it is difficult or very difficult to access an NHS dentist in Oxfordshire compared to 4% (n=21) who thought it was easy or very easy.

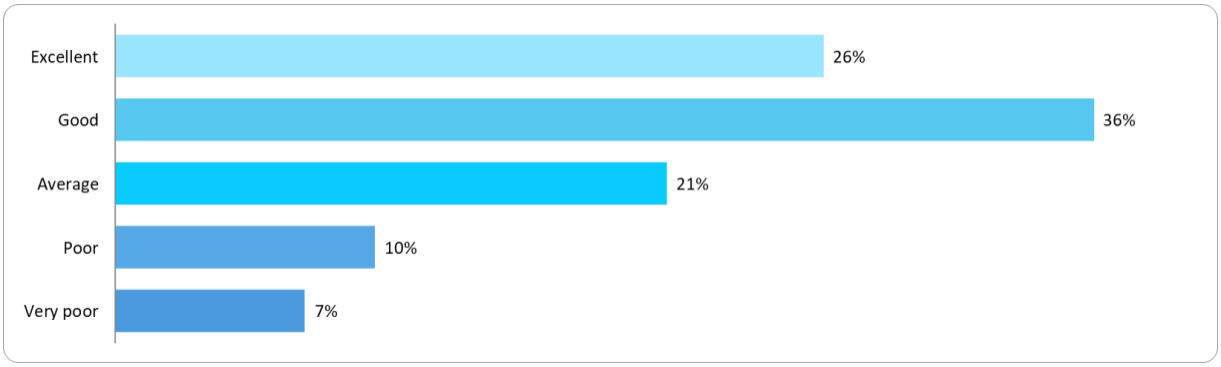
Q12. Roughly how far do you have to travel to your closest NHS dentist?



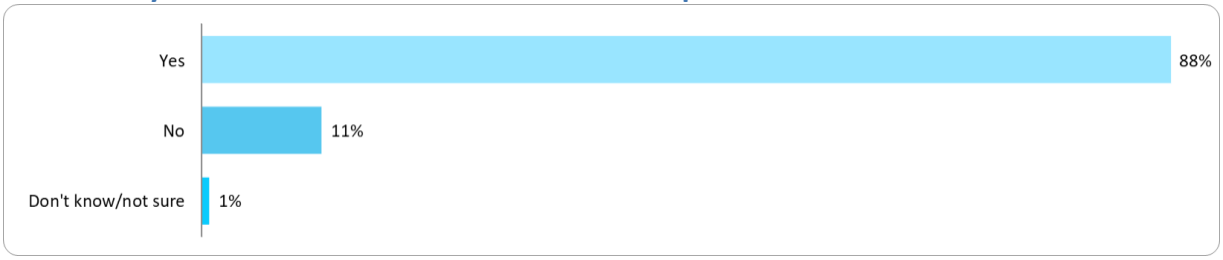
Q13. When did you last access the following NHS dental services?

	A high street dentist	**Community dental services** (For those with additional needs e.g. learning or physical difficulties/mental health issues)	**Hospital dental services**
0-6 months	64%	3%	1%
6 months - 1 year	24%	1%	2%
2-3 years	8%	1%	2%
4-6 years	2%	1%	4%
6-10 years	0%	0%	5%
More than 10 years	0%	1%	14%
Never accessed - I access dental care privately	0%	1%	1%
Never accessed	2%	91%	70%

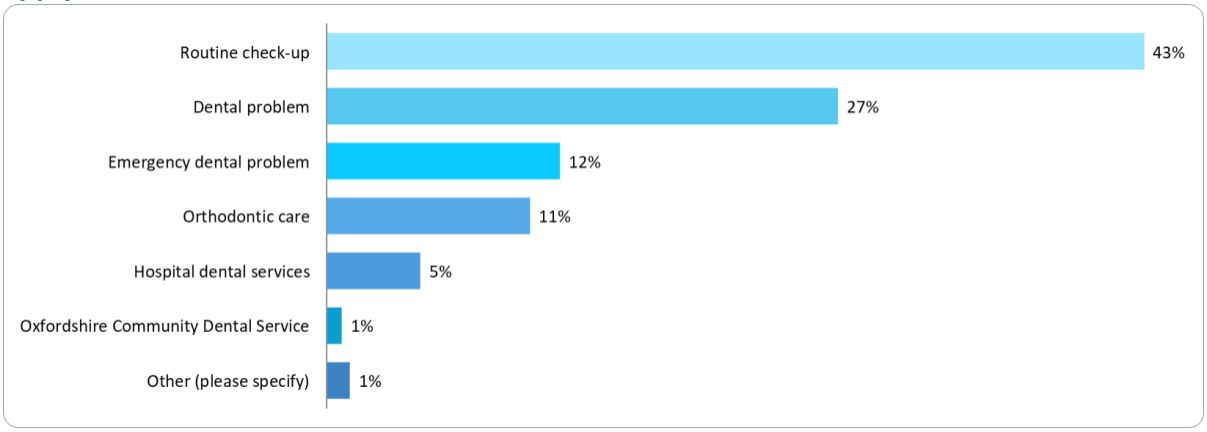
Q14. Please rate your most recent NHS dental care experience



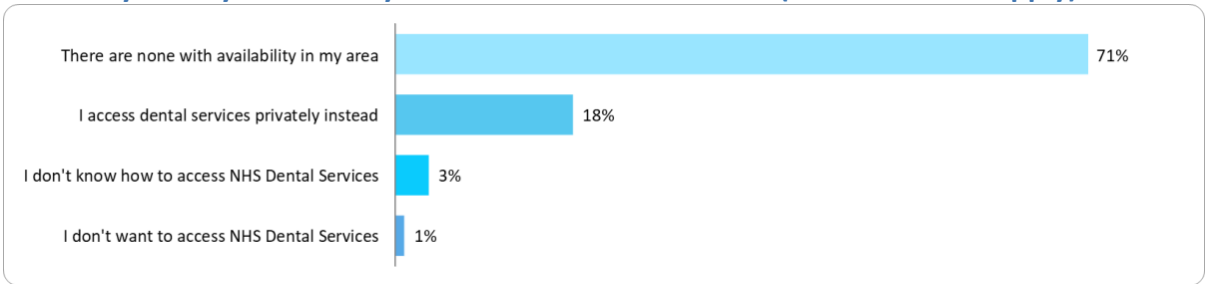
Q15. Have you accessed NHS dental services in the past?



