

## **Oral Health insights paper**

### **1. The issue: dental decay, oral infection and tooth extractions**

- The proportion of dental courses of treatment involving extractions in 0-17-year olds by NHS dentists in Barnet (5%) is lower or similar to statistically neighbouring London boroughs, London and similar to levels in England.
- 32% of 5-year olds in Barnet had decay experience in 2014/15; this was higher than England (25%) but statistically similar to London (27%) neighbouring boroughs.
- Number of teeth with decay has remained similar between 2007/8 and 2014/15 in Barnet, however it has improved in London and England.
- Tooth extraction is the most common reason for hospital admission of 5–9 year old children, and is completely preventable.
- The number of in-patient extractions due to decay in 0-10 years olds has increased from 2011-12 to 2016/17 (by more than 50% in 0-5 year olds and almost 75% in 6-10 year olds)
- This could be due to tooth decay not being diagnosed and treated appropriately in primary care, or because children are seeking dental treatment when decay is at an advanced stage.
- Also, it could be that preventative measures such as reducing sugar consumption and brushing teeth at least twice a day need to be improved
- According to Health Matters: Child Dental Health, hospital based tooth extractions cost the NHS over £50 million for children under 19 in 2015-16.

### **2. Protective factors and risk factors: breastfeeding, gender, age, ethnicity and deprivation**

- The percentage of mothers who breastfed within 48 hours of delivery decreased from 91.5% in 2010/11 to 85.1% in 2014/15.
- Levels of breastfeeding were higher than London up to 2012/13 but lower in 2014/15
- Breastfeeding in Barnet has remained higher than the England average throughout the most recent 5 years of data.
- The rate of in-patient tooth extraction was four times higher among children living in the most deprived versus the least deprived areas in Barnet.
- In-patient tooth extractions for dental decay were significantly higher in 6-10-year olds compared to 0-5-year olds.
- There was no difference between boys and girls in Barnet for in-patient tooth extractions
- We need data and mapping on oral health and ethnicity to show which Barnet ethnic groups have worse dental decay.

### **3. Dental care**

- The number of NHS dentists has increased in Barnet from 2012/13 to 2016/17 compared to England.
- NICE guidelines recommend that children visit the dentist at least once every year.
- Children should be registered with a dentist as soon as their first teeth appear and should visit regularly (as often as their dentist recommends).
- However, the number of children in Barnet who accessed a dentist in the last 12 months was lower than neighbouring boroughs, London and England
- Possible reasons for this could be that parents are unsure when to register their child with a dentist or that they have issues with accessing a dentist
- The HealthWatch survey 2014/15 suggests that Barnet dentists are not taking on new NHS patients.

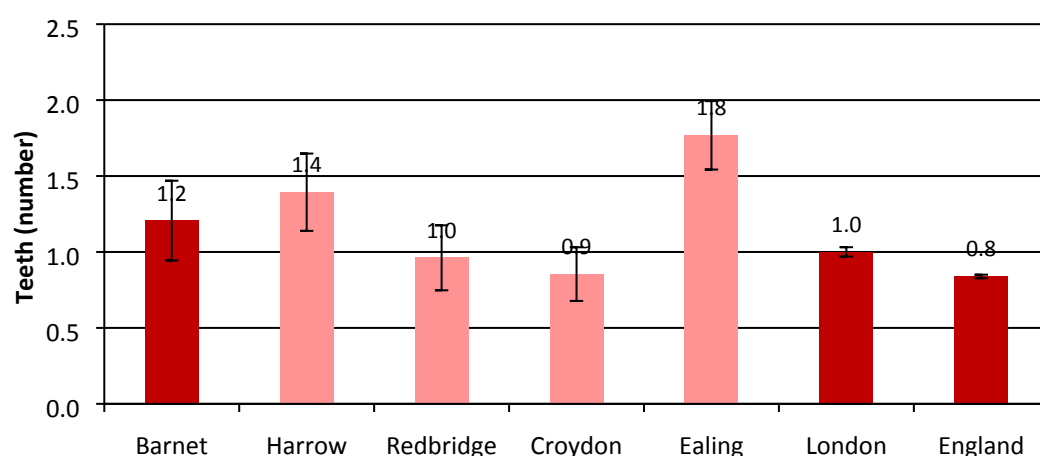
## **Complete Data Report**

Barnet Public Health Intelligence team Nov 2017

Note: Comments refer to statistically significant differences unless otherwise specified

### **1. Dental decay, oral infection and tooth extractions**

**Average number of teeth with decay experience in 5 yr olds in Barnet, 4 statistical neighbours, London & England, in 2014/15**

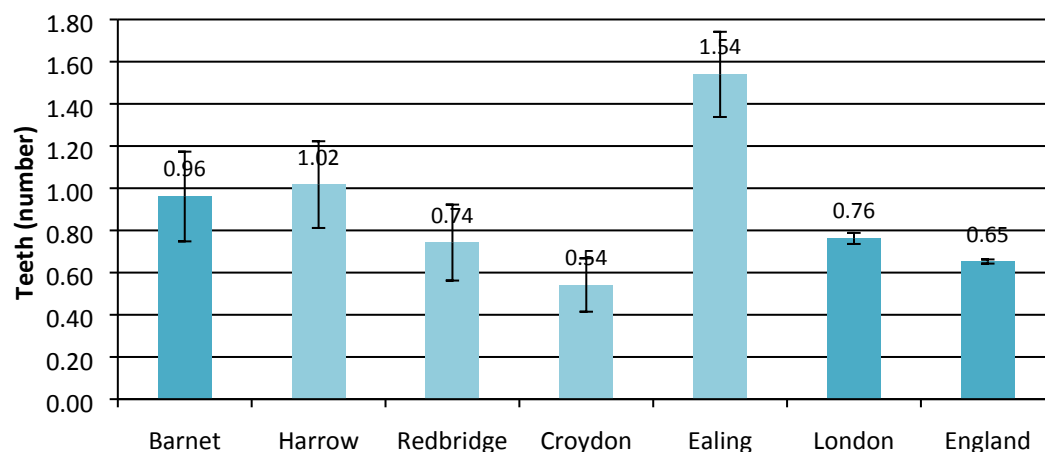


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, Barnet 5 yr olds had an average 1.2 teeth each with decay experience (i.e. decayed, filled, or missing due to dental extraction for decay).
- This was higher than in England but similar to London and three of Barnet's four closest statistical neighbours.

**Average number of decayed teeth in 5 yr olds in Barnet,  
4 statistical neighbours, London & England, in 2014/15**

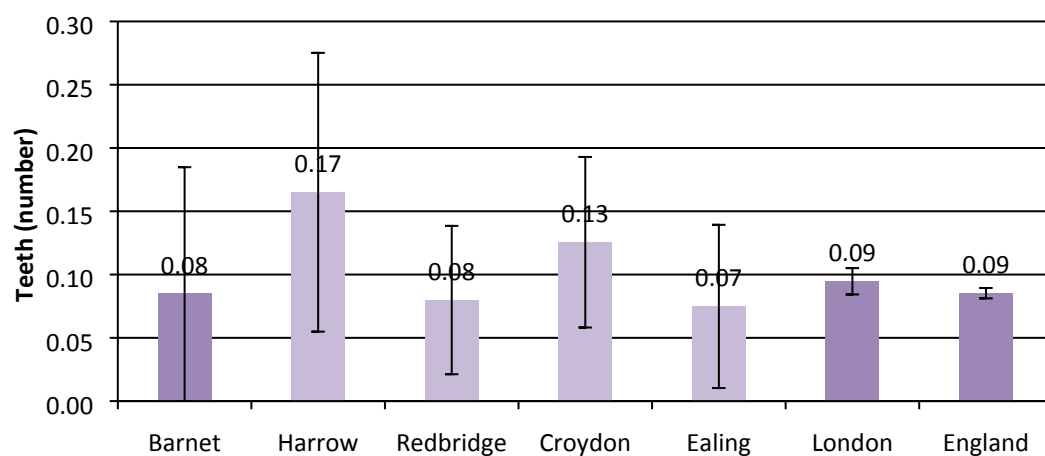


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, Barnet 5 yr olds had an average 1 decayed tooth each
- This was higher than in England but similar to London and two of four statistical neighbours.

**Average number of missing teeth in 5 yr olds in Barnet,  
4 statistical neighbours, London & England, in 2014/15**

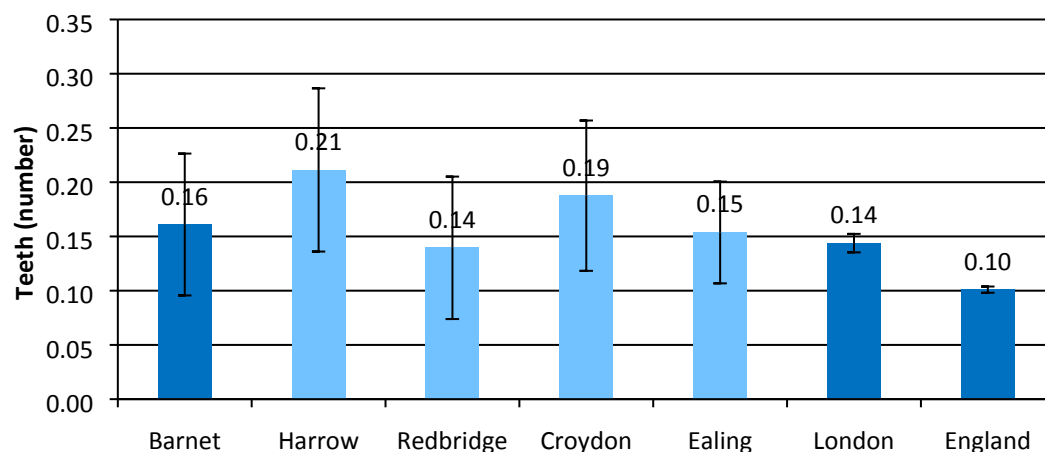


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, Barnet 5 yr olds had an average 0.08 missing teeth (due to extraction for dental decay) each.
- This was similar to levels for London, England and four statistical neighbours.

**Average number of filled teeth in 5 yr olds in Barnet,  
4 statistical neighbours, London & England, in 2014/15**

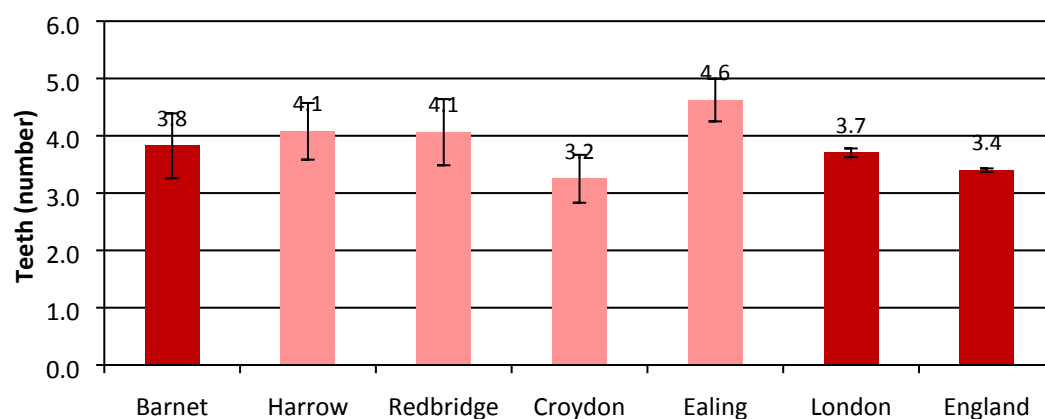


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, Barnet 5 yr olds had an average 0.16 filled teeth each.
- This was similar to levels in London, England and four statistical neighbours.

**Average number of teeth with decay experience, in 5 yr olds with any decay  
experience, in Barnet, 4 statistical neighbours,  
London & England, in 2014/15**

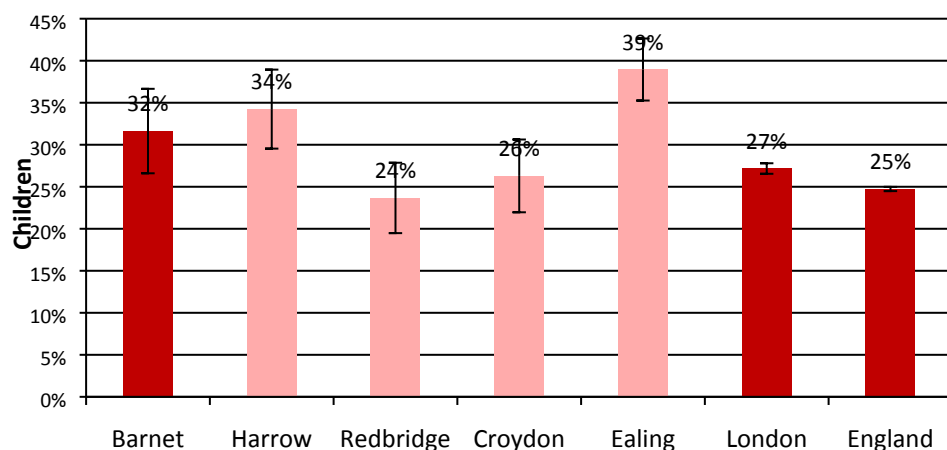


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, Barnet 5 yr olds with any dental decay experience had an average 3.8 teeth each with decay experience.
- This was similar to levels in London, England and four statistical neighbours.

