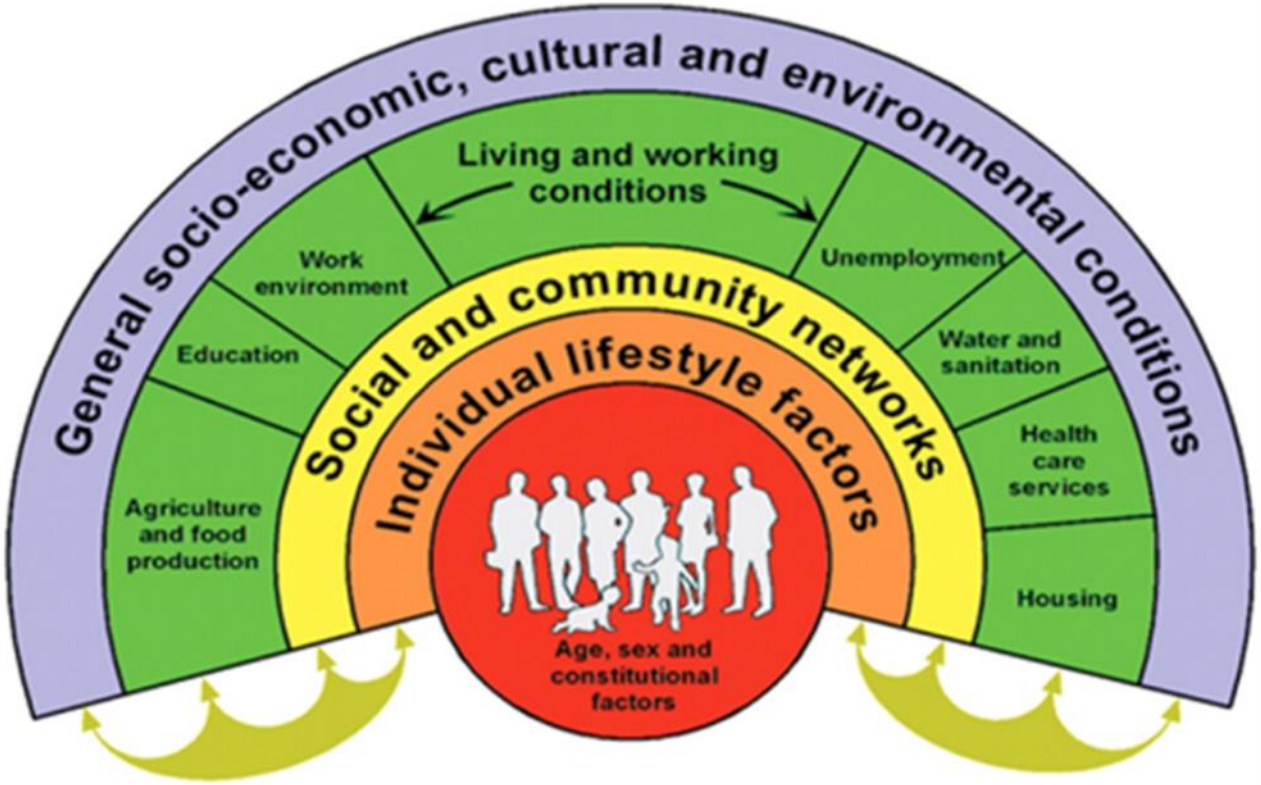
Oral Health

Brent JSNA
2019/2020

NHS
Brent
Clinical Commissioning Group

Overview

Dental decay is one of the commonest health conditions affecting children and young people and is one of the top causes of non-emergency hospital admissions for children.



Oral disease is associated with an array of structural determinants such as income, goods and services. This approach looks at multiple interconnections such as daily living conditions as well as social and individual lifestyle factors.

For instance, factors such as poor access to health care systems or low literacy levels or an individuals employments status can affect how well they look after their oral health.

This structure allows us to see determinants such as lower income and socially disadvantaged groups in Brent may be affected by oral health problems (See Figure 1).

Figure 1: Determinants of oral and general health (Dahlgren and Whitehead, 1991)

