



Northumberland County Council

HEALTH & WELLBEING BOARD

12TH MAY 2022

Oral Health Strategy update

Report of: Liz Morgan - Interim Executive Director of Public Health and Community Services

Cabinet Member: Cllr Wendy Pattison - Adult Health and Wellbeing

Purpose of report

This report updates the Health and Wellbeing Board of progress against the Northumberland Oral Health Strategy 2019 – 2022 and proposes an extension to the strategy period.

Recommendations

The Health and Wellbeing Board is recommended to:

- Comment on the progress on oral health outlined in the report, delivered in partnership via the Northumberland Oral Health Strategy Implementation Group.
- Acknowledge the impact on dental and oral health action and delivery caused by the Covid-19 pandemic.
- Support an extension to the strategy period from 2022-2025.

Link to Corporate Plan

This report is linked to the 'Living' priority included in the NCC Corporate Plan 2018-2021. Extending the Northumberland Oral Health Strategy will facilitate improvements to the oral health of our communities and will reduce oral health inequalities.

Key issues

Oral health is an important part of the overall health and wellbeing of individuals and poor oral health will have significant impacts on many aspects of an individual's life throughout the life course.

Oral health has improved considerably in the UK, with some areas now almost entirely free of dental decay in 5-year-olds. However, pockets of inequalities and areas with greater need

remain, as seen in Northumberland. The 2019 national oral health survey of five-year-olds shows that 20.3% of 5-year-olds in Northumberland had experience of visually obvious decay.¹

The average number of decayed, missing or filled teeth (DMFT) in 12 years olds in Northumberland (in the last available survey, 2009) was 1.2, the highest number of DMFT in 12-year-olds in the north east and significantly higher than the England average.

The 2017 Oral Health Needs Assessment (OHNA) noted the needs of the older population and the likely increase in the size of this group in the future. Older people are increasingly retaining their natural teeth and now often have heavily restored dentitions. In the oral health survey of adults attending general dental practices in 2018, 43.8% of adults who took part in the survey in Northumberland had active dental decay compared to 28.5% in Middlesbrough and 26.8% in County Durham².

Inequalities in oral health are evident in the UK across the social spectrum and across the life course largely reflecting the socio-economic inequalities that impact on general health. The COVID-19 pandemic will have widened these inequalities as well as having a direct impact on dental care provision.

Improving the oral health of Northumberland residents and reducing inequalities is a priority. The Covid-19 pandemic meant that some work had to stop, due to ceasing dental delivery or partner capacity issues. The Northumberland Oral Health Strategy and Implementation Group prioritised action during this time and utilised opportunities to engage with communities about oral health.

Background

Oral health is 'multi-faceted and includes the ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of emotions through facial expressions with confidence and without pain, discomfort and disease of the craniofacial complex'³. In other words, oral health is an important part of the overall health and wellbeing of individuals, and poor oral health will have a significant impact on many aspects of an individual's life which can extend throughout the life course.

Dental decay is the most common non-communicable disease worldwide and yet it is largely preventable. Dental decay and other oral diseases such as gum disease and oral cancer share common risk factors with several other non-communicable diseases, such as diabetes, cardiovascular disease and chronic obstructive pulmonary disease. These risk

¹ National Dental Epidemiology Programme for England: oral health survey of 5-year-olds 2019

² PHE: National Dental Epidemiology Programme for England Oral health survey of adults attending general dental practices 2018

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/891208/AiP_survey_for_England_2018.pdf

³ Glick M, Williams D M, Kleinman D V, Vujicic M, Watt R G, Weyant R J. A new definition for oral health developed by the FDI World Dental Federation opens the door to a universal definition of oral health. J Am Dent Assoc. 2016; 147(12): p. 915-917.

factors include unhealthy diet (including excessive sugar intake and sugary drinks) and excessive alcohol consumption. Tooth decay and obesity are also more likely to occur together, given that social deprivation and excess sugar intake are associated with both.

Further background information and local context, including the impact of the coronavirus pandemic on oral health inequalities, can be found at Appendix 1.

Oral Health Action Plan

The Northumberland Oral Health Strategy and Action Plan 2019-2022 outlines key priority areas for action for improving oral health and reducing inequalities, following a comprehensive oral health needs assessment in 2017. It was approved by the Health and Wellbeing Board at the meeting on 14 March 2019. Fourteen recommendations and areas for action were proposed and agreed under four priority themes:

- ⊘ Giving every child the best start in life and best opportunities for oral health.
- ⊘ Improving the oral health of older people.
- ⊘ Service development and commissioning.
- ⊘ Partnership working.