**Proportion of 5 yr olds with decay experience in Barnet,  
4 statistical neighbours, London and England, 2014/15**

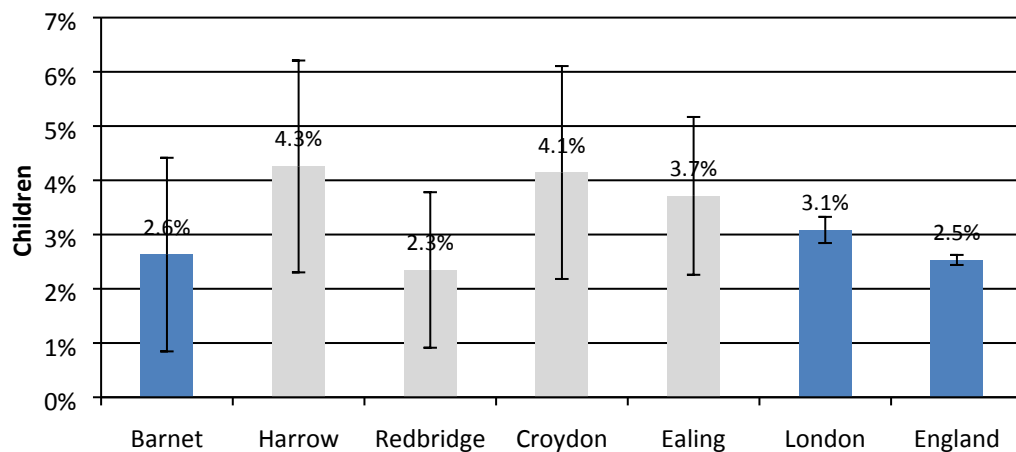


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, almost one-third (32%) of Barnet 5 year olds had decay experience
- This was more than in England, but similar to London and four statistical neighbours.

**Proportion of 5 yr olds with missing teeth in Barnet,  
4 statistical neighbours, London & England, in 2014/15**

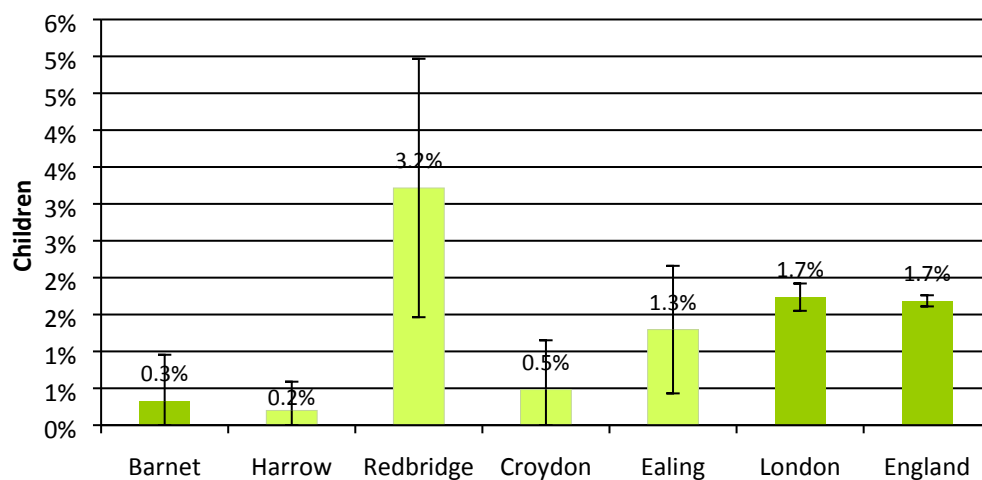


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, 2.6% of Barnet 5 yr olds had missing teeth due to extractions for dental decay.
- This was similar to levels in England, London and four statistical neighbours.

**Proportion of 5 yr olds with substantial plaque, in Barnet,  
4 statistical neighbours, London & England, in 2014/15**

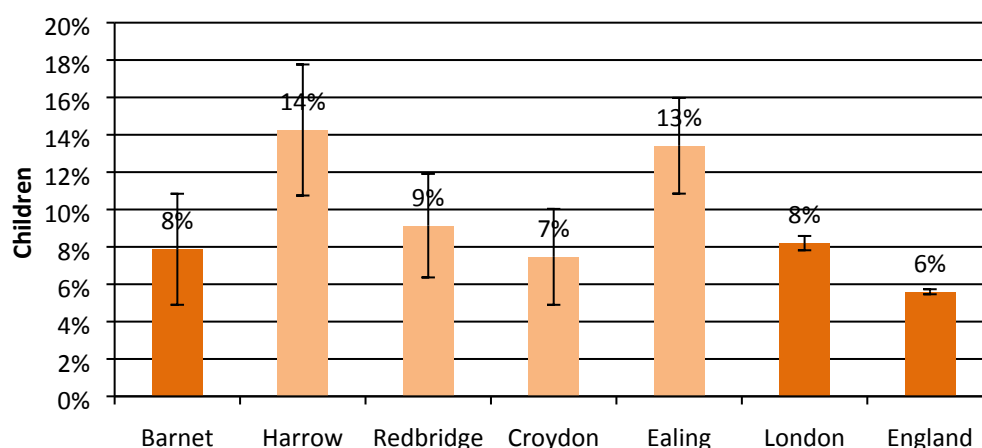


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, 0.3% of Barnet 5 yr olds had substantial plaque (a proxy measure for children who do not brush their teeth, or brush them rarely).
- This was better than in London and England, and similar to three of four statistical neighbours.
  - This indicates that brushing of teeth among children is better than in London and nationally whilst other charts show that different types of decay are not.

**Percentage of 5 yr olds with incisor caries in Barnet,  
4 statistical neighbours, London & England, in 2014/15**

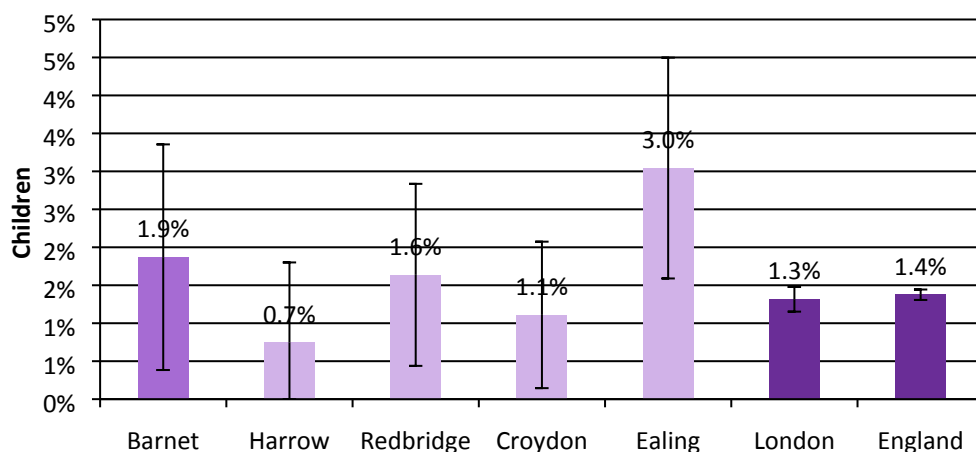


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, one in 12 (8%) of Barnet 5 yr olds had incisor caries (aggressive dental decay associated with long-term bottle use with sugar-sweetened drinks).
- This was similar to levels in London, England, and three of four statistical neighbours.

**Proportion of 5 yr olds with oral sepsis in Barnet,  
4 statistical neighbours, London & England, 2014/15**

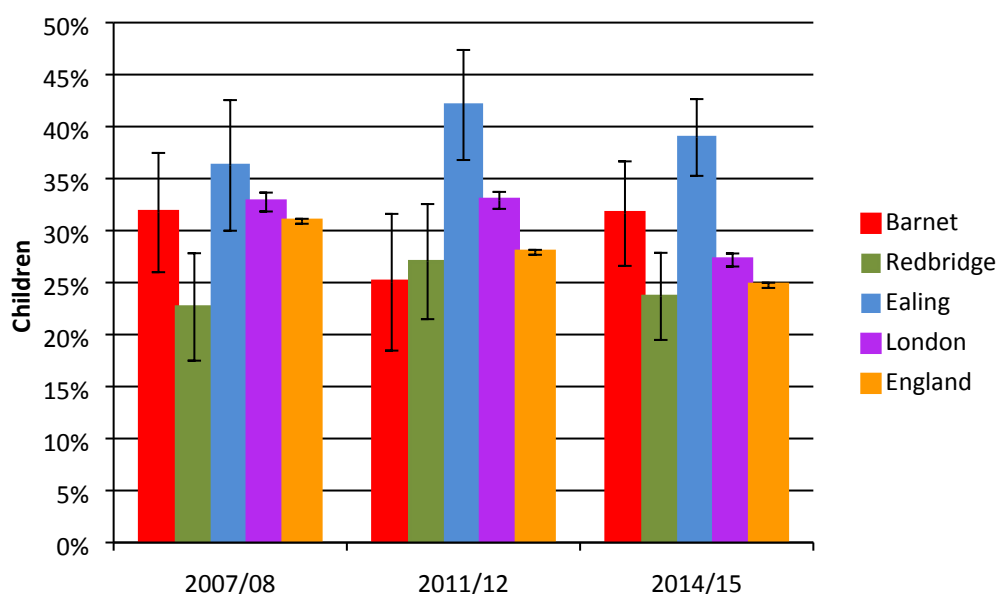


Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In 2014/15, nearly 2% of Barnet 5 yr olds had oral sepsis (increasing their risk of more serious infections).
- This was similar to levels in London, England and four statistical neighbours.
- Nearly all oral sepsis in 5 yr olds is due to dental decay and is completely preventable.

**Proportion of 5 yr olds with decay experience, in Barnet,  
2 statistical neighbours\*, London & England,  
in 2007/08, 2011/12 & 2014/15**



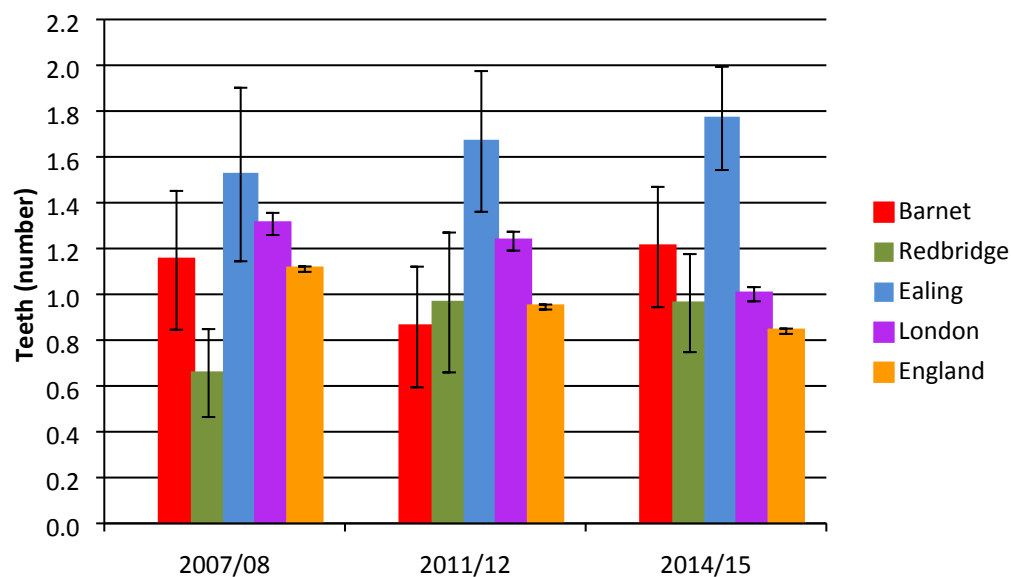
\*Those with complete records (Redbridge and Ealing)

Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In recent surveys (2007/08, 2011/12 and 2014/15), the proportion of 5 yr olds with dental decay experience has not changed significantly in Barnet or in two statistical neighbours.
- However, levels have fallen in London (by one-sixth) and England (by one-fifth).