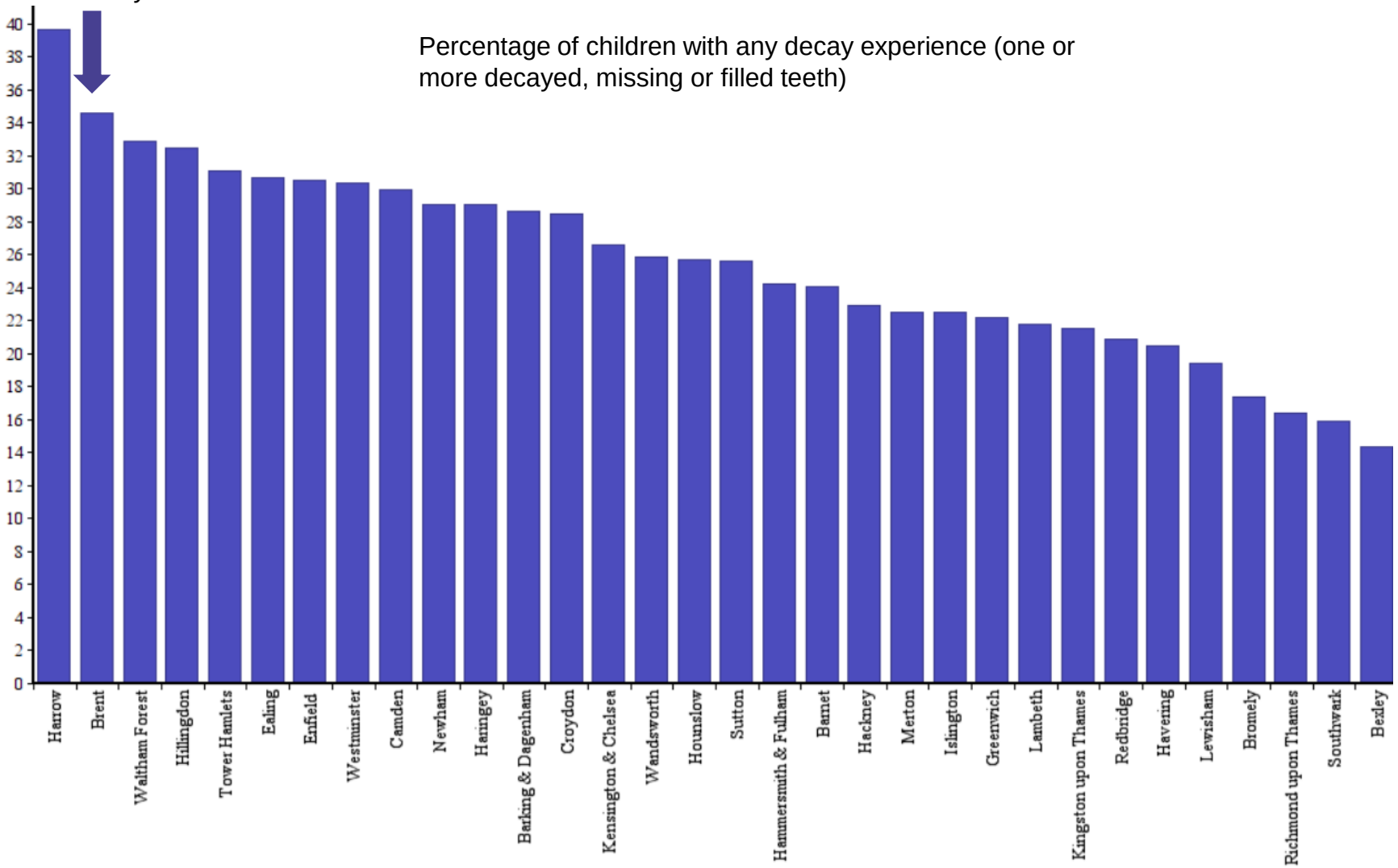
Oral Health in Brent

Brent has the **2nd highest** proportion of children with dental decays in London (35%, PHE 2017)

The number of children with dental decay **continues to rise** at odds with national trends and the **London average of 26%**

2nd highest in London with dental decay.

Percentage of children with any decay experience (one or more decayed, missing or filled teeth)



Source: Public Health England, National Dental Epidemiology Programme for England, Oral Health Survey of five-year-old children 2017

Dental decay

Every 2 years

The Dental Public Health Intelligence programme surveys the oral health of 5 year olds in local schools.