The Northumberland Oral Health Strategy Implementation Group (OHSIG) brings together a group of stakeholders relevant to the oral health agenda. The group enjoys commitment from across NCC (public health, Integrated Wellbeing Service, Northumberland Communities Together (NCT), commissioning, communications, education and early years) with key members from Northumbria Healthcare NHS Foundation Trust (NHFT) (Looked After Children/Paediatrics, Community Dental Service) and Harrogate and District NHS Foundation Trust (HDFT) (0-19 Public Health Service). The group has a GP representative, key staff from Health Education England (HEE), the Office for Health Improvement and Disparities (formerly PHE), NHS England and the Local Dental Committee.

During 2019, the group worked together to turn the strategy recommendations into a working action plan for delivery; developing it to fit identified need and priorities; removing the recommendation to implement the 'Brush Up' programme when it was discovered to only be available in Newcastle schools; and adding a focus on learning disabilities and people with severe mental illness.

Impact of pandemic on delivery

The arrival of the Covid-19 pandemic resulted in a delay to planned oral public health activity in Northumberland. All partners spent time adjusting to the demands of restrictions, followed by changes due to remote working and delivery. Dental practice in particular was affected by the restrictions and subsequent staged re-openings. Public health capacity was turned toward Covid management and contact tracing. All stakeholders and organisations and their work with client groups was affected.

When the strategy group met in May 2020, it started to prioritise what could be delivered within the various frameworks of restrictions. The provision of toothpaste and toothbrushes

for vulnerable children and families was agreed as a priority and especially relevant while routine access to dental health services was suspended. The Public Health team worked with partners in the NCT hub, the Looked After Children (LAC) service and Health Visiting team, and with the Integrated Wellbeing Service Health Trainer team to utilise their avenues to distribute toothbrush and toothpaste packs to those in need.

Feedback received included:

LAC Team Manager:

I am giving [a toothbrush/toothpaste pack] at all face-to-face assessments (except one teenager who said no).

I have given one to a child in general developmental clinic whose mother and grandmother showed no sign of noticing her needs, but were terribly negative about her for 45 mins, and described her as totally unmanageable, but for the bribe of a new toothbrush allowed me to look in her mouth, and who I am sure had no toothbrush at home (but lots of sweets).

It is honestly so positive. It makes children and carers really happy. Children leave saying "look what I got!" and "can I clean my teeth?"

Health Visiting Team:

This has been working well with my families, they respond really well and its great visual for when you're talking about dental care.

Staff were really delighted with the toothbrush/paste packs and feel they are well received when given out at 3-4-month contact.

They really feel these are beneficial and support them to promote good oral health and the importance of cleaning teeth in the early years.

Health Trainers:

Hadston House: These are brilliant and will go to good use as we will give them to adults who are in need, they receive our food packs and meals on wheels. Many of these people don't get out much and are shielding themselves from COVID.

Hadston Childrens Centre: The toddlers toothbrush packs will go into the community, they will be offered to families in need, who our Family Support Workers are in contact with despite Covid. The

workers are sending out activity packs to families and the packs will go out to families with the packs. Thank you so much; they are an added bonus to families in need at this difficult time.

Stobhill Link: *These are amazing. Thank you – we have many families on this estate who are really struggling with finances, the toothbrush packs will be given to those families who are receiving food parcels and I know they will really appreciate them.*

Being Woman: *Thank you to the Health Trainers – we will offer these toothbrushes to families in our BAME group where many asylum seekers and refugees are really struggling with finances and will benefit from these packs.*

Summary of achievements

Below is a summary of progress made against the strategy actions at the end of each year, followed by recommendations for further action.

Giving every child the best start in life (Actions 1-6)

Action 1. Consideration to be given to extending the existing community water fluoridation scheme in order to protect those communities at highest risk of dental decay.

- 2020 – Extensive work undertaken to prepare for a variation to the existing Community Water Fluoridation (CWF) scheme which had to be suspended due to Covid-19 pandemic.
- 2021 - New national powers for CWF proposed. Communication with Secretary of State asking for early consideration for Northumberland and related schemes within new legislation.
- 2022 - Bill containing fluoridation amendments was considered in the House of Lords 31 Jan 2022. Conclusion that the new powers are supported, and that the government will consult with the public regarding any new schemes.

Recommendation: *Maintain active links with DHSC to progress variation of CWF under new legislation. CWF remains a critical pillar in the Northumberland Oral Health Strategy.*

Action 2. Explore the feasibility of targeted provision of toothbrush and toothpaste packs for use at home by health visitors at the 6 month and 2-year checks in those areas of greatest need.

