Oral Health Needs Assessment

Croydon 2018

Delivering for Croydon | CROYDON
www.croydon.gov.uk

Table of Contents

Note on data cut off period 3
1. Introduction 4
1.1. Key messages 4
1.2. Background to oral health 4
1.3. The impact of poor oral health 6
2. Oral Health Policy Context 7
2.1. Local policy context 8
3. Demographic and specific risk factors for poor oral health 9
3.1. Population factors 9
3.2. Sociodemographic impact on oral health 10
3.3. Deprivation and oral health inequalities in Croydon 10
3.4. Vulnerable groups at higher risk of poor oral health 11
3.5. Lifestyle risk factors for poor oral health/oral disease 13
4. Oral health status of the Croydon population 15
4.1. Oral health of three -year old children 15
4.2. Oral health of five -year old children 16
4.3. Hospital admissions for tooth extraction in 0-19year olds 18
4.4. Oral health of children aged five and twelve attending special schools 19
4.5. Oral health of Looked After Children in Croydon 19
4.6. Adult Oral health in Croydon 20
4.7. Older adults 20
4.8. Oral Cancer 21
5. Oral health promotion activities and dental services in Croydon 21
5.1. Oral health promotion services 22
5.2. Availability and accessing of NHS general dental services 24
5.3. Community Special Care Dental service 27
5.4. Patient perspective of NHS dental services 27
5.5. Feedback from the Croydon health visiting survey 27
6. Next Steps and Recommendations 28
References 30
Appendix 1: Policies related to oral health 33
Appendix 2: Additional Data 34
Appendix 3: NICE PH55 Recommendations 35
Appendix 4: Details about dental survey of three and five year olds 37
Appendix 5: Oral Health Impact Profile 38
Acknowledgements 39

Note on data cut off period

The data in this needs assessment was the most recent published data as at December 2018. Readers should note that more up-to-date data may have been subsequently published, and are advised to refer to the sources noted in the chapter for the latest information.

1. Introduction

The purpose of this short needs assessment is to;

- highlight the policies and guidance relating to oral health and oral diseases,
- identify the current state of the oral health of the Croydon population,
- outline the availability and use of services and
- Identify key areas for action.

1.1. Key messages

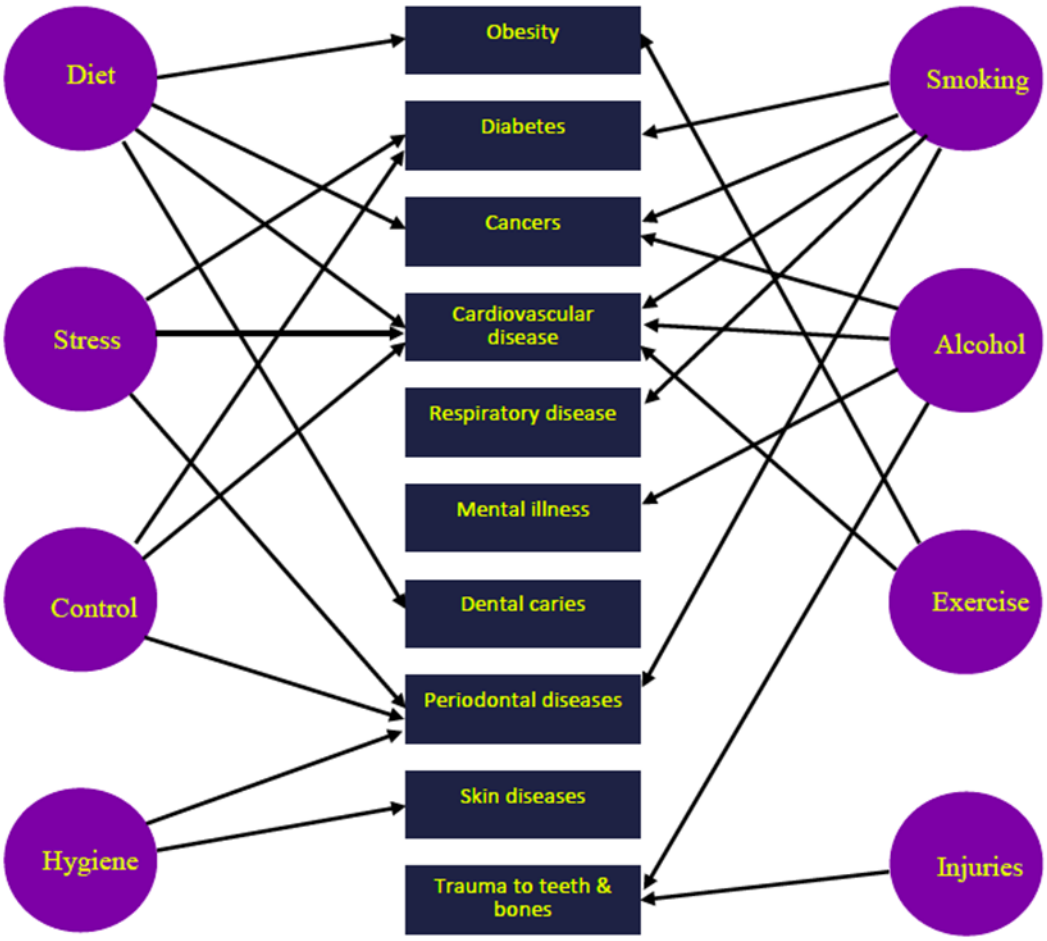
- The dental health of five -year olds in Croydon does not appear to be improving at the same rate as London or England [(1).]
- The attendance rate of children at the dentist is lower than London in all age groups under 19. Adults have a slightly higher attendance rate than London.
- There were 94,775 children and young people aged 0-17 years in Croydon in 2017, which is the highest in London and 51,384, 65+ years which is 3rd highest in London [(2).] The large and increasing number of children and older people in Croydon may have implications for service capacity. In addition, there is a need to ensure that needs of people in high risk groups such as Looked After Children (CLA), homeless and older people living in residential care are met.
- The increase in numbers of children in reception who are overweight and obese with its common risk factors e.g. a diet high in sugar, highlights the need for a common risk factor approach in improvement programmes.
- There are opportunities to ensure that oral health is embedded within the prevention and intervention services across the system- health, social care, voluntary and private sectors.

1.2. Background to oral health

Good oral health is defined by World Health Organisation as a ‘state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity [(3).]

It is well recognised that oral health has an important role in the general health and well-being of individuals [(4)]. Oral diseases and their consequences are largely preventable. Many general health conditions, such as cancer, diabetes and heart disease, and oral diseases share common risk factors such as smoking, alcohol misuse, poor diet, hygiene, stress and trauma [(5).] A common risk factor approach aims to control the shared risk factors and presents opportunities to co-ordinate prevention and intervention activities to achieve sustained and long-term improvements [(6).] See **Figure 1** below.

Figure 1:



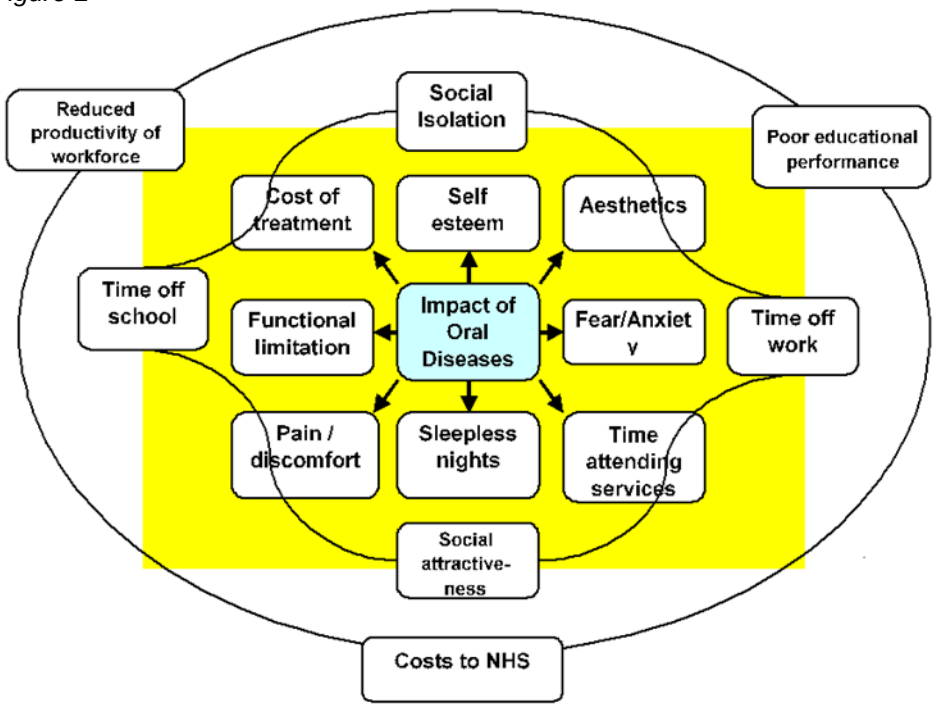
Source: Sheiham and Watt, 2000 (7)

While oral health in England has improved significantly across the population as a whole over recent decades, it is of concern that significant inequalities exist across England. People living in deprived communities consistently have poorer oral health than those living in richer communities [(4) (5).] These oral health inequalities, similar to general health, stem from inequalities in income, education, employment and neighbourhood circumstances throughout life and can be reduced. The relationship between oral disease and social determinants is inextricably bound together [(8).] Because of the failure to tackle social and material determinants and incorporate oral health into general health promotion, millions suffer poor oral health and poor quality of life [(9).] A system-wide common risk factor approach, focusing on the wider determinants as well as facilitating healthy choices, will impact not only on oral health but wider general health.

1.3. The impact of poor oral health

The potential impacts of poor oral health on individuals, families, services, e.g. the NHS and society are illustrated in the **Figure 2** below.

Figure 2



Source: Modified from Department of Health (2010) (10)

Consequences of poor oral health such as discomfort, pain, aesthetics and loss of function can be far reaching, impacting on; daily activities like eating, speaking, sleeping, family life but also future opportunities such as school readiness, educational attainment, employability as well as socialising [(11)].