**Average number of teeth with decay experience in 5 yr olds  
in Barnet, 2 statistical neighbours\*, London & England,  
in 2007/08, 2011/12 and 2014/15**



\*Those with complete records (Redbridge and Ealing)

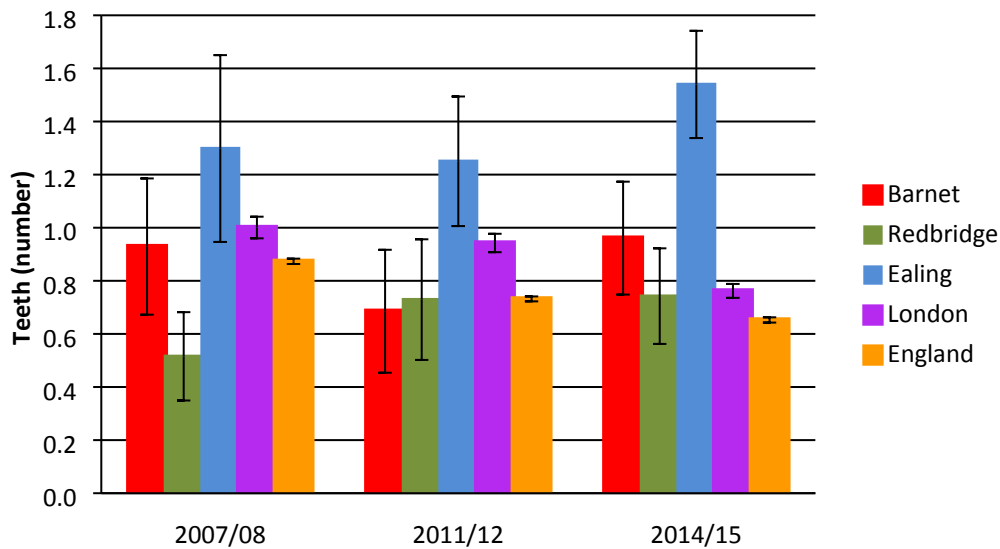
Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In recent surveys the average number of 5 yr olds' teeth with decay experience has not changed significantly in Barnet or in two statistical neighbours.
- However, levels in London and England have fallen significantly (by almost one-quarter).
- Barnet levels have deteriorated compared with London and England: they were lower than London's in 2011/12 but similar in 2014/15; and they were similar to England's in 2011/12 but higher in 2014/15.



**Average number of decayed teeth in 5 yr olds in Barnet,  
2 statistical neighbours\*, London & England,  
in 2007/08, 2011/12 & 2014/15**



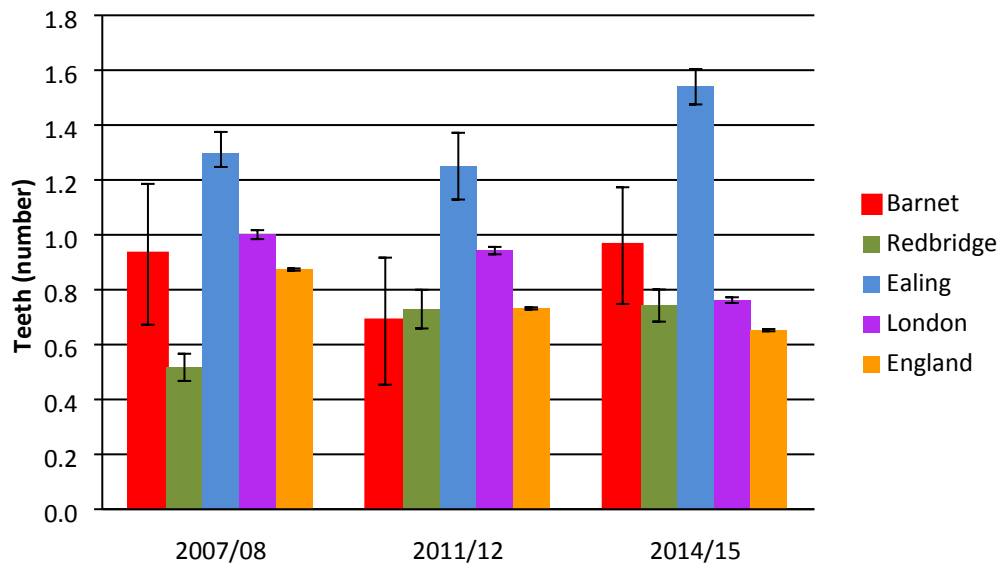
\*Those with complete records (Redbridge and Ealing)

Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In recent surveys, the average number of decayed teeth in 5 yr olds has not changed in Barnet or in two statistical neighbours.
- However, levels in London and England have fallen by one-quarter.
- Barnet has deteriorated compared with England: Barnet levels were similar to England's in 2011/12 but higher in 2014/15.

**Average number of missing teeth\* in 5 yr olds in Barnet,  
2 statistical neighbours\*\*, London & England,  
in 2007/08, 2011/12 & 2014/15**



\*Due to dental extraction

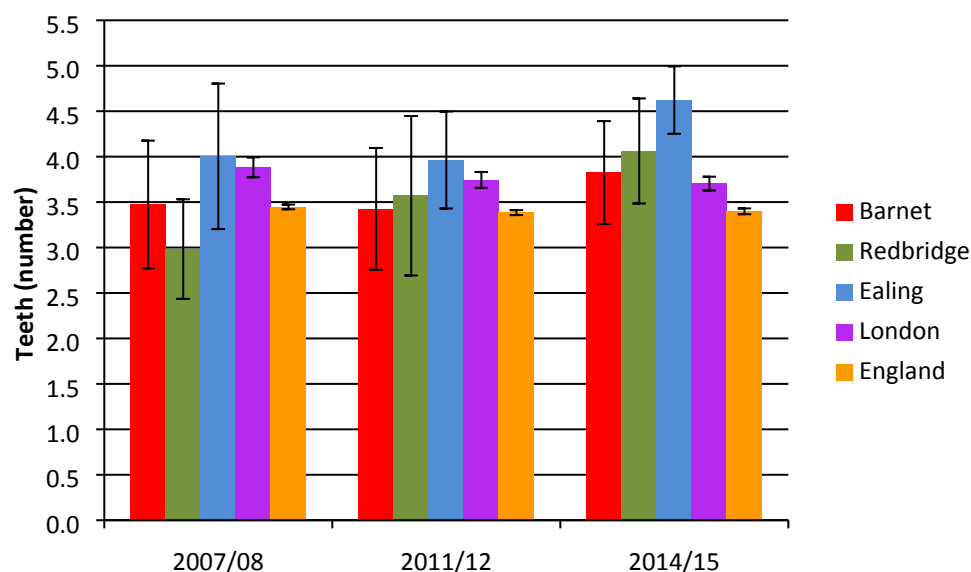
\*\*Those with complete records (Redbridge and Ealing)

Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In recent surveys, the average number of missing teeth in 5 yr olds has not changed significantly in Barnet, but levels in two statistical neighbours have risen.
- In contrast, levels have fallen in London (by over one-third) and England (by almost one-third).
- Barnet levels have deteriorated compared with England: they were similar to England's in 2007/08 and 2011/12 but higher in 2014/15.

**Average number of teeth with decay experience, in 5 yr olds with any decay experience, in Barnet, 2 statistical neighbours\*, London & England, in 2007/08, 2011/12 & 2014/15**



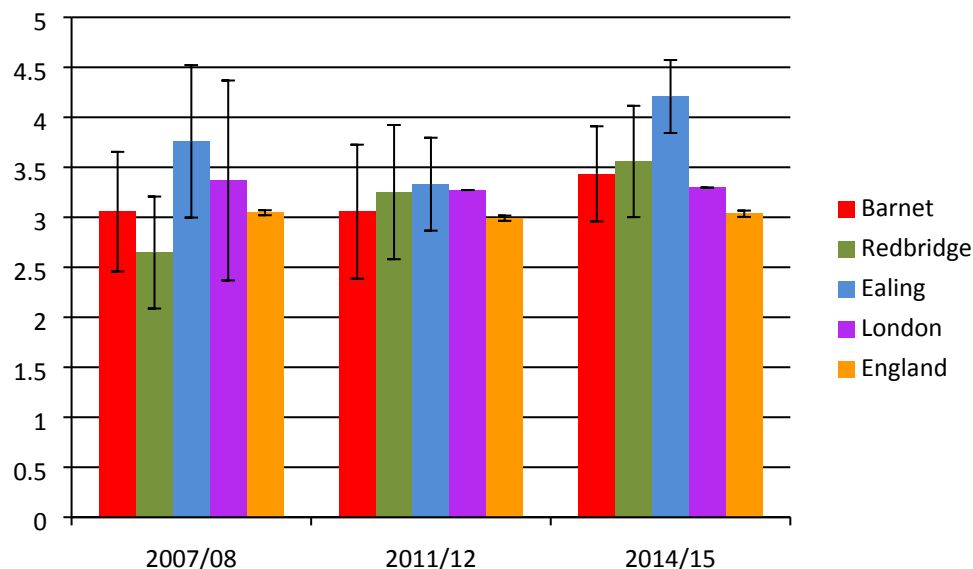
\*Those with complete records (Redbridge and Ealing)

Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In recent years, there has been no significant change in the mean number of teeth with decay experience in 5 yr olds with any decay experience, in Barnet, two statistical neighbours, London or England (London's downward trend was not significant).
- Barnet levels were similar to London's and England's over this period.

**Average number of decayed teeth in 5 yr olds with decay, in Barnet, 2 statistical neighbours\*, London & England, in 2007/08, 2011/12 & 2014/15**



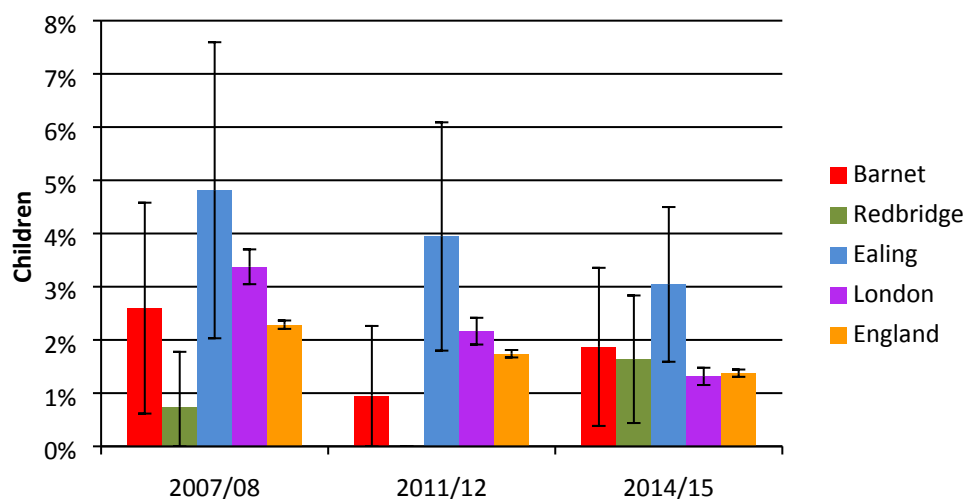
\*Those with complete records (Redbridge & Ealing)

Source: Public Health England (Dental Public Health Epidemiology Programme)

This shows:

- In recent years, there was no significant change in the average number of decayed teeth among 5 yr olds with decay, in Barnet, two statistical neighbours, London or England.
- Barnet levels were similar to London's and England's over this period.

**Proportion of 5 yr olds with oral sepsis in Barnet, 2 statistical neighbours\*, London & England, in 2007/08, 2011/12 & 2014/15**



\*Those with complete records (Redbridge and Ealing)

Source: Public Health England (Dental Public Health Epidemiology Programme)

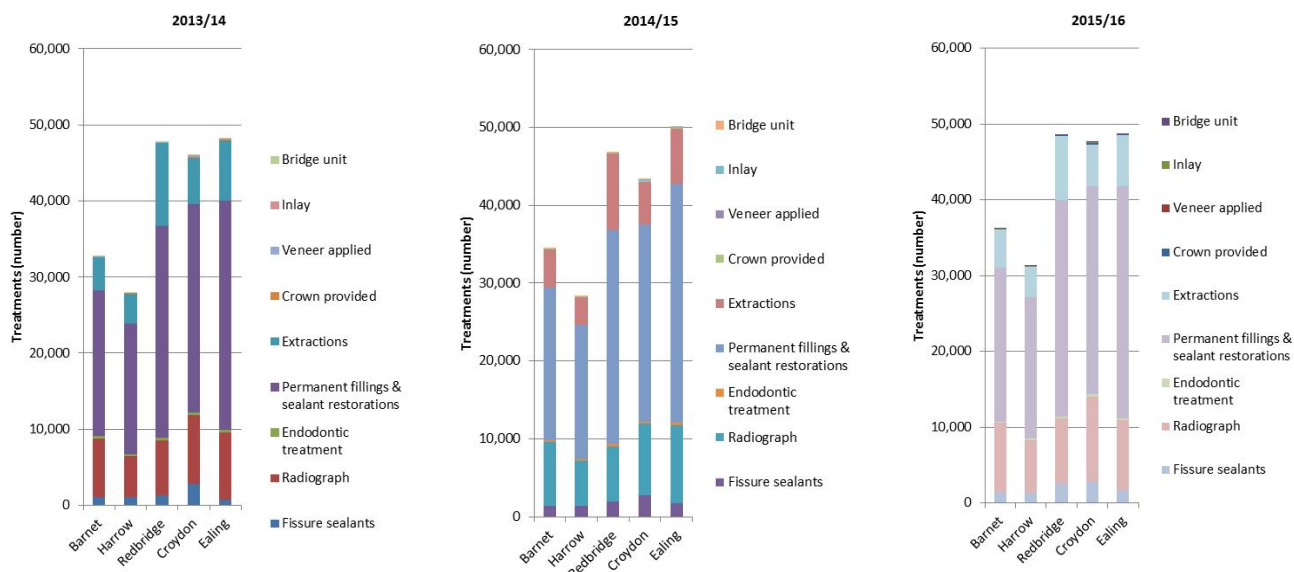
This shows:

- In recent years, there were no significant changes in the proportion of 5 yr olds with oral sepsis in Barnet or two statistical neighbours.