- 2020 - Priority agreed to source and disseminate toothbrush/ paste packs to vulnerable families.
- 2021 - Health Visitors & LAC distributed packs to vulnerable families. IWS Health Trainers also distributed via networks. NCC Public Health agreed to continue funding these during 2021.
- 2022 - Pack distribution continued via HVs, LAC, IWS HTs and NCT (during summer and Christmas community engagement activities).

Recommendation: *Excellent feedback from partners (see above) with support for the continuation of this evidence-based intervention.*

Action 3. Ensure that community midwives, health visitors, social care staff and others in early years settings promote messages regarding the reduction of consumption of sugary drinks and the promotion of water as the drink of first choice. Clear and consistent messages to be delivered in health promotion and health education work with families and young children.

- 2020 - LAC and foster carers delivered oral health messages including reducing sugar, brushing teeth and seeking advice from dentist until they reopen.
- 2021 - Early Years team facilitated focus group to develop a sugar-free pledge. Reviewed old training and information materials to update training for childminders and other EY professionals.
- 2022 - IWS oral health training workbook for settings working with children and young people developed. Ratified by HEE and offered online. Twelve-month accredited training programme developed by EY team for EY practitioners and posted on SharePoint.

Recommendation: *Develop online access to IWS children and young people's oral health workbook via Learning Together and develop a workbook/ training resource focussing on adults. Promote and evaluate the EY training programme.*

Action 4. Health visitors, midwives and early years settings to ensure that breastfeeding advice and support also includes messages regarding oral health promotion.

- 2020 – Review of current practice in Early Years, Health Visiting and Midwifery. NHFT maternity & neonates and Sure Start Childrens Centres working towards UNICEF accreditation.
- 2021 – Health Visiting team confirm this is still in place.
- 2022 – Retained in 0-19 Public Health Service.

Recommendation: *Maintain ongoing assurance as part of partnership between NCC and NHS providers.*

Action 5. Breastfeeding policy to be reviewed to ensure that issues relating to early childhood caries are addressed.

- 2020 - NCC and NHFT breastfeeding policies in place. Policies based on the UNICEF UK Baby Friendly Initiative standard, relevant NICE guidance and the Healthy Child Programme. Oral health links with breast feeding not explicitly referenced.
- 2021 - NCC & NHFT policies reviewed and amended to add reference to oral health.
- 2022 – Complete as above

Recommendation: *Check compliance annually or at appropriate strategy review times.*

Action 6. Explore opportunities for supervised brushing in those areas with the highest risk of dental decay.

- 2020 - Dental Core Training Curriculum includes Dental Public Health. HEE promoting on-line training resources where appropriate.

- 2021 - On hold: Supervised brushing not possible during COVID.
- 2022 - OHSIG decision to de-prioritise this action as pandemic continues due to limited capacity to develop in Early Years settings

Recommendation: OHSIG to regularly review this action and at least twice annually.

Improving the oral health of older people (Actions 7 – 8)

Action 7. Support residential care settings to improve the oral health of their residents. This should include the introduction of an Oral Health Lead in every residential care setting and compliance with NICE guidelines on oral health for adults in care homes.

- 2020 - HEE sent on-line training resources to practices. Extra promotion of training at this time.
- 2021 – OHSIG identified that oral health may be low priority in care homes and for people in supported living with learning disabilities and severe mental illness (vulnerable adults).
- 2022 - HEE has delivered training and training packages to 24 Northumberland care homes.

Recommendation: Evaluate HEE training drive and opportunities for further delivery. Continue work programme with focus on those in supported living and/or with learning disabilities or serious mental illness (vulnerable adults).

Action 8. NHS England review of domiciliary dental care to be considered by the Northumberland Health and Wellbeing Board with a view to identifying actions for the Northumberland system.

- 2020 – Review not undertaken. No local action.
- 2021 – Review not undertaken. No local action.
- 2022 – Review not undertaken. However, a 'Framework for 'Enhanced Health in Care Homes' v2 March 2020 is available, which includes an oral health set of expectations.

Recommendation: OHSIG to consider adapting this action to a more general one around oral healthcare in domiciliary dwellings. Seek assurance from commissioners regarding implementation.

Service development and commissioning (Action 9)

Action 9. Ensure that oral health improvement strategies are mandated in all service specifications for appropriate local authority commissioned services for children and older people.

