NHS ENGLAND AND NHS IMPROVEMENT

ORAL HEALTH NEEDS ASSESSMENT

SOUTH WEST OF ENGLAND

January 2021

APPENDIX 4 BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE STP ANALYSIS

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NHS England and NHS Improvement
Oral Health Needs Assessment
South West of England

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Appendix 4 Bristol, North Somerset, South Gloucestershire OHNA STP Appendix

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1 Summary of highlighted oral health needs and priorities

1.1 This appendix to the OHNA for the South West has identified a series of factors that impact on the oral health needs and the provision of dental services in Bristol, North Somerset, and South Gloucestershire. These issues relate to the whole population, for example risk factors that determine the oral health of the population, epidemiological research and the context of current provision.

1.2 In addition, there has been engagement with stakeholders in the Sustainability and Transformation Partnership (STP) area such as patients, the general public and providers of oral health services locally. There are clear themes emerging from this engagement as well as clear implications for the findings of this local appendix.

1.3 Bristol, North Somerset, and South Gloucestershire has a population 912,166 people. Its population consists of more females (51%) than males (49%), a gender profile that is consistent with the population of England. Compared with England as a whole, there is the same proportion of people of working age but less people of retirement age and the same proportion of children and young people. The BAME population in Bristol, North Somerset, and South Gloucestershire is 10% compared to 4% in the South West and 14% in England. However, in Bristol the BAME population is 16%.

1.4 Population growth is a significant factor for oral health services and in particular primary care dentistry, as by 2028 the total population of Bristol, North Somerset, and South Gloucestershire will have grown by 8% (an additional 76,192 people). The child population will have grown by 3% (5,788) and the older adult (65+) population will have grown by 13% (an additional 21,826 people). This significant change in the demographic profile of the region will have important implications for the planning of dental service provision, which will have to meet the specific needs of, in this case, an older age group. Furthermore, the projected shift in the child population suggests that there will be an increase in child patients, which will impact on the oral health needs of children in the STP area.

1.5 With regards to the Index of Multiple Deprivation, details are different in the three component areas in this STP. North Somerset Council ranked as the 121st most deprived district out of 326 districts. North Somerset had 5 Lower Layer Super Output Areas (LSOAs) within the most deprived 5% in England, all within South or Central wards of Weston-Super-Mare. Bristol continues to have deprivation 'hot spots' that are amongst some of the most deprived areas in the country yet are adjacent to some of the least deprived areas in the country. Bristol has 41 LSOAs in the most deprived 10% in England for Multiple Deprivation, including 3 LSOAs in the most deprived 1% in England. Across South Gloucestershire the highest levels of deprivation are generally found within the Council's designated priority

neighbourhoods (PNs). In terms of the IMD 13 of the 20 most deprived LSOAs in South Gloucestershire (65%) are located within PNs.

1.6 The mortality rate for cardiovascular disease is lower in South Gloucestershire than the national and South West rates. In Bristol and North Somerset, the mortality rate for cardiovascular disease is higher than the England and South West rates. The mortality rates for respiratory disease in South Gloucestershire and North Somerset are lower than the rates in England and the South West. I Bristol these rates are lower than the South West but fractionally higher than England. The prevalence of diabetes in Bristol (5.5%) and South Gloucestershire (6.4%) is lower than the South West (6.5%) and England profile (6.9%). The profile for North Somerset (6.7%) is higher than the South West but lower than England.

1.7 Most recent data suggests that the level of physical activity varies within the STP area - in Bristol 71% of people are classed as active (undertaking 150* minutes per week), which is above the national percentage of 64% and below the South West profile of 67%. South Gloucester with 66% and North Somerset with 64% were both below the South West and above the national level. Correspondingly there are lower levels of physical inactivity, with 18% inactive in Bristol and 20% inactive in South Gloucestershire, both of which are below the nation profile at 25% and the South West profile at 21%. The inactive profile in North Somerset was 21%, the same as the South West but below the national level.

1.8 Reception Years data from the national child measurement programme shows that, when compared to national and South West levels, there was a consistent proportion of children in Bristol that are obese and or overweight, at22%. In North Somerset it was higher at 25% and in South Gloucestershire it was lower at 20%. The levels of those who are obese or overweight in the adult population is 55% Bristol, lower than the national (62%) and regional (61%) level. However, in North Somerset and South Gloucestershire the rates of 62% were higher than the South West but similar to the national rate. The GP Survey in 2018-19 showed that 14.5% of over 18-year olds in England were smokers compared to 13.7% in the South West, 16.94% in Bristol, 12.94% in North Somerset and 10.81% in South Gloucestershire.

1.9 The patient and public survey completed as part of this OHNA suggests that 72.4% of patients travel to their dentist by car. However, there are lower numbers of households with access to a car or van, particularly in rural areas, suggesting that many patients would find it difficult to access healthcare services including dentistry.

1.10 The recent Adults in practice national dental epidemiological survey was not completed for any of the three authorities in the STP. Although it is unclear why this was the case, an ongoing effort should be made to secure this important epidemiological data, to better understand the impact of oral health on the

residents of the area. However, from previous child surveys, the data for Bristol, North Somerset, and South Gloucestershire shows a higher level of 3-year-old dental decay in Bristol (15.3) and North Somerset (11.1%), when compared to national (11.7%) and regional (10.4%) findings. In Bristol, North Somerset, and South Gloucestershire the data for 5-year-old dental decay is lower in Bristol at 15.5%, North Somerset at 13.9% and South Gloucestershire at 14.3% than nationally (23.4%) and the South West (20.4%). For 12-year-olds the level of dental decay in Bristol, North Somerset, and South Gloucestershire was lower in South Gloucestershire at 29.3% but higher in North Somerset with 33.9% and Bristol with 39.8% than the national (33.4%) and South West (33.3%) levels.

1.11 From a dental care service provision perspective, Bristol, North Somerset, and South Gloucestershire, in 2019-20 had 105 dental practices commissioned to carry out 1,587,814 UDAs. This was delivered by 503 dentists providing NHS dental services. Indeed, Bristol, North Somerset, and South Gloucestershire saw a decrease of 7 dentists in 2019-2020 from the year before, a -1.42% decrease. The average UDAs per person was higher than the South West rate at 1.65 UDA/person as compared to 1.52 UDA/person.

1.12 In terms of access to dentistry the percentage of children that accessed NHS dentistry in the last 12 months[1] was 61% in North Somerset, 59% Bristol but 50%, which was above the South West (54%) percentage but below England (53%). In South Gloucestershire, 50% of children accessed NHS dentistry which is below national and regional access levels. The percentage of adults that accessed NHS dentistry in the last 24 months was 53% in North Somerset, 51% in Bristol and 50% in South Gloucestershire, all of which are above both the South West level (47.3%) and the national level (47.1%).

1.13 The proportion of the contracts target (UDAs) that dentists did not reach in Bristol, North Somerset, and South Gloucestershire resulted in, the last three years, a clawback of contract value to the tune of £5,604,177.

1.14 62% of treatments were Band 1, 24% Band 2, 4% Band 3 and 10% urgent treatment. This shows comparable levels of Band 1, 2 and 3 treatments and a higher level of urgent treatment when compared to national and regional levels. More urgent care tends to reflect lower levels of regular routine dentistry. It may also reflect the difficulty some people face in accessing NHS dentistry. Further examination of urgent care shows a higher proportion of non-paying adults (16%) and paying adults (11%) accessing urgent care.

1.15 Fluoride varnish application rates are higher than the rate in the South West with 49% of the child population. Oral cancers rates in Bristol are 17.28 per 100,000, which is higher than the England and South West rates and in North Somerset it is

[1] NHS Dental Services, NHS Business Services Authority (BSA).

12.49 per 100,000 and in South Gloucestershire it is 11.91 per 100,000 both lower than the South West and England rate.

1.16 Data suggests some key areas for prioritisation. These include:

- The projected increase in the older adult age groups may result in an increase in demand for fillings and bridges (restorative treatments). Many may already have a heavily restored dentition and treatment may require complex treatment. Additionally, some of them may be suffering with multiple chronic conditions and take multiple medications which may affect their oral health. Some frail, elderly patients may also require domiciliary care.
- Pockets of deprivation across the STP area suggest the potential need for targeted interventions where possible and feasible.
- Tackling obesity may require joint working between stakeholders to support the development of healthy eating policies in school and preschool settings.
- Stakeholders might wish to explore the issues around the participation in National Dental Epidemiological Surveys for Bristol, North Somerset, and South Gloucestershire.
- Operationally there is a case for further targeting resources to facilitate access to NHS dentistry in the STP area to meet the levels consistent with the South West.
- Further support to NHS dental service providers may be required in order to ensure delivery against contracted activity.

1.17 The key priorities emerging out of both Healthwatch in Bristol, North Somerset, and South Gloucestershire and the patient and public surveys are summarised below. These provide commissioners with real insight into the priorities and concerns of patients in the area:

  - More access to NHS dentists in your locality should be made easier
  - Better dentist allocation to key localities in the county (this is addressed in 1.18 below)
  - NHS dentistry should be affordable.
  - Finding a private dentist is easy, there need to be more NHS dentists.
  - Improve the quality of care.
  - Increase capacity in all areas.
  - NHS Dentistry should provide all services that are available through private dentists.
  - Reduce waiting list.
  - Urgent appointments should be easier to get for broken teeth and infections.
  - Work with young people to promote life-long good oral health.

Key Priorities

1.18 The levels of **access to NHS dentistry** in Bristol, North Somerset, and South Gloucestershire STP are generally above the regional and national average for both children and adults but there is significant variability between inner city and rural areas:

1.18.1 NHS Digital data for 2019-2020 shows that access for children in South Gloucestershire Council (50.3%) was below England (53%) and the South West (54%).

1.18.2 Stakeholder engagement has strongly supported this, highlighting significant barriers for accessing dental care as there are poor public transport links and low levels of car ownership in more deprived, areas including South Bristol and Weston Super Mare.

1.18.3 The population in Bristol, North Somerset, and South Gloucestershire is set to grow by 8% (an additional 76,192 people) in the next 8 years. The highest growth is projected to be in the older adult (65+) group which will increase by 13% (an additional 21,826 people).

1.18.4 The UDA rates per person in the STP (1.65) was higher than the South West rate (1.52). This may require the apportionment of UDAs to those people in greatest need of NHS dentistry. There is significant variability of UDAs values with the average of £25.13 (lowest £19.71 to highest £34.23).

1.18.5 Additional NHS dentistry will need to be targeted to those areas of greatest deprivation and demand in the County. Bristol has 41 LSOAs in the most deprived 10% in England for Multiple Deprivation, including 3 LSOAs in the most deprived 1% in England.

1.18.6 The residents engaged both through the survey and through focus groups raised the difficulty they have had in accessing an NHS dentist, often experiencing extensive waiting times and with many dentists not opening their lists a-to any further patients.

1.19 There is a need to **support targeted programmes** to reflect the diversity of the population in the STP and reduce inequalities. This is emphasised for a number of reasons.

1.19.1 There are proportionally more people of working age in the county (64%) compared to the average for the South West of England (60%). The highest proportion is in Bristol (69%) and the lowest is in North

Somerset (58%). Most people of retirement age are in North Somerset (24%) and the least are in Bristol (13%).

1.19.2 By 2028 the proportion of older adults (65+) in Bristol, North Somerset and South Gloucestershire STP will have grown by 13% (an additional 21,826 people). The projected increase in the proportion of older adults may have implications for the increase of demand for treatment.

1.19.3 There were significant differences within the STP in terms of ethnic diversity. The highest BAME population is in Bristol (16%), making Bristol more diverse in comparison to England. North Somerset has the lowest proportion of people from BAME groups at 3%. Oral health improvement programmes need to take into account these factors for targeted provision of services.