## Appendix B: Oral Health Supporting Data

- However, levels fell in London (by almost two-thirds) and England (by over one-third).

### Estimated number of clinical treatments to 0-17 yr olds by NHS dentists in Barnet and 4 statistical neighbours, by treatment type



Source: NHS Digital (NHS Dental Activity Statistics)

### Estimated number of permanent fillings & sealant restorations, extractions, and total clinical treatments\*, to 0-17 yr olds by Barnet NHS dentists in 2013/14, 2013/14 and 2015/16

	Permanent fillings & sealant restorations	Extractions	Total clinical treatments*
2013/14	19147	4366	32,773
2014/15	19589	4904	34,483
2015/16	20268	5042	36,221

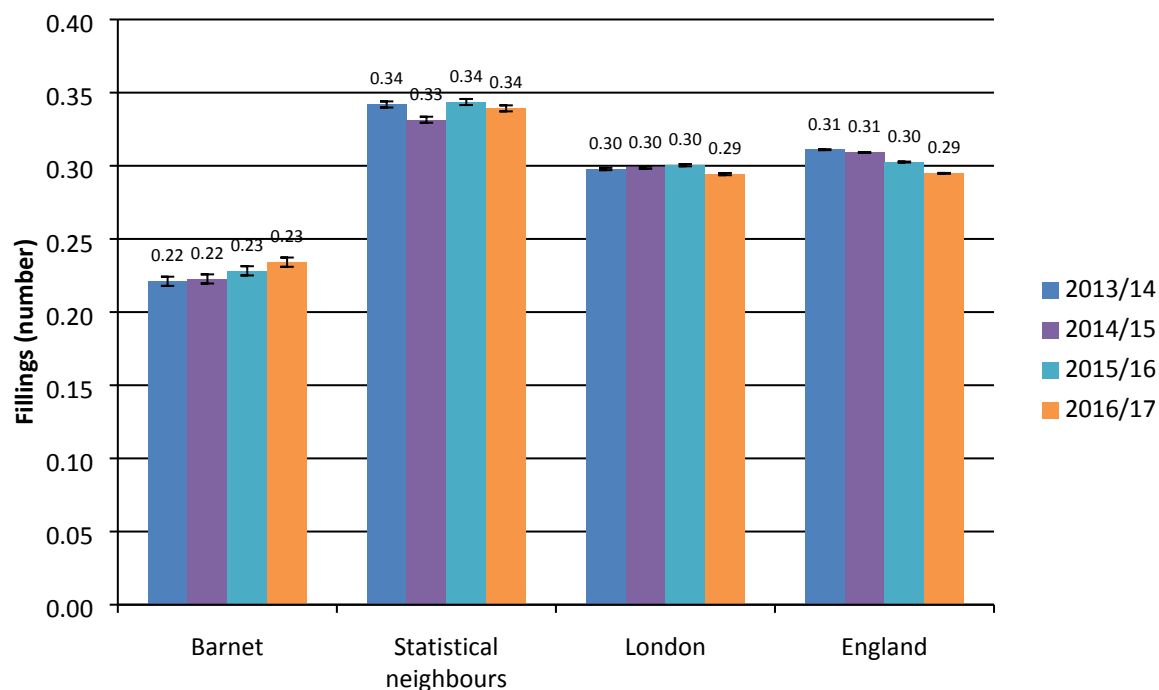
\*Including clinical treatments not shown

Source: NHS Digital (NHS Dental Activity Statistics)

This shows:

- The estimated number of permanent fillings, extractions and total clinical treatments given to 0-17 yr olds in Barnet has increased between 2013/14 and 2015/16.
- The same pattern is seen for four close statistical neighbours.  
(Results not statistically assessed)

**Average number of fillings\* by NHS dentists per 0-17 yr old, in Barnet, statistical neighbours aggregate, London & England, 2013/14 to 2016/17**



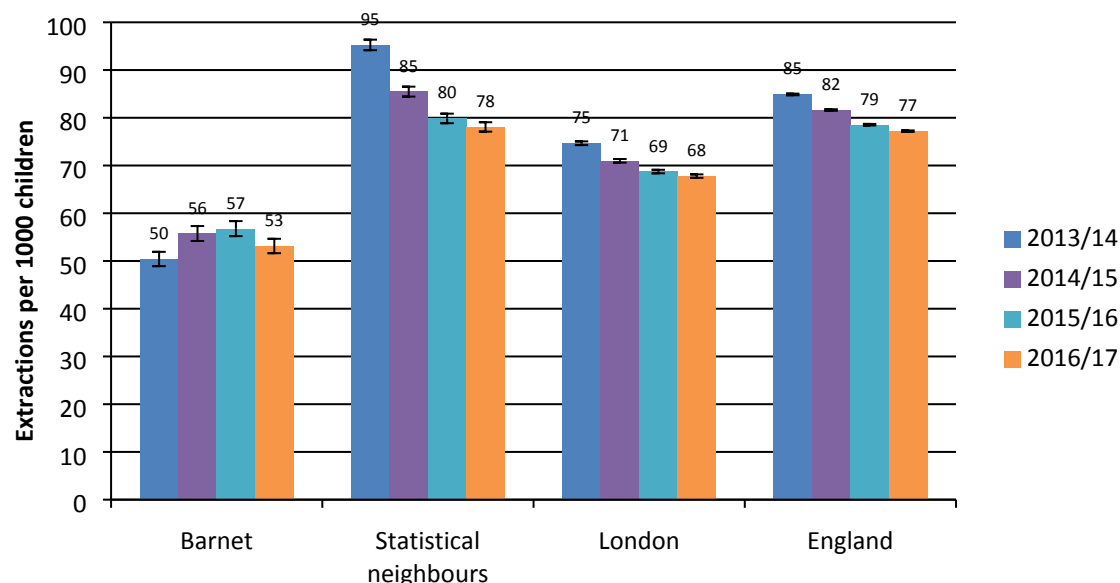
\*Permanent fillings or sealant restorations

Sources: NHS Digital (NHS Dental Activity Statistics), Office for National Statistics (population mid-year estimates)

This shows:

- From 2013/14 to 2016/17, the average number of permanent fillings or sealant restorations per 0-17 yr old, done by NHS dentists, rose significantly in Barnet but fell significantly in London and England.
- However, levels in Barnet stayed significantly lower than those in a statistical neighbours aggregate (i.e. average results for Harrow, Croydon, Redbridge & Ealing combined) and in London and England – in 2016/17, Barnet levels (0.23 fillings per child) were one-fifth lower than London and England levels.

**Average number of dental extractions by NHS dentists, per 1000 0-17 yr olds, in Barnet, statistical neighbours aggregate, London & England, 2013/14 to 2016/17**

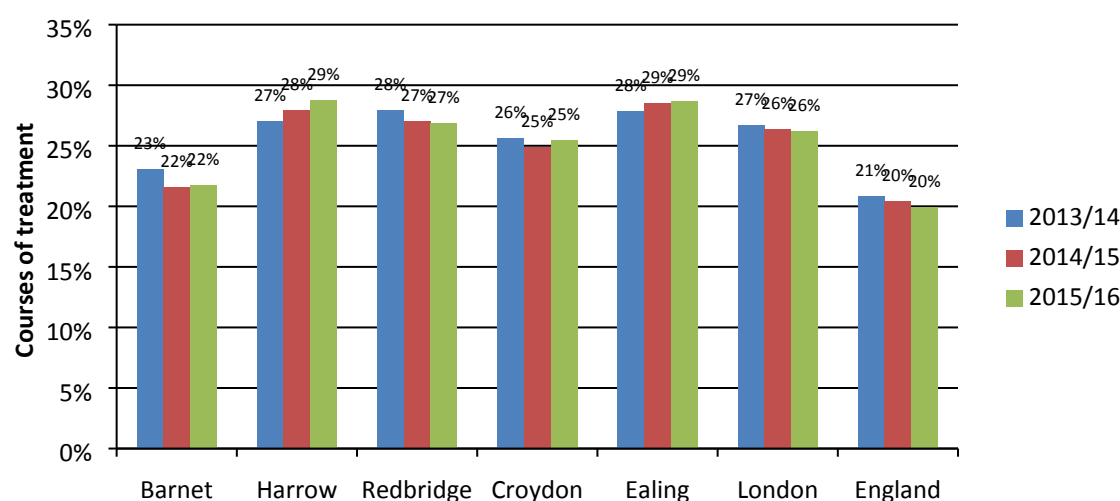


Sources: NHS Digital (NHS Dental Activity Statistics), Office for National Statistics (Population mid-year estimates)

This shows:

- In recent years the rate of extractions per 1000 0-17 yr olds, performed by NHS dentists, rose in Barnet up to 2015/16 but then fell in 2016/17.
- Levels in a statistical neighbours aggregate, London and England fell from 2013/14 to 2016/17.
- Throughout this period, levels in Barnet remained lower than in the statistical neighbours aggregate, London and England.

**Proportion of dental courses of treatment involving permanent fillings\*, for 0-17 yr olds, by NHS dentists in Barnet, 4 statistical neighbours, London & England, 2013/14 to 2015/16**



\*Permanent fillings and sealant restorations

Source: NHS Digital (NHS Dental Activity Statistics)

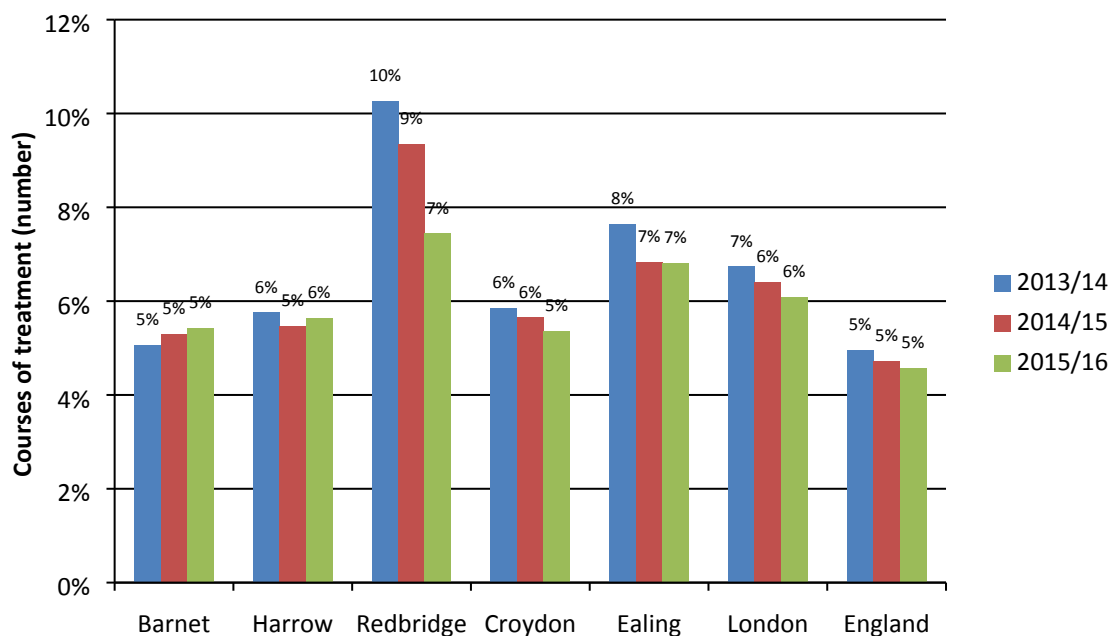
This shows:

- From 2013/14 to 2015/16, the percentage of child dental courses of treatment involving permanent fillings in Barnet

## Appendix B: Oral Health Supporting Data

(about one-fifth) was lower than in four statistical neighbours and London, but higher than in England.  
(Results not statistically assessed)

**Proportion of dental courses of treatment involving extractions,  
in 0-17 yr olds, by NHS dentists in Barnet, 4 statistical neighbours, London & England,  
2013/14 to 2015/16**