- 2020 – Access to dentist messaging confirmed by commissioners for residential settings.
- 2021 – OHSIG to consider appropriate interpretation of this recommendation (e.g. brief advice at appropriate times).
- 2022 – Ongoing support to group from Childrens Senior Commissioning Manager.

Recommendation: Further support to be developed e.g. using HEE 'Silver' Better Health at Work dental module. Commissioners to give continued support to this strategy and relevant actions.

Partnership working (Actions 10 – 15)

Action 10. Ensure that the local Making Every Contact Count (MECC) approach encompasses oral health considerations.

- 2020 - Oral health is not currently specifically referenced in MECC training. Explored how oral health slide and info can be included in MECC training packages.
- 2021 - IWS supports with oral health messaging running through all its delivery, with MECC underpinning approach - Health Trainers, Ageing Well, Starting Well programme and Stop Smoking Service.
- 2022 - MECC resources updated to include oral health reference.

Recommendation: Further proactive use of MECC to promote oral health. Cross reference with other actions where support and training on oral health could be given to providers via MECC approach.

Action 11. Through the Northumberland Cancer Strategy, encourage partners to work together to increase awareness in Northumberland residents of oral cancer and the risk factors associated with it, especially for those most at risk.

- 2020 – OHSIG considered current practice
- 2021 – work across partners and services is embedded in relation to the oral cancer risk factors e.g. smoking, alcohol
- 2022 – no additional action

Recommendation: Maintain profile of the risks of oral cancer in relation to behaviours. Maintain links with Northumberland Cancer Strategy and its implementation.

Action 12. Work with partners to improve the availability of robust data to enable accurate assessment of oral health in Northumberland (this should include arrangements to access data from private dental providers).

- 2020 - Data from private dental providers is not currently available. SHAPE Atlas Tool now includes dental access data.
- 2021 - National survey data published and provided by PHE.
- 2022 - Proportion of children in deprived areas data provided by PHE

Recommendation: Public Health team to investigate data link-up opportunities and provide regular feedback to OHSIG to inform planning and delivery.

Action 13. Undertake regular monitoring and review of the oral health plan to demonstrate progress and determine any additional actions required.

- 2020 – Public Health led development of detailed action plan and set up the Northumberland OHSIG.
- 2021 – Virtual meetings held, action plan reviewed, and priorities agreed.

- 2022 – On-line meetings continued to be convened and actions delivered by all partners. Public Health added yearly monitoring/update column to action plan.

Recommendation: *Virtual meetings have worked well enabling busy professionals to attend and contribute. Action plan has been the subject of ongoing monitoring and much has been achieved with further actions identified. Recommend that the strategy, action plan and OHSIG partnership should continue.*

Action 14. Work with schools to promote good oral health and develop an oral health promotion campaign.

- 2020 – Lesson plans shared on Courier. Senior Education agreement to ask Headteachers their views on a campaign.
- 2021 – Campaign activity not progressed during Covid. 210 settings open for vulnerable children during lockdown. 57 out of 465 vulnerable children attending. Information provided for schools re: oral health messaging.
- 2022 - Oral health section on PHSE Padlet resource for schools. EY training package.

Recommendation: *Continue development of resources. Consider whether a school-based campaign is appropriate and adapt this action accordingly. Link with education and public health for any recommended activity planning.*

Action 15. Work with GP/Pharmacy teams to promote OHP with focus on vulnerable groups

- 2020 – OHSIG decision to add this additional specific action to capture this target setting and group.
- 2021 - HEE webinar on dental care during COVID19. HEE sent on-line resources to care homes and Learning Disability (LD)/ Severe Mental Illness (SMI) establishments. CCG cascaded to GPs.
- 2022 – Partnerships link established between CCG and HEE via OHSIG. HEE developed video for General Practice, using Makaton to help people with a LD with information about accessing a dentist.

Recommendation: *Developments to continue. Targeted promotion of HEE resources in Northumberland settings.*

Challenges and opportunities

Improving the oral health of the Northumberland population and reducing inequalities was already a priority following the Oral Health Needs Assessment and the strategy endorsement by Health and Wellbeing Board. The Covid-19 pandemic meant that some work had to stop, due to changes in service delivery or capacity issues. However, the OHSIG made decisions to develop a distribution programme of toothbrush/toothpaste packs to vulnerable families and supported the continuation of online training offers for professionals. Practitioners continued to mention the importance of oral health in their community contacts

and developed further support to providers to understand the importance of oral health and integrate messages into practice.