1.20 There is a need to **support the recruitment and retention of dentists** providing NHS services.

1.20.1 Stakeholder feedback has highlighted recruitment and retention concerns for dentist in rural and coastal areas.

1.20.2 Joint action with local partners (LDN/LDC, HEE, local authorities) to facilitate recruitment of dentists and other members of the dental team in rural areas.

1.21 There is evidence that there is **difficulty being experienced by Dentists in meeting their contractual targets.**

1.21.1 The annual increase of the under delivery of NHS contracts has resulted in £5,6M[2] being clawed back from providers who did not reach their activity targets in 2018/19

1.21.2 There is a risk for future service provision because of the commercial viability of certain contracts.

1.21.3 General dental practitioners responding to the Stakeholders surveys from Bristol, North Somerset and South Gloucestershire identified concerns regarding the GDS contract and the fulfilment of UDA targets.

[2] Figure relates to Bristol North Somerset, Somerset and South Gloucestershire.

1.22 There are a range of **further oral health priorities that have emerged through this OHNA**. Many of these will require support from key partners and in some cases, they would be best served through partnership work. These include:

1.22.1 Carers of children and adults with learning disabilities may require additional training and support in techniques to help support the oral health of those they care for.

1.22.2 Promoting early dental attendance and supporting programmes like Dental Check by One (DCb1)[3].

1.22.3 Having been unable to carry out/complete and or report on the recent national dental survey for Adults in Practice 2019 there is a critical need to ensure participation in future surveys is secured for Bristol, North Somerset and South Gloucestershire. This is essential in order to gather more granular information about the current status and trends of oral disease in the STP area and allow comparisons.

1.22.4 To address the needs of residents in domiciliary care and to ensure that services providing for these people are based on evidence-based interventions and that training programmes for health, social care and domiciliary care staff should be available[4].

1.22.5 Target resources to areas of higher deprivation across the STP area. These targeted interventions could include joint interventions with local authority partners such as:

- Supervised toothbrushing programmes for nurseries and primary schools in areas where children are at high risk of poor oral health.
- Provision of toothbrushes and paste by health visitors and by post.
- Targeting of oral health programmes for key vulnerable groups in the community including the substance misusing population, those who are homeless, the traveler and gypsy community, older people, migrant communities and many who are deemed to be socially isolated.
- Developing the capacity of the oral health improvement workforce and health, social care and educational professionals.
- Reorientating the dental practices towards prevention.

1.22.6 As different areas within the region presents higher prevalence of smoking, alcohol consumption and obesity, partners may wish to support the integration and signposting between dental service providers and

[3] https://dentalcheckbyone.co.uk/
[4] https://www.e-lfh.org.uk/

locally commissioned health improvement programmes in line with the Making Every Contact Count[5] (MECC) model.

2 Introduction

2.1 The Bristol, North Somerset and South Gloucestershire Sustainability and Transformation Partnership has developed Healthier Together which represents a commitment to work together on improving health and care.

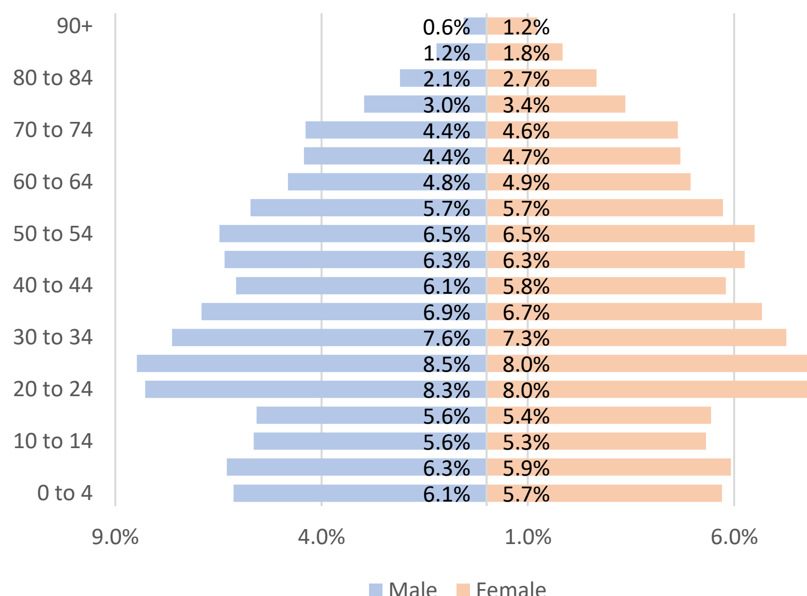
2.2 This section will set out the oral Health needs and profile for Bristol, North Somerset and South Gloucestershire, starting with its demographics, risks and determinants of poor oral health, relevant national epidemiology research findings, local oral health services, oral health improvement programmes and key findings for the oral health of the local population.

3 Demographics

Gender and Age

3.1 The population of Bristol, North Somerset and South Gloucestershire is an estimated 912,166[6]. The population is equally split between females and males whereas across England 49% of the population is male and 51% are female. The age and gender profile of the population of Bristol, North Somerset and South Gloucestershire is set out in the population pyramid below.

Chart 1: Gender and Age Bristol, North Somerset and South Gloucestershire: ONS Mid -18 Estimates



[5] https://www.makingeverycontactcount.co.uk/
[6] ONS mid-2018 estimates

3.2 64% of the population of Bristol, North Somerset and South Gloucestershire are of working age, (16 to 64 years), 17% are of retirement age (65 years and over) and 18% are children and young people (aged under 16 years). This age distribution is broadly similar in comparison to England as a whole. This age profile at local authority level varies – in North Somerset, 24% of the population are of retirement age, higher compared to England (18%), Bristol and South Gloucestershire have a higher proportion of their population that are of working age (69% and 63%). The age profile is set out below.

Table 1: Age Bristol, North Somerset and South Gloucestershire: ONS Mid -18

	Children and young people (under 16 years)		Working-age population (16-64 years)		Retirement age population (65 years and older)		Total population
	(n)	(%)	(n)	(%)	(n)	(%)	(n)
North Somerset	38863	18%	124109	58%	50947	24%	213919
Bristol, City of	85677	18%	317778	69%	59950	13%	463405
South Gloucestershire	52963	19%	176931	63%	52750	19%	282644
NSBSG	177503	18%	618818	64%	163647	17%	959968
South West	986908	18%	3382627	60%	1230200	22%	5599735
England		18%		64%		18%	

Population projections

3.3 A review of the subnational population project for England (2018)[7] indicates the projected future populations for English local and health authorities. The data below for Bristol, North Somerset and South Gloucestershire has been taken from the CCG dataset. This data has been broken down by total population shift, shifts in the child (0-15) population and shifts to the older population (65+). It is defined by total counts, the additional numbers of people in each category and the level of growth based on a percentage (%) against the 2018 figure.

Table 2: NHS Bristol, North Somerset and South Gloucestershire Population Projections 2018-2043

Population growth	2018	2023	2028	2033	2038	2043
Total Population shift	959968	1000204	1036160	1070974	1103847	1135120
Additional people		40236	76192	111006	143879	175152
% Growth		4%	8%	12%	15%	18%
0 to 15 population shift	177503	182526	183291	187165	195453	204509
Additional Young people		5023	5788	9662	17950	27006
% Growth		3%	3%	5%	10%	15%
65+ population shift	163647	172845	185473	200179	209818	213542
Additional older People		9198	21826	36532	46171	49895
% Growth		6%	13%	22%	28%	30%

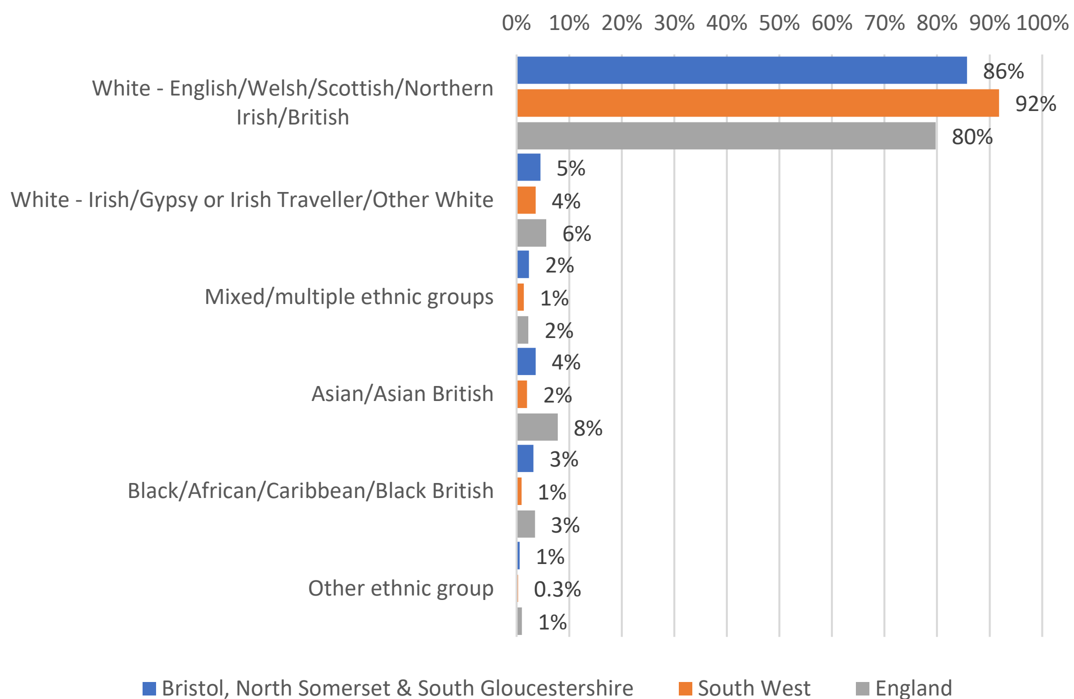
[7] Subnational population Projections for England 2018
https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/subnationalpopulationprojectionsforengland/2018based

3.4 What is evident from this analysis is that by 2028 the total population of Bristol, North Somerset and South Gloucestershire will have grown by 8% (an additional 76,192 people), the child population will have only grown by 3% (5,788) and the older adult (65+) population will have grown by 13% (an additional 21,826 people). This demographic change may inform the planning of dental services around the increase for older people's dental needs. The shift in the child population suggests that there will be marginally more child patients, and this will not significantly impact on the oral health needs of children in the STP area.

Ethnicity

3.5 There is less ethnic diversity in the population of Bristol, North Somerset and South Gloucestershire compared to England, 10% of the population are from BAME groups whilst across England this group represents 15%. The proportion of the population that are from BAME groups in Bristol, North Somerset and South Gloucestershire is higher than for across the South West (5%).

Chart 2: Ethnic profile Bristol, North Somerset and South Gloucestershire, South West and England ONS 2011



3.6 Nonetheless, here are some clear variations in the ethnic profile at local authority area level – the highest BAME population is in Bristol (16%), making Bristol more diverse in comparison to England. North Somerset has the lowest proportion of people from BAME groups at 3%.

Table 3: Ethnic profile Bristol, North Somerset and South Gloucestershire, South West and England ONS 2011

	White - English/ Welsh/ Scottish/ Northern Irish/ British	White – Irish/ Gypsy or Irish Traveller/ Other White	Mixed/ multiple ethnic groups	Asian/ Asian British	Black/ African/ Caribbean/ Black British	Other ethnic group	Ethnic Minority (total)	BAME (total)
North Somerset	94%	3%	1%	1%	0.3%	0.2%	6%	3%
Bristol, City of	78%	6%	4%	6%	6%	1%	22%	16%
South Gloucestershire	92%	3%	1%	2%	1%	0.3%	8%	5%
Bristol, North Somerset & South Gloucestershire	86%	5%	2%	4%	3%	0.6%	14%	10%
South West	92%	4%	1%	2%	1%	0.3%	8%	5%
England	80%	6%	2%	8%	3%	1%	20%	14%

Deprivation

3.7 The area is relatively affluent, and there is widespread good health, but there are significant pockets of deprivation – with around one in ten people living in a deprived location. The STP has recognised that some people within their area experience high levels of illness linked to low income, poor housing or disability. Average life expectancy varies between those living in the most and least deprived areas by around six years, with some places seeing a startling 15-year difference. These health inequalities are unfair and more needs to be done to support those affected by many of the circumstances that are beyond an individual's control.