Q16. What type of NHS dental care have you accessed in the past? Please select all that apply.



Q17. Why don't you currently access NHS dental services? (Choose all that apply)

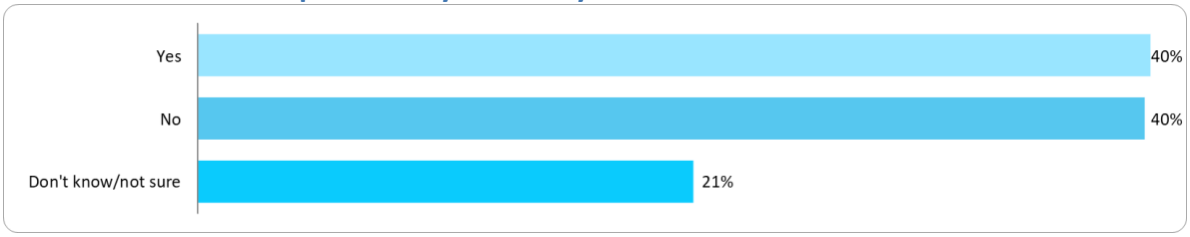


Q18. Please can you briefly explain why you don't want to access NHS dental services?

Very unlikely that the situation has changed and NHS dental care is any more available now than it was when I first tried to access it on moving to Oxford 20 years ago

Dentist scary
NHS routine visit comprises a very brief check of teeth, with the onus on the patient to say if there are any problems. Any cleaning and polishing, removal of plaque etc is done via a Hygienist that has to be paid for separately. This is also true of my private dentist but they check the whole mouth including tongue, jaw, inside cheeks, etc for cancer. They show how to clean properly with demos of how to brush. They spend time trying to prevent issues. NHS just whisk you in, do a quick glance, check very briefly and then you're out again. Never again! It didn't used to be like that. They used to do a good job
I have called all dentists in my area and no one will take an adult. As a military spouse I've not been able to access dental care on the NHS since 2015 as we move frequently and have to find a new one every 18 months
NHS dentists don't have time for that stuff
Previous NHS dental treatment was unacceptable. The dentist was working under stress and could not provide good care
Most NHS dentist are cowboys and don't trust them
It was shockingly bad

Q19. Has COVID-19 impacted on your ability to access NHS dental care?



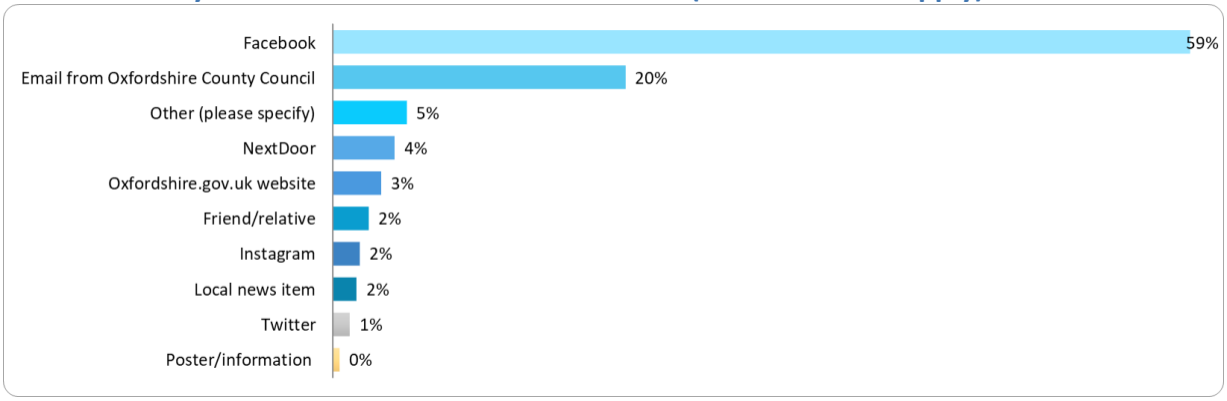
If yes, please briefly explain how.

Q20. Is there anything else that you would like to share about NHS dental services delivered in Oxfordshire?

There are insufficient NHS dentists for the size of the population in Oxfordshire
Not enough NHS dentists available
Why is it both rare and expensive?
Dental provision is most often a mix of public and private provision – and often it is not clear when you are being 'upsold' a private option, or exactly what the costs of that provision is when compared to the NHS option (e.g. white fillings, clear braces). It would be helpful for there to be a requirement to make it explicitly clear whenever any discussion, leaflet or poster etc. moves away from non-NHS services into paid-for provision, and for there to be clear guidance about what expected costs should be for paid-for provision and what are the benefits (or risks) e.g. hygienist
More and good standard of NHS dentists and dental treatment needed. NHS patients should not be treated as second class citizens by dentists who also offer private treatment

Almost non-existent and I had to pay for root canal treatment which cost about £3k and now I need a tooth surgically removed and will probably have to pay. The NHS contract dentist remuneration is completely idiotic and therefore shunned by nearly all of them. The NHS contract needs to be re-evaluated and changed
Too many houses, not enough dentists, GPs, childcare or schools. It's a huge problem that needs a joined-up approach
I feel there needs to be admission that NHS dental services are no longer available/accessible nor sustainable

Q21. How did you find out about this consultation? (choose all that apply)



Q23. What is your age? And Q24. What is your sex?

Row labels	Not recorded	Female	Male	Prefer not to say
Under 16		0.1%	0.4%	
16-24	11.1%	1.1%	0.8%	
25-34	22.2%	14.5%	6.1%	4.2%
35-44	55.6%	21.2%	14.6%	12.5%
45-54	11.1%	21.5%	19.5%	25.0%
55-64		21.9%	22.8%	12.5%
65-74		14.7%	19.5%	12.5%
75-84		3.8%	13.0%	
85 or over		0.3%	2.9%	
Prefer not to say		0.6%		33.3%
(blank)		0.2%	0.4%	
TOTAL	**9**	**944**	**246**	**48**