There have been both challenges and opportunities for this work. Such as;

- Remote working - The OHSIG inaugural meeting in early 2020 took place in person prior to the pandemic. Partner attendance was excellent, with a variety of disciplines and organisations represented. Once it was known the pandemic was ongoing, virtual meetings were held via Teams on a quarterly then 6-monthly basis. This challenge turned into an opportunity that facilitated engagement, allowing busy professionals the freedom to attend meetings where they practice; most notably, the dentist representing the Local Dental Committee (LDC) could dial in from his surgery without needing to travel.
- Community covid support – The ability to tie in toothbrush/toothpaste packs distribution for example, with work happening in communities to support them in the pandemic. Packs were included in community welfare pack distribution and also distributed in the summer and at Christmas times as part of engagement programmes.

It is hoped that this report demonstrates the difficult prioritisation decisions made by the Oral Health Strategy Implementation Group over the duration of the oral health strategy and its achievements toward the improvement of oral health for Northumberland residents.

It is acknowledged, from the data described in this paper and the impact of Covid-19 on behaviours directly and indirectly affecting oral health, that there is still much to do. The Board is asked to support a strategy extension period of 3 years, so that the action plan can be developed further with the aim of mitigating oral health inequalities in Northumberland.

Implications

Policy	This strategy supports the ‘Living’ corporate priority and the commitment to provide a range of programmes which will help residents achieve and maintain good health.
Finance and value for money	The strategy and action plan is based on evidence based and cost-effective interventions to improve oral health. Funding to support the implementation of the action plan is currently through the ring-fenced public health grant.
Legal	The transfer of the responsibility for varying CWF schemes from LAs to the SoS HSC removes the most significant legal implication. No other legal implications have been identified.
Procurement	Any opportunities for including elements of oral health promotion as part of arrangements between the council and commissioned providers will be developed as part of the normal commissioning process.

Human Resources	The strategy and action plan will be delivered within existing resources.
Property	None identified
Equalities (Impact Assessment attached) Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Not undertaken for this report but have been undertaken for elements of the strategy.
Risk Assessment	Not undertaken for the strategy
Crime & Disorder	No implications for crime and disorder identified
Customer Consideration	The strategy and recommendations set out in this report is based upon a desire to improve outcomes for vulnerable groups in Northumberland and put in place measures to address preventable ill health and promote good oral health.
Carbon reduction	It is not envisaged that the processes set out within this report will have any impact, positive or negative, on carbon reduction.
Health and Wellbeing	Good oral health is an essential component of overall good health. It supports better educational and social outcomes throughout the life course and is a key area where inequalities are apparent.
Wards	All

Background papers

1. The Northumberland Oral Health Strategy 2019-2022 was approved by Health and Wellbeing Board on 14 March 2019:

Paper - https://northumberland.moderngov.co.uk/Data/Health%20and%20Well-being%20Board/201903141000/Agenda/40987_M9332.pdf

Minutes - https://northumberland.moderngov.co.uk/Data/Health%20and%20Well-being%20Board/201904111000/Agenda/42162_M9333.pdf

2. Update papers were subsequently given to:

- Cabinet – 8 October 2019
- Health and Wellbeing Board – 13 February 2020
- Health and Wellbeing Overview and Scrutiny Committee – 3 March 2020

All papers and meeting minutes available here or on request:
<https://northumberland.moderngov.co.uk/ieDocHome.aspx?Categories=>

Report sign off

Authors must ensure that officers and members have agreed the content of the report:

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Appendix 1

Background Information

LOCAL CONTEXT

Children and young people

Oral health has improved considerably in the UK, with some areas now almost entirely free of dental decay in 5-year-olds. However, pockets of inequalities and areas with greater need remain, as seen in Northumberland. Several key indicators are monitored by the Office for Health Improvement and Disparities (OHID) on oral health, and these provide an indication of the current picture in Northumberland. The 2019 Oral Health Survey of five-year-olds shows that 20.3% of 5-year-olds in Northumberland had experience of visually obvious decay⁴ (see Figure 1).