Deprivation in North Somerset[8]

3.8 North Somerset Council ranked as the 121st most deprived district out of 326 districts. North Somerset was the district with the 3rd highest inequality, as measured by the range in national ranking between the most and least deprived LSOAs in the district.

3.9 North Somerset had 5 LSOAs within the most deprived 5% in England, all within the South or Central wards of Weston-Super-Mare. There were 11 LSOAs within the

[8] https://www.n-somerset.gov.uk/sites/default/files/2020-02/indices%20of%20multiple%20deprivation%20briefing%20note%20November%202015.pdf

least deprived 5% in England and these were spread across the district. The more relatively deprived LSOAs in IMD 2010 had generally become more deprived and these were in Weston-Super-Mare.

Deprivation in Bristol[9]

3.10 The Indices of Deprivation 2019 reinforce previously identified patterns of deprivation across the city. Bristol continues to have deprivation 'hot spots' that are amongst some of the most deprived areas in the country yet are adjacent to some of the least deprived areas in the country (see Figure 1). The 10 most deprived neighbourhoods in Bristol are all in the South Bristol areas of Hartcliffe, Whitchurch Park and Knowle West. At ward level, the greatest levels of deprivation in Bristol are in the wards of Hartcliffe & Withywood, Lawrence Hill and Filwood, the same neighbourhoods identified in 2015.

- Bristol has 41 LSOAs in the most deprived 10% in England for Multiple Deprivation (one less than in 2015), including 3 LSOAs in the most deprived 1% in England (3 less than in 2015).
- One LSOA 'Hareclive' in Hartcliffe and Withywood ward is in the most deprived 100 neighbourhoods in England. 'Hareclive' is ranked 91st most deprived neighbourhood nationally compared to 67th most deprived in 2015. 'Bishport Avenue' also in Hartcliffe and Withywood was ranked 65th most deprived in 2015 and is now ranked 182nd.

3.11 The maps below set out those areas of deprivation based on the Index of Multiple Deprivation (IMD) indicators and highlight levels 1 and 2 (most deprived), levels 3 and 4, levels 5 and 6, levels 7 and 8 and levels 9 and 10 (least deprived) deprivation indicators.

Deprivation in South Gloucestershire[10]

3.12 Across South Gloucestershire the highest levels of deprivation are generally found within the Council's designated priority neighbourhoods (PNs). In terms of the IMD (the composite index) 13 of the 20 most deprived LSOAs in South Gloucestershire (65%) are located within PNs. This is lower than the figure for 2015 when 90% of the most deprived LSOAs in South Gloucestershire were in priority neighbourhoods, however it should be noted that less areas fall into priority neighbourhoods for the 2019 report as Filton is no longer considered to be a priority neighbourhood.

3.13 The pattern for most domains is similar with the majority of the top 20 most deprived LSOAs being within priority neighbourhoods, with the exception of the

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[9] https://www.bristol.gov.uk/documents/20182/32951/Deprivation+in+Bristol+2019.pdf/ff3e5492-9849-6300-b227-1bdff2779f80

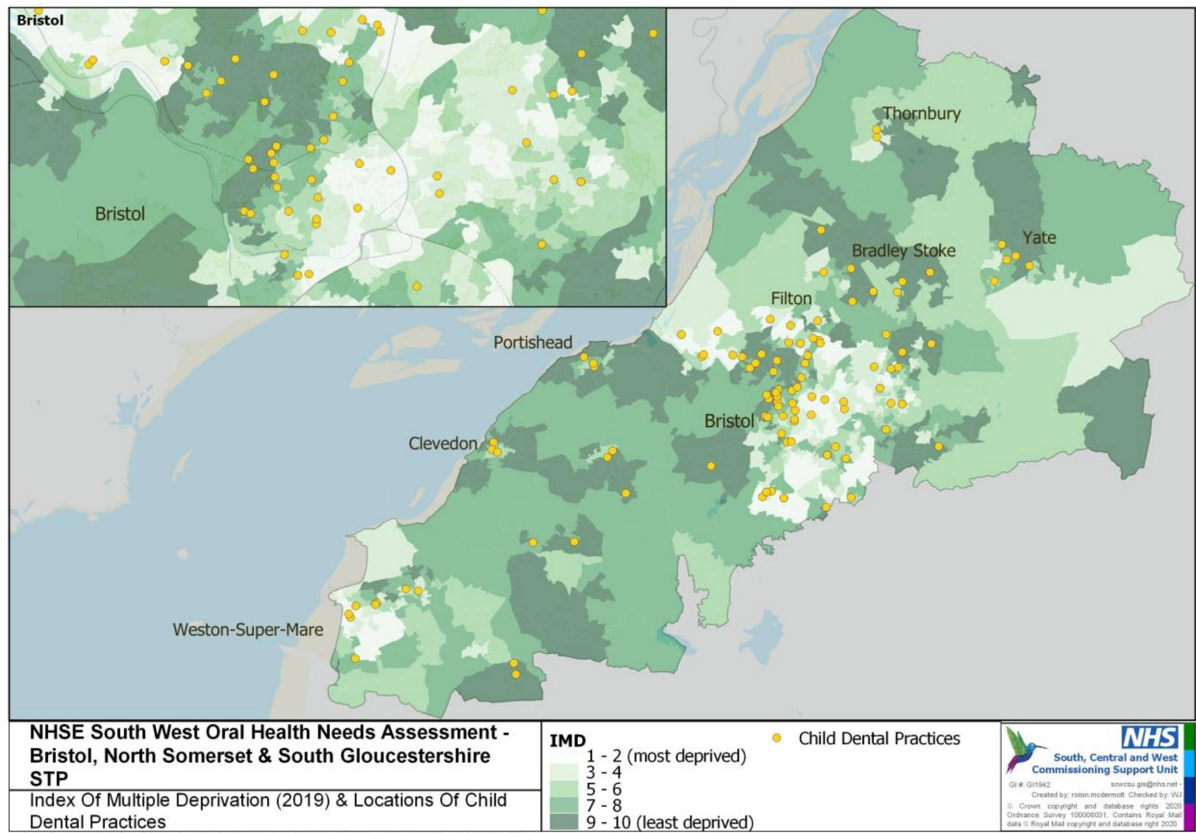
[10] https://www.southglos.gov.uk/documents/IOD-2019-Priority-Neighbourhood-Analysis.pdf

‘Barriers to housing and services’ domain (1 LSOAs within PNs) and the ‘Living environment’ domain (2 LSOAs within PNs)

- Staple Hill PN contains to be the most deprived LSOA in South Gloucestershire and is the only PN containing an LSOA within the most deprived 20% of LSOAs in England in terms of the IMD.
- All LSOAs within the Cadbury Heath and Patchway PNs are within National Quintile 2.

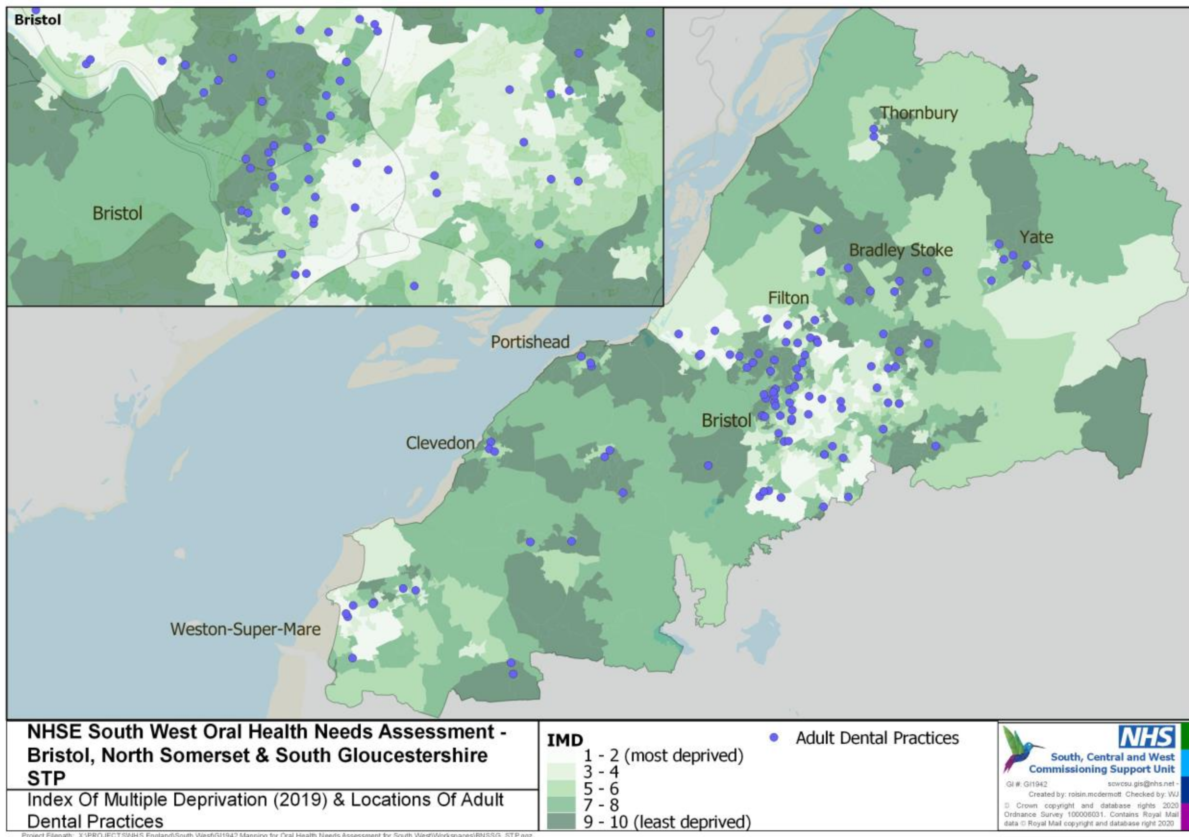
3.14 The maps below describe the index of Multiple Deprivation (2019) and sites the location of Dental Practices that provide for children.

Map 1: Bristol, North Somerset and South Gloucestershire IMD 2019 Child Dental practices[11]



[11] NHS South, Central and West Commissioning Support Unit Oct 2020

Map 2: Bristol, North Somerset and South Gloucestershire IMD 2019 Child Dental practices[12]



3.15 These maps suggest that there are certain deprived areas requiring additional provision of dental services This is critical given the established relationship between deprivation and poor oral health. This is particularly the case across Bristol, Weston-Super-Mare and Thornbury, where from a population density perspective there is a higher level of deprivation per head of population.

[12] NHS South, Central and West Commissioning Support Unit Oct 2020

4 Risks and determinants of poor oral health

4.1 Healthy behaviours can contribute to the prevention and control of non-communicable diseases such as cardiovascular diseases, chronic respiratory diseases, diabetes and cancers. PHE Fingertips and NHS Digital monitor trends in the nation's health and health related behaviours. It is important to consider these factors as certain chronic conditions share common risk factors with oral disease. Furthermore, the age profile of the region suggests a potential increase of the prevalence of chronic conditions which may have implications for the planning of dental services.