Poor child oral health can also suggest wider health and social care issues such as poor nutrition, obesity, the need for parenting support, and in some instances safeguarding and neglect [(11)] [(12)].

7% (59,314) of hospital episodes of 0-19 year olds in England in 2017/18 involved dental extractions. Dental extraction was the most common reason for hospital admissions in children aged 6 to 10 years in 2017/18 with over 22,785 admissions in England [(13)].

In 2015 /2016 the NHS spent approximately £50.5m on tooth extractions for children under 19 years in England [(14)].

2. Oral Health Policy Context

From 1 April 2013, while NHS England obtained the statutory duty to commission the totality of NHS dental services, all Local Authorities through Statutory Instrument [15] became responsible to provide, or make arrangements to secure the provision of dental public health programmes:

1. Oral health promotion programmes, and
2. Oral health surveys as part of the PHE dental public health intelligence programme to facilitate –
    - the assessment and monitoring of oral health needs,
    - the planning and evaluation of oral health promotion programmes,
    - the planning and evaluation of the arrangements for provision of dental services as part of the health service, and

Public Health England has an advisory role. PHE employs dental public health consultants who provide expert advice to local authorities, NHS England, Healthwatch and other partners. PHE and NICE have published a range of documents that identify key issues and provide guidance and evidence- based recommendations for action. Here is a non -exhaustive list of recent PHE publications:

- Guidance on Child Oral Health: Applying All Our Health. February 2018 [11]
- Guidance on Adult Oral Health: Applying All Our Health. December 2017 [5]
- Delivering better oral health: an evidence-based toolkit for prevention. Third Edition, March 2017 [16]
- Improving oral health: an evidence-informed toolkit for local authorities. June 2014 [9]

PHE developed and published a set of supporting outcome indicators on the Public Health Outcomes Framework that help focus our understanding of how well we are doing based on what is considered as realistic measures at the moment.

PHE also launched a Children's Oral Health Improvement Programme Board (COHIPB) in 2016 (17). The COHIPB is a multi-sectoral approach to improving child oral health, making oral health everybody's business and training of frontline workforce on oral health improvement.

The NICE guidelines (PH55) Oral Health local authorities and partners makes 21 recommendations. **See Appendix 4** for the full list.

These include ensuring:

- oral health is a key health and wellbeing priority
- oral health needs of local populations are articulated in chapters of each local authority Joint Strategic Needs Assessment (JSNA)
- the inclusion of information and advice on oral health in all local health and wellbeing policies
- the incorporation of oral health promotion in existing services for all children, young people and adults at high risk of poor oral health

In addition, there is guidance on:

- improving oral health in early years services including nurseries (NICE pathway 2018) [18]
- oral health for people in care homes (NICE 2016) [16]
- oral health promotion in the community (NICE 2016) [19]

2.1. Local policy context

It has been evidenced that wider determinants of general health similarly impact on oral health with recommendation that prevention and health improvement strategies take a 'common risk factor' approach [6]. Below are examples of Croydon strategies and policies or programmes which can also be used as a vehicle for raising awareness / improving oral health are:

- Sugar Smart Croydon
- Child Healthy Weight Action Plan
- Just Be Croydon
- Healthy Schools
- Healthy Early Years
- Healthy Child Programme
- Safer Croydon Community Safety Strategy 2017-2020
- Drug and alcohol strategies
- Social Prescribing

3. Demographic and specific risk factors for poor oral health

There are a range of population level, sociodemographic and lifestyle factors that can impact negatively on the oral health of individuals. This section takes each of the three areas and identifies how they might impact on the oral health of the Croydon population.

3.1. Population factors

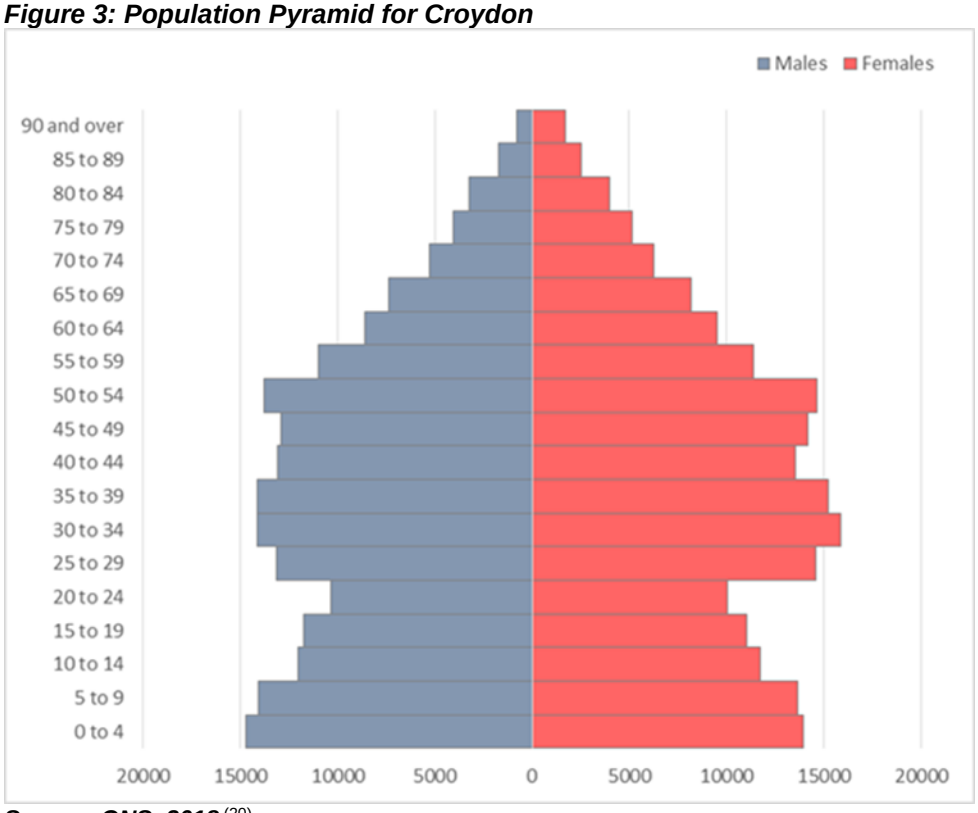
Maintaining good oral health is important for all groups across the life course. However, there are age groups most at risk of poor oral health for example children and older people.

Croydon had the largest (99,369) resident population of 0-18 year olds in London. The largest population group within the 0 to 19s was the 0 to 4s, followed by the 5 to 9s at 27,974 and 27,394 respectively in 2018.

Croydon also has the third largest resident population of people aged 65 and over in London. 50,248 people of this age group are estimated to be living in the Croydon borough, 13% of the total population of the borough in 2018.

By 2026, this number is projected to increase by 29% to 64,665 people aged 65 and over, the eighth largest percentage increase in London [(2)]. The large and increasing number of children and older people in Croydon may have implications for service capacity.

Figure 3: Population Pyramid for Croydon



Source: ONS, 2018 [(20)]

3.2. Sociodemographic impact on oral health

A sociodemographic gradient is associated with poor oral health outcomes for children, young people and adults. Evidence has shown that social disadvantage is a cause and effect of heath disadvantage and socio-economic status is also an important underlying determinant of other shared common risk factors described elsewhere in the report [10] [21].

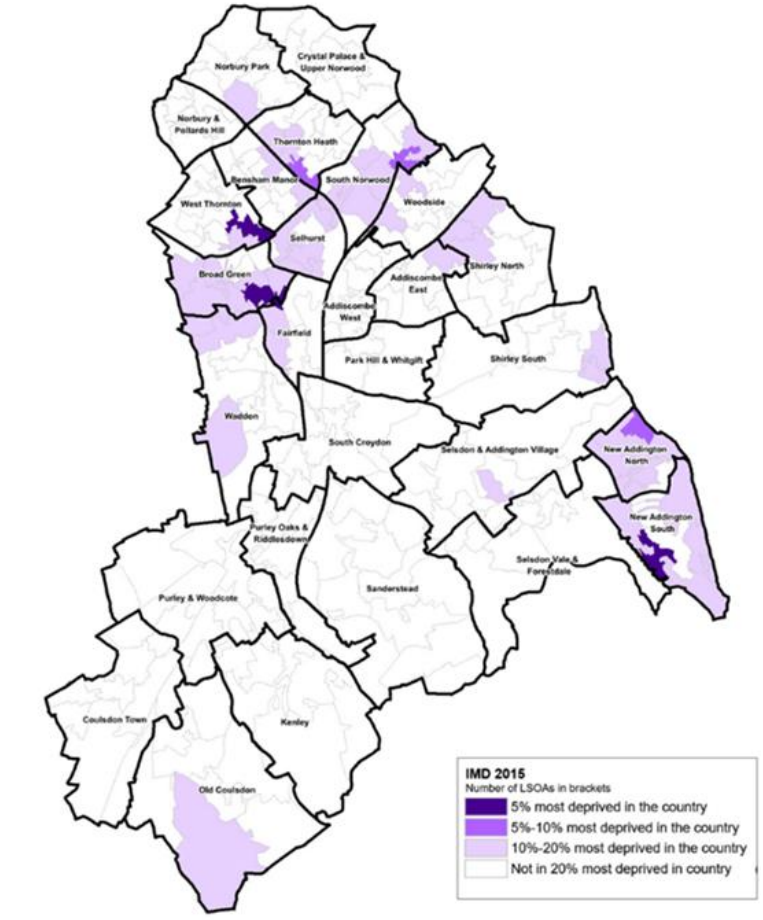
- People living in areas that are described as socially and economically disadvantaged are often at high risk of poor oral health [6].
- In the 2015 survey of five-year-olds in England, 45% of the variation in decay levels in local authorities was explained by differences in deprivation [1].
- The 2009 Adult Dental Health Survey showed that people from managerial and professional occupation households had better oral health (91%) compared with people from routine and manual occupation households (79%) [22].