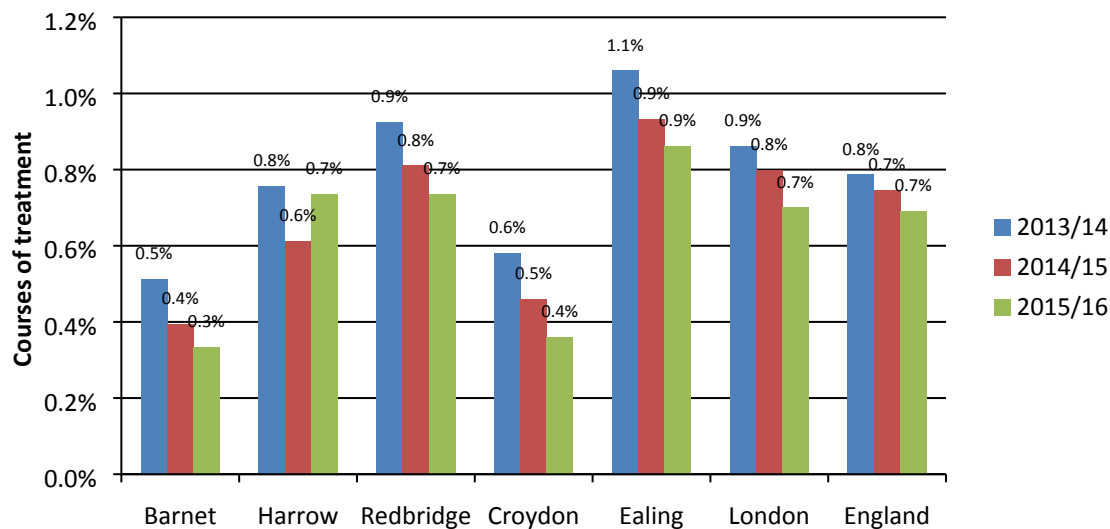
Source: NHS Digital (NHS Dental Activity Statistics)

This shows:

- In recent years, the percentage of child dental courses of treatment involving extractions, performed by Barnet NHS dentists, was about 5%.
- This was either lower than or similar to four statistical neighbours, lower than London levels, and similar to England levels.  
(Results not statistically assessed)



**Proportion of dental courses of treatment involving antibiotic prescribing, for 0-17 yr olds, by NHS dentists in Barnet, 4 statistical neighbours, London & England, 2013/14 to 2015/16**



Source: NHS Digital (NHS Dental Activity Statistics)

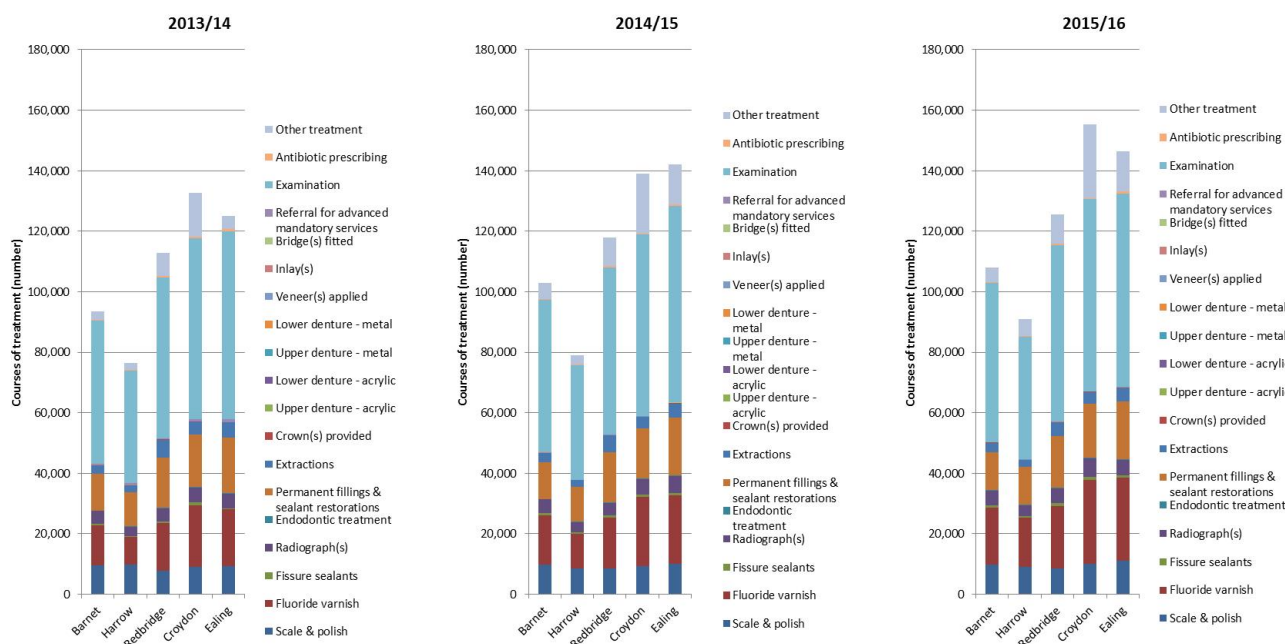
This shows:

- In recent years, the proportion of child dental courses of treatment involving antibiotic prescribing, done by dentists in Barnet (about 0.4%) was lower than or similar to levels in four statistical neighbours, and lower than in London and England.

(Results not statistically assessed)

## Appendix B: Oral Health Supporting Data

### Estimated number of dental courses of treatment by clinical type, for 0-17 yr olds, by NHS dentists in Barnet and 4 statistical neighbours, 2013/14 to 2015/16



Source: NHS Digital (NHS Dental Activity Statistics)

### Estimated number of dental courses of treatment involving permanent fillings & sealant restorations, extractions, antibiotic prescribing, and total\*, for 0-17 yr olds, by NHS dentists in Barnet, 2013/14 to 2015/16

Year	Permanent fillings & sealant restorations	Extractions	Antibiotic prescribing	Total
2013/14	12,185	2671	270	93,606
2014/15	12,185	2983	222	103,020
2015/16	12,499	3127	192	108,067

\*Including courses of treatment involving activities not shown

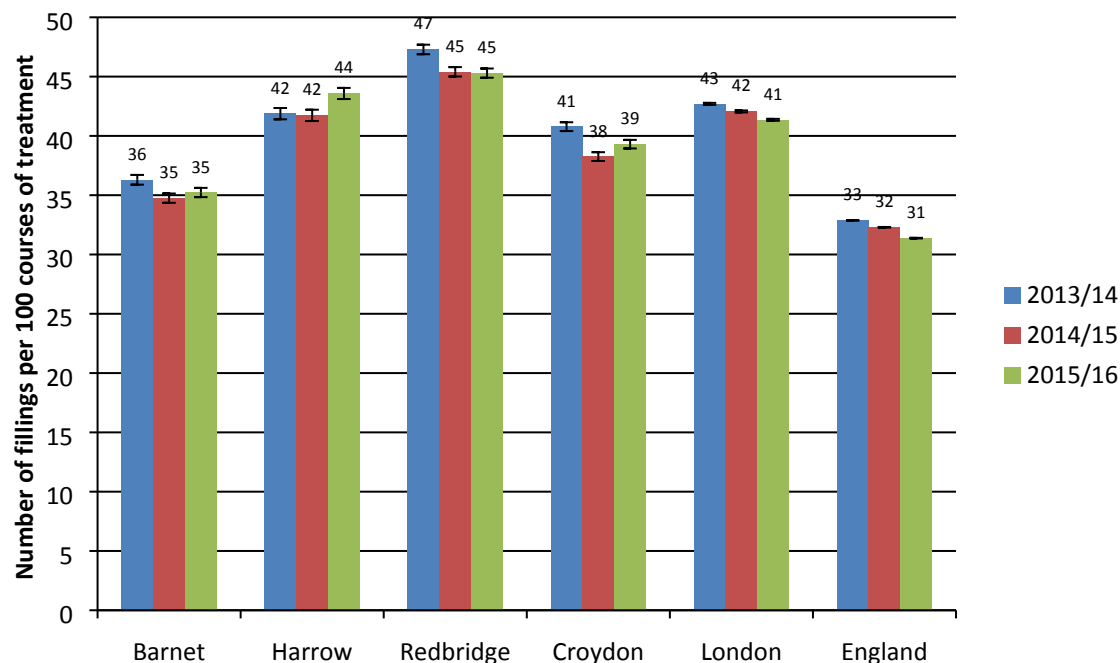
Source: NHS Digital (NHS Dental Activity Statistics)

This shows:

- Between 2013/14 and 2015/16, the number of courses of treatment involving permanent fillings and extractions, and the total courses of treatment, increased in Barnet, while the number involving antibiotics prescribing decreased.
- Over this same time period, the total number of dental courses of treatment increased in the four closest statistical neighbours.

(Results not assessed statistically)

**Number of permanent fillings\* per 100 courses of treatment for  
0-17 yr olds, by NHS dentists in Barnet, 3 statistical neighbours,  
London & England, 2013/14 to 2015/16**



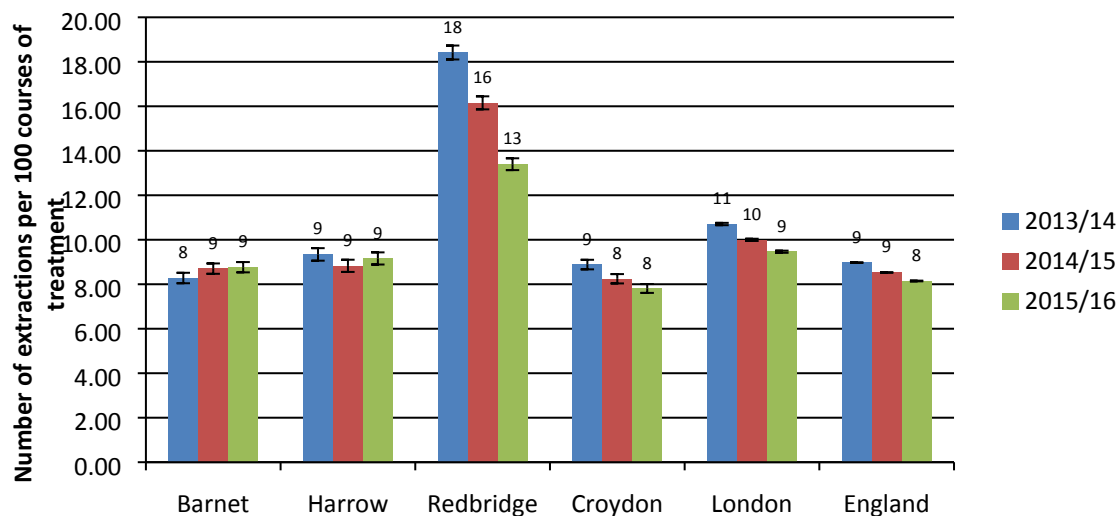
\*Permanent fillings and sealant restorations

Source: NHS Digital (NHS Dental Activity Statistics)

This shows:

- In recent years, the number of permanent fillings per 100 courses of treatment done in 0-17 yr olds by NHS dentists fell significantly in Barnet, in two of the three closest statistical neighbours, and in London and England.
- Over this period, Barnet levels were lower than in London and in the three closest statistical neighbours, but higher than in England.

**Number of extractions per 100 courses of treatment for 0-17 yr olds, by NHS dentists in Barnet, 3 statistical neighbours, London & England, 2013/14 to 2015/16**

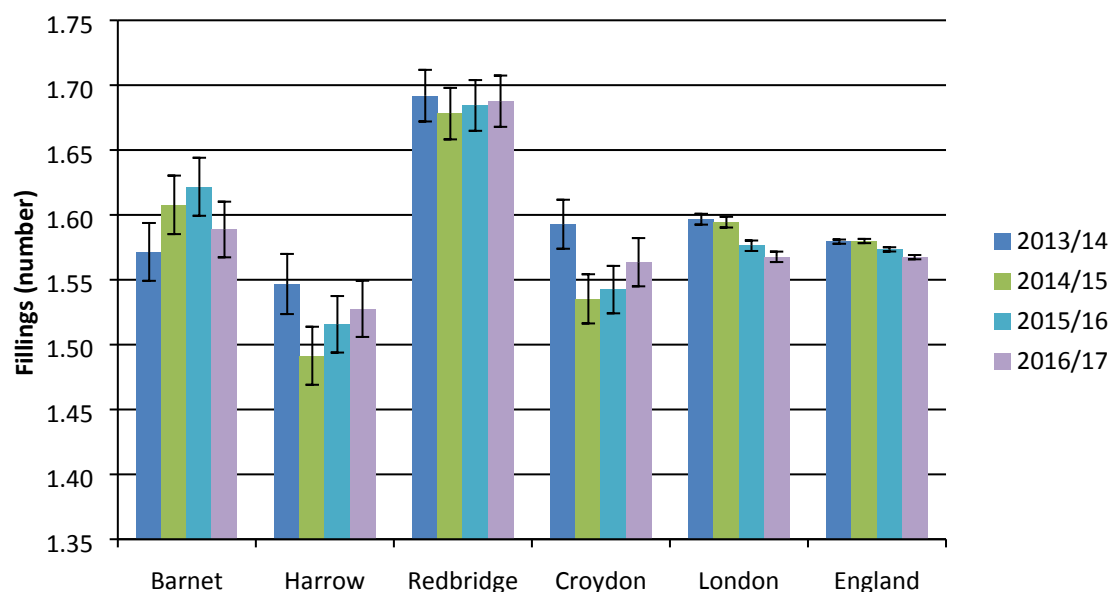


Source: NHS Digital (NHS Dental Activity Statistics)

This shows:

- In recent years, the number of extractions per 100 courses of treatment in 0-17 yr olds, done by NHS dentists, rose in Barnet but fell in two of the three statistical neighbours, and in London and England.
- In 2013/14, Barnet levels were lower than London and England levels, but by 2015/16 Barnet levels had risen above England levels.