4.2 The under 75 mortality rate, per 100,000 from all Cardiovascular Disease in England in 2016-2018 was 71.7, however for the South West this rate per 100,000 was lower at 61.9, as were the rates for North Somerset and South Gloucestershire. Bristol however was higher at 78.3 per 100,000. The adult populations' diabetes prevalence profile (QoF 2018-19) for England was 6.93% and for the South West this was 6.65%; for Bristol this was 5.54%, for South Gloucestershire it was 5.38% and for North Somerset it was 6.68% which was lower than the national prevalence but higher than the South West prevalence. The under 75 mortality rate, per 100,000 from a respiratory disease considered preventable in 2016-2018 was 19.2 per 100,000 in England, and 15.6 in the South West. It was 22.6 in Bristol but only 14.1 in North Somerset and 10.2 in South Gloucestershire. The proportion of deaths in a person's usual place of residence (DiPUPR) from a respiratory disease in 2016 was 32.17% in England and was 38.25% in the South West. For the same indicate it was 34.95 in North Somerset, 33.91 in South Gloucestershire and 32.14 in Bristol. This data is set out in the table below:

Table 4: Health indicators, Cardiovascular disease, Diabetes prevalence and Respiratory disease, national, regional and local

Indicator	England	South West region	Bristol	North Somerset	South Gloucestershire
Under 75 mortality rate per 100,000 from all cardiovascular diseases[13]	71.7	61.9	78.3	62.6	55.8
Diabetes: QOF prevalence (17+) (%)[14]	6.93	6.65	5.54	6.68	6.38
Under 75 mortality rate per 100,000 from respiratory disease considered preventable (Whole Pop)[15]	19.2	15.6	22.6	14.1	10.2
DiPUPR - Respiratory disease (%), Persons, All Ages.[16]	32.17	38.25	32.14	34.95	33.91

4.3 The key health behaviours reviewed in this OHNA have been healthy eating, physical activity levels (adults), obesity (child and adult), alcohol misuse and

[13] PHE: Public Health Profiles: Fingertips 2016-18
[14] PHE: Public Health Profiles: Fingertips 2018-19
[15] PHE: Public Health Profiles: Fingertips 2016-18
[16] PHE: Public Health Profiles: Fingertips 2016

smoking prevalence. These lifestyle health behaviours are pertinent to general health and wellbeing as well as oral health.

Healthy Eating

4.4 A healthy and balanced diet is critical to preventing ill health and disease. The annual cost of food related ill health to the NHS is estimated at £5.8 Billion[17]. A minimum intake of five portions of fruit and vegetables is an important component of a healthy diet and is the measure used for healthy eating. The proportion of the population aged 15 that eat 5 portions of fruit and vegetables is 52.4% in England and higher at 56.5% in the South West. This was higher again in North Somerset, however in both Bristol and South Gloucestershire the rate was greater than the national rate but below the South West average. The proportion of the adult population meeting the recommended 5-a-day on a usual day was 54.61%, although this was greater in the South West with 59.55% and in in Bristol 58.86%. However, for North Somerset and South Gloucestershire the proportion was lower than both the national and South West profile with 54.18% and 52.61% respectively.

Table 5: Healthy Eating indicators 5-a-day 15 year olds and adults national, regional and local

Indicator	England	South West region	Bristol	North Somerset	South Gloucestershire
Percentage who eat 5 portions or more of fruit and veg per day at age 15[18]	52.4	56.5	52.9	59.9	54.8
Proportion of the population meeting the recommended '5-a-day' on a 'usual day' (adults)[19]	54.61	59.55	58.86	54.18	52.61

Physical activity levels (adults)

4.5 Lack of physical activity is an important risk factor for chronic non-communicable diseases such as ischemic heart disease and stroke with an estimated direct cost to the NHS of £1.1 billion and the country of £7.4 Billion[20]. Guidelines for physical activity suggest adults (aged 16 and over) should have 150 minutes of activity or moderate intensity a week. Th Active Lives Survey[21] commissioned by Sport England and the PHE Physical Activity survey data[22] differ slightly in their definition of what is included as activity. With PHE including non-recreational exercise, i.e. gardening, in their assessment of activity. The Active People data shows that the

[17] The Burden of Food Related Ill Health in the UK; Epidemiology in Community Health Dec 2005

[18] PHE: Public Health Profiles: Fingertips 2014-15
[19] PHE: Public Health Profiles: Fingertips 2018-19
[20] PHE: Everybody active everyday Oct 2014
[21] Sport and physical activity levels Adults aged 16+ Nov 18 – Nov 18 % published Sport England Active Lives 23rd April 2020
[22] PHE: Physical activity levels among adults in England, 2015

South West region has a slightly higher level of active residents with 67.4% as compared to England with 63.6%. The rate of active people was highest in Bristol from within this cluster with 70.6% followed by South Gloucestershire with 65.5% and North Somerset with 63.9%. Correspondingly the level of inactive residents is 20.8% in the South West as compared to 24.6% for England. In Bristol it was 17.5%, in South Gloucestershire it was 20.3% and in North Somerset it was 21.3%.

Table 6: Physical activity levels national, regional and local

Indicator	England	South West region	Bristol	North Somerset	South Gloucestershire
Active (150+ minutes a week)	63.6	67.4	70.6	63.9	65.5
Fairly Active (30-149 minutes a week)	12.2	11.8	11.9	14.9	14.2
Inactive (<30 minutes per week)	24.6	20.8	17.5	21.3	20.3
% Active (150+ mins a week)	57	59.2	62.2	60.9	60.1
% Some activity (90-149 mins a week)	6.9	7.1	7.6	5.1	5.7
% Low activity (30-89 mins a week)	7.4	7.3	5.2	9.5	8.8
% Inactive (<30 mins)	28.7	26.3	25	24.5	25.5

Obesity (Child and Adult)

4.6 Whilst not exactly a health-related behaviour, being overweight or obese is usually associated with an unhealthy diet and lack of physical activity. Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. Obesity in adults is associated with cardiovascular diseases, diabetes, musculoskeletal disorders, and some cancers. It is estimated that the NHS spent £6.1 billion on overweight and obesity-related ill-health in 2014 to 2015.[23]

4.7 The annual child weight measurement programme is completed locally and is fed into the national database held by PHE. The data set out below is taken from PHE Fingertips data for 2018-19.

4.8 South West profiles for Reception and Year 6 prevalence of overweight including obesity are slightly below the England prevalence, North Somerset is above this rate at 24.80. The South West profiles for Reception and Year 6 prevalence of obesity are also below the England prevalence. Bristol is slightly above the national rate for Reception obesity prevalence. All are below the obesity prevalence for Year 6 children although Bristol is above the regional rate. The percentage of adults in the South West classified as overweight and obese is 61.35% compared to England at 62.34%. Bristol has a profile of 54.83%, South Gloucestershire 62.28% and North Somerset 62.06%

[23] Health matters obesity and the food environment PHE March 2017.

Table 7: Overweight and Obesity levels children and adults national, regional and local

Indicator[24]	England	South West region	Bristol	North Somerset	South Gloucestershire
Reception: Prevalence of overweight (including obesity) (%)	22.59	22.05	22.20	24.80	19.91
Year 6: Prevalence of overweight (including obesity) (%)	34.29	29.88	31.48	26.86	28.43
Reception: Prevalence of obesity (including severe obesity) (%)	9.68	8.74	9.87	9.55	7.72
Year 6: Prevalence of obesity (including severe obesity) (%)	20.22	16.52	18.41	14.37	15.77
Percentage of adults (aged 18+) classified as overweight or obese (%)	62.34	61.35	54.83	62.06	62.28

Alcohol misuse

4.9 Alcohol use can affect health and increases the risks of accidents, injury, and violence. The health harms of alcohol are dose dependent; that is, the risk increases with the amount drunk.

4.10 The recommended limits to avoid the risk of alcohol-related harm are no more than 21 units per week in men and 14 units per week in women. Adults who regularly drink more than these amounts are at increased risk. Men and women who regularly drink more than 6 units a day (or 35 units a week) and more than 8 units a day (or 50 units a week) respectively, are higher risk drinkers and are more exposed to harm. The proportion of adults over the age of 16 years who are higher risk drinkers is described below, with the South West figure at 3.21% compared to England at 4.04%. Bristol and North Somerset have a higher rate of admissions for alcohol specific conditions and Bristol has a higher alcohol related mortality rate per 100,000.

Table 8: Alcohol hospital admissions, mortality rates and consumption rates national, regional and local

Indicator	England	South West region	Bristol	North Somerset	South Gloucestershire
Admission episodes per 100,000 for alcohol-specific conditions[25]	869.25	814.97	1399.32	903.03	875.30
Alcohol-related mortality per 100,000[26]	46.54	45.55	56.76	43.81	36.27
Admission episodes for alcohol-related conditions (Broad) per 100,000[27]	2367.40	2142.39	2997.59	2428.00	2401.03

[24] PHE: Public Health Profiles: Fingertips 2018-19
[25] PHE: Public Health Profiles: Fingertips 2018-19
[26] PHE: Public Health Profiles: Fingertips 2018
[27] PHE: Public Health Profiles: Fingertips 2018-19

Indicator	England	South West region	Bristol	North Somerset	South Gloucestershire
Estimated weekly alcohol consumption, by region: More than 14, up to 35/50 units (increasing risk) Age Standardised %[28]	18.18	19.56	No Data	No Data	No Data
Estimated weekly alcohol consumption, by region: More than 35/50 units (higher risk) Age Standardised %[29]	4.04	3.21	No Data	No Data	No Data

Smoking prevalence

4.11 Tobacco use is a risk for cancers and chronic respiratory and circulatory disease[30]. In England tobacco smoking is the greatest cause of preventable illness and premature death.

4.12 The 2009 Adult Dental Health Survey reported that more men than women smoked, and that smoking was socially patterned, with 8.8% of participants smoking in the least deprived areas compared to 26.4% in the most deprived. The 2018 Health Survey for England shows that 10% of current smokers lived in the least deprived areas whereas 28% of smokers lived in the most deprived areas. This suggests that smoking prevalence is becoming more concentrated in deprived areas.

4.13 The indicators for smoking prevalence show a level of variance from survey to survey. In England just under 10.6% of women were smokers at the time of delivery. This was higher at 10.9% in the South West and in Bristol, North Somerset and South Gloucestershire the rate was lower at 10.10%. The prevalence of adult smokers (QoF) 2018 showed that 17.2% of the population were smokers in England, compared to 16.5% in the South West, 20.53% in Bristol, 15.84% in North Somerset and 14.46% in South Gloucestershire. The GP Survey in 2018-19 showed that 14.5% of over 18-year olds were smokers compared to 13.7% in the South West, 16.94% in Bristol, 12.94% in North Somerset and 10.81% in South Gloucestershire.

[28] Health Survey for England 2018
[29] Health Survey for England 2018
[30] WHO

Table 9: Smoking prevalence rates national, regional and local

Indicator	England	South West region	Bristol	North Somerset	South Gloucestershire
Smoking status at time of delivery (%)[31]	10.59	10.91	10.10	10.10	10.10
Estimated smoking prevalence (16+) (QOF)[32]	17.19	16.50	20.53	15.84	14.64
Smoking prevalence in adults (18+) - current smokers (GPPS)[33]	14.46	13.75	16.94	12.94	10.81

Oral hygiene practices

4.14 The most prevalent oral diseases, tooth decay and gum diseases can both be prevented by regular tooth brushing with fluoride toothpaste. The fluoride in toothpaste is the important ingredient of tooth brushing as it prevents, controls and arrests decay. Higher concentrations of fluoride in toothpaste leads to better control. By contrast, the physical removal of plaque is the important element of tooth brushing to control gum diseases as it reduces the inflammatory response of the gum and its consequences.