3.3. Deprivation and oral health inequalities in Croydon.

The map (**Figure 4**) below shows areas of relative deprivation in Croydon where evidence suggests that there is a high likelihood of children and adults at higher risk of poor oral health.

Figure 4: Deprivation map of Croydon (2015)

Indices of Deprivation 2015 (with new Croydon wards)
Croydon Lower Super Output Areas (LSOAs)



3.4. Vulnerable groups at higher risk of poor oral health

Children at risk of poor oral health include:

- Those living in areas material and social deprivation.
- Children with physical and mental disabilities and complex medical needs.
- Children looked after (CLA) and unaccompanied asylum-seeking children (UASC).

Adults at risk poor oral health include:

- Those living in areas of material and social deprivation.
- Adults with a learning disability.
- Individuals addicted to drugs and alcohol are at higher risk of longer-term oral health conditions including oral cancer.
- Homeless people or rough sleeping population groups.

- People with mental illness.
- People in long term institutional care, including residential care, psychiatric hospitals care or are homeless [16].
- People from travelling communities.
- Teenagers and young adults not in education or training; young adults generally between the age of 18 and 25, and young offenders [6].
- Diabetics as diabetes is known to have a bidirectional relationship with periodontal disease.
- Older people who are frail and those experiencing the effects of polypharmacy.

Table 1 shows the prevalence, trends (where available) and numbers of people in Croydon with the particular risk factors for poor oral health identified above. Where necessary proxy measures are employed.

Table 1: Groups at higher risk of poor oral heath in Croydon compared to London and England

Indicator	National comparison	London comparison	Croydon value	Croydon number	Croydon trend	Croydon trendline	Period
Children in care rate per 10,000 population aged under 18	62	50	83	785	⇩		2017
Children with Special Educational Needs (SEN) % of pupils with statements or EHC plans	2.8%	2.9%	3.0%	1,956	▫	n/a	Jan 17
Children with Special Educational Needs (SEN) % of pupils with statements or EHC plans or SEN support	14.4%	14.3%	14.0%	9,130	▫	n/a	Jan 17
Traveller children % of pupils who have a Gypsy/Roma ethnicity	0.3%	0.1%	0.1%	55	▫	n/a	2015/16
Children in poverty (under 16) % of children aged under 16 living in low income families	16.8%	18.8%	18.7%	14,615	⇩		2015
16-17 year old NEET % of 16-17 year olds not in education, employment or training (NEET) or whose activity is not known	6.0%	5.3%	10.5%	970	▫	n/a	2016
Learning disability prevalence % of people (all ages) registered with a GP recorded as having a learning disability	2.6%	2.0%	2.7%	1,929	▫	n/a	2016/17
Statutory homelessness rate of households in temporary accommodation	3.3	15.1	15.6	2,449	⇧		2016/17
Mental illness: ESA claimants for mental and behavioural disorders Rate per 1,000 working age population (16-54)	27.5	23.0	22.4	5,510	⇧	n/a	2016
Estimated prevalence of physical disability % of population aged 16-64 estimated to have a moderate or serious physical disability	11.1%	9.9%	10.6%	25,708	▫	n/a	2012
Socially excluded / isolated: in adult social care users % of people who use adult social care services who stated they have as much social contact as they would like	45.4%	41.0%	42%	n/a	▫		2016/17
Frail older people: measured using hip fractures Rate per 100,000 people aged 65+ of emergency admissions for fractured neck of femur	575	499	524	268	▫		2016/17
Living in a care home Rate per 1,000 people aged 65+ living in a care home, with or without nursing	31.7	25.7	33.4	1,677	▫	n/a	2017

Source: Fingertips- 2018

In addition to the numbers above the following points are noted:

Special Education needs schools

- There were six schools in January 2017 in the borough that provided enhanced learning provisions for 819 children with special needs or disabilities [23].

- There were 15 schools with an enhanced learning provision (ELP) in January 2018, but there is no data on the number of pupils receiving enhanced learning as these units are attached to mainstream schools.

Older adults living in residential or nursing homes

There are approximately 130 care homes in Croydon. It is estimated that by 2025, there will be 2,129 adults aged 65 and over living in a care home with or without nursing in Croydon [(2)].

3.5. Lifestyle risk factors for poor oral health/oral disease

Diet and lifestyles can increase the risk to oral health. These include:

- increased intake of sugars
- poor oral hygiene and limited use of fluoride
- smoking and tobacco use
- excessive consumption of alcohol
- problematic use of drugs
- poor uptake of dental services

Table 2 shows the prevalence, trends (where available) and numbers of people in Croydon with modifiable risk factors for poor oral health identified above (where necessary, proxy measures are employed).

Table 2: Prevalence of modifiable risk factors in Croydon

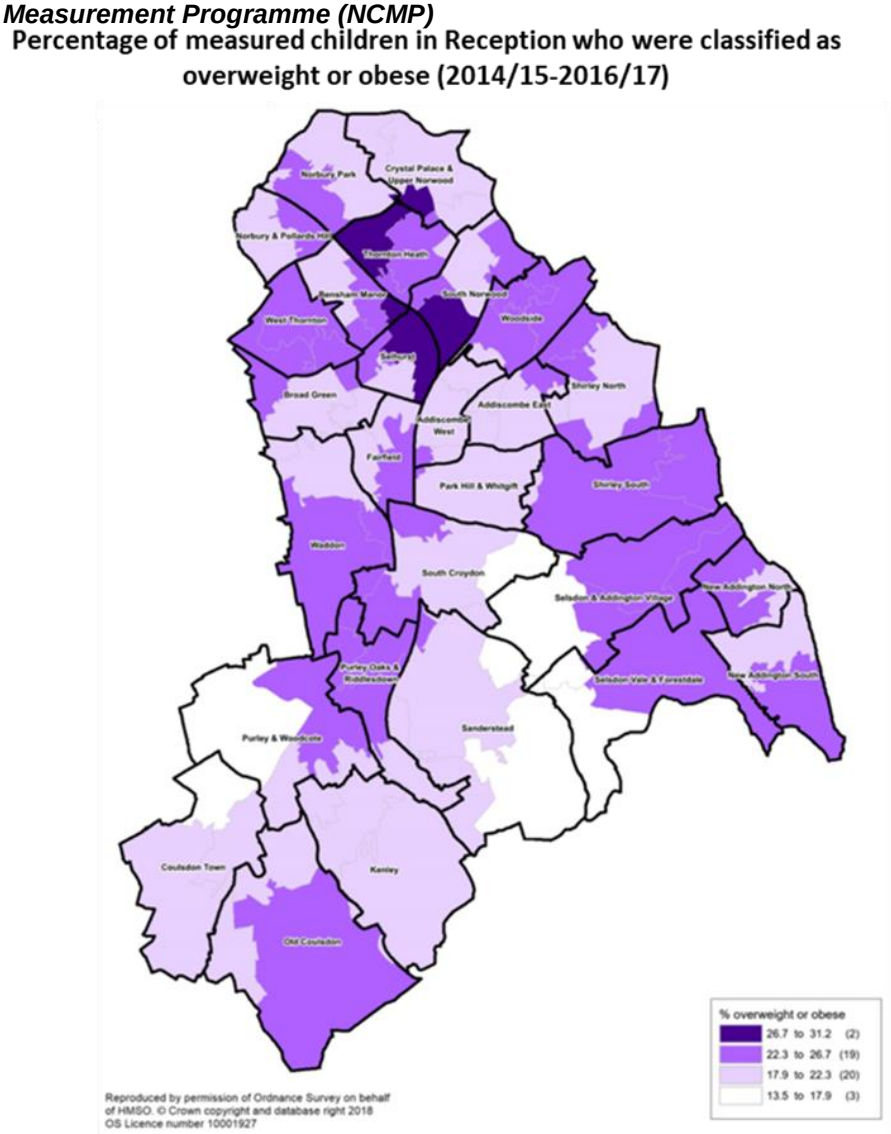
Indicator	National comparison	London comparison	Croydon value	Croydon number	Croydon trend	Croydon trendline	Period
Breastfeeding initiation % of all mothers who breastfeed their babies in the first 48hrs after delivery	74.5%	n/a	84.0%	4,248	▫		2016/17
Visiting the dentist % of children aged 0-17 visiting a dentist in the year	58.2%	48.9%	47.2%	43,978	▫	n/a	2016/17
Excess weight in children (aged 4-5) % of children in reception classified as overweight or obese	22.6%	22.3%	24%	1,140	⇔		2016/17
Excess weight in children (aged 10-11) % of children in year 6 classified as overweight or obese	34.2%	38.5%	38%	1,548	⇧		2016/17
Smoking prevalence - current smokers % of 15 year olds responding to the WAY survey stating they were current smokers	8.2%	6.1%	7.2%	n/a	▫	n/a	2014/15
15 year olds drunk in the past four weeks % of 15 year olds responding to the WAY survey stating that they had been drunk in the past four weeks	14.6%	8.9%	8.2%	n/a	▫	n/a	2014/15
15 year olds taken cannabis in the past month % of 15 year olds responding to the WAY survey stating that they had tried cannabis in the past month	4.6%	5.0%	4.4%	n/a	▫	n/a	2014/15
15 year olds taken drugs other than cannabis in the past month % of 15 year olds responding to the WAY survey stating that they tried any drugs other than cannabis in the past month	0.9%	1.0%	0.9%	n/a	▫	n/a	2014/15-2016/17
Visiting the dentist % of adults aged 18+ visiting a dentist in the past 2 years	51.5%	45.2%	46.9%	133,993	▫	n/a	2016/17
Estimated opiate and/or crack use Estimated prevalence rate per 1,000 population aged 15-64 of opiate and/or crack use	8.57	8.87	8.13	2,028	▫	n/a	2014/15
Excess weight in adults % of adults (18+) classified as overweight or obese	61.3%	55.2%	59%	n/a	▫	n/a	2016/17
Adult current smokers % of adults aged 18 and above responding to the Annual Population Survey who are current smokers	15.5%	15.2%	13.2%	n/a	▫		2016
Adult current smokers % of adults aged 18 and above responding to the GP patient survey who are current smokers	15.6%	16.4%	14.9%	n/a	▫		2016/17
Adult current smokers % of adults registered with a Croydon GP who are on the GP register as a current smoker (from QOF)	17.6%	17.3%	16.9%	55,466	▫		2016/17
Adult drinking % of adults drinking over 14 units of alcohol a week	25.7%	21.6%	19.2%	n/a	▫	n/a	2011-14

Source: Fingertips- 2018

One of the more worrying trends which does have implications for oral health is the increasing rates of excess weight in primary school children. In reception (ages 4-5) prevalence rose to 23.7% in 2016/17, a higher percentage than the regional average of 22.3% and England average of 22.6%, but to note it is statistically similar [(24)]. Healthier dietary patterns (including a sugar-free diet) are important for both oral and general health [(6)].