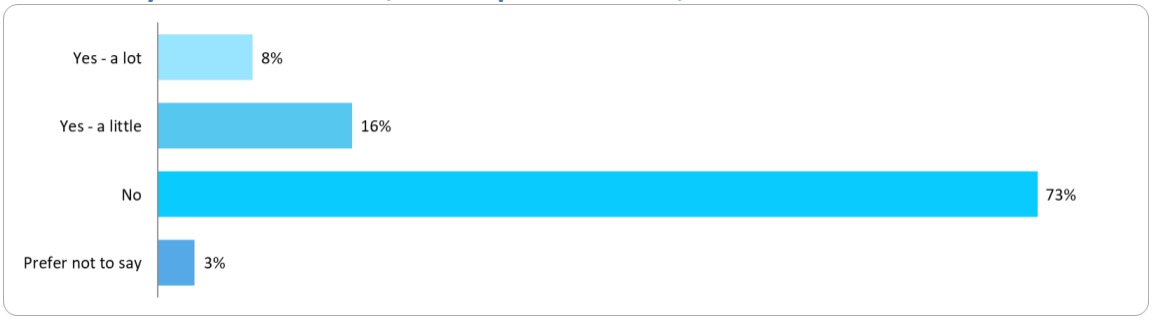
A total of 75.7% (n=944) of respondents were female compared to 19.7% (n=246) that were male.

Q26. What is your ethnic group or background?

Ethnicity	%
Asian or Asian British (Indian, Pakistani, Bangladeshi or any other Asian background)	1.2%

Black or Black British (Caribbean, African, or any other Black background)	0.4%
Chinese	0.6%
Mixed or multiple ethnic groups (White and Black Caribbean, White and Black African, White and Asian, and any other mixed background)	1.7%
Prefer not to say	5.7%
White (British, Irish, or any other white background)	89.9%
Not recorded	0.5%

Q28. Are your day-to-day activities limited because of a long-term illness, health problem or disability which has lasted, or is expected to last, at least 12 months?



Q29. Are you a carer? (choose one option) A carer is anyone who cares, unpaid, for a friend or family member who, due to illness, disability, a mental health problem or an addiction, cannot cope without their support. Both children and adults can be carers.

11.4 Summary findings – Oxfordshire public oral health survey

There was an excellent response to the public survey. A total of 1,242 members of the public completed the survey, of these 88% had accessed NHS dental services in the past. 76% of respondents were female compared to 20% male.
The vast majority of respondents wished to have improved access to NHS dental care in Oxfordshire as it was felt that there is limited/no NHS dental service available across the county. When asked how easy it is to access NHS dentists, 81% felt that it is difficult or very difficult to access an NHS dentist in Oxfordshire compared to 4% who thought it was easy or very easy. In response to the availability of dentists 71% stated there was no availability of NHS dentists in their area.
“There are insufficient NHS dentists for the size of the population in Oxfordshire.”

There was also criticism about the quality of an NHS check-up
“NHS routine visit comprises a very brief check of teeth, with the onus on the patient to say if there are any problems.”
In addition, the respondents requested clearer information about dental services that are not covered by the NHS, affordable dental care and more advertising across the county regarding the NHS dental services that are available.

12 Recommendations and conclusion

12.1 Recommendations

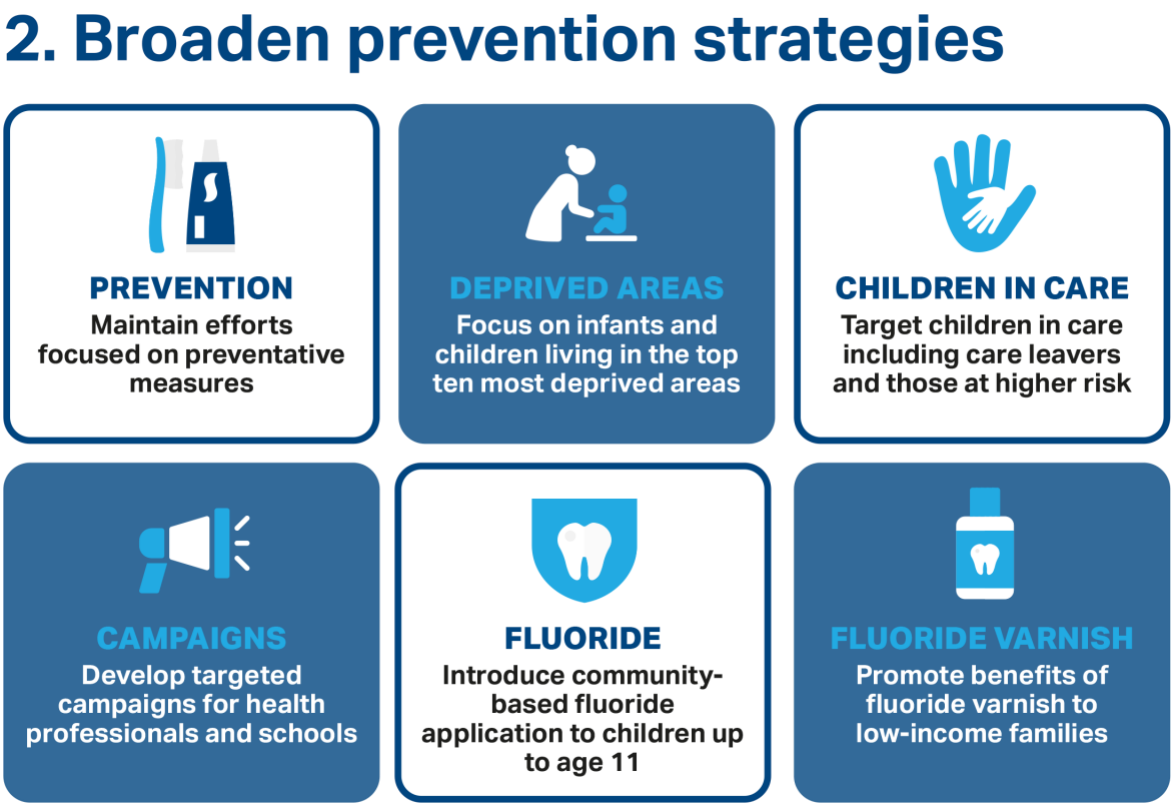
The oral health needs assessment conducted in Oxfordshire has shed light on the significance of oral health in individuals' overall well-being and the existing gaps in NHS dental care accessibility. The assessment emphasises the importance of preventive strategies, targeting vulnerable populations, and addressing key issues such as oral cancer and dental care in care homes.

The Oxfordshire System includes, but is not limited to the Integrated Care System (ICS) and Integrated Care Board (ICB), Public Health, Children's and Adults Social Care, Early Years, Care homes and Community Dental Services (CDS).