**Average number of fillings\* done in courses of treatment where they occurred, in 0-17 yr olds, done by NHS dentists in Barnet, 3 closest statistical neighbours, London & England, 2013/14 to 2016/17**



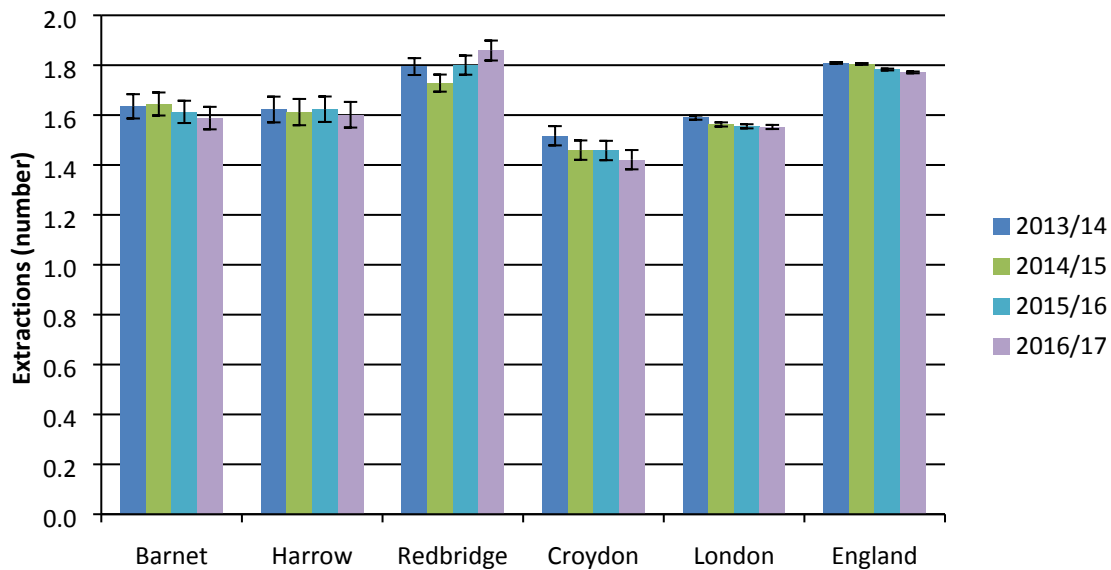
\*Permanent fillings or sealant restorations

Source: NHS Digital (NHS Dental Activity Statistics)

This shows:

- From 2013/14 to 2016/17, the average number of permanent fillings and sealant restorations per courses of treatment in which they occurred, in 0-17 yr olds, done by NHS dentists, did not change significantly in Barnet or in its 3 closest statistical neighbours but fell in London and England.
- In 2016/17, levels were similar in Barnet, London and England.

**Average number of extractions done in courses of treatment where they occurred, in 0-17 yr olds, done by NHS dentists in Barnet, 3 closest statistical neighbours, London & England, 2013/14 to 2016/17**

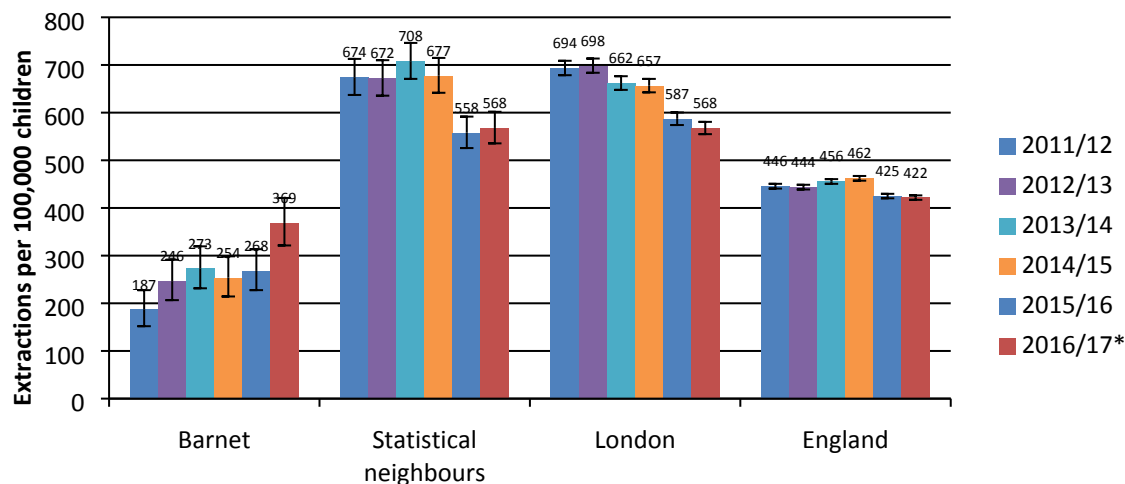


Source: NHS Digital (NHS Dental Activity Statistics)

This shows:

- From 2013/14 to 2016/17, the average number of extractions done in courses of treatment in which they occurred, in 0-17 yr olds, by NHS dentists, was unchanged in Barnet and in 2 of the 3 closest statistical neighbours.
- However, levels fell in London and England.
- In 2016/17, Barnet levels were similar to London's and lower than England's.

**Inpatient tooth extractions due to decay in 0–10 yr olds  
per 100,000 population, in Barnet, statistical neighbours aggregate,  
London & England, 2011/12 to 2016/17\***



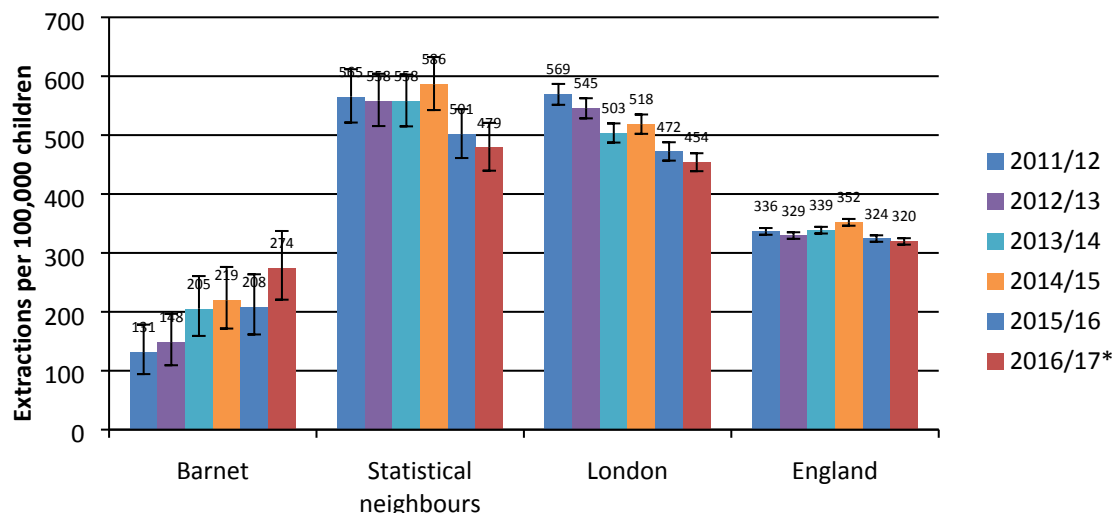
\*2016/17 data is provisional (to be confirmed Nov 2017)

Sources: NHS Digital (NHS Outcomes Framework, Hospital Episodes Statistics), Office for National Statistics (population mid-year estimates)

This shows:

- From 2011/12 to 2016/17, the prevalence of inpatient tooth extractions for dental decay amongst Barnet 0-10 yr olds almost doubled (from 187/100,000 to 367/100,000). However, numbers remain lower than London and neighbours.
- Over the same time period, levels in London and in an aggregate of the four closest statistical neighbours fell by one-sixth; levels in England also fell.
- From 2011/12 to 2015/16, Barnet levels were below those in England, London and the statistical neighbours aggregate. ,
- Between 2015/16 and 2016/17, Barnet levels have risen by over one-third.

**Inpatient tooth extractions for dental decay in 0–5 yr olds,  
per 100,000 population, in Barnet, statistical neighbours aggregate,  
London & England, 2011/12 to 2016/17\***



\*2016/17 data is provisional (to be confirmed Nov 2017)

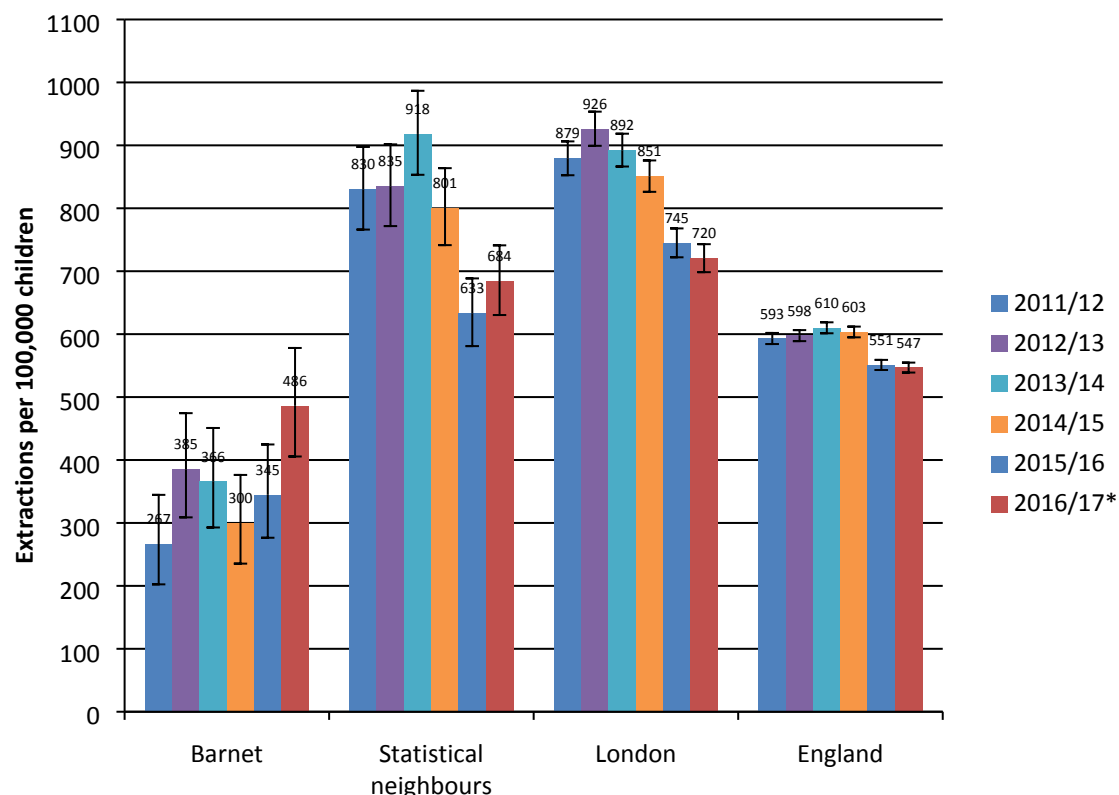
Sources: NHS Digital (NHS Outcomes Framework, Hospital Episodes Statistics), Office for National Statistics (population mid-year estimates)

This shows:

- From 2011/12 to 2016/17, the rate of inpatient tooth extraction for dental decay in 0-5 yr olds per 100,000 population more than doubled in Barnet (from 131/100,000 to 274/100,000).
- Over the same period, levels fell significantly in England, in London (by one-fifth) and in an aggregate of 4 closest statistical neighbours (by one-sixth).
- From 2011/12 to 2015/16, levels in Barnet were below those in England, London and the statistical neighbour aggregate, but by 2016/17 Barnet levels were similar to England levels.
- Between 2015/16 and 2016/17, Barnet levels have risen by almost one-third.