4.15 In 2008/09, most 12-year-old schoolchildren in the South West reported brushing their teeth twice daily (73%), the same proportion as the national average.

5 Transport and Communications in Bristol, North Somerset and South Gloucestershire

5.1 There are many people across the country who are not able to access important local services and activities such as jobs, learning, healthcare, food shopping or leisure as a result of a lack of adequate transport provision[34]. The University of Leeds report demonstrates that mobility and accessibility inequalities are highly correlated with social disadvantage. This means that some social groups are more at risk from mobility and accessibility inequalities than others:

- Car owners are the least mobility constrained across all social groups.
- Lowest income households have higher levels of non-car ownership, 40% still have no car access – female heads of house, children, young and older

[31] PHE: Public Health Profiles: Fingertips 2018-19
[32] PHE: Public Health Profiles: Fingertips 2018
[33] PHE: Public Health Profiles: Fingertips 2018-19
[34] Inequalities in Mobility and Access in the UK Transport Social and Political Science Group, Institute for Transport Studies, University of Leeds March 2019 Systemhttps://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784685/future_of_mobility_access.pdf

people, black and minority ethnic (BME) and disabled people are concentrated in this quintile.

- In addition, there are considerable affordability issues with car ownership for many low-income households.

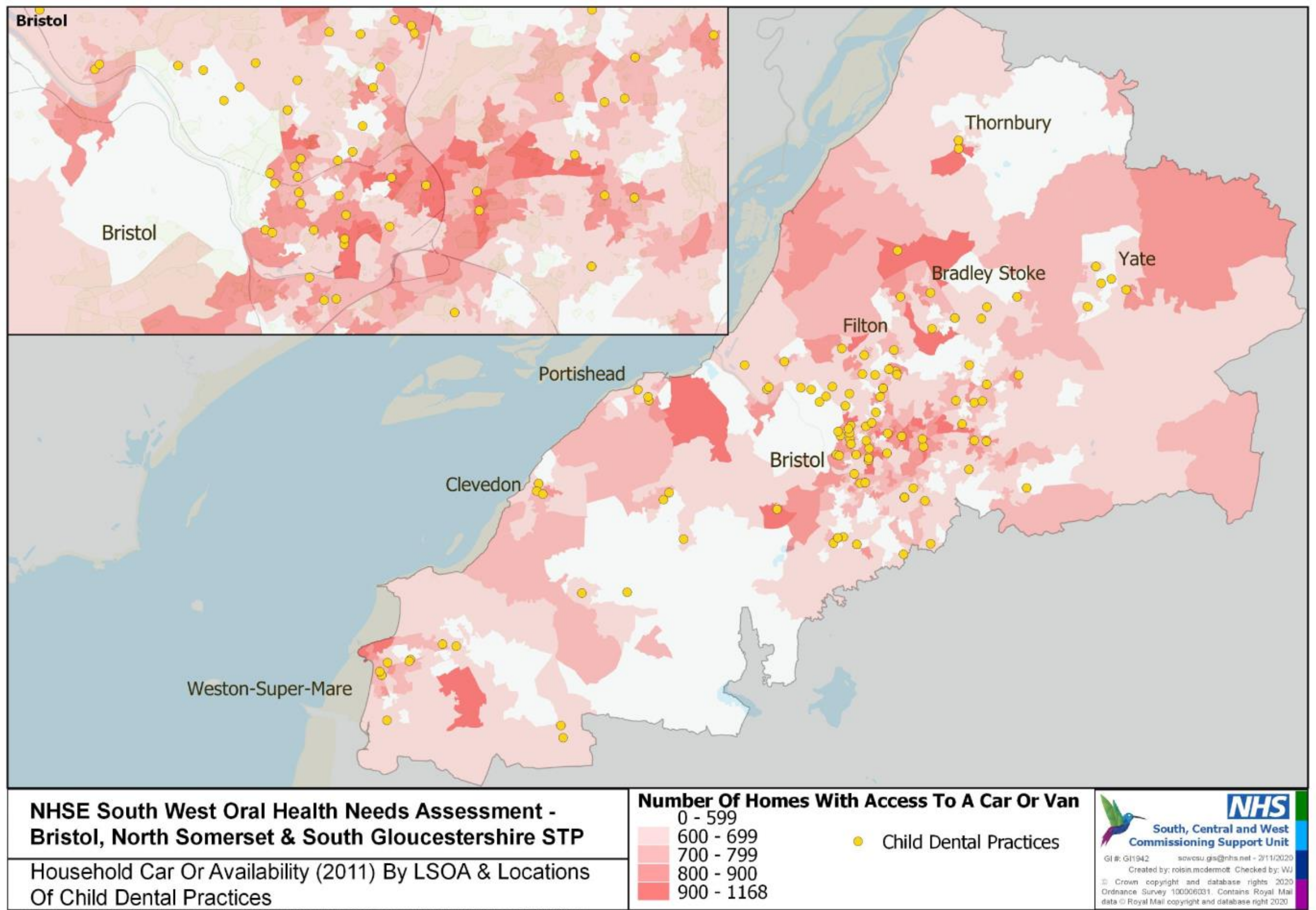
5.2 Inequalities in the provision of transport services are strongly linked with location of residence, this is further exemplified in rural and coastal communities. However, the lack of private vehicles in low-income households, combined with limited public transport services in many peripheral social housing estates, considerably exacerbates the problem in many parts of the UK.

5.3 In 2003 the Social Exclusion Unit report 'Making the Connections[35]' identified that two out of five job seekers could not get a job due to a lack of transport, 31% of people without cars could not access a hospital, 16% of households without cars found it difficult to access a supermarket, and 6% of 16- to 18-year-olds turned down training or further education because of travel costs.

5.4 The recent public and patient survey has shown that 72.4% of respondents travelled to their local dentist by car, 6.9% by public transport and 20.7% by walking/bicycle. To support this OHNA we have worked with the NHSE South West Commissioning Support Unit to identify the level to which people across the area have access to a car or a van, this has been overlayed with the location of dental practices which provide for both children and adults.

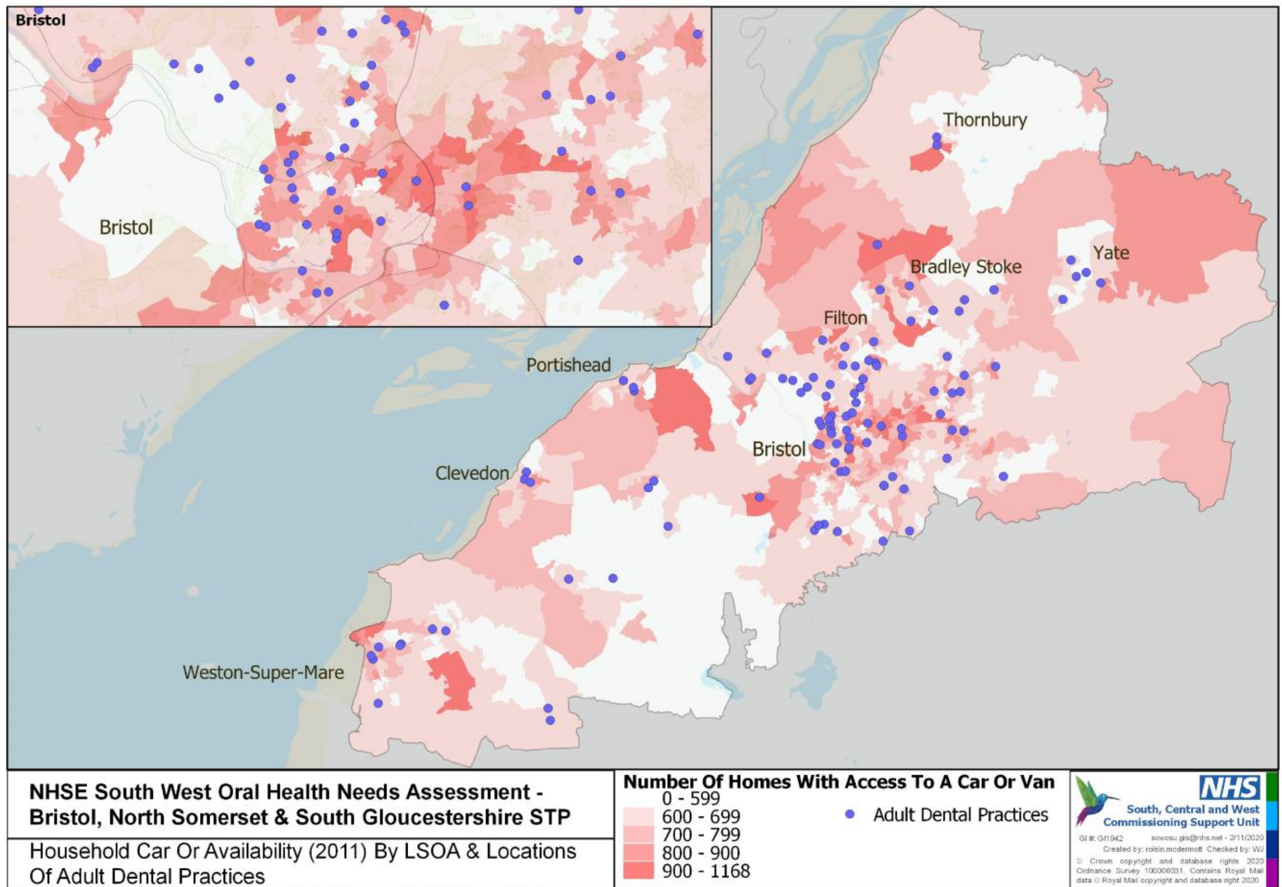
[35] Social Exclusion Unit 2003 Making the Connections. http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/---invest/documents/publication/wcms_asist_8210.pdf

Map 3: Household Car or Van availability (2011) by LSOA and locations of Child Dental Practices[36]



[36] NHS South Central and West Commissioning Support Unit Oct 2020

Map 4: Household Car or Van availability (2011) by LSOA and locations of Adult Dental Practices[37]



5.5 These maps show that there are key areas across the STP where car ownership is lower and if correlated to existing dental provision can identify those areas where there is priority for investment both due to inaccessibility or low car ownership and due to the lack of high street dentistry.

6 National Dental Epidemiology Research Findings

6.1 The table below sets out the headline findings for Bristol, North Somerset and South Gloucestershire from the National Dental Epidemiology programme research undertaken for 3-year-olds (2013), 5-year-olds (2019), 12-year-olds (2008-09) and adults in practice (2018). It sets out comparators for England and the South West.