The following recommendations will require the Oxfordshire System to work together to address these challenges and improve oral health services in Oxfordshire:

1. **Make oral health one of the Oxfordshire System's top priorities**

Raise awareness regarding the impact of good oral health on an individual's quality of life. It is crucial to prioritise oral health as a key area of focus within Oxfordshire's health and social care system. All relevant oral health stakeholders within the system need to work together to improve oral health in Oxfordshire. This entails allocating adequate resources, establishing clear goals, and integrating oral health into wider health promotion and disease prevention strategies.

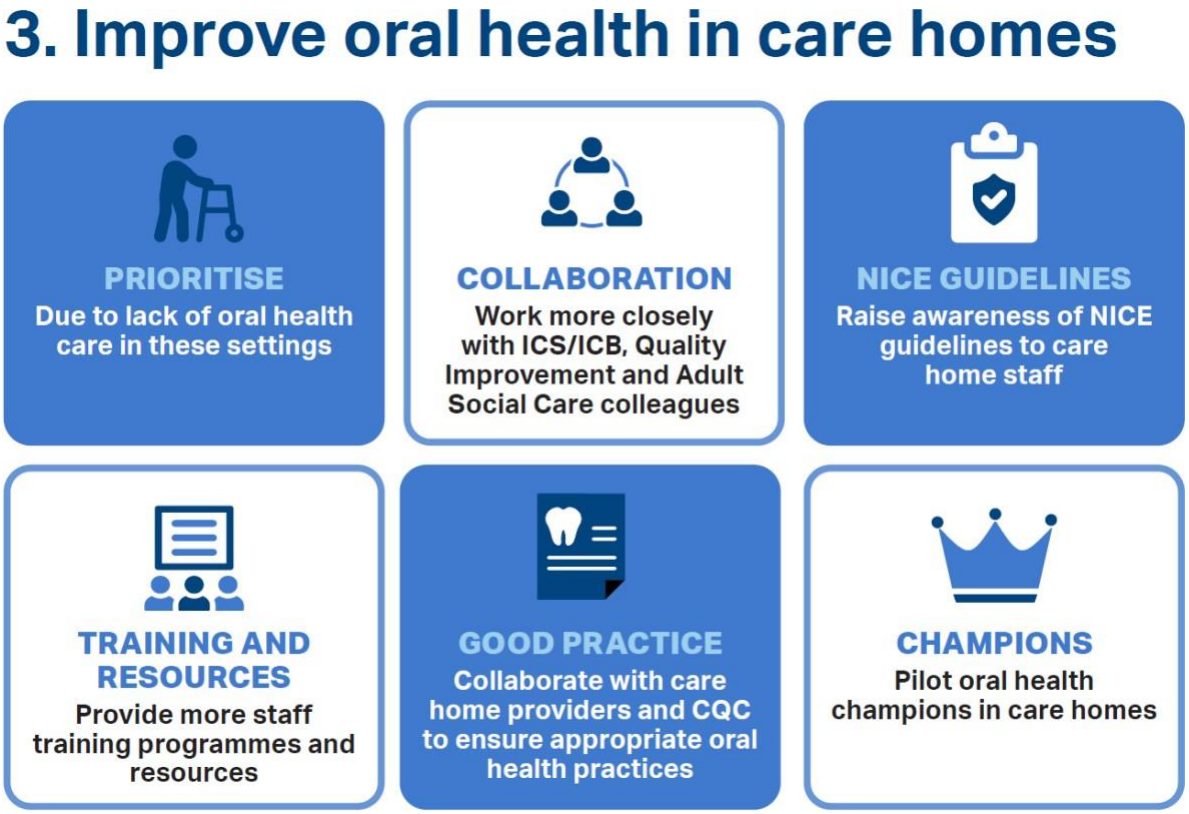


2. Broaden prevention strategies

To broaden the existing oral health promotion and improvement services, it is essential to:

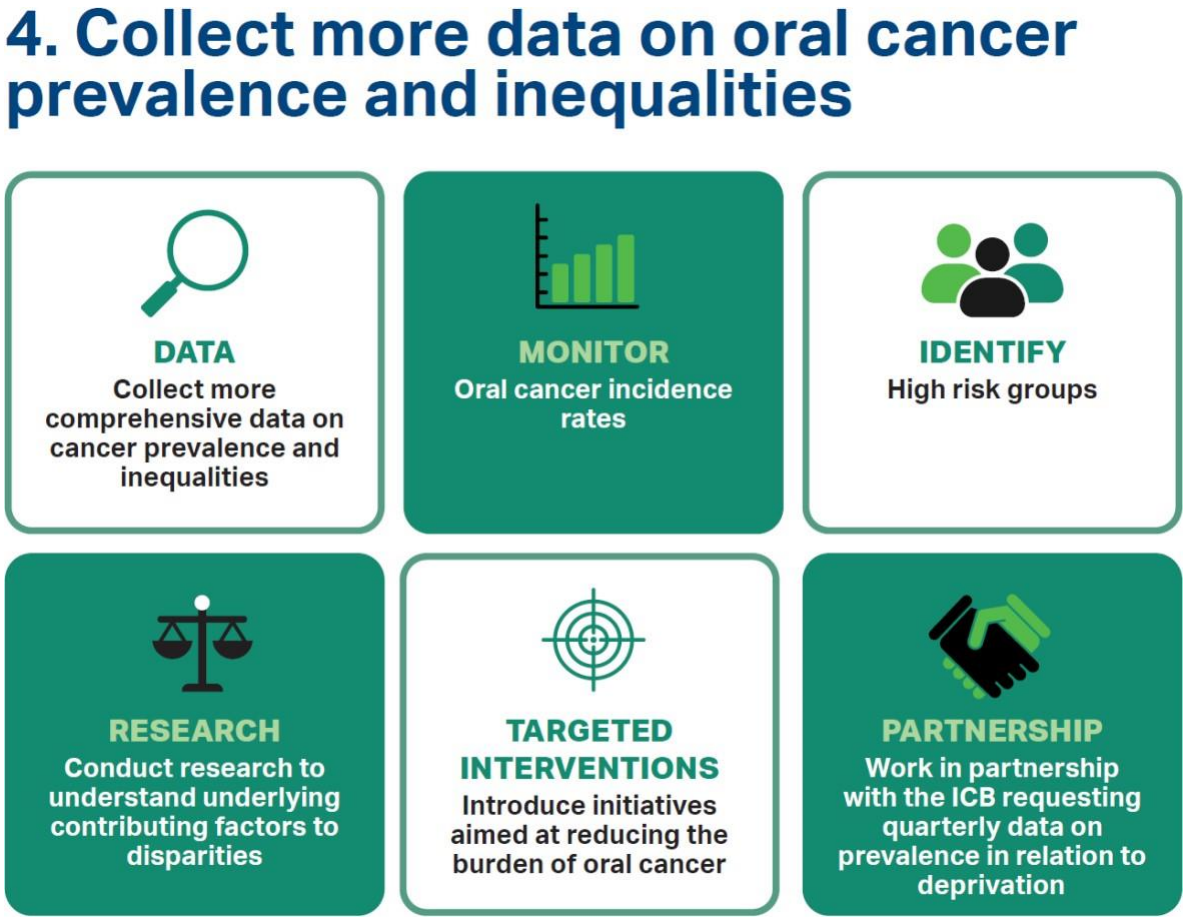
- Maintain and expand efforts focused on preventive measures
- Focus on addressing inequalities within the top ten most deprived areas in Oxfordshire
- Target children in care including care leavers and children at higher risk of poor oral health.