**Inpatient tooth extractions for dental decay in 6–10 yr olds per 100,000 population, in Barnet, statistical neighbours aggregate, London & England, 2011/12 to 2016/17\***



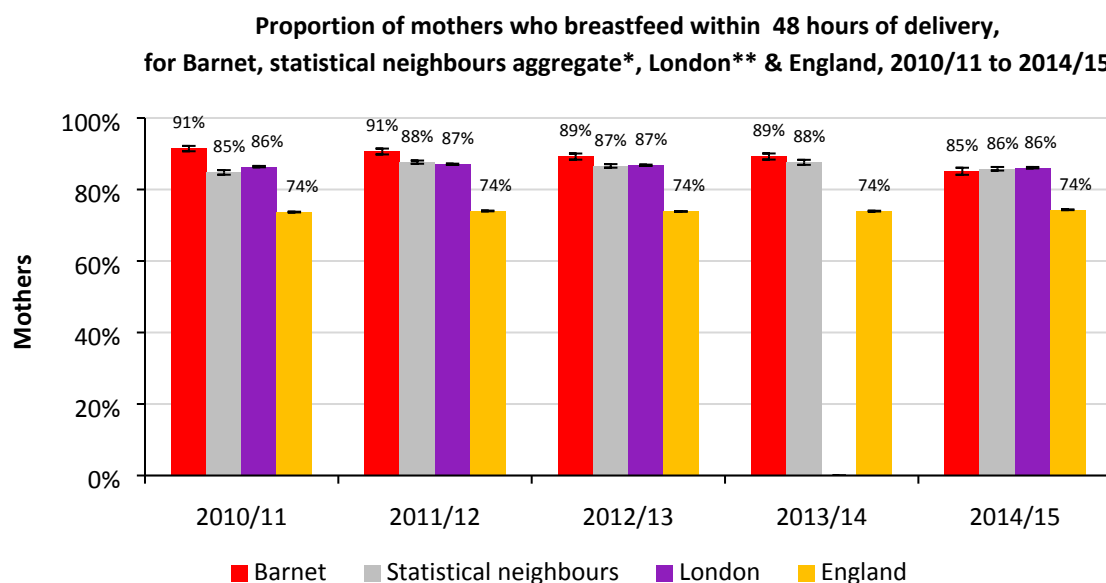
\*2016/17 data is provisional (to be confirmed Nov 2017)

Sources: NHS Digital (NHS Outcomes Framework, Hospital Episodes Statistics), Office for National Statistics (population mid-year estimates)

This shows:

- From 2011/12 to 2016/17, the rate of inpatient tooth extractions for dental decay in 6-10 yr olds per 100,000 population increased by almost three-quarters in Barnet (from 267/100,000 to 486/100,000).
- However, levels fell in England, London (by one-sixth) and a statistical neighbours aggregate (by one-sixth).
- Between 2011/12 and 2015/16, levels in Barnet were below those in England, London and the statistical neighbours aggregate, but in 2016/17 Barnet levels appeared to be similar to England.
- Between 2015/16 and 2016/17 alone, Barnet levels appeared to increase by over one-third.

## 2. Protective factors and risk factors: breastfeeding, gender, age, ethnicity and deprivation



\*Croydon, Ealing, Harrow and Redbridge (2010/11 value excludes Ealing data; 2013/14 and 2014/15 values exclude Croydon and Redbridge data)

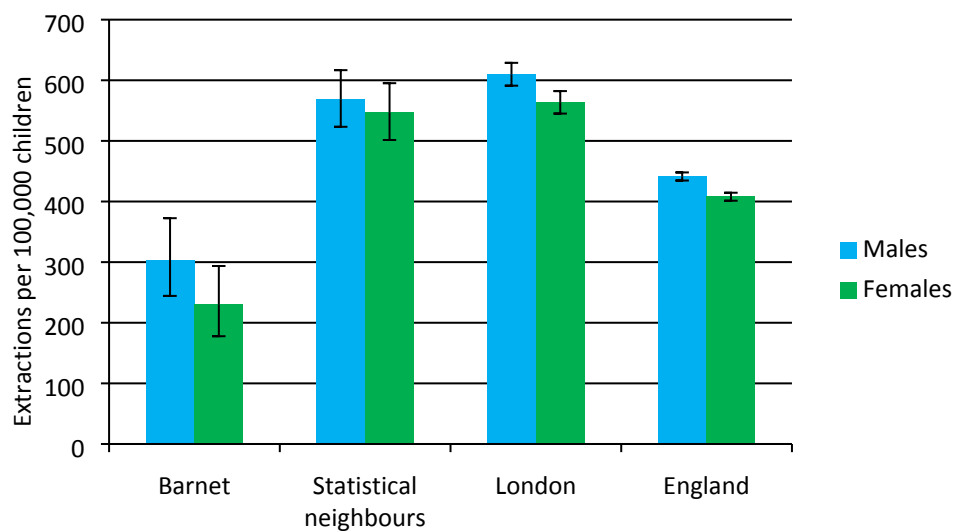
\*\*2013/14 value not published for data quality reasons

Source: Public Health England (Public Health Outcomes Framework)

This shows:

- Breast-feeding initiation levels in Barnet remained higher than England throughout the five years.
- Barnet levels decreased from 91.5% in 2010/11 to 85.1% in 2014/15.
- Barnet levels were higher than London's up to 2012/13, but lower in 2014/15.

**Inpatient tooth extractions for dental decay in 0–10 yr olds  
per 100,000 population, by sex, in Barnet, statistical neighbours aggregate,  
London & England, 2015/16**

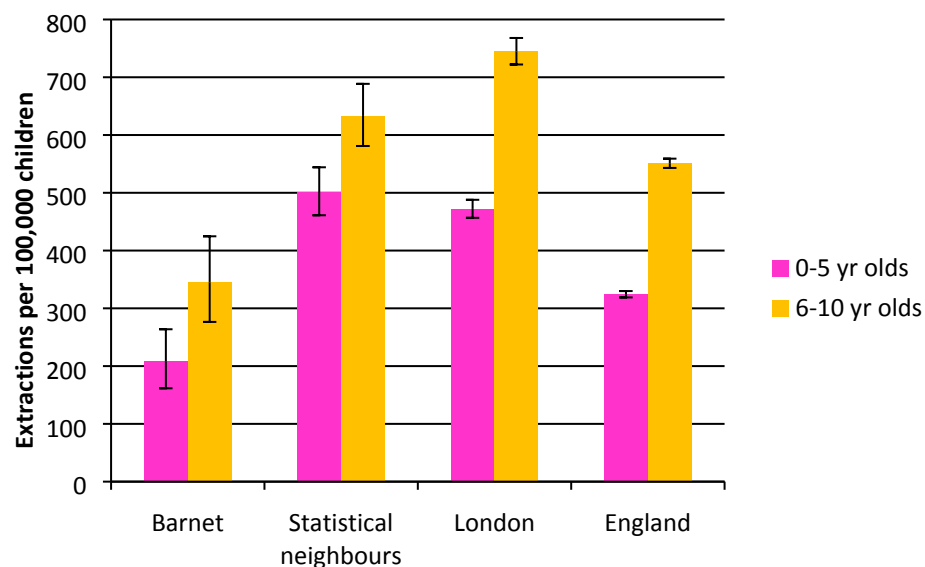


Sources: NHS Digital (NHS Outcomes Framework, Hospital Episode Statistics), Office for National Statistics (population mid-year estimates)

This shows:

- In 2015/16, the rate of inpatient tooth extraction for dental decay in 0-10 yr olds per 100,000 population was similar in boys and girls in Barnet and a statistical neighbours aggregate.
- However, in London and England levels were significantly higher for boys than girls.

**Inpatient tooth extractions for dental decay in children by age group, in Barnet, statistical neighbours aggregate, London & England, in 2015/16**

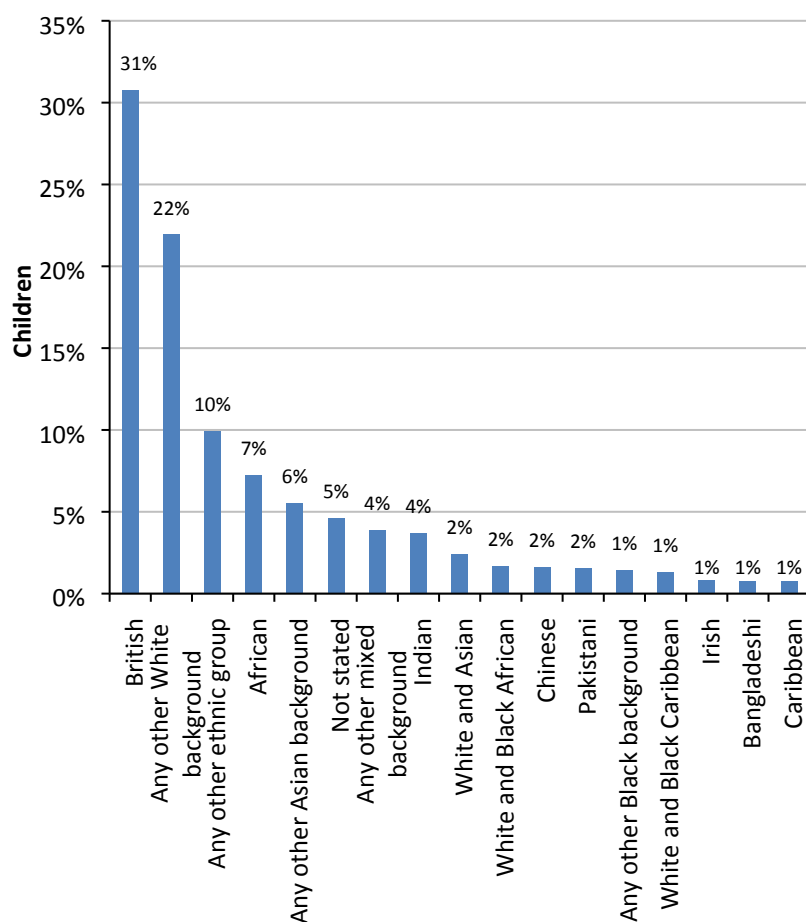


Sources: NHS Digital (Hospital Episode Statistics), Office for National Statistics (population mid-year estimates)

This shows:

- In 2015/16, the rate of inpatient tooth extraction for dental decay per 100,000 population was significantly higher among 6-10 yr olds than 0-5 yr olds, in Barnet (by two-thirds), in a statistical neighbours aggregate (by one-quarter), in London (by over half) and in England (by over two-thirds).

**Proportion of 4-5 year olds attending Barnet schools, by ethnic group, in 2015/16**

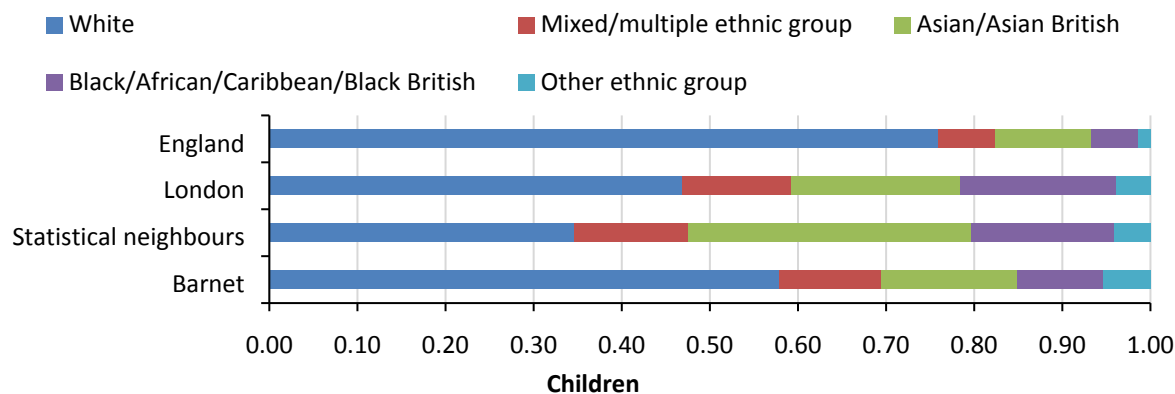


Source: Public Health England (National Child Measurement Programme, Pupil Enhanced Dataset)

This shows:

- Among Barnet 4-5 year old school pupils in 2015/16, 2% were from Chinese ethnic groups and 22% were from 'any other white' groups. (Results not statistically assessed)
- Note: In the 2015 Dental Public Health Epidemiology Survey, across England, 5 yr old children from Chinese and Eastern European backgrounds had higher prevalence, severity and extent of dental decay than other ethnic groups.