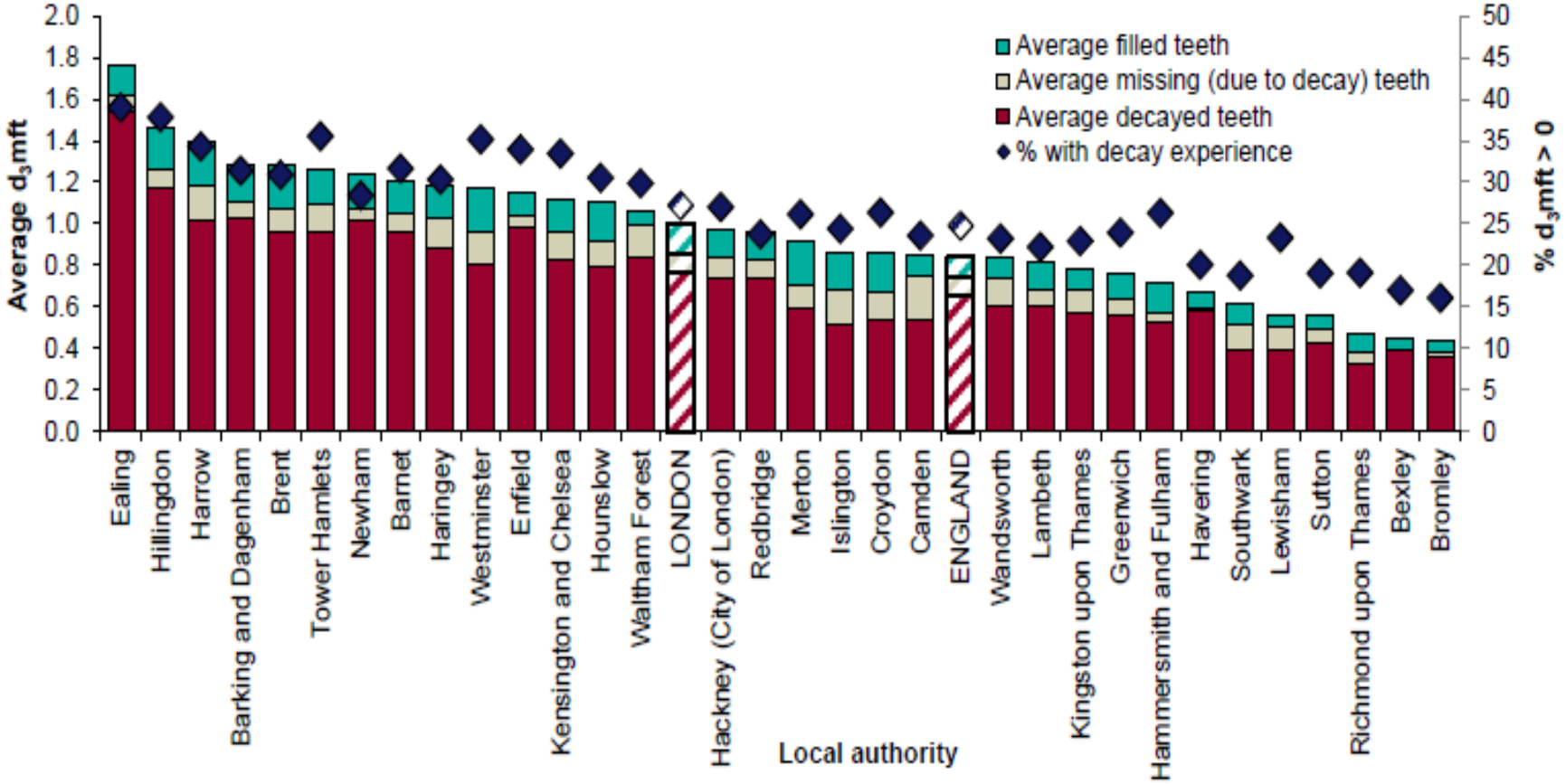
The proportion of 5 year old children affected by dental decay is an indicator used to assess the general health and well-being of children.

In Brent, 9% of children under the age of 5 have dental decay of the incisors due to high intake of sugary drinks similar to **London average of 8%.**

Source: Public Health England. Dental Public Health Intelligence Programme. Hospital episode statistics: Extractions data

Dental Decay in Children

- In the 2015 National Dental Epidemiology programme survey, 542 children were Sampled in Brent.
- One of the indicators for this is the proportion of children aged five years free from dental decay. This data shows Brent dental decay problems for children are significantly higher than London and England averages



Source: PHE Local Oral Health Profiles, 2019

Proportion of Different Measures of Dental Decay in Brent and National Averages

	Brent	London	England
% without decay experience	69.2%	72.6%	75.2%
% with decay experience	30.8%	27.2%	24.7%
% with active decay	26.6%	23.1%	21.5%
% with experience of extraction	3.4%	23.1%	21.5%
% with dental abscess	0.2%	1.3%	1.4%
% with teeth decays into pulp	2.1%	3.4%	3.6%
% with decay affecting incisors	12.1%	8.2%	5.6%
% with high levels of plaque present on upper front teeth	2.3%	1.7%	1.7%

Table: Range of measures of oral health among five-year-olds in Brent local authority compared with England and London averages.