Interventions include awareness campaigns, educational programmes targeting health professionals and schools, social media campaigns, and partnerships with community organisations. By emphasising prevention, the burden of dental disease can be significantly reduced. Consider introducing community-based fluoride varnish to children aged up to eleven years, especially targeting low-income individuals and families affected by the cost-of-living crisis.



3. Improve oral health in care homes

Given the concerning lack of oral health care in care homes, it is imperative to prioritise this population group. This involves raising awareness of NICE guidelines among care home staff, implementing staff training programmes and providing resources to support residents in maintaining good oral health. Collaboration with care home providers and CQC is also vital to ensure the implementation of appropriate oral care practises. Consider piloting oral health champions in care homes who will ensure quality oral health care is in line with CQC/NICE guidelines.



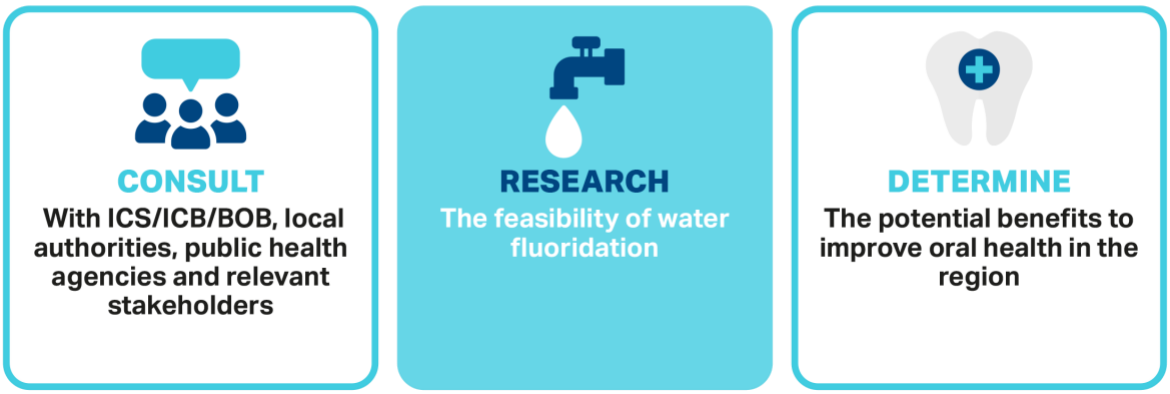
4. Collect more data on oral cancer prevalence and inequalities

To develop effective strategies for oral cancer prevention and management, it is crucial to gather more comprehensive data on cancer prevalence and inequalities in Oxfordshire. This includes monitoring oral cancer incidence rates, identifying high-risk populations and conducting research to understand the underlying factors contributing to disparities. This information will guide targeted interventions and support initiatives aimed at reducing the burden of oral cancer.

5. Review oral health research evidence to update health promotion initiatives

Regularly review the oral health research evidence to ensure the accuracy and relevance of oral health information provided to the public. This includes updating oral health promotion messages with the latest oral health research findings and tailoring the messages to various population groups. All system oral health partners should collaborate with oral health experts, professional oral health organisations and patient-focused organisations, such as Healthwatch to facilitate this process.

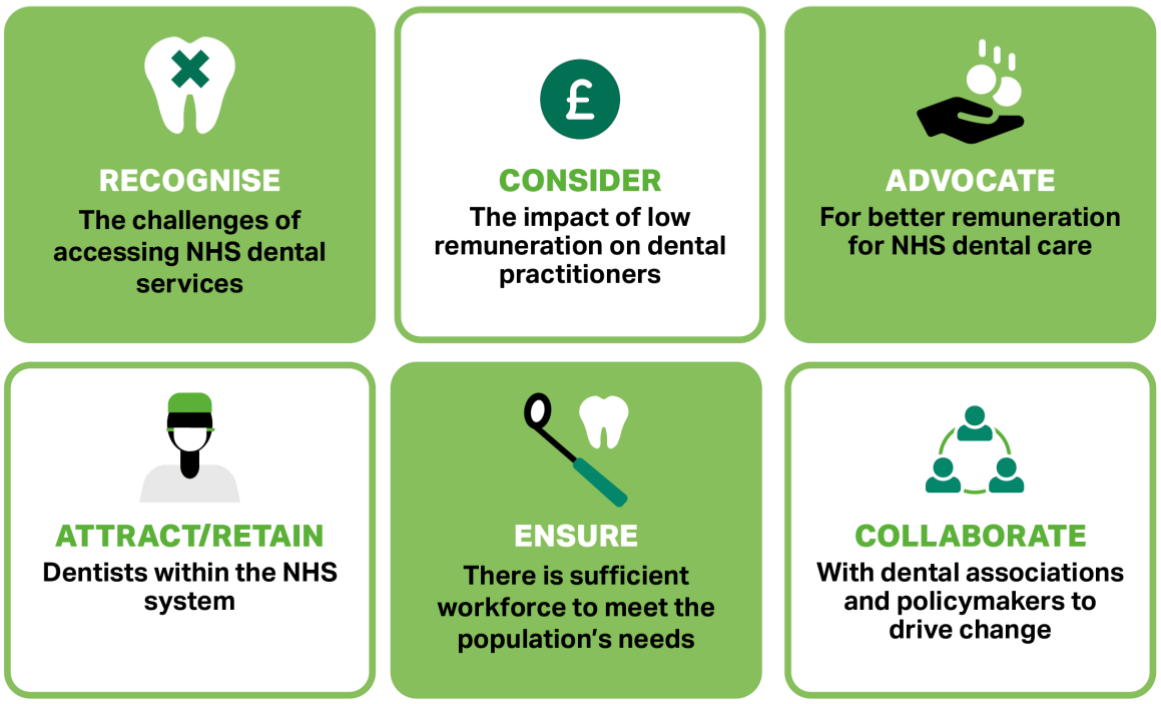
6. Explore the feasibility of regional water fluoridation