[37] NHS South Central and West Commissioning Support Unit Oct 2020

Table 10: NDEP Headline results for Bristol, North Somerset and South Gloucestershire

3-year-old 2013	England	South West region	Bristol	North Somerset	South Gloucestershire
3-year-old % tooth decay (% d3mft > 0 including incisors)	11.7	10.4	15.3	11.1	1.9
3-year-old Number of teeth with decay experience (Mean d3mft including incisors)	0.36	0.31	0.73	0.31	0.03
5-year-olds 2019	**England**	**South West region**	**Bristol**	**North Somerset**	**South Gloucestershire**
5-year-old % tooth decay (% d3mft > 0 including incisors)	23.4	20.4	15.5	13.9	14.3
5-Year-old Number of teeth with decay experience (Mean d3mft including incisors)	0.8	0.6	0.5	0.3	0.3
5-Year-old Number of teeth with decay experience (Mean d3mft including incisors) 2017	0.80	0.60	0.8	0.4	0.6
Care Index % (ft/d3mft)	10.3	10.9	8.7	8.3	13.3
12-year-olds 2008-09	**England**	**South West region**	**Bristol**	**North Somerset**	**South Gloucestershire**
12-year-old % tooth decay (% d3mft > 0 including incisors)	33.4%	33.3%	39.8%	33.9%	29.3%
12-year-old Number of teeth with decay experience (Mean d3mft including incisors)	0.74	0.73	1.06	0.71	0.53
12-year-old Care Index % (ft/d3mft)	47%	47%	42%	47.8%	41.8%
Adults in Practice 2019	**England**	**South West region**	**Bristol**	**North Somerset**	**South Gloucestershire**
Adult in Practice % with a functional dentition	81.9	82.2	No Data	No Data	No Data
Adult in Practice % with active decay (DT>0)	26.8	31.5	No Data	No Data	No Data
Adult in Practice Average number of decayed teeth (for those with active decay)	2.1	1.9	No Data	No Data	No Data
Adult in Practice % with filled teeth	90.2	90.8	No Data	No Data	No Data
Adult in Practice % with dentures	15.4	14.4	No Data	No Data	No Data
Adult in Practice % with bleeding on probing	52.9	69.2	No Data	No Data	No Data
Adult in Practice % with PUFA	5.2	6.5	No Data	No Data	No Data
Adult in Practice % with any treatment need	70.5	81.9	No Data	No Data	No Data
Adult in Practice % with an urgent treatment need	4.9	8.2	No Data	No Data	No Data

7 Oral Health Services

7.1 The current primary care NHS dental contracts, the General Dental Service Contract and Personal Dental Service Agreement, were introduced in 2006. The contracting currency for both contracts is the Unit of Dental Activity (UDA). A general dental service provider is contracted for an annual agreed number of units of dental activity.

7.2 Dental practices provide services according to four different bands of care with the provider awarded different numbers of UDAs for each band:

Band 1	includes an examination, diagnosis and advice. If necessary, it also includes, x-rays, scale and polish, application of fluoride varnish or fissure sealants and preventive advice and planning for further treatment (1 UDA).
Band 2	includes all treatment covered by Band 1, plus additional treatment, such as fillings, root canal treatment, gum treatments and removal of teeth (3 UDAs).
Band 3	includes all treatment covered by Bands 1 and 2, plus more complex procedures, such as crowns, dentures and bridges (12 UDAs).
Band 4 urgent	includes urgent care such as removal of the tooth pulp, removal of up to two teeth, dressing of a tooth and one permanent tooth filling (1.2 UDAs).

7.3 Fee paying adults contribute towards the costs of NHS dental treatment with the contribution determined by the band (the patient contribution is the same for Band 1 and Band 4 urgent).

Availability of general dental services

7.4 In 2019/2020, 705 dental practices across the South West were contracted by the NHS to provide a total of 8,520,528 UDAs. In Bristol, North Somerset and South Gloucestershire 105 practices were commissioned to deliver 1,587,814 UDAs. The amount dentists were paid per UDA varied considerably from £1.9.71 to £34.23.

Table 11: Primary Care General Dental Services Provision across the South West

Sustainable Transformation Partnership (STP)	Contracts GDS and Ortho	General Dental Services/Mixed GDS and Ortho	Number of Practices	Commissioned UDAs	Average UDA Value	Ortho Only
Bristol, North Somerset and South Gloucestershire	113	108	105	1,587,814	£25.13 (Lowest £19.71 to highest £34.23)	5
Total	748	681	705	8,520,528	-	53

Numbers of Dentists[38]

7.5 In 2019/2020 there were 2,664 dentists in the South West delivering NHS dentistry. This represented 48 dentists per 100,000 population which is slightly higher than the national average of 44 per 100,000 population. In Bristol, North Somerset and South Gloucestershire there were 285 dentists delivering NHS dentistry.

7.6 The average across the South West is 48/100,000, higher than in England at 44/100,000, in Bristol, North Somerset and South Gloucestershire this is 50/100,000. The population per dentist in England is 2,268 which is higher than the population per dentist in the South West of 2,104, in Bristol, North Somerset and South Gloucestershire it is 1,908. In 2019/2020 Bristol, North Somerset and South Gloucestershire saw a decrease of 7 dentists (-1.4%).

Table 12: Number of dentists with NHS activity, for years ending 31 March, England - NHS England region geography and CCG[39]

			2019/20		
Area	Dentists difference 2018/19 to 2019/20	Percentage difference 2018/19 to 2019/20	Total dentists	Population per dentist[2]	Dentists per 100,000 population[2]
England	**139**	***0.6***	**24,684**	**2,268**	**44**
South West of England	**8**	***0.3***	**2,664**	**2,104**	**48**
NHS Bristol, North Somerset and South Gloucestershire CCG	**-7**	***-1.4***	503	1,908	52

Average UDAs commissioned per person.

7.7 Based on the numbers of commissioned UDA and comparing this to the general population in each locality across the South West it is possible to assess the average UDAs commissioned per person in the region. This shows a potential disparity in the proportionality of commissioned UDA by the local population sizes in each STP area.

[38] NHS Digital: https://digital.nhs.uk/data-and-information/publications/statistical/nhs-dental-statistics/2019-20-annual-report
[39] NHS Digital: https://digital.nhs.uk/data-and-information/publications/statistical/nhs-dental-statistics/2019-20-annual-report

7.8 What is clear is that there are higher levels per head of population of commissioned UDAs in Bristol, North Somerset and South Gloucestershire.

Table 13: Average UDAs commissioned per head of population

Area	Average UDAs commissioned per person (n)
Bristol, North Somerset and South Gloucestershire	1.65
Average for South West	1.52

Access to Dental Care

Children

7.9 Many children and adults will seek care from an NHS dental practice. Those with additional needs are generally seen in community dental services. According to NICE guidance, adults should be seen for a dental recall at intervals from 3 to 24 months and children should be seen at intervals from 3 to 12 months depending on their level of risk of oral disease[40]. Dental attendance does not necessarily prevent dental disease, but it is important in terms of assessing patient risk to oral diseases and giving appropriate evidence-based advice. Public Health England and NICE have developed specific guidance for dental teams[41]. The indicator used to assess dental access in children is the number of separate people accessing dental services over the previous 12 months.

7.10 From April 2019 to March 2020 access for child patients in the South West was 54.1%. The access levels for child patients is higher than the England average of 52.7%. In Bristol, the access level for child patients was 58.9%, in North Somerset the access level for children was 60.8%, both of which were above the South West and England average values. In South Gloucestershire, the access level for children was 50.3%, this is below the South West and England average for child dental access. (Source: NHS Dental Services: NHS Business Services Authority: June 2020).

Adults

7.11 The indicator used to assess dental access in adults is the number of separate people accessing dental services over the previous 24 months. This metric is based upon NICE guidance, which recommends the longest interval between dental

[40] The National Institute for Health and Care Excellence. Dental checks: intervals between oral health reviews: Clinical guideline [CG19] 2004 [Available from: https://www.nice.org.uk/guidance/cg19]

[41] The National Institute for Health and Care Excellence. Dental checks: intervals between oral health reviews: Clinical guideline [CG19] 2004 [Available from: https://www.nice.org.uk/guidance/cg19]

recalls[42]. From April 2019 to March 2020 access for adult patients in the South West overall had fallen by 1.51% to 47.3%. Access levels are slightly below the England average of 47.7%. In Bristol, the access levels for adults was 50.9%, in North Somerset the access levels for adults was 53.2% and in North Gloucestershire the access levels for adults was 50.1%, all of which were above the South West and England percentages. (Source: NHS Dental Services: NHS Business Services Authority: June 2020).

Table 14: Adult patients seen in the previous 24 months and child patients seen, in the previous 12 months as a percentage of the population, by patient type and LA[43]

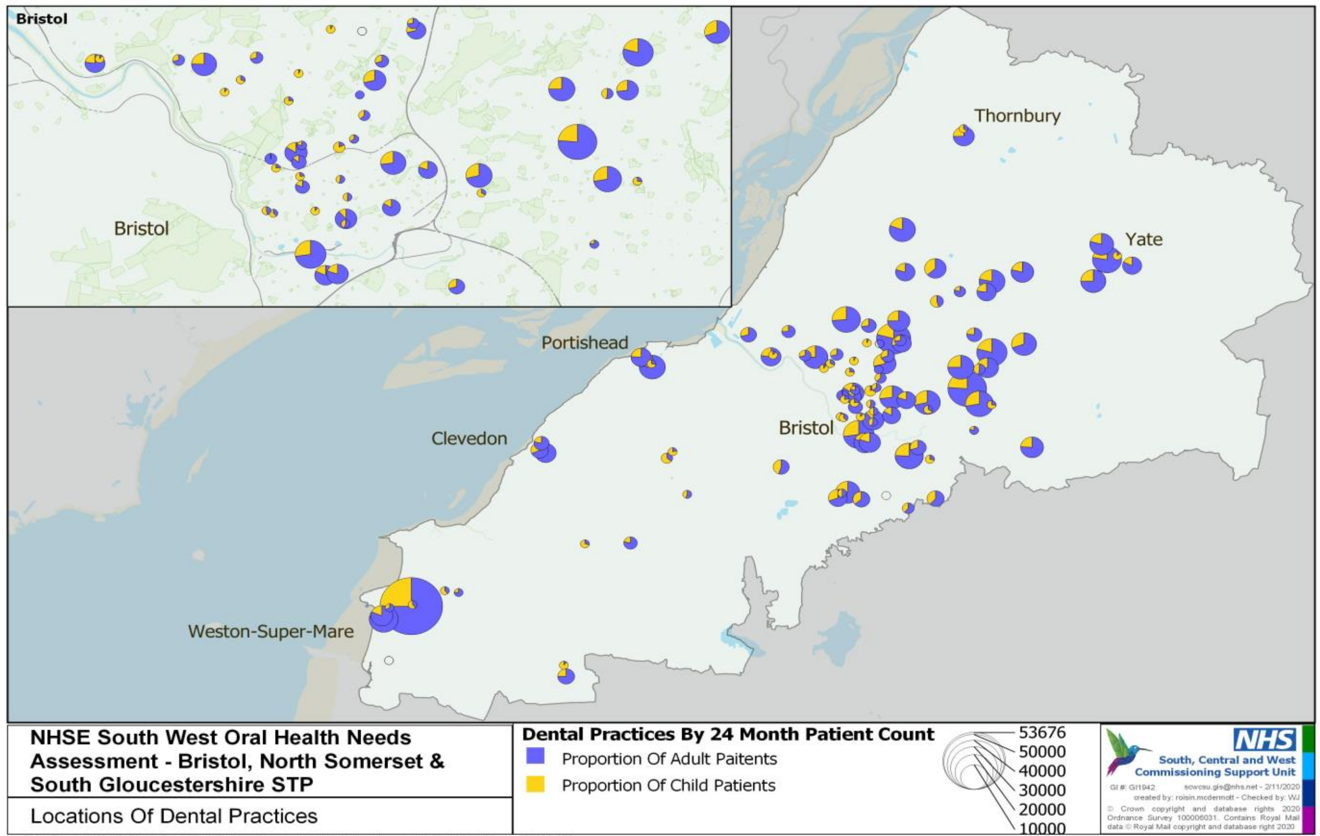
Area	Adult % of pop.	Child % of pop
England	47.1	52.7
South West	47.3	54.1
Bristol City Council	50.9	58.9
North Somerset District Council	53.2	60.8
South Gloucestershire Council	50.1	50.3

7.12 The map below sets out the activity of dental practices based on the count of patients seen, in the case of adults in the last 24 months and in the case of children in the last 12 months, as per the guidelines used by NHS Digital. What the map describes is the location of the practices across the region and the pie charts show the split and size of practice as per the legend.