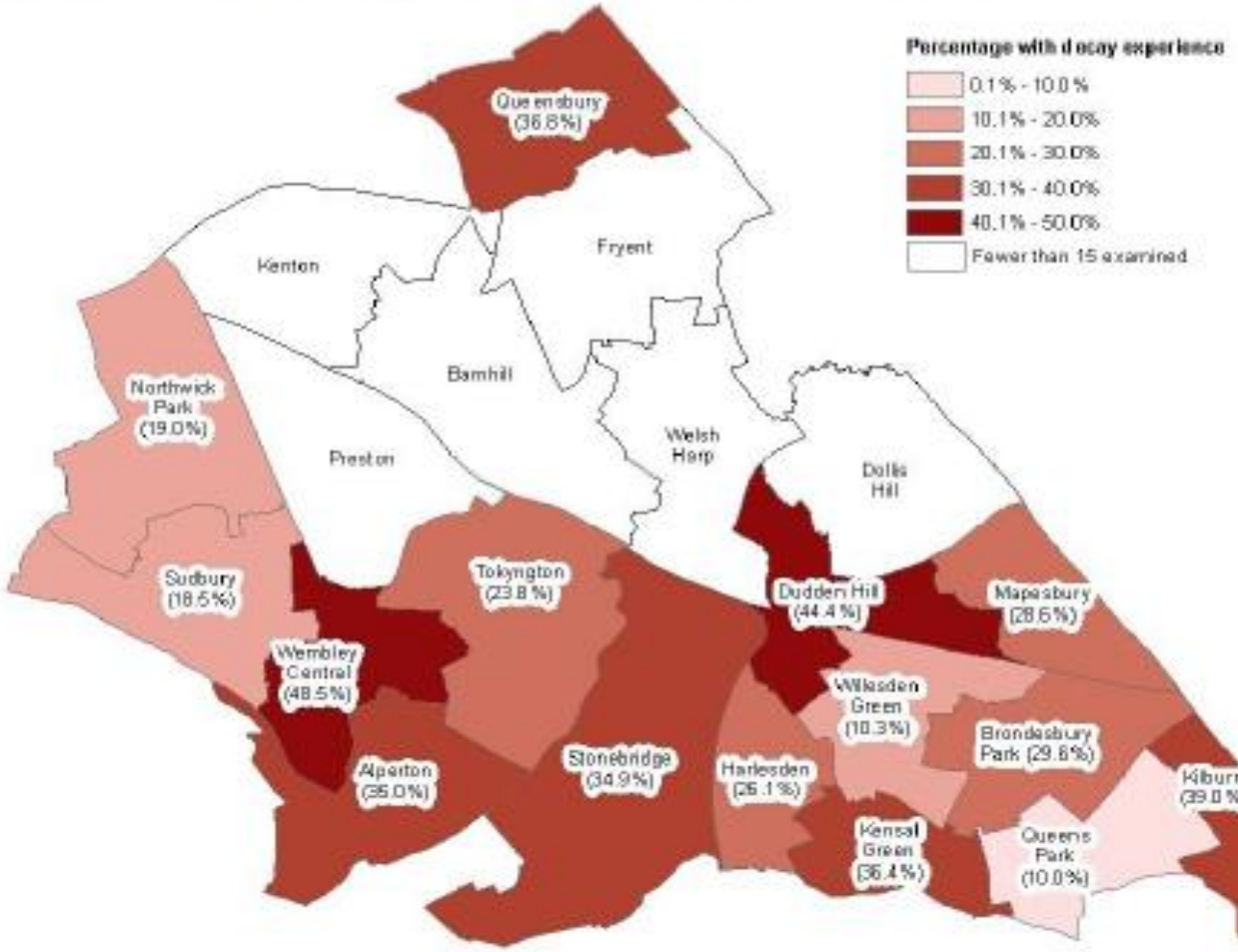
This table highlights the percentage of a range of measures of oral health among five year olds across London, England and Brent.

We can see from the table that the percentage of five year olds with active decay is significantly higher than London and England averages. Also the proportion is significantly higher for decay affecting incisors as well as decay experience.