6. Explore the feasibility of regional water fluoridation

With all system oral health partners, explore the feasibility and potential benefits of water fluoridation to improve oral health outcomes in the region, particularly in deprived areas with limited access to dental care. It has been shown that water fluoridation is an effective, safe, equitable intervention to reduce the prevalence, severity, and consequences of dental caries. The benefits are greatest in in populations where dental decay levels are higher and it can reduce need for dental care in the long term, thereby contributing to reducing dental health inequalities.

7. Collaboration for a financially sustainable model of NHS dentistry provision



7. Collaboration for a financially sustainable model of NHS dentistry provision

The Oxfordshire oral health system partners should review the challenges the Oxfordshire public are having in gaining access to NHS dental care. These include low remuneration and poorly defined career pathways for NHS dental practitioners. Collaboration with dental associations and policymakers is essential to drive positive change in this regard.

12.2 Conclusion

This oral health needs assessment has been undertaken as we are emerging from the COVID-19 lockdowns, which resulted in reduced access to dental services. The high response from the public survey illustrates the concern and dissatisfaction with current access to NHS dental services in England. The recent national survey for five-year-olds has illustrated the inequalities in children learning about oral health. The way that Oxfordshire current oral health services are focused on prevention, especially targeting areas of high deprivation, is highly relevant in this climate of inaccessible NHS dental care for many people.

In conclusion, the oral health needs assessment in Oxfordshire highlights the importance of improving oral health services and reducing oral health inequalities in the region. By prioritising oral health, broadening preventive efforts, targeting vulnerable populations, addressing oral cancer, updating health promotion messages, considering fluoridation and advocating for better remuneration for NHS dental care, significant advancements can be made in oral health outcomes for the population. Implementing these recommendations will require collaboration between healthcare providers, local authorities, public health agencies, and community organisations. Together, we can create a comprehensive and equitable oral health system that improves the well-being of individuals across Oxfordshire. The oral health needs assessment conducted in Oxfordshire has shed light on the significance of oral health in individuals' overall well-being and the existing gaps in NHS dental care accessibility. The assessment emphasises the importance of preventive strategies, targeting vulnerable populations, and addressing key issues such as oral cancer and dental care in care homes.

Appendix I - Glossary

Term	Definition
Access Rates	Access rates show the proportion of resident population that attended an NHS dentist in the 24-month period(s) stated.
Average number UDAs claimed	The average number of UDAs claimed for each patient is a fundamental measure of the intensity of resource use.
Care index	The proportion of teeth with decay that have been filled. It gives an indication of the restorative care received by children with decay by dentists. The higher the care index the more fillings have been undertaken. Analysis of access alongside care index data can indicate if children are accessing, or receiving the dental treatment they require
Clinical Data set	The clinical data set provides information on the range and number of treatments being provided within the three treatment bands. All contractors are required to record details of the treatments provided (including any appliances) for each patient during each course of treatment.
Comparative need	Comparative need is the need between groups of people with similar characteristics
Dental Caries (tooth decay)	Cavities or holes in the outer two layers of a tooth — the enamel and the dentine. Dental caries is caused by bacteria which metabolise carbohydrates (sugars) to form organic acids which dissolve tooth enamel. If allowed to progress, dental caries may result in tooth decay, infection, and loss of teeth.
dmft index	dmft index, is obtained by calculating the average number of decayed (d), missing due to decay (m) and filled due to decay (f) teeth (t) in a population. In five-year-old children, this score will be for the deciduous or primary teeth and is recorded in lower case. In 12-year-old children it reports on the adult or permanent teeth in upper case (DMFT). As tooth decay in children is highly polarised towards lower socio-economic groups, another useful indicator, dmft>0, demonstrates the proportion of children with obvious tooth decay experience.
Domiciliary Dental care	Domiciliary dental care is dental treatment that is provided in the patient's home. Patients who have severe mobility problems that make it difficult for them to leave their home for treatment would benefit from domiciliary dental care where a dentist visits their home and provides dental treatment
Domiciliary dental care	Dental treatment that is provided in the patient's home. Patients who have severe mobility problems that make it very difficult for them to leave their home for treatment would benefit from domiciliary dental care where a dentist visits their home and provides dental treatment
Expressed need or demand	Actions taken by service recipients to utilise health services
Felt need	Perceived needs of lay people or service recipients
Global Majority	All people who are non-white
HEE	Health Education England
LDC	Local Dental Committee
LDN	Local Dental Network
LSOA	Lower-Level Super Output Area (LSOA) are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. Lower Layer Super Output Areas
NHSE&I	NHS England and NHS Improvement
Normative need	Need defined by experts