There is variation in the prevalence of excess weight across the borough. Broadly speaking, the areas of higher deprivation in the borough also have higher rates of excess weight in reception year children (**Figure 5** below).

Figure 5: Prevalence of overweight and obesity across the borough- National Child Measurement Programme (NCMP)



Source: ***[Public Health England- NCMP small area level data]***

4. Oral health status of the Croydon population

Data on the oral health status of Croydon is generally confined to information on the general child and adult populations. There is limited local data on the oral health status of specific at-risk groups.

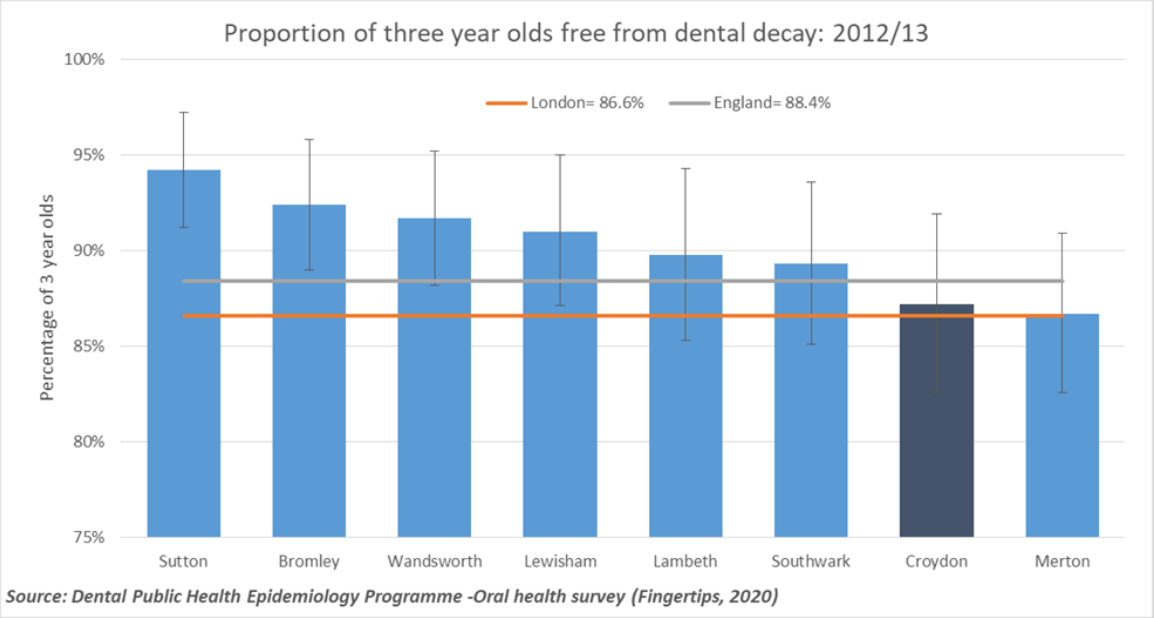
4.1. Oral health of three -year old children

At a national level, the oral health survey shows that children's oral health has improved over the past 20 years. However, for each cohort of three, five and twelve-year olds, the respective surveys have demonstrated that the prevalence of decay for Croydon is higher than the national average.

The Public Health Outcomes Framework (PHOF) reports on children who are free from obvious decay as shown in **Figure 6** below. The proportion of three- year olds presenting with no obvious decay was lower in Croydon (87.2%) compared to the national average and its geographical neighbours except for Merton in 2012/13.

The rates in Croydon were better when compared to the regional average. It is worth noting that, population averages can mask inequalities with a number of children remaining tooth decay free but the disease concentrating in certain population groups. Caution is needed in the interpretation of the data on three -year olds due to very wide confidence intervals for this age group, and small sample sizes.

Figure 6



Source: Dental Public Health Epidemiology Programme -Oral health survey (Fingertips, 2020)

The PHOF indicator reporting the proportion of children with experience of decay is more consistent with the measure for severity of decay; mean d3mft (the number of decayed teeth and those missing or filled due to decay).

The prevalence of decay, missing or filled teeth due to decay in three -year olds is higher in Croydon (0.41%) compared to the national (0.36%) but not regional average (0.42%). Caution is needed in the interpretation of the data on three -year olds due to small sample sizes.

4.2. Oral health of five -year old children

The national oral health survey for five -year old children measures the prevalence and severity of tooth decay among five-year-old children attending mainstream schools within each local authority [(1)]. See **Appendix 4** for more detail.

In Croydon, dental data is available from the surveys conducted in 2007/08, 2014/15 and 2016/17 but not 2011/12. In 2016/2017, of the 337 children who took part in the

survey, 28.5% children had experienced tooth decay compared to 25.6% across London and 23.3% across England [(1)].

PHE states that due to the use of standardised criteria and processes it is possible to compare trends over time. The rate of year old children experiencing visually obvious dental decay reported in decay experience in Croydon was higher in 2016/17 when compared to the two previous surveys- in 2007/08- 28% and 2014/15 -26.3%). However, caution should be exercised when interpreting the data due to; small sample sizes, varying consent rates among population groups and local authorities as well as influx of certain groups who may have a higher risk of tooth decay.

Table 3 shows that this deterioration is not in line with most other comparator boroughs or London and England who, in large, have seen an improvement in decay experience.

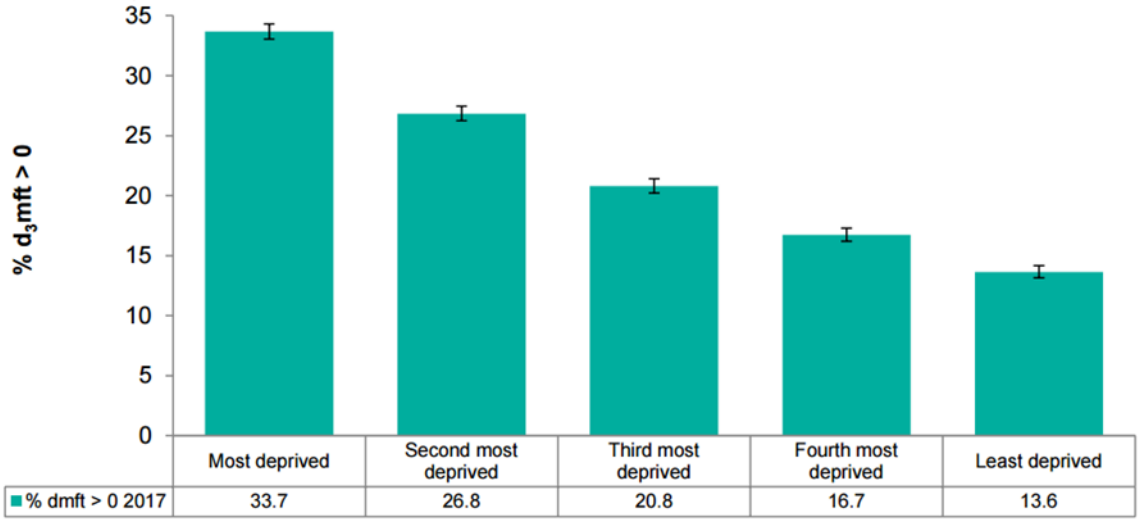
Table 3: Percentage of children (5 years) with decay experience (dmft>0) compared to comparators boroughs (London and England)

Borough	2007-2008	2014-2015	2016-2017	Percentage change between 2007-2008 and 2016-2017
Bromley	**18.8%**	**16.0%**	**17.4%**	**-1.4%** ⬇
Croydon	**28.1%**	**26.3%**	**28.5%**	**+0.4%** ⬆
Lambeth	**31.3%**	**22.1%**	**21.7%**	**-9.6%** ⬇
Lewisham	**31.3%**	**23.3%**	**19.4%**	**-11.9%** ⬇
Merton	**22.8%**	**26.1%**	**22.5%**	**-0.3%** ⬇
Southwark	**24.5%**	**18.8%**	**15.9%**	**-8.6%** ⬇
Sutton	**23.5%**	**19.0%**	**25.6%**	**+2.1%** ⬆
Wandsworth	**29.9%**	**23.2%**	**25.8%**	**-4.1%** ⬇
London	***32.7%***	***27.2%***	***25.7%***	**-7.0%** ⬇
England	***30.9%***	***24.7%***	***23.3%***	**-7.6%** ⬇

Source: Dental Public Health Epidemiology Programme for England: Oral Health survey for five -year old children (Biennial publication-latest report 2017) – Fingertips 2020

At a national level the percentage of decay experience was compared with IMD quintiles which showed a clear gradient between levels of deprivation and decay experience (**Figure 7**).

Figure 7: Percentage of five -year old children with decay experience in England by national Index of Multiple Deprivation (IMD 2015) quintiles, 2017



Error bars represent 95% confidence limits

Source: Dental Public Health Intelligence Programme (PHE)

Dental decay affecting one or more of the incisor (front) teeth is usually associated with long term bottle use with sugar-sweetened drinks, especially when these are given overnight or for long periods during the day [25].

As was seen earlier Croydon's NCMP data has shown an increase in the rate of overweight and obese in reception. PHE highlighted in 2018 that similar patterns are seen between the two surveys and that they are working to link the results of the two surveys [1].