42 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/215663/dh_126005.pdf

43 NHS Dental Services, NHS Business Services Authority (BSA).

Map 5: Local of Dental Practices by proportion of Adult and Child Patients[44]

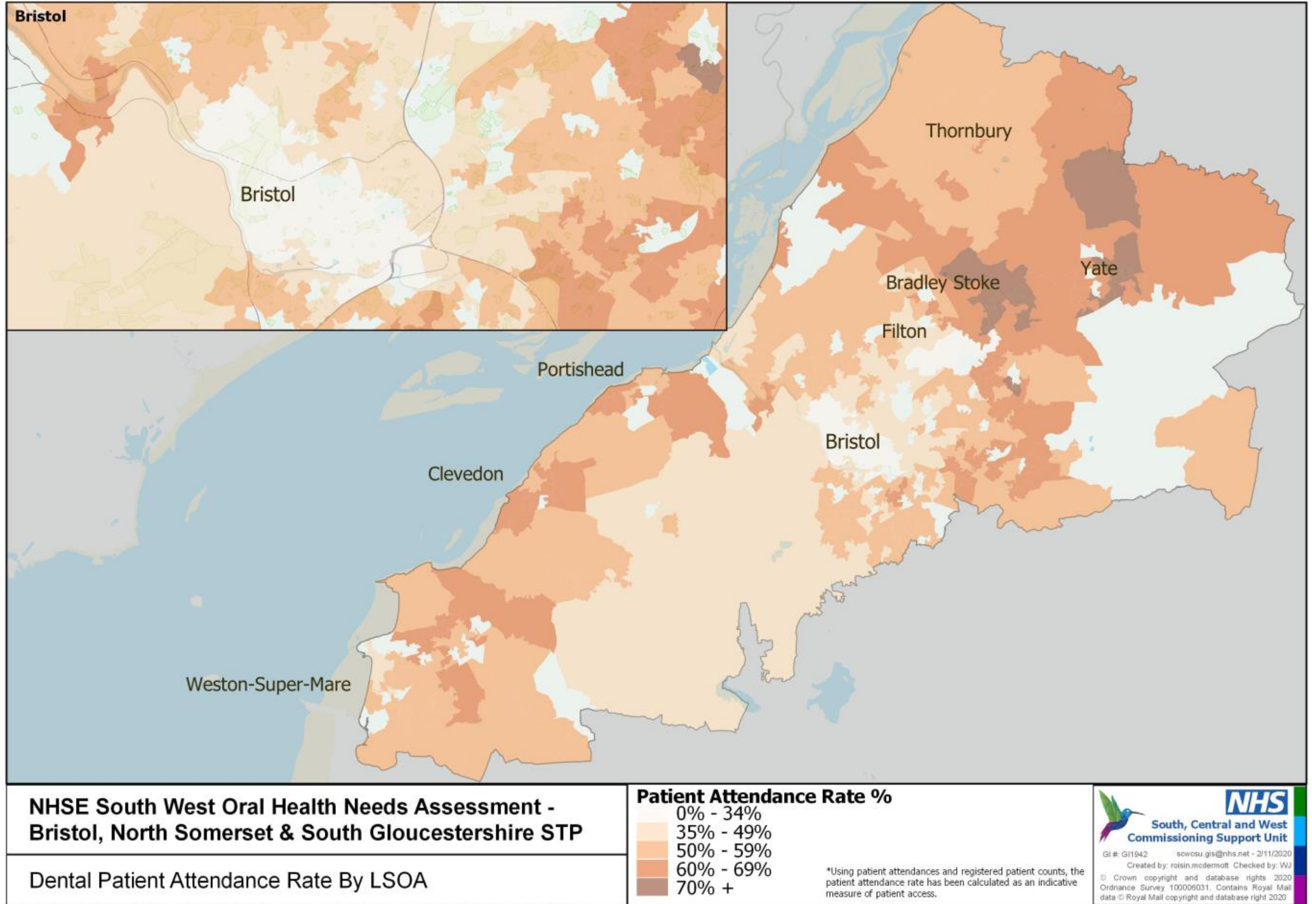


7.13 Through the patient and public survey, a considerable number of concerns were raised regarding difficulty of access to NHS dentistry Practices that have NHS patients are presented in this map. The geographical spread of the practices, which inevitably seem to be linked to the major towns across the STP, presents an issue. Moreover, there is no indication if these practices are taking on new patients and there is also no data available on the size and lengths of waiting lists.

7.14 The map below sets out the patient attendance rate as a percentage of the local population. It would seem that most of the STP is based on a 50-59% attendance rate but there are some localities where this is significantly lower, crucially, in areas where there is a greater population.

[44] NHS South, Central and West Commissioning Support Unit Oct 2020

Map 6: Dental Patient Attendance Rate by LSOA (%)[45]



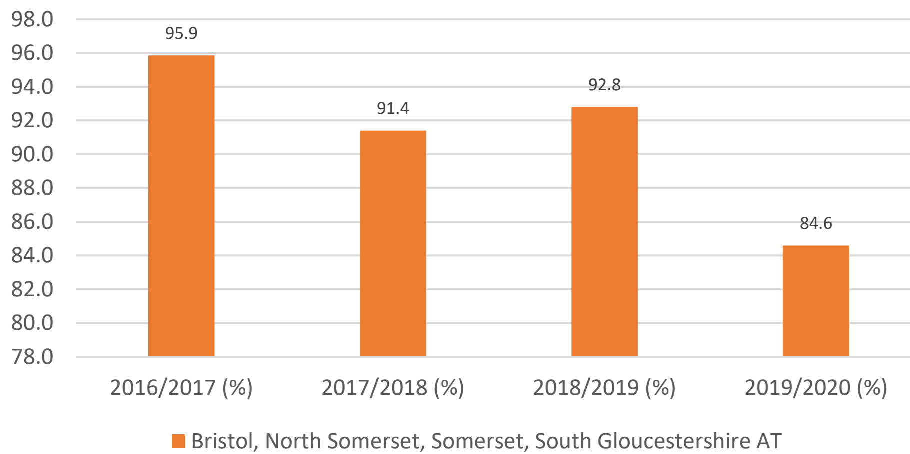
[45] NHS South, Central and West Commissioning Support Unit Oct 2020

UDA/Contract performance

7.15 In England in 2015/2016, £54,505,326 was clawed back from practices who have not met their contractual targets, resulted in £81,506,678 in 2016/17, £88,774,248 in 2017/18 and £138,438,340 in 2018/19.

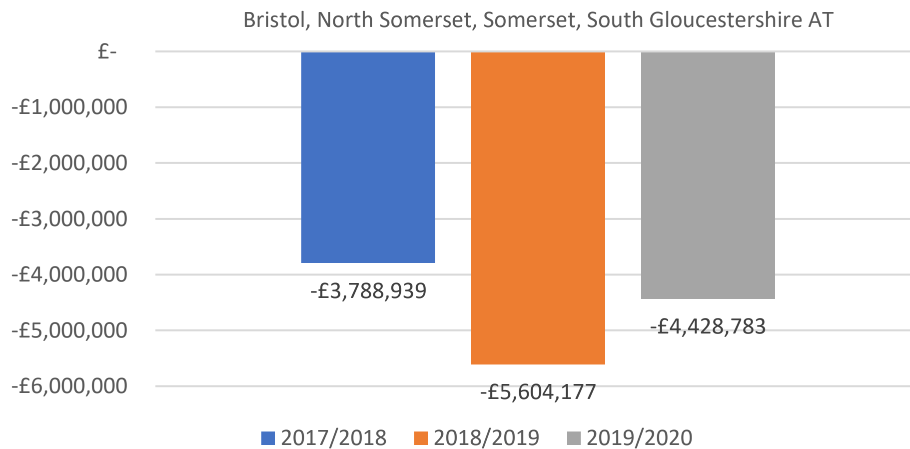
7.16 The chart below presents achievement against target of dentistry funded through the UDA contracting system for Bristol, North Somerset and South Gloucestershire. The chart shows the percentage of UDAs achieved against this target.

Chart 3: Delivered UDAs over last 4 years as % of contracted UDAs by South West Sub Region (Source NHSE Aug 2020)



7.17 The chart below sets out the UDA clawback value in £s by sub-region across the South West. It shows a sizeable level of claw back each year; 2018/2019 was a particularly significant year with £5,604,177 clawed back by the NHS for the under delivery of UDAs.

Chart 4: UDA Clawback Value (£) by Subregion 2017-2020 Source NHS England Aug 2020



Cross-Border Flow and Seasonal Variation

7.18 As people may visit a dental practice anywhere in the country, it is useful to explore cross border flows for three reasons. Firstly, large numbers of people accessing services from outside an area can limit access to services for residents. Secondly, such patterns may indicate a lack of service availability or poor service quality in the area. Thirdly, some areas in the South West have seasonal migrant workers and are popular holiday destinations, which may lead to seasonal variations in access to care, especially urgent care.

Complexity of care

7.19 The proportion of people having Band 1 courses of treatments is higher in all areas of the South West relative to the England average. This suggests that people needing more complex care may be facing additional barriers to accessing care. Therefore, NHS England and NHS Improvement may want to consider undertaking a health equity audit to ensure the equitable availability and access to NHS primary dental care in Bristol, North Somerset and South Gloucestershire.

Table 15: Proportion of courses of treatment in each band (adults and children combined)

Area	Band 1	Band 2	Band 3	Band 4 Urgent
NHS Bristol, North Somerset and South Gloucestershire CCG	62.74%	23.60%	3.70%	9.69%
South West	62.24%	24.14%	3.71%	9.58%
England	59.96%	25.48%	4.78%	9.47%

Evidence based prevention and care

Fluoride varnish application

7.20 Those aged three-years and above are more frequently at risk of decay, thus are recommended to undergo fluoride varnish application. Fluoride varnish application is also recommended twice a year for vulnerable adults. Fluoride varnish application two-three times a year can reduce tooth decay by 33% in baby teeth and 46% in adult teeth[46].

7.21 In 2018-2019 there were 599,188 fluoride varnish application in the South West. (NB this data is not available for 2019-20). In 2018-2019 the % of the population that have received fluoride varnish was 42.8% for children and 1.2% of adults. In Bristol, North Somerset and South Gloucestershire there were 104,808 representing 17.5% of the regional applications. 8.1% were for adults and 91.9% were for children. This represented 10.9% of the population and 1.1% of adults, slightly

[46] https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002279.pub2

below the South West proportion and 49.1% of children, above the South West proportion

Table 16: Fluoride varnish application Children and Adults by STO 2018-19

Fluoride Varnish	Fluoride Varnish Count	Regional %	Fluoride varnish as a % of the population
NHS Bristol, North Somerset and South Gloucestershire CCG	104808	17.5%	10.9%
Adult (over 18)	8496	1.4%	1.1%
Child (u18)	96312	16.1%	49.1%
South West	599188	100.0%	9.5%
Adult (over 18)	59207	9.9%	1.2%
Child (u18)	539981	90.1%	42.8%

7.22 NICE has published evidence-based guidelines for dental recall intervals. Adults should be seen for a dental recall at intervals from 3 to 24 months and children should be seen at intervals from 3 to 12 months depending on their level of risk of oral disease. Therefore, adults whose care falls under Band 1, that is those people with low levels of disease activity, should usually have a recommended recall interval of 24 months.

7.23 The table below present the proportion of people re-attending every 3 months in the South West. The data shows that the proportion of people seen every 3 months is comparable with the England average. This is despite a greater proportion of Band 1 courses of treatments being provided in the region. What stands-out, is the recall intervals for children compared with the England-average.

Table 17: 3-month recall intervals (high-risk) patients 2019 Source: NHS England

Area	Children (%)	Adults (%)
Bristol, North Somerset, Somerset and South Gloucestershire	6.6	12.7
England	7.0	12.7

Other primary care services

Primary care activity is also provided at Bristol Dental Hospital and its associated outreach clinics, predominantly by dental students, supervised by General Dental Council (GDC) registered staff.