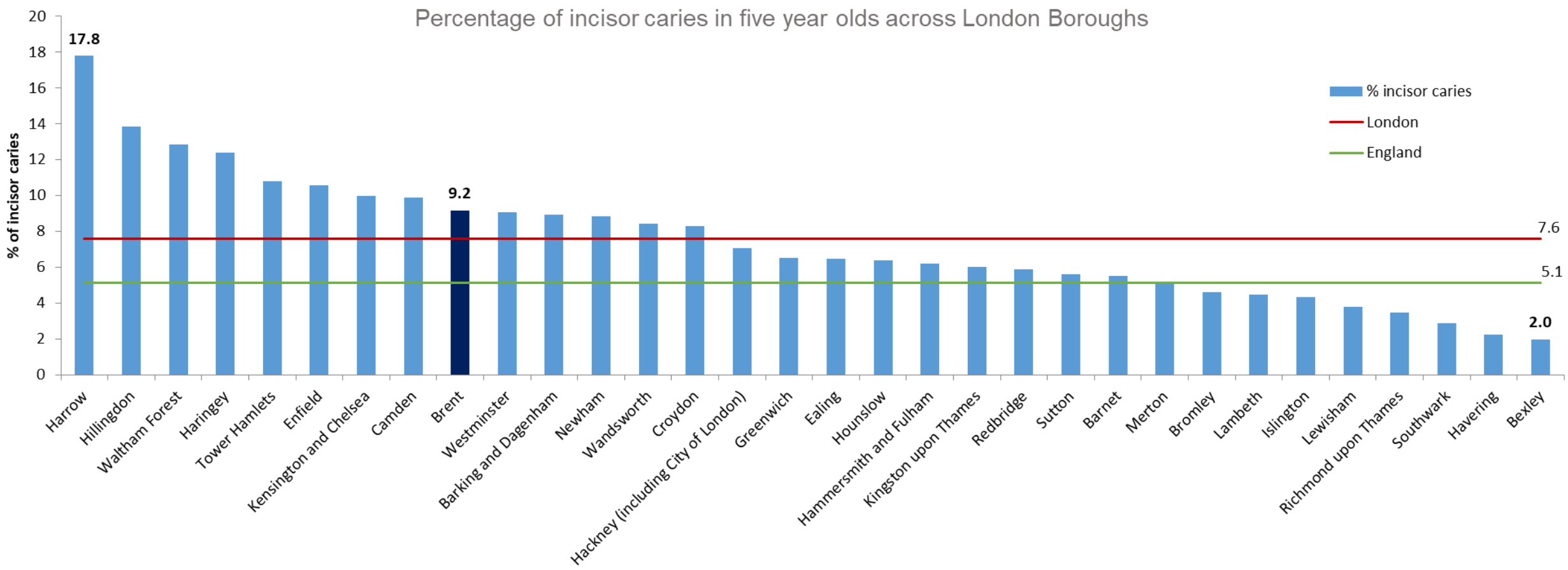
Prevalence of Dental Decay in children by Ward

- In summary, Brent local authority has levels of decay that are higher than the average for England. The higher levels of decay experience can be found in the Wembley Central and Dudden Hill wards. This indicates that efforts to improve oral health and reduce inequalities should be targeted at these areas.

Figure 3: Map showing decay prevalence by ward in Brent local authority.



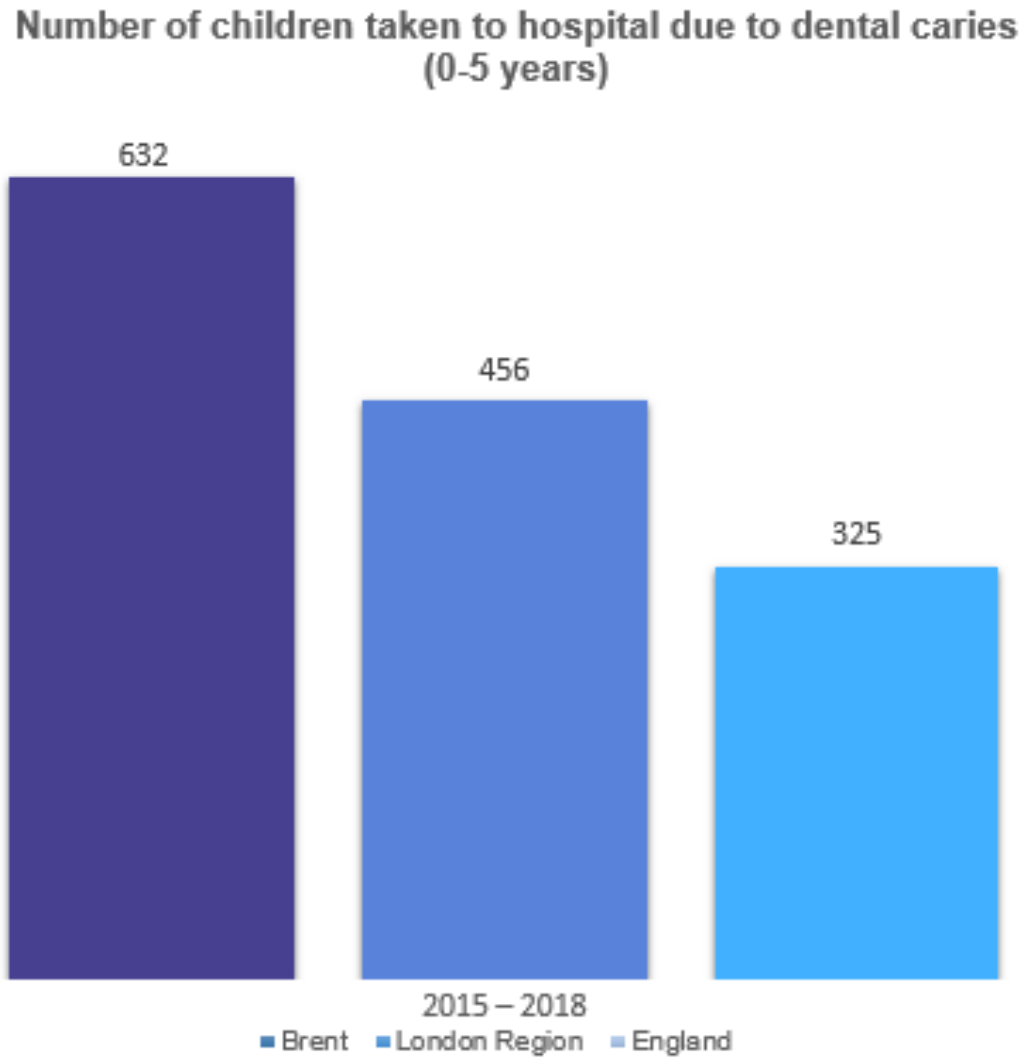
Prevalence of Dental Decay affecting Incisors