4.3. Hospital admissions for tooth extraction in 0-19 year olds

Tooth extractions with a primary diagnosis of dental caries (tooth decay) is the number one reason for hospital admissions among young children in England. The majority of these extractions in a hospital setting are carried out under general anaesthetic, many could be avoided with better home care and management within primary care [11].

- In 2016/17, 0.6% (n. 613) of the 0-19 population in Croydon were admitted to hospital for dental extractions (all diagnoses). See **Appendix 2** for more detail.
- This is similar to the London average of 0.59% and higher than the England average of 0.47%. It is worth noting that London has a higher rate of hospital admissions compared to the rest of England partly due to availability of acute trusts in the region.
- Those aged five to nine have the highest rate of admissions compared to the other age groups. In 2016/17 Croydon had a similar rate to London across all

age groups apart from those aged 15-19 where Croydon had a higher rate (5.6 admissions per 1,000 population in Croydon compared to 4.3 in London) [13].

4.4. Oral health of children aged five and twelve attending special schools

A national oral health survey (2014) of 5 and 12 year olds attending special support schools found that 'fewer children have experience of decay, but those who have tend to have decay more severely, with more teeth affected than mainstream educated children' [26].

In London, 11% of five -year children attending special schools had had one or more teeth extracted compared to 3% in mainstream educated children [26]. Although Croydon did not take part in this national study, there might be similarly high levels of tooth decay in children attending local special support schools.

4.5. Oral health of Looked After Children in Croydon

There is no data on the actual oral health status of looked after children, but the annual Department for Education (DfE) data return records whether children under the age of 18 who have been looked after continuously for 12 months or more have had their teeth checked. Children who declined to have their teeth checked are recorded as not having received a dental check.

In 2017/18, of the 493 children who had been looked after continuously for 12 months or more, 73.2% had a record of their teeth checked by a dentist. This is an increase from the previous year where 53.6% had their teeth checked, compared to 83.5% in London and 83.4% across England [27].

4.6. Adult Oral health in Croydon

London level data about adult oral health is collected from the National Adult Dental Health Survey (ADHS) which is carried out every ten years. There is no equivalent local data. The most recent national survey conducted in 2009 [28] showed that:

- 28% of adults living in London had obvious tooth decay in either the crowns or roots of their teeth compared to the higher England average of 31%.
- 96% of adults were dentate (with teeth) in London compared with 94% in England.
    - In England, adults who had routine and manual occupations had the lowest proportion of the population with natural teeth (90%) and those with managerial and professional occupations the highest (98%).
- The possession of 21 or more teeth is used to define a minimum functional dentition to ensure good oral health. In London, 91% of adults had a functional dentition.
- There were little differences in the prevalence of periodontal conditions (gum disease) between the London adult samples and the English average.
- Overall, 72% of adults in London used toothpaste of adequate fluoride concentration (1300-1550ppm) compared with 76% of adults in England.
- 77% of adults reported brushing their teeth twice a day compared to the England average of 75%.

4.7. Older adults

Older adults experience higher amounts of decay than the general adult population and in care homes the prevalence of active caries appears higher [27]. PHE identified in December 2016 that the majority of information available related to older people living in residential and nursing homes but was able to make the following statements [29].

- Older adults living in residential and nursing care homes are more likely to be without teeth, and less likely to have a functional number of teeth
- Untreated caries is higher in the household resident elderly population than in the general adult population and older adults living in care homes have higher caries prevalence still, where the majority of dentate residents have active caries
- Signs of severe untreated caries appear to be more common in the oldest age groups across all settings and current pain also appears to be slightly higher than in the general adult population
- Approximately 90% of care home managers reported that they have residents who need help with oral care

In terms of self- related oral health:

- 71% of all adults in the 2009 ADHS survey [1]rated their dental health as good or very good [(1)].
- It appears that older people have worse oral health related quality of life than the general population
- In the general adult population, 39% of all adults report experiencing at least one Oral Health Impact Profile-14 (OHIP-14) impact “occasionally or more often”. In the London over 65 household resident sample the figure was 53% [(29)]. See **Appendix 5** for further information on the Oral Health Impact Profile

4.8. Oral Cancer

Over the last decade, oral cancer incidence rates have increased by around a quarter (24%).

During 2013-2015, 125 people in Croydon were registered with oral cancer, a rate of 14.3 people per 100,000 population [(30)]. In the same years 37 people in Croydon died from oral cancers, a mortality rate of 4.7 per 100,000. Rates of oral cancer registrations and mortality in Croydon are consistently similar to both London and England averages [(30)].

An estimated 91% of oral cancers in the UK are linked to lifestyle factors including smoking, alcohol (30%), and infections (13%) [(31)]. Other risk factors for mouth cancer may include:

- chewing tobacco or other smokeless tobacco products
- chewing betel nuts with or without tobacco
- a poor diet
- the human papilloma virus (HPV) [(31)].

There is also evidence of an association between deprivation and the incidence of, and mortality from, head and neck cancers [(31)].

5. Oral health promotion activities and dental services in Croydon

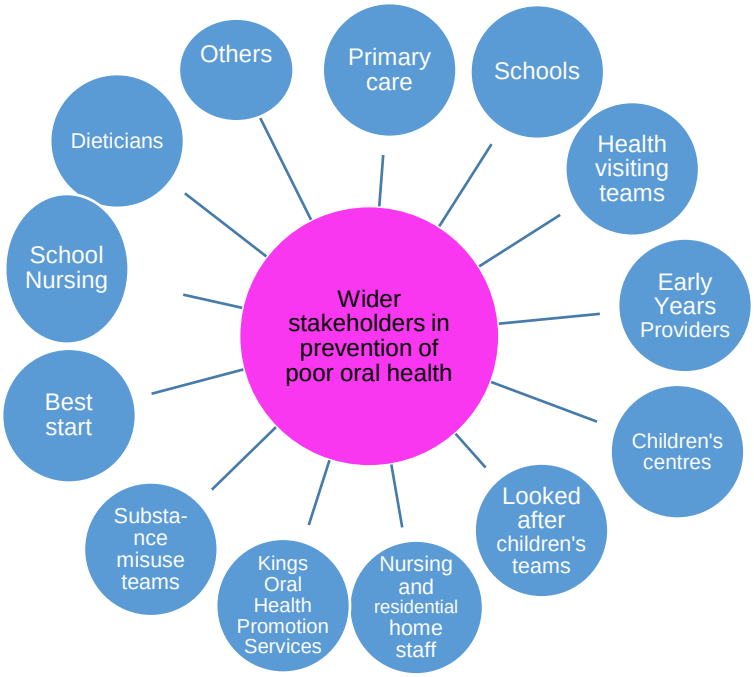
As previously indicated, oral health conditions are largely preventable and activities that can prevent oral diseases can be / are embedded in other health improvement work. However, due to lack of integration between medical, dental, mental health and social care, specific thought around oral health and engagement with specialists in this area is imperative to ensure oral health is on the agenda and its consequences are addressed and ultimately prevented.

The prevention activities for oral diseases can take place at the primary, secondary and tertiary levels. Taking the Making Every Contact Count principle, a range of

[1] Data relates to England, Wales and Northern Ireland

professionals and services in Croydon across health, social care, education and voluntary sector have a role to play at all levels of oral disease prevention. The radial diagram in **Figure 8** below illustrates the stakeholders across the system.

Figure 8: Professionals and services that have an oral health promotion role



Source: Croydon Public Health Team, 2019

5.1. Oral health promotion services

King's College Hospital Department of Community Special care Dentistry (commissioned by NHSE) provides oral health promotion services across the life course with an emphasis on early and older years, targeting priority schools and care homes.

Targeted work in Nursery, Reception and Key Stage 1 children in Croydon is informed by the pupil premium data to engage with ten schools. In these schools, children are given tooth-brushing packs twice per annum. Fluoride varnishing, which used to be part of this service, is now provided by general dental practices.

The service utilises a train the trainer approach for sustainable oral health promotion and undertakes training for a wide-ranging workforce, including education and health professionals, for instance;

- childcare providers
- health visitors
- Speech and Language Therapists (SALTs)
- care homes teams

The key service work-streams currently include:

- Enabling (through training) mouth care provision in care homes and Healthy Early Years London (HEYL) accreditation in the oral health domain.
- Offering oral health education widely across the life-course.
- Engagement with stakeholders for collaborative working e.g. Best Start.

The annual report for 2018/2019 with outcome and process evaluation data will be published early in 2020/2021.

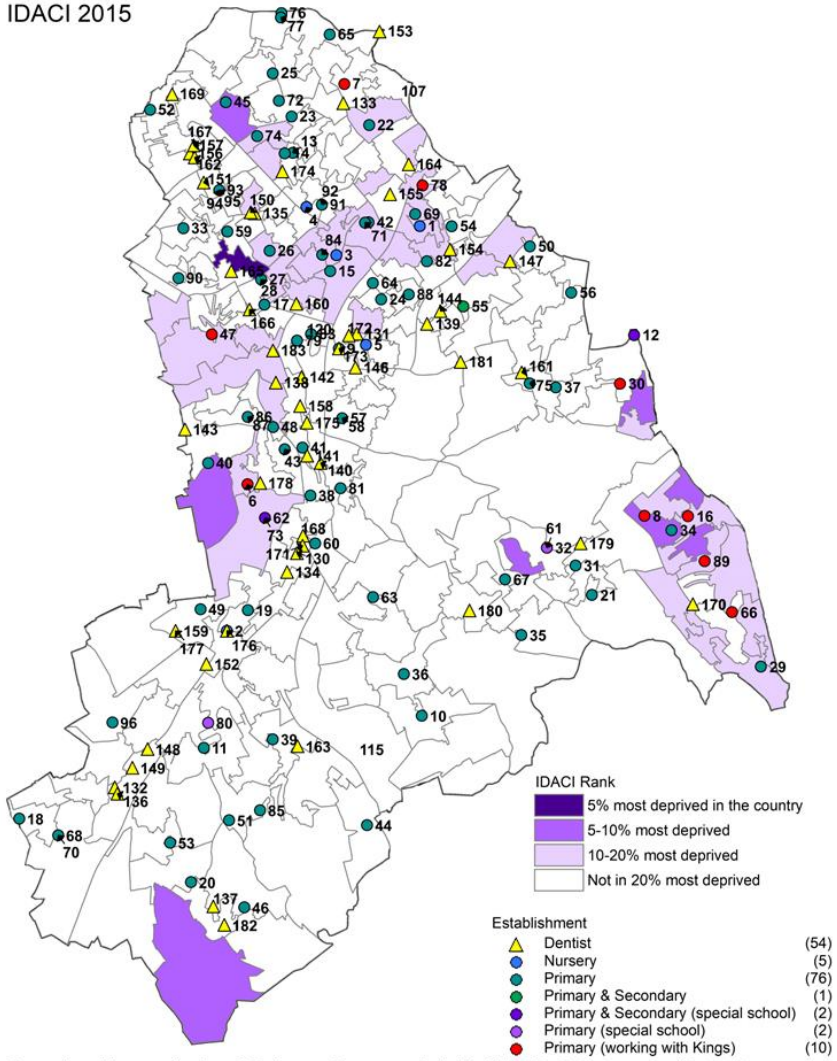
Figure 9 shows the local community dentists, nurseries and primary schools working with the Oral Health Promotion team at the King's College Community Special Care Dental Services in 2018/19.