Term	Definition
Patient Charge Band 1	Band 1 course of treatment: covers an examination, diagnosis (including X-rays), advice on how to prevent future problems, a scale and polish if needed, and application of fluoride varnish or fissure sealant.
Patient Charge Band 2	Band 2 course of treatment: covers everything listed in Band 1 above, plus any further treatment such as fillings, root canal work or removal of teeth.
Patient Charge Band 3	Band 3 course of treatment: covers everything listed in Bands 1 and 2 above, plus crowns, dentures and bridges.
Patient Charge Band 4	Urgent care
Patient Charge Bands	Patient Charge Bands of FP17s on Patients: NHS dental treatment is divided into Patient Charge Bands depending on the level and complexity of treatment provided. There are three standard charge bands for all NHS dental treatments:
Patient Flow	Patient Flow In details where the patients treated in an area reside. Significant numbers of patients from outside an area can limit access to services for residents. Patient Flow Out highlights where the patients living within an area have received their dental treatment.
PHE	Public Health England
Population density	The number of people residing in an area (square kilometre/mile)
Sedation	Sedation is used to help people feel relaxed and comfortable about having certain dental procedures done.
STP	STP stands for sustainability and transformation partnership. These are areas covering all of England, where local NHS organisations and councils drew up shared proposals to improve health and care in the areas they serve. STPs were created to bring local health and care leaders together to plan around the long-term needs of local communities. They have been making simple, practical improvements like making it easier to see a GP, speeding up cancer diagnosis and offering help faster to people with mental ill health. In some area, STPs have evolved to become 'integrated care systems', a new form of even closer collaboration between the NHS and local councils. The NHS Long Term Plan set out the aim that every part of England will be covered by an integrated care system by 2021, replacing STPs but building on their good work to date.
The Care Index	The care index is the proportion of teeth with decay that have been filled. It gives an indication of the restorative care received by children with decay by dentists. The higher the care index the more fillings have been undertaken. Analysis of access alongside care index data can indicate if children are accessing or receiving the dental treatment they require.
Treatment on Referral	Treatment on referral occurs when a patient is in need of specialist dental care for example treatment under sedation. This refers only to treatment on referral in primary care.
UDA	Units of Dental Activity (UDAs) are a measure of the amount of work done during dental treatment. More complex dental treatments count for more UDAs than simpler ones. For example, an examination is 1 UDA, fillings are 3 UDAs, and dentures are 12 UDAs.
Unmet need	The gap between service and/or oral health improvement activities and that considered necessary by providers and recipients.

Appendix II - Key stakeholders

Key stakeholders invited to complete the survey included individuals from the following organisations and groups.

- Children's Preventative Care Services
- School Advisors
- Managers from CSC, OSCB fostering and education
- Front Door Services
- Human Resources
- Adopt Thames Valley
- Business Service Support CEF
- Finance
- Team Support Specialists
- Education
- Children's Services
- Think Coordinators
- Foundation Years Leader
- Early Help
- Primary School Improvement Officers
- SHN
- Partnerships and Safeguarding Managers
- Virtual School
- Commissioning
- Children's Social Care
- FSS Plus South
- Quality and Improvement Managers
- Senior Commissioning Officer
- Lead Commissioner
- Learner Engagement
- LC & UCYP
- Health Visiting 0-5s
- SEND
- Quality and Improvement Education
- Access to Learning
- Disabled Children Service
- Social Workers CSC
- Head of Service YJE
- Partnership Youth Development
- Service LAC
- Safeguarding
- Learning and School Improvement
- Housing Development Officers
- Performance Info Managers
- Category HESC
- Midwifery
- Here for Health

Appendix III – List of Oxfordshire Dental Services

Id	Code	Name	Address	Postcode
1	V13323	14 High Street [Dental Practice]	14 High Street	OX10 6RP
2	V05693	204 Fane Drive (Dental Surgery)	204 Fane Drive	OX10 7QA
3	V12435	28 New Street [Dental Practice]	28 New Street	OX7 5LJ
4	V06822	33 - 35 Duke Street	33-35 Duke Street	RG9 1UR
5	V07852	70b Main Road	70 Main Road	OX29 8BD
6	V06267	ADP Dental Co. Ltd.	31 Oxford Road	OX5 2BP
7	V91102	Abingdon Dental Centre	Dalton	OX13 6JB
8	V07824	Accessible Orthodontics	21 Beaumont Street	OX1 2NA
9	V83560	Amsel and Wilkins Llp	26 High Street	OX16 5EG
10	V65243	Aspire Orthodontics Ltd	49 South Bar Street	OX16 9AB
11	V82888	Audley Dental Solutions	Unit 9	OX27 9AU
12	V91021	Benson Dental Centre	Benson	OX10 6AA
13	V91020	Bicester Dental Centre	Arncott	OX25 1PP
14	V06264	Bicester Health Centre	Coker Close	OX26 6AT
15	V05680	Blandy House Dental Practice	Blandy House	RG9 2AR
16	V10978	Bloxham Dental @ Banbury	49 The Green	OX16 9AB
17	V05517	Bloxham Dental Practice	Godswell Stables	OX15 4ES
18	V05685	Boathouse Dental Surgery	High Street	RG8 9AB
19	V13258	Bridge Street Dental Practice	58 Bridge Street	OX16 5QB
20	V91022	Brize Norton Dental Centre	Roman Way	OX18 3LX
21	V313896	Bullingdon	Patrick Haugh Road	OX25 1PZ
22	V05571	Bury Knowle Health Centre	207 London Road	OX3 9JA
23	V05702	Busby House Dental Practice	13 Hagbourne Road	OX11 8DP
24	V17584	Buttercross Dental Practice	17a Corn Street	OX28 6DB
25	V05681	Byways Dental Practice	Checkendon	RG8 0SP
26	V06266	Causeway Dental Practice	23 Causeway	OX26 6AN
27	V05724	Charlbury Dental Surgery	Spendlove Centre	OX7 3PQ
28	V05705	Cherrytree Dental Care	1 Vale Avenue	OX12 7LU
29	V87411	Church Green Dental Practice Leondaki Ltd	4 Church Green	OX28 4AW
30	V07821	Colosseum Dental (Manor)	7 Manor Buildings	OX3 7RB
31	V82903	Corn Street Dental Practice	51 Corn Street	OX28 6BT
32	V05522	Cornhill Dental Clinic	22 Cornhill	OX16 5NG
33	V45272	Cornmarket Street Dental Practice	3rd Floor, 11-12 Cornmarket Street	OX1 3EX
34	V05688	Courtrai House Dental Surgery	84 Reading Road	RG9 1DA
35	V54047	Damira Bicester Dental Practice	Unit 4, Westbury Court	OX26 6JU
36	V80300	Deddington Dental	New Street	OX15 0SS
37	V09228	Dental Surgery	84 High Street	OX1 4BG
38	V05513	Dental Surgery	43 Castle Street	OX16 5NU
39	V05545	Dental Surgery	279 Banbury Road	OX2 7JF
40	V05546	Dental Surgery	6A The Parade	OX3 7BL