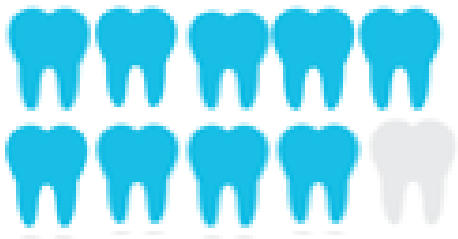


Dental decay affecting the incisors is often rapid and extensive and is usually associated with prolonged bottle use in infants and a high dietary intake of free sugar. In 2018, **9.2%** of children in Brent under the age of 5 had this form of caries, compared with 7.6% in London and 5.1% in England. Brent continues to be worse than the London average.

Source: Public Health England, National Dental Epidemiology Programme for England, Oral Health Survey of five-year-old children 2017

Hospital admissions for Dental Caries





Almost 9 out of 10 hospital tooth extractions among children aged 0 to 5 are due to preventable tooth decay. It also the most common hospital procedure in 6 to 10 year olds (PHE, 2019).

Accident and Emergency attendances in children aged 0-4 years within **Brent is significantly worse than the England Average.** In 2017/18 the local value was **850.9 per 1,000** compared to 619.0 per 1,000 in England.

From 2015-18, **632 children** aged 0 to 5 were admitted to hospital from Brent
Compared to the significantly lower England average of 325 children.

Source: PHE Brent Child Health Profile 2019.

Health burdens

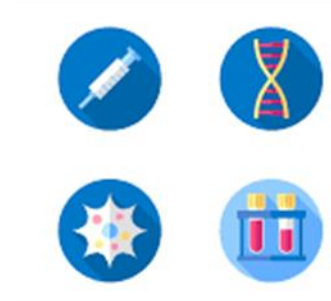
Some of the determinants of oral disease are harmful behaviours such as:

Increased consumption of sugary foods and drinks

Poor oral hygiene

Low fluoride exposure

They are the risk factors common to a number of chronic diseases such as:



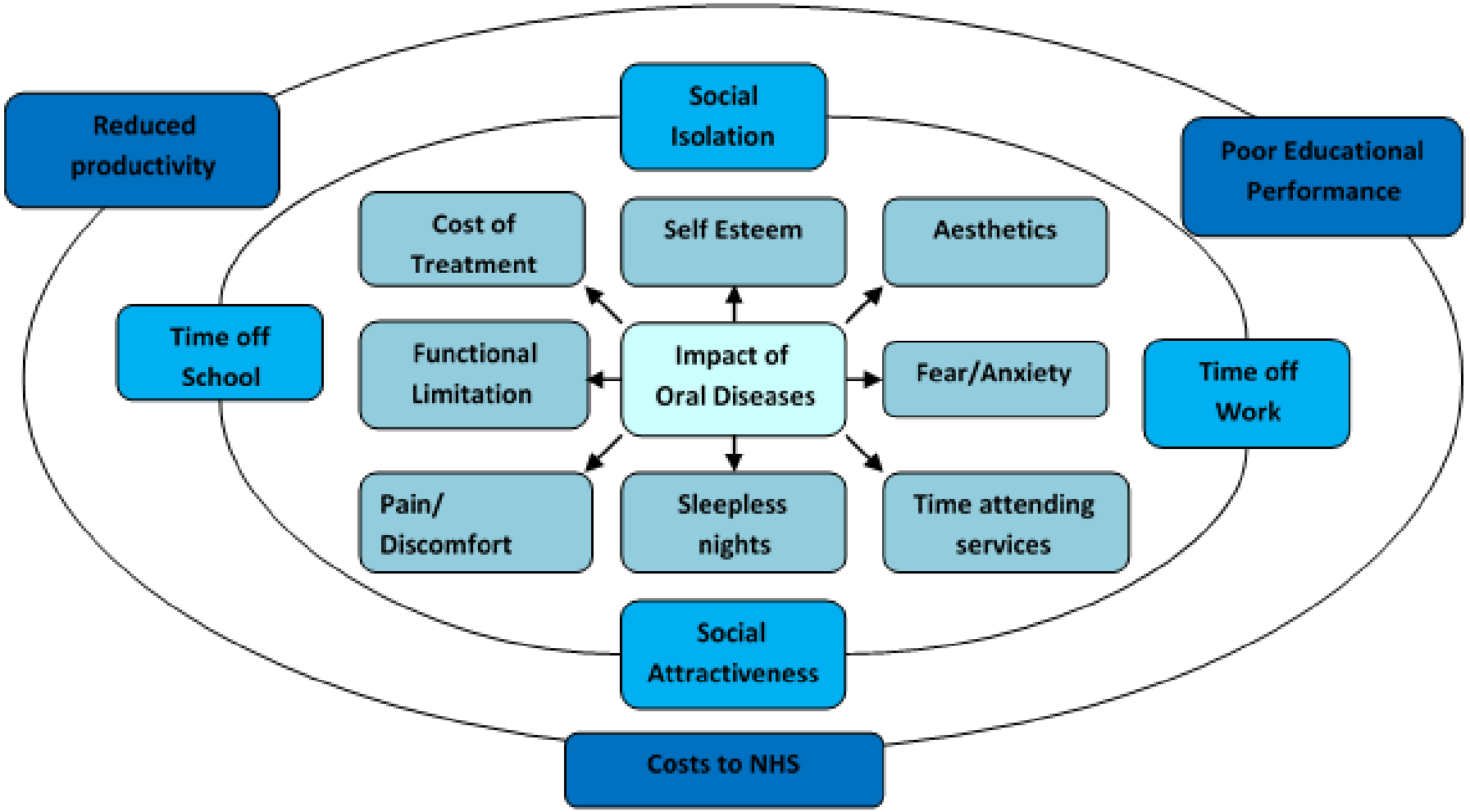
Cancers

Obesity

Type 2 diabetes

Social determinants of Oral Health disease

The impact of oral health disease could lead to a number of issues as shown in the diagram below:



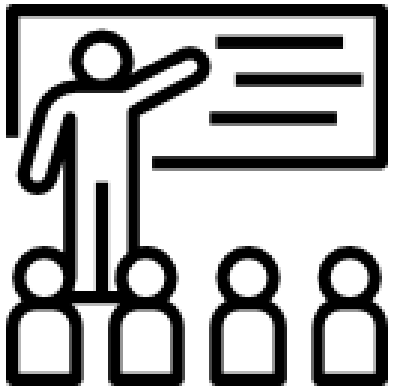
Source: [social determinants diagram]

Dental Harm and School Readiness

Research about extractions in children in North west Hospitals showed that on average

3 school days are missed due to dental problems.

Consequently this result of a tooth extraction may impact a child's performance at school and educational achievement.



67% of parents reported their child had been in pain.

38% of children had sleepless nights because of the pain

Source: Public Health England. Dental Public Health Intelligence Programme. Hospital episode statistics: Extractions data

Commissioning Implications

- In Brent, the Oral Health Network Group have addressed oral health promotion and are proactively seeking funding opportunities to further create oral health awareness campaigns and training. The aim of the group is overseeing the delivery plan for child oral health promotion in Brent and to facilitate multi-agency partnership working.

- Brent Public Health team commission Whittington Health NHS Trust to deliver oral health promotion across the borough. They have introduced Supervised Tooth Brushing programme to 6000 children in schools and nurseries.
- Whittington health offer training to all health visitors, school nurses and early years.

- HealthWatch surveyed parents about oral health in February 2017.
- **The results have shown**
  - **Children are not visiting their dentist when they have had their first tooth.**
  - **Children are not brushing their teeth twice a day**
  - **Children are rinsing and not spitting.**

To tackle this the aim is to:

- **Make Every Contact Count (MECC).** Ensuring front line staff from all services in Brent are bringing public health issues to light in their contact with children and families. Oral health is one of the priorities identified and training has been offered.

- **Health Matters** – child dental health outlines how health and professionals can help prevent tooth decay in children under 5. Health Matters includes a call to action for healthcare practitioners.