Figure 1 Percentage of 5-year-olds with experience of visually obvious dental decay

Area	Value	Lower CI	Upper CI
England	23.4	23.1	23.7
North East region	23.3	21.9	24.8
Middlesbrough	38.1	31.9	44.8
Sunderland	32.5	26.2	39.5
Redcar and Cleveland	28.0	22.4	34.4
County Durham	26.8	21.7	32.7
Gateshead	26.6	20.9	33.2
Newcastle upon Tyne	24.2	20.7	28.0
Darlington	22.3	17.4	28.0
South Tyneside	22.1	16.9	28.3
Northumberland	20.3	16.2	25.1
Stockton-on-Tees	19.5	14.8	25.1
Hartlepool	15.9	11.7	21.2
North Tyneside	12.7	9.5	16.8

Source: Dental Public Health Epidemiology Programme for England: oral health survey of five-year-old children (Biennial publication - latest report 2019) <https://www.gov.uk/government/collections/oral-health#surveys-and-intelligence--children>

As Figure 2 shows, five-year-olds in Northumberland have an average of 0.68 teeth that are decayed, missing or filled (DMFT), which is lower than the England average. However, there are regions with lower average DMFT in 5-year-olds: Gateshead, North Tyneside and Hartlepool, all these areas have fluoridated water. Hartlepool has naturally fluoridated water and Gateshead and North Tyneside have existing community water fluoridation schemes.

⁴ National Dental Epidemiology Programme for England: oral health survey of 5-year-olds 2019

Figure 2 Average number of decayed, missing or filled teeth in 5-year-olds

Area	Value	Lower CI	Upper CI
England	0.80	0.78	0.81
North East region	0.82	0.75	0.89
Middlesbrough	1.68	1.31	2.05
Redcar and Cleveland	1.15	0.78	1.51
Sunderland	1.10	0.80	1.40
Darlington	1.01	0.71	1.31
County Durham	0.81	0.58	1.04
Newcastle upon Tyne	0.78	0.61	0.95
Stockton-on-Tees	0.74	0.51	0.97
South Tyneside	0.73	0.46	1.00
Northumberland	0.68	0.48	0.87
Gateshead	0.58	0.40	0.77
Hartlepool	0.50	0.29	0.71
North Tyneside	0.41	0.28	0.55

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

The dental surveys of older children are not as frequent as for 5-year-olds, in 2009 the DMFT of 12-year-olds in Northumberland was 1.2, the highest number of DMFT in the Northeast and significantly higher than the England average. A national survey in 2013 found nearly a half (46%) of 15-year-olds and a third (34%) of 12-year-olds had obvious decay experience in their permanent teeth.

Figure 3 Average number of decayed, missing or filled teeth in 12-year-olds⁵

⁵ OHID: Fingertips Public Health Data: DMFT in twelve year olds: 2008/9; mean DMFT per child: <https://fingertips.phe.org.uk/search/oral%20health#page/3/gid/1/pat/6/par/E12000001/ati/402/are/E06000057/iid/92506/age/41/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1>

Area	Value	Lower CI	Upper CI
England	0.74	0.73	0.75
North East region	-	-	-
Northumberland	1.20	0.98	1.42
Darlington	1.19	0.87	1.50
Redcar and Cleveland	1.17	0.89	1.45
Sunderland	1.10	1.02	1.17
Middlesbrough	1.10	0.91	1.29
County Durham	1.03	0.85	1.21
Stockton-on-Tees	0.96	0.81	1.11
North Tyneside	0.95	0.77	1.12
South Tyneside	0.87	0.78	0.96
Newcastle upon Tyne	0.82	0.72	0.92
Gateshead	0.64	0.58	0.70
Hartlepool	0.55	0.43	0.67

Source: Dental Public Health Epidemiology Programme for England: oral health survey of twelve-year-old children 2009

Northumberland has the highest rate within the region for hospital admissions of 0–5-year-olds for tooth removal due to dental decay (see Figure 4). Hospital admissions due to tooth decay in children are noteworthy not only because of the significant pain and discomfort in terms of the caries and infection, but also because of the avoidable clinical risks associated with a general anaesthetic and the fact that surgery at a young age can be traumatic and can impact on the relationship the child has with dental professionals.

Figure 4 Hospital admissions for dental caries (0-5 years) 2017/18 – 19/20 Crude rate per 100,000⁶

Area	Value	Lower CI	Upper CI
England	286.2	283.2	289.3
North East region	457.6	439.1	475.9
Northumberland	937.0	855.7	1,020.1
Newcastle upon Tyne	818.2	746.1	891.9
North Tyneside	531.2	463.3	606.3
Middlesbrough	514.3	439.2	592.1
Gateshead	485.4	418.8	559.5
County Durham	334.8	301.5	375.0
Darlington	321.7	246.7	401.3
Stockton-on-Tees	316.9	263.5	372.5
Redcar and Cleveland	314.9	254.8	393.5
South Tyneside	282.1	225.3	348.9
Sunderland	146.7	119.5	186.6
Hartlepool	103.2	55.0	146.8

Source: Hospital Episode Statistics (HES) Copyright © 2020, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved.