7.24 In addition, many NHS dental practices provide primary care dentistry on a privately funded basis and there are also several wholly private dental practices. There is no local data available on private dentistry activity and costs.

Domiciliary services

7.25 Domiciliary oral healthcare reaches out to those people who cannot visit a dentist. Care is provided where the patient permanently or temporarily resides including patients' own homes, residential units, nursing homes, hospitals and day centres. Adequate provision of these services ensures dental services provide a reasonable alternative route for older people and vulnerable groups in accordance with the Equality Act 2010.

7.26 The table below presents the primary care service in Bristol, North Somerset and South Gloucestershire that provides domiciliary care. The provider is remunerated on the basis of UDAs. Remuneration through UDAs can pose barriers to provision of care for people with additional needs due to inadequate recognition of the extra time needed to deliver safe and high-quality care. Data previously outlined in this section, describes the demographic characteristics of the population, specifically more people of retirement age and less people of working age living in the Bristol, North Somerset and South Gloucestershire. This will lead to greater need for domiciliary care. Therefore, commissioners might consider if there is adequate provision of domiciliary dental care in Bristol, North Somerset and South Gloucestershire and seek innovative models of commissioning domiciliary care combining personal dental contracts and flexible commissioning.

Table 18: Domiciliary Care Provision in the South West

Contract type	Area Covered	Annual Delivery Parameters
Community Dental Services	Bristol, North Somerset, Somerset and South Gloucestershire	Nothing specified in the contract

Unplanned dental care

7.27 Access to urgent care is critical to support the relief of pain and for accidental damage. Patients' use of urgent care services is more complex than just a failure to access preventive or routine care. One in four, (25%), of the adult population in the South West reported that they only went to the dentist when they had a problem (ADHS 2009). In the recent 2018 Adult in Practice survey, 8.2% of patients in the South West stated they had an urgent treatment need compared to 4.9% across England.

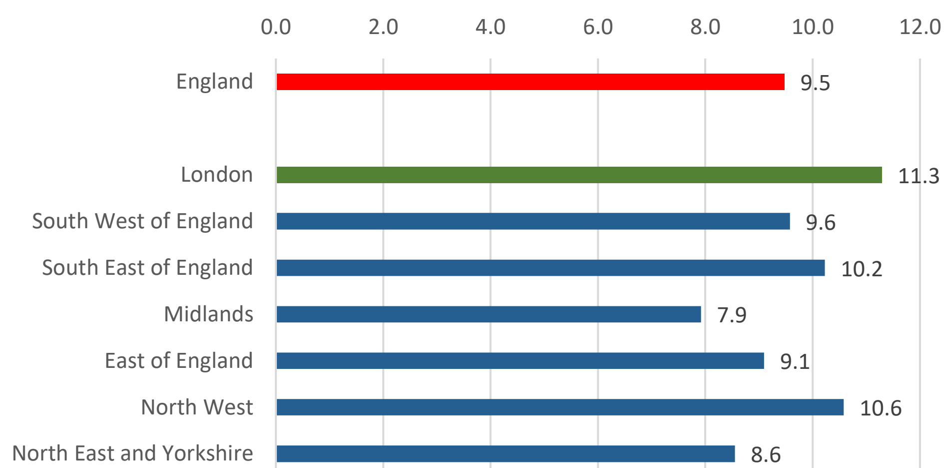
7.28 Across the South West, approximately half of the adult population and a third of the child population have not visited the dentist in the last two years, and thus may not have a regular dentist when a problem occurs.

7.29 Unplanned dental care is best reviewed by assessing the levels of urgent care as per the bands of provision in the dental care system. The table below sets out the number and % of urgent care in 2019-2020 by region. It shows that in the South West 9.6% of dental care was urgent care which is slightly above the proportion of urgent care nationally at 9.5%.

Table 19: Number and percentage of Courses of Treatment by NHS Commissioning Region1 and treatment band, 2019-20 (NHS Dental Services, NHS Business Services Authority (BSA))[47]

Org Name	Urgent	Urgent (%)[48]
England (19/20)	3,638,000	9.5%
England (18/19)	3,621,000	9.1%
South West of England (19/20)	370,000	9.6%
South West of England (18/19)	372,000	9.2%

Chart 5: Percentage of Urgent Care Treatment by NHS Commissioning Regions (% of total Bands) 2019-20 NHS Digital



47 Data is affected by COVID-19.
48 Figures presented are rounded

Urgent Dental treatment by type (Child/non-paying Adult/paying Adult)

7.30 Across the South West the profile of urgent care as a proportion of all treatment bands had been taken from the review of treatment bands nationally by region, STP, LA and by Cost of Treatment 2019-2020 (Sum and %).[49]

7.31 In the South West region, the level of urgent care for children was 4% (as compared to England at 4.2%), for non–paying adults it was 16.4% (as compared to England at 16.2% and for paying adults it was 10.8% as compared to England at 10.5%

7.32 Across the South West there are some variances in the levels of urgent care between children, non-paying and paying adults. The table below compares this STP with the South West's levels of urgent care activity by type of patient.

Table 20: Review of Urgent care treatment Bands by STP in the South West by Cost of treatment 2019-2020 (Sum and %) NHS Digital 2020

Row Labels	Type	% within Type
NHS Bristol, North Somerset and South Gloucestershire CCG		
Urgent/Occasional	Child	4.3%
	Non-paying adult	16.1%
	Paying adult	10.8%
South West		
Urgent/Occasional	Child	4.0%
	Non-paying adult	16.4%
	Paying adult	10.8%

7.33 In Bristol, North Somerset and South Gloucestershire in 2019/2020, 4.3% of urgent care was for children compared to 4.4% for the South West, 16.1% was for non-paying adults as compared to 16.4% for the South West and 10.8% was for paying adults compared to 10.8% in the South West.

Oral Cancer

7.34 Mouth cancers make up 2% of all new cancers in the UK[50]. Oral cancer rates in the South West are 14.9 per 100,000 – lower in comparison to England (at a rate of 15.0 per 100,000).I In Bristol it is 17.28 per 100,000, higher than the England and South West rates, in North Somerset it is 12.49 per 100,000 and in South

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49 Source: https://digital.nhs.uk/data-and-information/publications/statistical/nhs-dental-statistics/2019-20-annual-report : NHS Dental Statistics for England - 2019-20: Annex 3 (Activity)

50 State of mouth Cancer UK Report 2018-2019 https://www.dentalhealth.org/Handlers/Download.ashx?IDMF=21dc592b-d4e7-4fb2-98a9-50f06bed71aa

Gloucestershire it is 11.91 per 100,000 both lower than the South West rate and the England rate.

8 Oral Health Improvement

8.1 The necessary factors for good oral health are diet, access to fluoride, and regular dental checks. Amongst adults avoiding smoking and excessive alcohol consumption is included. Risk factors tend to cluster around individuals. Childhood obesity is lower than the national average and more than the national average of children are offered breast milk in the first weeks of life. Smoking rates are lower although rates of admissions for alcohol are higher than the regional and national average. HPV vaccine uptake is, at 73.1%, below the goal of 90% and the regional average.

8.2 There is a West of England Oral health Promotion Strategy 2016-2021 whose aim is to improve the oral health of all people in Bristol, Bath and North Somerset, North Somerset and South Gloucestershire. It aspires to promote the best possible oral health across the life course, to reduce oral health inequalities and lay solid foundations for good oral health throughout life. It also provides an overarching framework for the development of local delivery plans.

8.3 This strategy aims to improve oral health and reduce inequalities by endorsing five strategic priorities, each of which is supported by three objectives. See table below

Table 21: Oral health Promotion Strategy 2016-2021

Strategic approach to improving oral health			
What we aim to do	*Objectives: How can we do it?*		*Who can do it?*
Promote oral health through healthier food and drink choices	1	Promote oral health by making healthier choices easier though multi-stranded approaches to promote healthier food and drink choices and reduce sugar intake.	Local authorities
	2	Commission interventions that encourage and support breastfeeding and healthy complementary feeding (weaning)	Local authorities
	3	Promote healthier food and drink choices that are lower in sugar in settings that the local authority reaches e.g. leisure, education, social and residential care and local food outlets.	Local authorities
Promote oral health by improving levels of oral hygiene	4	Commission supervised tooth brushing programmes for pre-school and primary school children at high risk of poor oral health	Local authorities, Dental professionals
	5	Train front line staff to provide demonstrations on how to clean teeth for those at high risk of poor oral health	Local authorities Dental professionals
	6*	Commission programmes that provide free toothbrushes and toothpaste to all pre-school and primary school children, prioritising targeted interventions for those at high risk of poor oral health	Local authorities NHS England Dental professionals
Improve population exposure to fluoride	7	Promote the use of fluoride toothpaste among those at high risk of poor oral health	Local authorities Dental professionals
	8*	Commission programmes that provide free toothbrushes and toothpaste to pre-school and primary school children, prioritising targeted interventions for those at high risk or poor oral health	Local authorities NHS England CCGs

Strategic approach to improving oral health			
	9	Commission fluoride varnishing programmes for young children in areas with high rates of tooth decay	Local authorities Dental professionals
Improve early detection, and treatment, of oral diseases	10	Maximise all opportunities for signposting to local NHS dental services	Local authorities CCGs
	11	Promote the benefits of visiting a dentist throughout the life course	Local authorities Dental professionals CCGs
	12	Raise awareness of eligibility for free check-ups, prioritising those at high risk of poor oral health	Local authorities NHS England
Reduce inequalities in oral health	13	Look for opportunities to embed oral health promotion within all health and wellbeing policies, strategies and commissioning	Local authorities NHS England CCGs
	14	Promote oral health among vulnerable groups; young children, people with diabetes, people who smoke, consume high quantities of alcohol or use drugs, people with learning disability, the elderly and other locally identified vulnerable groups	Local authorities NHS England CCGs
	15	Equip the wider health and social care workforce with the knowledge and skills to recognise the link with neglect and complex social circumstances and ensure provision of care for those at high risk of poor oral health.	Local authorities NHS England Dental professionals CCGs

8.4 Bristol, North Somerset and South Gloucestershire has developed an oral health action plan that has been support by PHE, and the University Hospital Bristol Oral Health Promotion team. The plan targets the above oral health strategy priorities by focusing on different stages in people's lives and specific group of people. This includes:

- Across life course: specifically addressing the prioritisation of oral health within the Joint Strategic Needs Assessment (JSNA), address oral health in public health strategies, policies and specifications, food policies and reduction in high sugar foods and supporting the wider health and social care workforce and signposting to local NHS dental services.
- Best start in life; including encouraging parents to brush or supervise young children's teeth brushing using fluoridated toothpaste, developing and providing information to promote good oral health, distributing free toothbrush and toothpaste packs to all children defined as at higher risk of poor oral health.
- Interventions supporting adults to improve their oral health; including promoting oral health within healthy lifestyle advice that reaches working adults, promoting visits to the dentist among working age adults and two way referral systems for dentists and dental care practitioners with public health, primary care and healthy lifestyle programmes.
- Targeting people at higher risk of poor oral health; working with partner agencies to provide advice on oral health, advice on the use of fluoride toothpaste, and sign posting to NHS dental services for those who are homeless, people with learning disability, migrants, gypsies and travellers, drug and alcohol users and looked after children.
- Interventions to improve the oral health of people as they age; including the oral health of older adults within JSNA and the health and wellbeing

strategy, the inclusion of clauses in Local authority care home service specs for oral health assessment of residents and for oral health to be included in their care plans. The training of health and social care staff in the recognising poor oral health and provision of information on how to promote visiting the dentist as well as how to brush teeth and care for dentures.