Id	Code	Name	Address	Postcode
41	V05551	Dental Surgery	310 London Road	OX3 8DJ
42	V05555	Dental Surgery	27 Oakthorpe Road	OX2 7BD
43	V05557	Dental Surgery	25 St. John Street	OX1 2LH
44	V05558	Dental Surgery	1 Kennett Road	OX3 7BH
45	V05718	Dental Surgery	4 Church Green	OX28 4AW
46	V05719	Dental Surgery	45 Ock Street	OX14 5AG
47	V05722	Dental Surgery	6 Bath Street	OX14 3QH
48	V06268	Dental Surgery	98 Sheep Street	OX26 6LP
49	V06271	Dental Surgery	43-47 Sheep Street	OX26 6JJ
50	V05538	Dental Surgery	1A Elms Parade	OX2 9LG
51	V05568	Dental Surgery	54a-55a Between Towns Road	OX4 3LR
52	V05682	Dental Surgery	96 Church Road	OX33 1LZ
53	V05687	Dental Surgery	7 Shirburn Street	OX49 5BU
54	V05700	Dental Surgery	4 Cassington Road	OX29 4LF
55	V05706	Dental Surgery	102 High Street	OX28 6HT
56	V05711	Dental Surgery	200a Broadway	OX11 8RN
57	V05714	Dental Surgery	1A Post Office Lane	OX12 8DR
58	V12336	Dental Surgery	Hanwell Mews	OX16 1AP
59	V05697	Didcot Hospital	Wantage Road	OX11 0AG
60	V12299	Euro Dental Practice	61 London Road	OX3 7RD
61	V05701	Gloucester House Dental Surgery	8 Gloucester Street	SN7 7HY
62	V83210	Harwell Dental Practice	Curie Avenue	OX11 0QQ
63	V06273	Hensington House Dental Practice	17 Union Street	OX20 1JF
64	V11297	High Street (Dental Surgery)	16 High Street	OX9 2BZ
65	V06263	Kidlington Health Centre	Exeter Close	OX5 1AP
66	V05703	Ladygrove Dental Practice	8 Lostock Place	OX11 7XT
67	V16658	Langdale Court (Dental Practice)	15 Langdale Court	OX28 6FG
68	V83153	Lars Christensen Orthodontics	69-71 Banbury Road	OX2 6PE
69	V82945	Lawrence & Pinkerton Limited	25 St. Marys Street	OX10 0ET
70	V05515	Lion House Dental Practice	High Street	OX15 5NF
71	V05512	Market Place Dental Practice	1A Parsons Street	OX16 5LW
72	V82922	Milton Dental Practice	Breakspeare House	OX7 6JW
73	V80384	Moreton Road Dental Practice	4 Moreton Road	OX2 7AX
74	V81772	Mr PC Chen	Blandy House	RG9 2AR
75	V81942	Mr S Patel	Blandy House	RG9 2AR
76	V05535	Nagi and Rattan Dental Surgery	2 Rose Hill	OX4 4HS
77	V143456	New Street	Deddington	OX15 0SS
78	V05541	Oasis Dental Care	22 Beaumont Street	OX1 2NA
79	V83291	One The Gallery	Unit 1	OX4 1LF
80	V80072	Oxford Dentalmed	174d Cowley Road	OX4 1UE
81	V83162	Oxford Oral Surgery Ltd	68 Cumnor Road	OX1 5JP
82	V143457	Oxford Road (Dental Surgery)	140 Oxford Road	OX5 1DZ
83	V83028	Park Street Dental Clinic	34 Park Street	OX9 3HR

Id	Code	Name	Address	Postcode
84	V96215	Peachcroft Dental Practice	Unit 4	OX14 2QA
85	V131696	Portman Healthcare Limited (Bicester)	Unit 4B	OX26 6FA
86	V05726	Portway House Dental Surgery	13 Portway	OX12 9BU
87	V16868	Pound Way (Dental Surgery)	127 Pound Way	OX4 3XH
88	V05727	Precinct Dental Practice	28a Bury Street	OX14 3QX
89	V08768	Rex Family Dental Health Centre	1 Vicarage Road	OX11 8EL
90	V05684	Royal House Dental Centre	51 Station Road	RG9 1AT
91	V05720	Sinson and Sykes Dental Surgery	50 Burford Road	OX18 3AD
92	V07825	Smile Solutions Dental Care	46 Bell Street	RG9 2BG
93	V83035	Smile With US	25a Banbury Road	OX5 1AQ
94	V05699	South West Oxfordshire Primary C	Abingdon Hospital	OX14 1AG
95	V05721	Stert Street (Dental Surgery)	45 Stert Street	OX14 3JF
96	V07823	Studental	Gipsy Lane	OX3 0BP
97	V83493	Taha Dental Excellence	5 The Old Gaol	OX14 3HE
98	V17622	Temple Street (Dental Surgery)	26 Temple Street	OX4 1JS
99	V05713	The Dental Centre	6 The Clock House	OX18 3HN
100	V11199	The East Oxford Health Centre	1 Manzil Way	OX4 1XD
101	V05696	The Health Centre	Mably Way	OX12 9BN
102	V12734	The Leys Health Centre	Dunnock Way	OX4 7EX
103	V09325	The Luther Street Centre	PO Box 7	OX1 1TD
104	V05089	The Orchard Health Centre	Cope Road	OX16 2EZ
105	V05511	The Surgery	83 Chatsworth Drive	OX16 9YJ
106	V00056	The Surgery	35 High Street	OX16 5ER
107	V06821	Thirty Three Dental	33 Market Square	OX28 6AD
108	V14237	Time for Teeth HMP Huntercombe	Dental Department H M YOI	RG9 5SB
109	V07850	Unit 12/13 The Tower Centre	12-13 The Tower Centre	OX18 3JG
110	V06820	Unit 8 (Peachcroft Orthodontics)	Unit 8	OX14 2QA
111	V05676	Wallingford Community Hospital	Reading Road	OX10 9DU
112	V05679	Wallingford Dental Surgery	8C Castle Street	OX10 8DL
113	V14014	Wantage House Dental Practice	The Chapel	OX12 8DJ
114	V05695	Witney Community Hospital	Welch Way	OX28 6JJ
115	V83021	Witney Dental Practice	26 Market Square	OX28 6BB
116	V05683	Wood Lane (Dental Surgery)	37 Wood Lane	RG4 9SJ
117	V05707	Wootton Dental Centre	4 Besselsleigh Road	OX13 6DN
118	V54573	Your Dentist Didcot	166 Greenwood Way	OX11 6GD