Figure 9

Location of Dentists and Nursery and Primary Schools in Croydon and Income Deprivation Affecting Children (IDACI) Rank

Dentists and Schools, 2019

IDACI 2015



5.2. Availability and accessing of NHS general dental services

As of July 2018, there are 50 NHS dental practices in Croydon (and 262 working dentists of which 16 are Foundation Dental Practitioners).

Irregular attendance at dental services is a risk factor for oral disease [6]. Access rates to NHS dentists are calculated as the percentage of people living in Croydon (patient postcode) who have visited an NHS dentist in the last 12 months (in children) or 24 months (in adults). Residents are not required to have accessed a dentist within Croydon to be included in these calculations; they can access NHS dentistry wherever they choose across England [32].

Access is a measure which describes the number of patients seen in the previous 24 months for adults and 12 months for children. The measure provides a count of the number of distinct patient identities scheduled in the last reporting period and access rates are expressed as a percentage of the area population.

As at June 2017, Croydon had statistically lower access rates compared to London for all child age groups (**Table 4**) but statistically higher access rates in adults (**Table 5**). **Figure 10** shows the proportion of Croydon patients who had attended a dentist within the previous 24 or 12 months. There is variation in access rates across the borough for both adults and children. To note that the adult and child maps do not have the same access patterns and neither is there a clear relationship with the deprivation map (**Figure 10**).

Families are being actively encouraged to take their children to the dentist from the age of one as part of the Dental Check by 1 (DCby1) initiative launched in April 2018 [(33)].

Sara Hurley, Chief Dental Officer for England (May 2018) stated that "Regular visits to your dentist from a very early age, is key to developing habits that lead to a lifetime of good oral health" [(34)]. NHS England, king's College Community Special Care Dental Service Oral Health Promotion team and Croydon's Local Dental Committee are working to support this initiative at a local level.

Table 4: Child patients seen in the previous 12 months, as a percentage of the population (as at 30/June/2017) (32)

	Croydon		London
	Number of children	Access rate	Access rate
Children aged 0-2 years	2,243	13.1%	14.1%
Children aged 3-5 years	7,409	43.3%	44.5%
Children aged 6-9 years	13,241	61.2%	63.7%
Children aged 10-14 years	14,336	62.3%	66.2%
Children aged 15-17 years	7,125	49.6%	51.4%
Total children	**44,354**	**47.6%**	**49.2%**

Source: NHS Digital, 2018

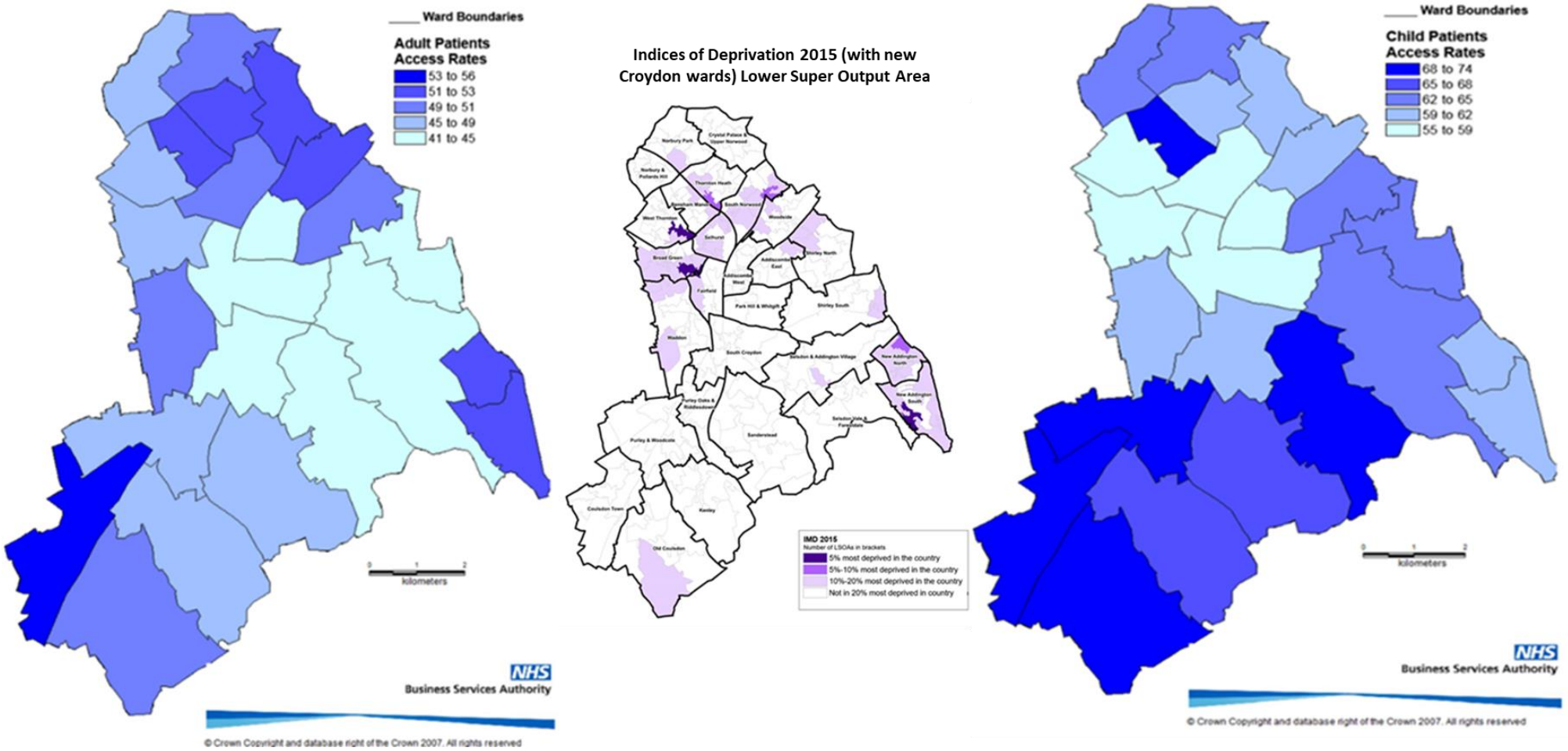
Table 5: Adult patients seen in the previous 24 months, as a percentage of the population (as at 30 June 2017) (32)

	Croydon		London
	Number of children	Access rate	Access rate
Adults aged 18 and over	134,280	47.0%	45.0%

Source: NHS Digital, 2018

.

Figure 10: Dental access rates for adult patients (map to the left) and child patients (map to the right) and indices of deprivation 2015
Access rates are expressed as a percentage of the area population in the



Source: NHS Business Services Authority (PHE)

5.3. Community Special Care Dental service

In Croydon, the Community Dental Services (CDS) is commissioned by NHS England (NHSE) and provided by King's College Hospital to provide targeted NHS dental treatment for people with:

- physical disability
- medical complex conditions
- learning disability
- severe anxiety/ phobia
- severe mental health conditions

The service also sees patients who are:

- need a home visit
- homeless
- plus sized and need a bariatric service
- looked after children
- children with multiple decay lesions

5.4. Patient perspective of NHS dental services

The annual national GP patient survey includes a number of questions that assess patients' experience of NHS dental services. 86% of patients responding to the annual survey in 2017 reported experience of dental services in Croydon as very good or fairly good, similar to the England average of 85% [(35)].

In the same survey, 91% of patients reported being successful in getting an NHS dental appointment, statistically lower than the England average of 93% [(35)]. There are approximately five queries a month to Croydon's Patient Advisory and Liaison Service requesting an NHS dentist in the borough (Freedom of Information request, 2017). Additional information is needed to better understand the geographical distribution of these queries in the borough to further highlight need.

5.5. Feedback from the Croydon health visiting survey

A client survey was undertaken as part of the 2018 review of the health visiting services. 226 of the 960 respondents would have liked to have discussed their child teeth and gums with the health visiting team but reported that they had not. When these discussions around teeth and gums had taken place, 84% of the respondents had said they were satisfied with them.

6. Next Steps and Recommendations

This needs assessment has identified that the oral health of children at age five in Croydon is not improving at the same rate as most of our geographical neighbours, London or England.

The oral health promotion services target ten high risk schools but there is a need to ensure that oral health promotion is consistently and systematically embedded throughout the universal, early intervention and targeted services for children, for instance, Best Start in Life.

There is also a need to ensure that needs of vulnerable groups of all ages are met.