Oral health and ageing well

Oral health is also a key issue for adults, and the 2017 Oral Health Needs Assessment (OHNA) noted the needs of the older population and the likely increase in the size of this group in the future. Older people are increasingly retaining their natural teeth and older adults now often have heavily restored dentitions which can sometimes require complex care in later life⁷.

Survey data on dental diseases in adults is not collected as frequently as it is for children. The 2009 Adult Dental Health Survey reported that approximately 40% of the 75-84 age group and 33% of the 85+ age group had dental caries, whilst periodontal (gum) disease affected 69% of those over 65 years of age. In the oral health survey of adults attending general dental practices in 2018 43.8% of adults who took part in the survey in Northumberland had active dental decay compared to 28.5% in Middlesbrough and 26.8% in County Durham⁸.

⁶ OHID: Fingertips Public Health Data: Hospital admissions for children 0-5 years:

<https://fingertips.phe.org.uk/search/oral%20health#page/3/qid/1/pat/6/par/E12000001/ati/402/are/E06000057/iid/93479/age/247/sex/4/cat/-1/ctp/-1/yr/3/cid/4/tbm/1>

⁷ PHE: What is Known About the Oral Health of Older People in England and Wales A review of oral health surveys of older people (2016)

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

⁸ PHE: National Dental Epidemiology Programme for England Oral health survey of adults attending general dental practices 2018

In terms of other indicators of oral health, the age standardised oral cancer mortality rate per 100,000 of the population in Northumberland in 2017-2019 was 3.4 (i.e. 3.4 deaths per 100,000 of the population each year), which is lower than the England value of 4.7 and the Northeast^{9(OBJ)}.

Data are also available on several indicators relating to the wider determinants that affect oral health. For example, smoking is a factor in both periodontal disease and oral cancer, and in 2019/20 12.7% of adults in Northumberland reported being a current smoker¹⁰. Dental decay is higher in deprived areas, and 19.4% of children (under 16s) were defined as living in absolute low-income families in 2019/20¹¹.

Access to dental services

Data are not currently monitored on how many people are 'registered' with a dentist as the current dental arrangements do not record access in this way, and dental services are not currently provided on a 'registration' basis in the same way that GP services are. Instead, we can monitor dental access in terms of the percentage of people who are able to get an appointment with a dentist if they want one; and the percentage of the population who received dental treatment in the past 12 or 24 months. Current guidance recommends that the maximum interval between dental appointments should be 24 months for adults and 12 months for children. Access to dental care in Northumberland has been higher than the national average. Between 56.5% of adults from Northumberland received dental care in the 24-month period ending March 2018, and 63.3% of children received dental care in the previous 12 months. Nationally, 50.9% of the adult population and 58.4% of the child population in England received dental care in the same periods¹¹.

A 2013 report from PHE¹² noted good access in Northumberland in children followed by a decline in young adults, particularly young males. The report highlighted geographic inequalities across the county, with less than 40% of the populations of Amble and Wooler accessing a dentist compared to 68% in Hexham West. The report recommended improving access in those areas where uptake was low; and for Northumberland County Council and NHS England to work together to address inequalities. Also, the distribution of dental decay

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/891208/AiP_survey_for_England_2018.pdf

⁹ OHID: Fingertips Public Health Data:

<https://fingertips.phe.org.uk/search/oral%20health#page/3/gid/1/pat/6/par/E12000001/ati/402/are/E06000057/iid/92953/age/1/sex/4/cat/-1/ctp/-1/yr/3/cid/4/tbm/1>

¹⁰OHID: Fingertips Public Health Data:

<https://fingertips.phe.org.uk/search/smoking#page/3/gid/1/pat/6/par/E12000001/ati/402/are/E06000057/iid/92304/age/168/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1>

¹¹OHID: Fingertips Public Health Data:

<https://fingertips.phe.org.uk/search/low%20income#page/3/gid/1/pat/6/par/E12000001/ati/402/are/E06000057/iid/93701/age/169/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1>

¹² D Landes (2013). Access to NHS Dental Services 2012/2013 - Northumberland Council And Cumbria, Northumberland and Tyne & Wear NHS England Area Team. (Available on request from PHE)

is not evenly spread. Higher levels of dental decay in children coincide with areas of higher levels of deprivation. The 2017 Oral Health Needs Assessment highlighted an increased prevalence of dental decay in the north of the county and in parts of the Southeast. Additionally, there is now the impact of the COVID-19 pandemic to consider.