Top 3 Interventions

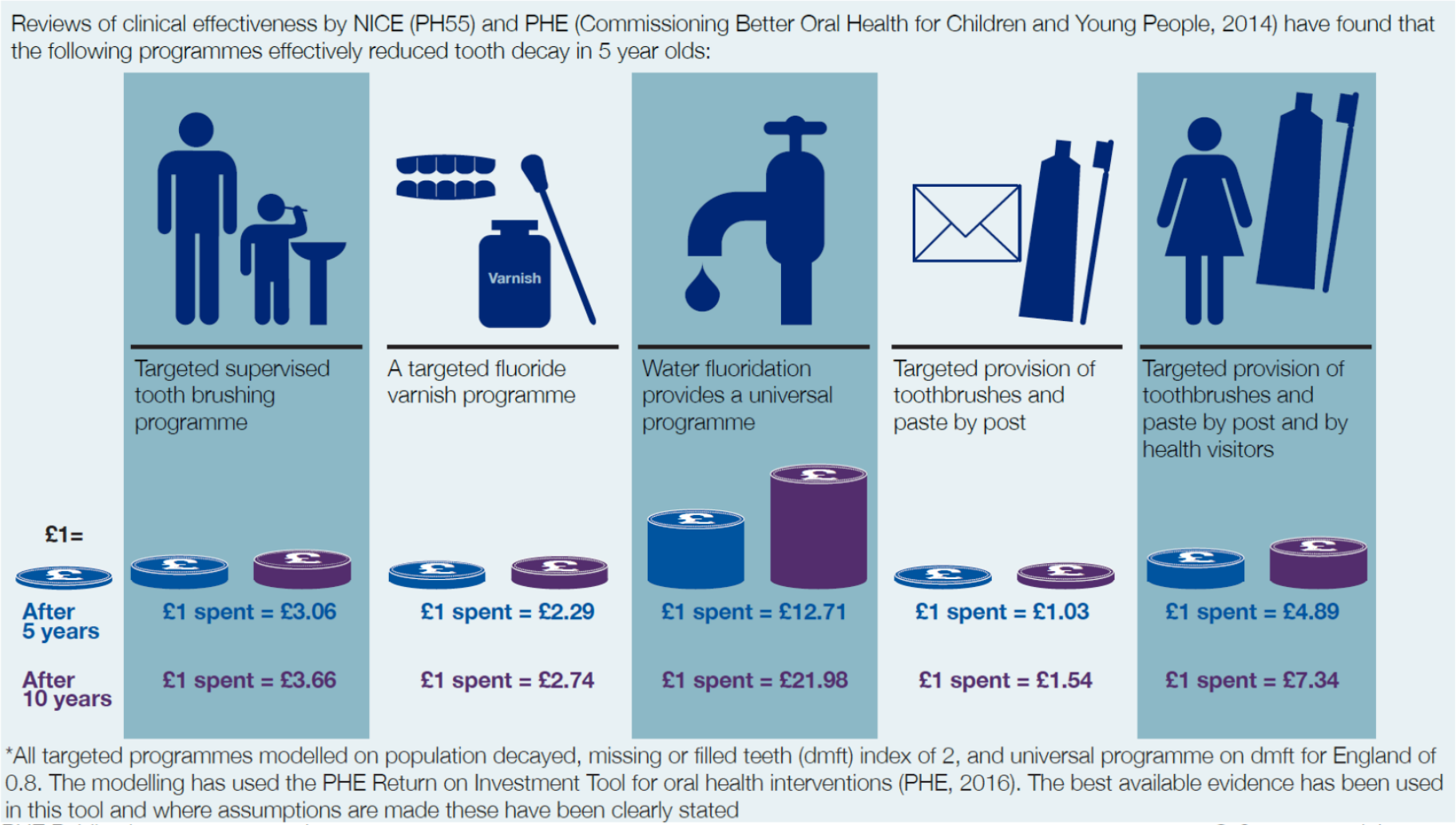
Reduce the food consumption of foods and drinks that contains sugars.

Brush teeth twice daily with fluoride toothpaste (1350-1500ppm), last thing at night and at least on one other occasion. After brushing spit, don’t rinse.

Take your child to the dentist when the first tooth emerge, at about 6 months and then on a regular basis.

Financial Implications

There is a strong financial return on investment to support the community based supervised tooth brushing programmes. It is estimated that for every £1 spent on a targeted supervised tooth brushing, it is estimated that there is a £3.06 return on investment after 5 years.



Source: Public Health England (2016). York Health Economics Consortium A rapid re-view of evidence on the cost-effectiveness of interventions to improve the oral health of children aged 0-5 years. PHE publications gateway number: 2016321

Technical Notes

	Meaning
Oral Health	"a state of being free from chronic mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing."
Dental Caries	Dental caries is caused if plaque is allowed to build up, it can lead to problems, such as holes in the teeth. The acid is usually produced when sugars in foods or drinks react with bacteria present in the plaque on the tooth surface.
Tooth decay	Tooth decay is damage to a tooth caused by dental plaque turning sugars into acid.
1350-1500ppm	This is the amount of fluoride in the toothpaste. It can be found on the side of the tube and is measured in parts per million (ppm). Toothpastes containing 1,350 to 1,500ppm fluoride are the most effective.

Data Sources

NHS Tooth decay definitions

Oral Health Fact Sheets

Oral Health Tables: Child-oral-health-applying-all-our-health

Public Health England. *Dental Public Health Intelligence Programme. Hospital episode statistics: Extractions data, 0 – 19 years olds, 2011 – 12 to 2017* – Available at: Dental Health Hospital Episode Statistics

PHE Tooth extractions and school attendance poster: Dental Health Matters

Public Health England, National Dental Epidemiology Programme for England: Oral Health Survey of five-year-old children 2017