The overarching messages are that:

- To achieve sustainable oral health improvements and reduce oral health inequalities, co-ordinated action is needed to tackle the underlying causes of poor oral health. This fits into the wider prevention agendas of partners in Croydon.
- Oral health should be integrated within broader public health programmes including those addressing obesity, improving diet and lifestyles, breastfeeding and weaning, smoking cessation and interventions tackling excessive alcohol consumption [(4)].

The recommended actions set out below have been informed by PHE and NICE guidance and the local issues highlighted in this document. The range of organisations who can play a role in promoting oral health suggest that the further development of an action plan should be undertaken in partnership.

Integration of oral health into general health: Ensure all health and wellbeing and disease prevention policies for children and young people, adults and older people (including local government, health, social care and education policies and strategies) include advice and information about oral health. This should reflect evidence from Commissioning Better Oral Health

Training of frontline workforce: Ensure that all early year staff and those working with children including; school nursing teams, looked after children, education and social services are trained on oral health and delivering consistent and evidence-based oral health messages to children and their families.

Promotion of oral health and well-being: Encourage all frontline staff in health, children and adult services across the statutory, independent and voluntary sectors to use every opportunity to promote oral health and to emphasise its links with general health and wellbeing. In addition to Making Every Contact Count (MECC) across the life course, particular attention should be paid to training opportunities among vulnerable client groups at risk of poor oral health and their supporting teams

Ensure standardisation of messages (literature and materials) across all venue to ensure use of evidence-based materials.

Support the creation of environments which promote oral health across the life course through health improvement programmes such as breastfeeding, the Healthy Child Programme, Sugar Smart, Health Early Years, Healthy Schools, London Healthy Workplace Charter, JustBe, tobacco and smoking cessation, substance misuse programme.

Increase the availability of fluorides: In light of the recent survey of five -year olds review the use of fluoride in the borough. Evaluate the need for increasing the availability and use of fluorides among younger and vulnerable children. This can include:

- Encouraging the use of fluoride toothpastes
- Distribution toothbrush and toothpaste packs by health visiting teams at the 2 mandated checks- 9 months and 2-2.5years.

Increase uptake of NHS dental services: Work with the local NHS dentists to increase the number of under 1s visiting a dentist- Dental Check by 1

Target vulnerable groups to promote uptake of dental services including looked after children, adults and children with special needs and older people especially in residential settings.

Review how the at-risk groups identified in this needs assessment are being supported currently; highlight any gaps and identify key actions.

References

1. **Public Health England.** National Dental Epidemiology Programme. *Oral health survey of 5 year old children 2018.* [Online] https://www.gov.uk/government/statistics/oral-health-survey-of-5-year-old-children-2018.

2. **GLA Population Projections.** ***Data.London.gov.uk.*** **[Online] https://data.london.gov.uk/dataset/gla-population-projections-custom-age-tables.**

3. World Health Organisation. Oral health. ***Who.int.*** **[Online] https://www.who.int/health-topics/oral-health/#tab=tab_1.**

4. Public Health England. Delivering better oral health: an evidence - based toolkit for prevention Third edition. ***Public Health England.*** **[Online] 2017. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/605266/Delivering_better_oral_health.pdf.**

5. —. Adult oral health: applying All our Health. ***GOV.UK.*** **[Online] https://www.gov.uk/government/publications/adult-oral-health-applying-all-our-health/adult-oral-health-applying-all-our-health.**

6. National Institute for Health and Care Excellence. Oral health: local authorities and partners| Guidance | NICE. ***Nice.org.uk.*** **[Online] https://www.nice.org.uk/guidance/ph55/chapter/what-is-this-guideline-about.**

7. ***The Common Risk Factor Approach: a rational basis for promoting oral health.*** **Sheiham, A and Watt, R. Community Dentistry and Oral Epidemiology, 2000, Vols. 28(6), pp. 399-406.**

8. Public Health England. North Yorkshire and Humber oral health needs assessment . ***Assets.publishing.service.gov.uk.*** **[Online] 2015. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/463063/North_Yorks___Humber_oral_health_needs_assessment.pdf.**

9. —. Local authorities improving oral heath commissioning better oral health for children and young people. an evidence informed toolkit for local authorities. ***Assets.publishing.service.gov.uk.*** **[Online] 2014. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/321503/CBOHMaindocumentJUNE2014.pdf.**

10. Department of Health. Impacts of poor oral health: Department of Health- Publications. ***Webarchive.nationalarchives.gov.uk.*** **[Online] 2010. https://webarchive.nationalarchives.gov.uk/+/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_5521284.**

11. Public Health England. Child oral health: applying All Our Health. [Online] 2018. https://www.gov.uk/government/publications/health-and-social-care-act-2012-fact-sheets , 2012.

12. White, Sandra. Health Matters: Child dental health- Public health matters. ***publichealthmatters.blog.gov.uk.*** **[Online] 14 June 2017. [Cited: 03 March 2020.] https://publichealthmatters.blog.gov.uk/2017/06/14/health-matters-child-dental-health/.**

13. Public Health England. Hospital tooth extractions 0 to 19 years old 2011 to 2018. *GOV.UK.* [Online] 2018. https://www.gov.uk/government/publications/hospital-tooth-extractions-of-0-to-19-year-olds.

14. —. Health matters: child dental health. *GOV.UK.* [Online] 2017. https://www.gov.uk/government/publications/health-matters-child-dental-health/health-matters-child-dental-health.

15. The NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012. *Legislation.gov.uk.* [Online] 2012. http://www.legislation.gov.uk/uksi/2012/3094/part/4/made.

16. National Institute for Health and Care Excellence. Overview | Oral health for adults in care homes | Guidance | NICE. *Nice.org.uk.* [Online] 2016. www.nice.org.uk/guidance/ng48 .

17. Children's Oral Health Improvement Programme Board. *GOV.UK.* [Online] 2016. https://www.gov.uk/government/news/launch-of-the-childrens-oral-health-improvement-programme-board, 2016.

18. National Institute for Health and Care Excellence. Improving oral health in early years service including nurseries. *Pathways.nice.org.uk.* [Online] 2020. https://pathways.nice.org.uk/pathways/oral-health-improvement-for-local-authorities-and-their-partners/improving-oral-health-in-early-years-services-including-nurseries .

19. National Institute for Health and Care Excellenc. Oral health promotion in the community. *Nice.org.uk.* [Online] 2016. https://www.nice.org.uk/guidance/qs139.

20. Office for National Statistics. Population estimates. *ons.gov.uk.* [Online] https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/latest.

21. Dental Health Foundation. Oral Health-the facts. *Dental Health Foundation- Ireland.* [Online] https://www.dentalhealth.ie/dentalhealth/.

22. NHS Digital. Adult Dental Health Survey-2009. *NHS Digital.* [Online] https://digital.nhs.uk/data-and-information/publications/statistical/adult-dental-health-survey/adult-dental-health-survey-2009-first-release.

23. London Councils. Local Overview Croydon. *Croydon Observatory.* [Online] 2018. https://www.croydonobservatory.org/wp-content/uploads/2018/04/Intelligent-London-Education-and-Learning-of-young-people-in-Croydon-Jan18.pdf , 2018.

24. Public Health England. NCMP and Child Obesity Profile. *fingertips.phe.org.uk.* [Online] https://fingertips.phe.org.uk/profile/national-child-measurement-programme .

25. —. National Dental Epidemiology Programme for England: oral health survey of five-year-old children 2017. *Assets.publishing.service.gov.uk.* [Online] 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/768368/NDEP_for_England_OH_Survey_5yr_2017_Report.pdf.

26. —. Oral Health Survey of five- year-old and 12-year-olds children attending special support schools . *Dental public health epidemiology programme.* [Online] 2014. http://www.nwph.net/dentalhealth/specsurvey/DPHEP%20for%20England%20OH.

27. Department for Education. Children looked after in England including adoption: 2017 to 2018. ***Gov.uk.*** **[Online] 2018. https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2017-to-2018.**

28. NHS Digital. Adult Dental Health Survey 2009- Summary report and thematic series. ***digital.nhs.uk.*** **[Online] 2011. https://digital.nhs.uk/catalogue/PUB01086.**

29. Public Health England. What is Known About the Oral Health of Older People in England and Wales:A review of oral helth surveys of older people. ***Assets.publishing.service.gov.uk.*** **[Online] 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.**

30. —. Oral Health Profiles. ***fingertips.phe.org.uk.*** **[Online] https://fingertips.phe.org.uk/search/oral#page/4/gid/1/pat/6/par/E12000007/ati/102/are/E09000008/iid/1206/age/1/sex/4.**

31. Cancer Research UK. Statistics by cancer type. ***cancerresearchuk.org.*** **[Online] http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/oral-cancer.**

32. NHS Digital. NHS Dental Statistics for England-2016-17. ***NHS Digital.*** **[Online] 2018. https://digital.nhs.uk/catalogue/PUB30069.**

33. Dental Check By One (DCby1). ***Dentalcheckbyone.co.uk.*** **[Online] https://dentalcheckbyone.co.uk/.**

34. NHS England. First dental check-up. ***England.nhs.uk.*** **[Online] https://www.england.nhs.uk/2018/05/70000-more-toddlers-to-get-their-first-dental-check-up-as-nhs-england-targets-childhood-dental-health.**

35. —. GP Patient Survey: CCG report (July 2017) publication. ***gp-patient.co.uk.*** **[Online] https://www.gp-patient.co.uk/surveysandreports..**

36. Anagnostopoulos, Fotio. Oral Health Impact Profile. ***Encylopedia of Quality of Life and Wellbeing Research.*** **2014.**