Oral health Inequalities

There are marked inequalities in oral health in England across all stages of the life course and over different clinical indicators such as dental decay and related quality of life measures. The relative inequalities in the prevalence of dental decay in 5-year-old children in England increased from 2008 to 2019. There are also inequalities in the availability and utilisation of dental services across ages, sex, geographies and different social groups.

There is clear and consistent evidence for social gradients in the prevalence of dental decay, tooth loss, oral cancer, quality of life measures, oral hygiene, and service use. The 2013 Children's Dental Health Survey (NHS Digital, 2015) showed that amongst children, self-reported oral health problems and impacts varied by socioeconomic position. Children aged 12 and 15 years who were eligible for free school meals were more likely to report toothache in the past 3 months. Both 12- and 15-year-old children who were eligible for free school meals were at least twice as likely to report having sugary drinks at least 4 times a day compared to those not eligible for free school meals. 15-year-old children eligible for free school meals were less likely to self-report brushing their teeth at least twice a day (71%) than 15-year-olds who were not eligible for free school meals (82%). The 2019 National Dental Epidemiology Programme (NDEP) survey of 5-year-olds showed that 34% living in the 10% most deprived areas of the country and 14% living in the 10% least deprived areas had experienced dental caries. Deprivation explained 38% of the variation in prevalence of tooth decay and 42% of the variation in severity of tooth decay¹⁰.

In terms of access to dental care, based on the summary of the dental results from the GP Patient Survey, the proportion of patients who tried and were successful at getting an NHS dental appointment varied across regions. For example, people from the North East and Yorkshire who tried to access NHS care were most successful in getting an appointment and those in the South East were least successful¹³.

Water fluoridation

In Northumberland, 135,480 residents received fluoridated water in 2014 and 179,139 were supplied by water that did not contain high enough levels of fluoride to be considered effective to prevent dental decay.

¹³ PHE: Inequalities in oral health in England (2021)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970380/inequalities_in_oral_health_in_England.pdf

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. Public Health England has monitored 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 2018 report were consistent with previous reports, it reported that water fluoridation was associated with a reduction in the number of five-year-olds who experience caries and with a decrease in caries severity. Hospital admissions for tooth removal were 59% lower in areas with fluoride of $\geq 0.7\text{mg/l}$, compared to areas with $< 0.1\text{mg/l}$. It also reported that there were no adverse health effects, particularly in terms of hip fracture, osteosarcoma, Down syndrome and bladder cancer.

Water fluoridation should be part of an overall oral health strategy, it is one intervention which should run alongside others, for example, fluoride varnish application. Delivering Better Oral Health is an evidence-based toolkit which provides interventions and advice on how dental health professionals can improve and maintain the oral and general health of their patients¹⁴. It recommends that children from the age of 3 attending NHS dental services should be offered fluoride varnish treatment at least twice a year. Other interventions would include supervised toothbrushing schemes and oral health checks for care home residents. A number of initiatives are already underway in Northumberland to improve the oral health of our population, as described in the action plan section above.

In 2021 the Department of Health and Social Care published a white paper which set out legislative proposals for a Health and Care Bill. The white paper proposed changes that would move the responsibilities for initiating and varying schemes for water fluoridation from local authorities to the Secretary of State. This will allow central government to directly take responsibility for fluoridation schemes. These reforms are awaiting the passage of the Bill and communication with DHSC has been maintained so that this initiative can be taken forward once the legislation is in place.

Impact of the Coronavirus pandemic

Inequalities in oral health are evident in the UK across the social spectrum and across the life course largely reflecting the socio-economic inequalities that impact on general health. The COVID-19 pandemic is likely to have widened these inequalities as well as having a direct impact on dental care provision. Health behaviours, which also impact on oral health, such as smoking and alcohol consumption have increased during the lockdown periods associated with the pandemic¹⁵.

During the first lockdown period in England all routine and non-urgent dental care stopped as practices were unable to operate safely. Figure 5 shows how the number of adult patients being seen by a dentist in Northumberland decreased rapidly following the first lockdown and a similar decrease was seen for children, which was confirmed by the results of the

¹⁴ 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>. Last updated Nov 2021

¹⁵ Health behaviour changes during COVID-19 and the potential consequences: A mini-review. Arora and Grey; Journal of Health Psychology 2020, Vol. 25(9) 1155–1163

to reduce their NHS commitment, putting further pressure on the NHS dental system and making it more difficult for patients to get an appointment¹⁸.

¹⁸ British Dental Association: <https://bda.org/news-centre/latest-news-articles/Pages/England-New-targets-force-more-NHS-appointments-despite-Omicron-wave.aspx>