Appendix 1: Policies related to oral health

- NICE (2014) Oral Health: Local Authorities and Partners. NICE Guidance: PH55. https://www.nice.org.uk/guidance/ph55/chapter/1-recommendations
- Public Health England (2014) Local Authorities improving oral health: commissioning better oral health for children and young people. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/321503/CBOHMaindocumentJUNE2014.pdf
- Public Health England (2014) 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
- NICE 2017 Improving oral health in early years services including nurseries. https://www.gov.uk/oral-health-improvement-for-local-authorities-and-their-partners-improving-oral-health-in-early-years-services-including-nurseries.pdf
- NHS Outcomes Framework 2016/17 includes indicators related to patient experiences of dental services, and access to dental services. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/513157/NHSOF_at_a_glance.pdf
- NHS Commissioning Board (2013) Securing excellence in commissioning NHS dental services. Guidance on commissioning dental services that are cost and clinically effective. https://www.england.nhs.uk/wp-content/uploads/2013/02/commissioning-dental.pdf
- The NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch Regulations 2012: Part 4. Dental Public Health Functions of Local Authorities. http://www.legislation.gov.uk/uksi/2012/3094/part/4/made
- NICE (2016). Oral Health for Adults in Care Homes. NICE Guidance 48. https://www.nice.org.uk/guidance/ng48
- NICE (2016) Oral Health Promotion in the Community. Quality Standard: QS139. https://www.nice.org.uk/guidance/qs139

Appendix 2: Additional Data

Table 6: Finished consultant episodes for children and adolescents (aged 0-19 years) for hospital dental extractions as a percentage of the population in 2016/17 (all diagnoses)

Borough	0-4yrs	5-9yrs	10-14yrs	15-19yrs	Total 0-19yrs
Bromley	0.3%	0.9%	0.7%	0.4%	0.6%
Croydon	0.3%	0.9%	0.6%	0.6%	0.6%
Lambeth	0.4%	1.2%	0.7%	0.2%	0.6%
Lewisham	0.4%	1.7%	0.7%	0.7%	0.9%
Merton	0.3%	0.9%	0.5%	0.4%	0.5%
Southwark	0.3%	1.6%	1.0%	0.7%	0.9%
Sutton	0.4%	1.3%	0.6%	0.3%	0.7%
Wandsworth	0.3%	0.9%	0.5%	0.3%	0.5%

Table 7: Finished consultant episodes for children and adolescents (aged 0-19 years) for hospital dental extractions as a percentage of the population in 2016/17 (primary diagnoses)

Borough	0-4yrs	5-9yrs	10-14yrs	15-19yrs	Total 0-19yrs
Bromley	0.2%	0.7%	0.2%	0.1%	0.3%
Croydon	0.3%	0.7%	0.2%	0.3%	0.4%
Lambeth	0.3%	1.4%	0.4%	0.3%	0.6%
Lewisham	0.3%	1.2%	0.4%	0.2%	0.5%
Merton	0.2%	0.8%	0.2%	0.2%	0.4%
Southwark	0.3%	1.2%	0.5%	0.3%	0.6%
Sutton	0.4%	1.2%	0.3%	0.1%	0.5%
Wandsworth	0.3%	0.8%	0.2%	0.1%	0.4%

Appendix 3: NICE PH55 Recommendations

Recommendation 1:	Ensure oral health is a key health and wellbeing priority
Recommendation 2:	Carry out an oral health needs assessment
Recommendation 3:	Use a range of data sources to inform the oral health needs assessment
Recommendation 4:	Develop an oral health strategy
Recommendation 5:	Ensure public service environments promote oral health
Recommendation 6:	Include information and advice on oral health in all local health and wellbeing policies
Recommendation 7:	Ensure frontline health and social care staff can give advice on the importance of oral health
Recommendation 8:	Incorporate oral health promotion in existing services for all children, young people and adults at high risk of poor oral health
Recommendation 9:	Commission training for health and social care staff working with children, young people and adults at high risk of poor oral health
Recommendation 10:	Promote oral health in the workplace
Recommendation 11:	Commission tailored oral health promotion services for adults at high risk of poor oral health
Recommendation 12:	Include oral health promotion in specifications for all early years services
Recommendation 13:	Ensure all early years services provide oral health information and advice
Recommendation 14:	Ensure early years services provide additional tailored information and advice for groups at high risk of poor oral health
Recommendation 15:	Consider supervised tooth brushing schemes for nurseries in areas where children are at high risk of poor oral health
Recommendation 16:	Consider fluoride varnish programmes for nurseries in areas where children are at high risk of poor oral health
Recommendation 17:	Raise awareness of the importance of oral health, as part of a 'whole-school' approach in all primary schools
Recommendation 18:	Introduce specific schemes to improve and protect oral health in primary schools in areas where children are at high risk of poor oral health
Recommendation 19:	Consider supervised tooth brushing schemes for primary schools in areas where children are at high risk of poor oral health
Recommendation 20:	Consider fluoride varnish programmes for primary schools in areas where children are at high risk of poor oral health

Recommendation 21:	Promote a 'whole school' approach to oral health in all secondary schools

Appendix 4: Details about dental survey of three and five year olds

The aim of the national oral health survey for three and five year old children is to measure the prevalence and severity of tooth decay among five-year-old children within each local authority (PHE, 2016). Caries diagnostic criteria are based on the British Association for the Study of Community Dentistry (BASCD) recommendations from previous surveys. The primary sampling unit is the local authority boundaries at unitary, metropolitan borough or lower tier level. A minimum sample size of 250 examined children is required per lower-tier local authority, from a minimum of 20 schools. The survey population is children who are;

- three years old, but have not had their fourth birthday on the date of examination attending child care institutions.
- five years old, but have not had their sixth birthday on the date of examination attending state schools.

Positive consent is required from parents/ carers. However, consent process changed from negative to positive consent in 2007-2008.

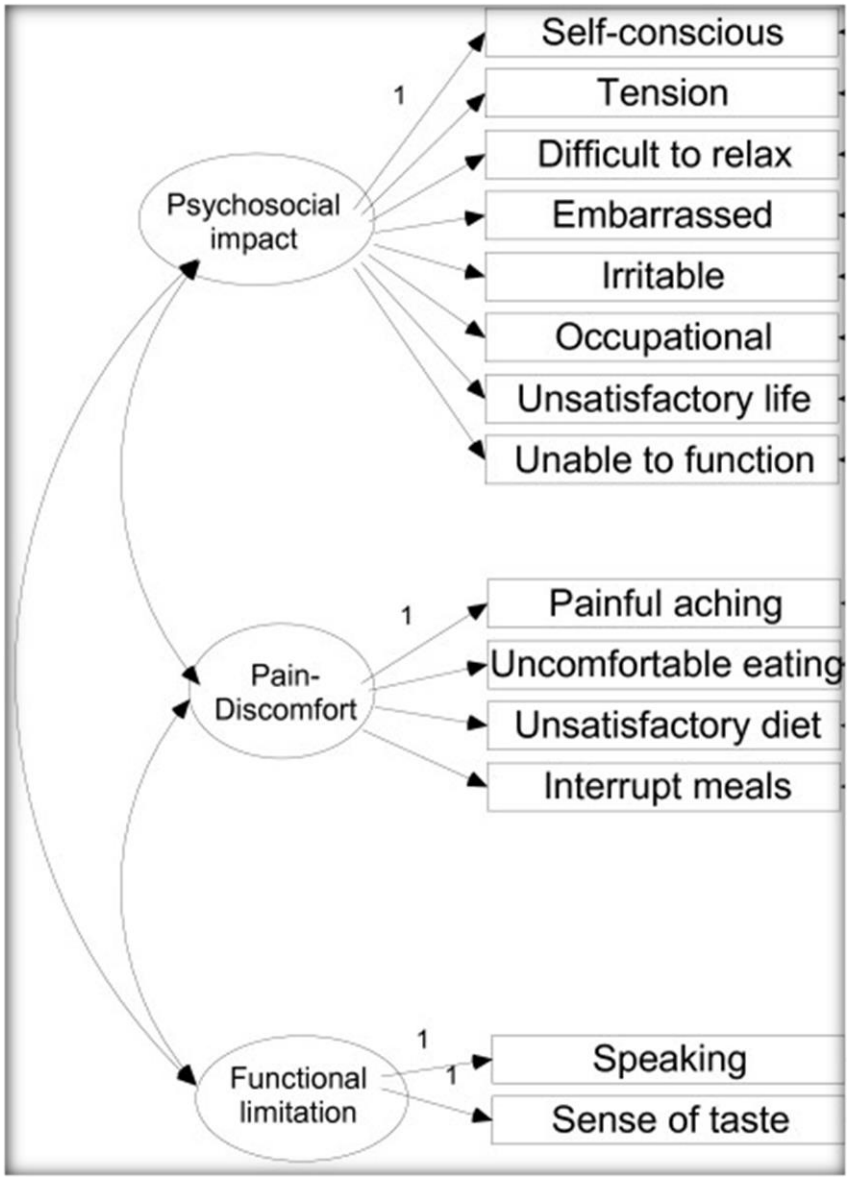
Dental health is measured by using the dmft index. This index is used to assess dental decay experience. The index is made up of:

- dt: decayed teeth
- mt: missing teeth due to decay
- ft: filled teeth due to decay

Appendix 5: Oral Health Impact Profile

The Oral Health Impact Profile (OHIP) is a 49-item measure of oral health-related quality of life, which measures people's perception of the impact of oral disorders on their well-being, that is, the dysfunction, discomfort, disability, and handicap caused by oral conditions.

The Oral Health Impact Profile (OHIP) was developed as a self-rating patient-centred instrument designed to assess the priorities of care by documenting social impact among individuals and groups, understand oral health behaviours, evaluate dental treatment, and provide information for planning for oral health. Seven dimensions are captured by the OHIP-49: Functional Limitation, Pain- Discomfort and Psychosocial impact [36].



Source: Adapted from Research Gate, 2020

Acknowledgements

Lead Authors; Anna Kitt, PH Principal; Damian Brewer, Specialist PH Practitioner; Carol Lewis, Senior PH Intelligence Analyst; Rachel Tilford, PH Principal; Sanjana Jio, PH Principal;

Project team: Susan Mubiru, PH Principal; Damian Brewer, PH Principal; Emma Pacey, Oral Health Promotion Lead CDS;

Lead Consultants: Ellen Schwartz, PH Consultant; Huda Yusuf, PHE Dental PH Consultant

Acknowledgement: Special thanks to all partners that provided information and data that contributed to this needs assessment