**Proportion of 0-4 yr olds by broad ethnic group, in Barnet, statistical neighbours aggregate, London and England, 2011**

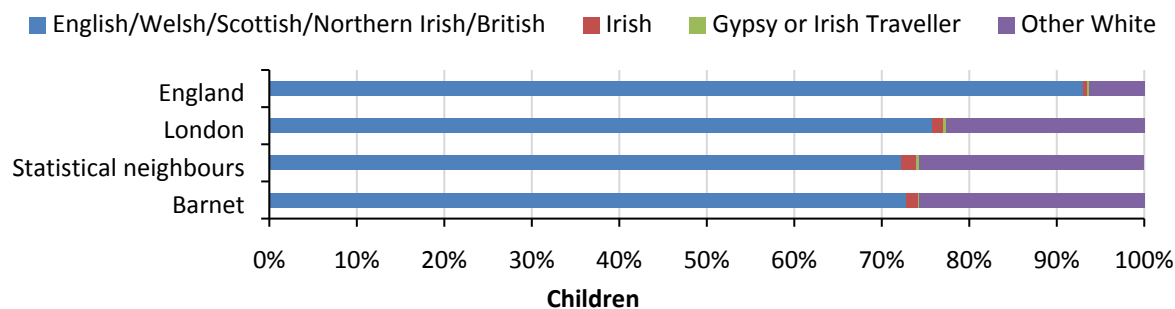


Source: Office for National Statistics (Census 2011)

This shows

- In the 2011 Census, Barnet had a higher proportion of 0–4 yr olds from White backgrounds than in an aggregate of four closest statistical neighbours, and in London, but less than in England.
  - In the 2011 Census, Barnet had a lower proportion of 0–4 yr olds from Asian backgrounds than in the statistical neighbours aggregate and in London, but more than in England.
- (Results not assessed statistically)

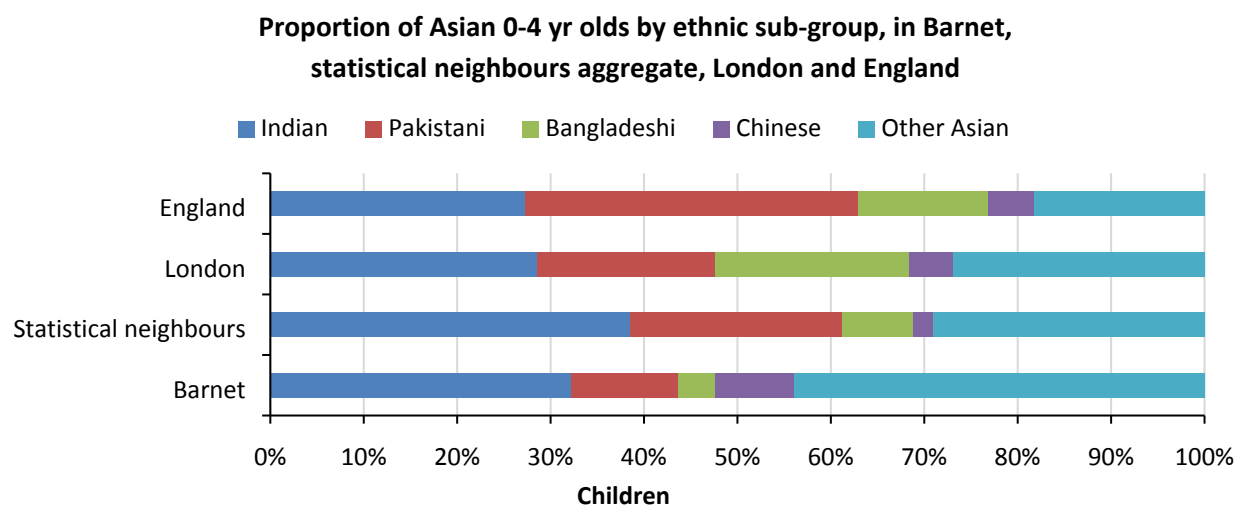
**Proportion of white 0-4 yr olds by ethnic sub-group, in Barnet, statistical neighbour aggregate, London and England, 2011**



Source: Office for National Statistics (Census 2011)

This shows

- In the 2011 Census, Barnet had a similar proportion of 0–4 yr olds from ‘other white’ backgrounds compared with a statistical neighbours aggregate, but more than in London and England.
- (Results not statistically assessed)

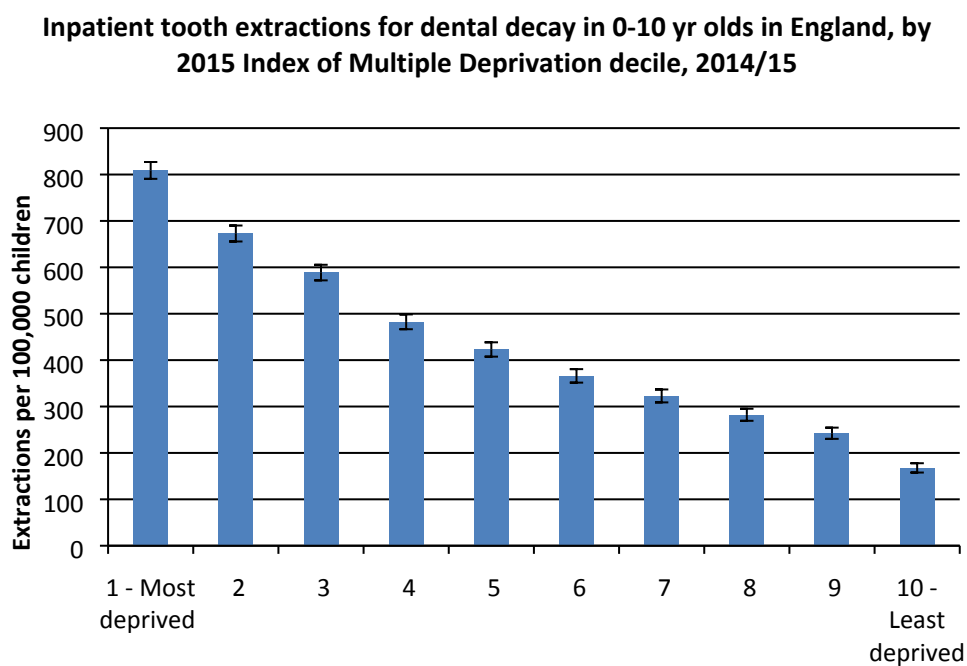


Source: Office for National Statistics (Census 2011)

This shows

- In the 2011 Census, Barnet had a greater proportion of 0–4 yr olds from a Chinese background compared with a statistical neighbours aggregate, London and England.

(Results not statistically assessed)



Source: Health & Social Care Information Centre (NHS Outcomes Framework)

## Appendix B: Oral Health Supporting Data

This shows:

- England-wide in 2014/15, the rate of inpatient tooth extractions among 0-10 yr olds per 100,000 population was four times higher among children living in the most deprived versus least deprived areas.
- Levels steadily decreased as local deprivation reduced.
- Note: Although data is not available for Barnet, England-wide evidence suggests that a similar pattern would be observed.

**Proportion of 0-15 yr olds in low income families\* in Barnet, statistical neighbours aggregate, London and England, 2006 to 2014**



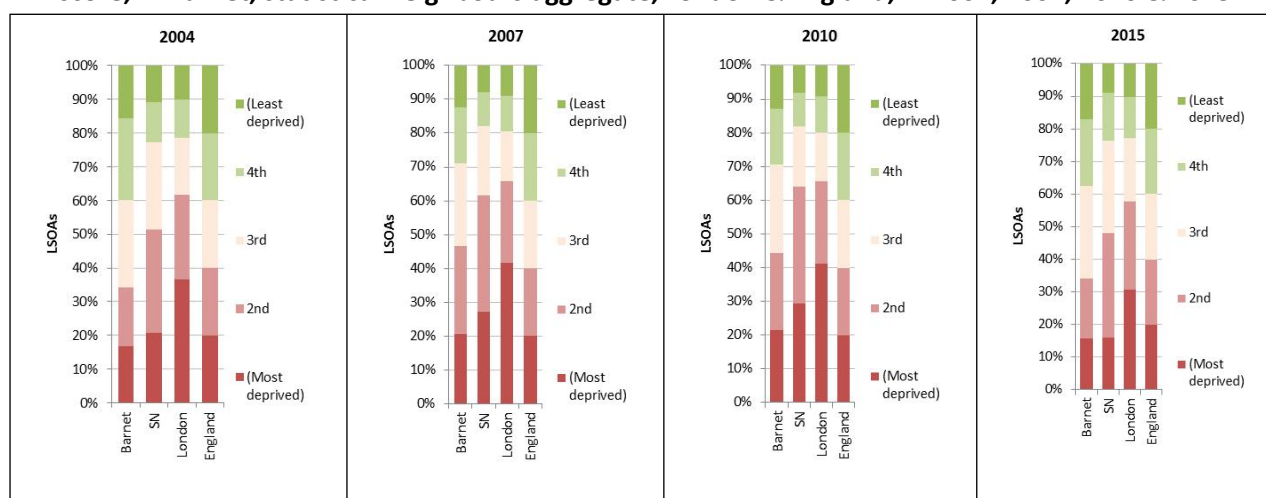
\*Children living in families receiving child tax credit, which have an income less than 60% of the median income, or which receive income support or income-related Job Seekers Allowance.

Source: Public Health England (Public Health Outcomes Framework)

This shows:

- From 2006 to 2013, the proportion of 0-15 yr olds living in low income families fell steadily in Barnet.
- Since 2011, Barnet levels have been lower than statistical neighbours aggregate, London and England levels.
- However, between 2013 and 2014 Barnet levels rose for the first time.

**Proportion of 0-17 yr olds by quintile rank\* of Income Deprivation Affecting Children Index (IDACI) score, in Barnet, statistical neighbours aggregate, London & England, in 2004, 2007, 2010 & 2015**



SN = aggregate of 4 closest statistical neighbours

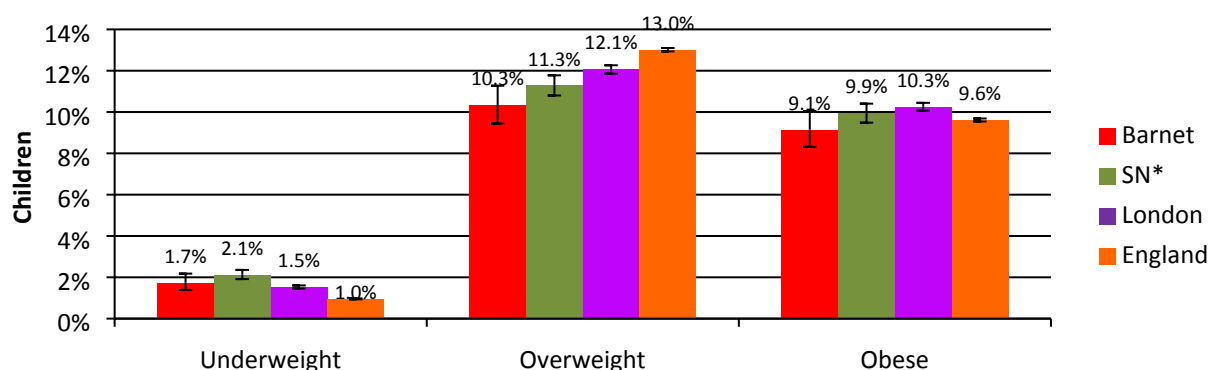
Source: Department for Communities and Local Government (English Deprivation Indices)



This shows:

- From 2004 to 2010, the proportion of children living in the most deprived fifth of areas (for income deprivation affecting children) rose, then fell in 2015 to a similar level to 2004.
  - Between 2010 and 2015, the proportion of children living in the most deprived fifth reduced, and the proportion of children living in least deprived two-fifths increased.
- (Results not statistically assessed)

### Prevalence of underweight, overweight and obesity in Reception Year pupils in Barnet, statistical neighbours\*, London & England, 2016/17



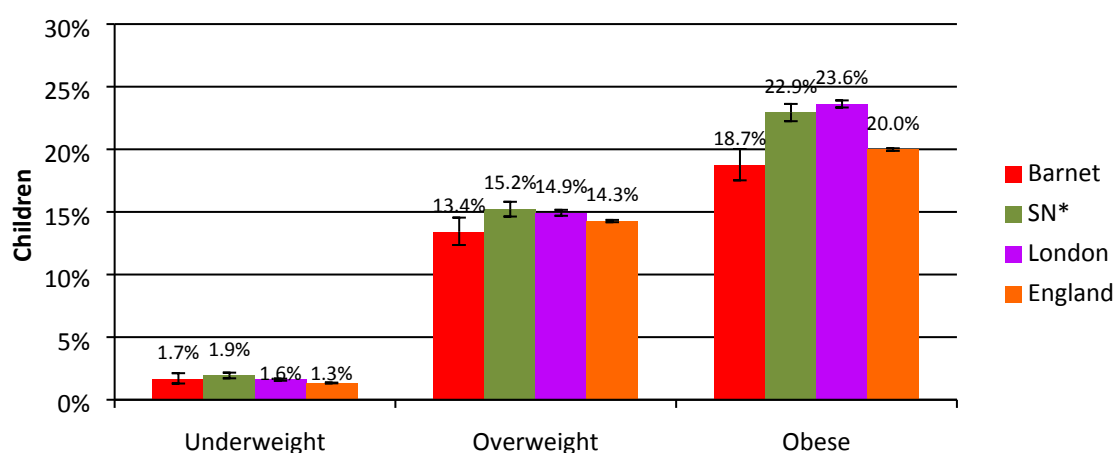
\*SN = composite of four closest statistical neighbours (Harrow, Redbridge, Croydon & Ealing)

Source: NHS Digital (National Child Measurement Programme, England 2016/17 School Year)

This shows:

- In 2016/17, the prevalence of underweight was over three-quarters higher in Barnet 4-5 year olds compared with the England average.
- Levels of overweight were lower in Barnet than in London and England.
- Barnet obesity levels were comparable to those in statistical neighbours, London and England.
- Note: obesity has a weak to moderate correlation with dental caries in five year olds (Public Health England, 2015)

### Prevalence of underweight, overweight and obesity in Year 6 pupils in Barnet, statistical neighbours\*, London & England, 2016/17



\*SN = composite of four closest statistical neighbours (Harrow, Redbridge, Croydon & Ealing)

Source: NHS Digital (National Child Measurement Programme, England 2016/17 School Year)

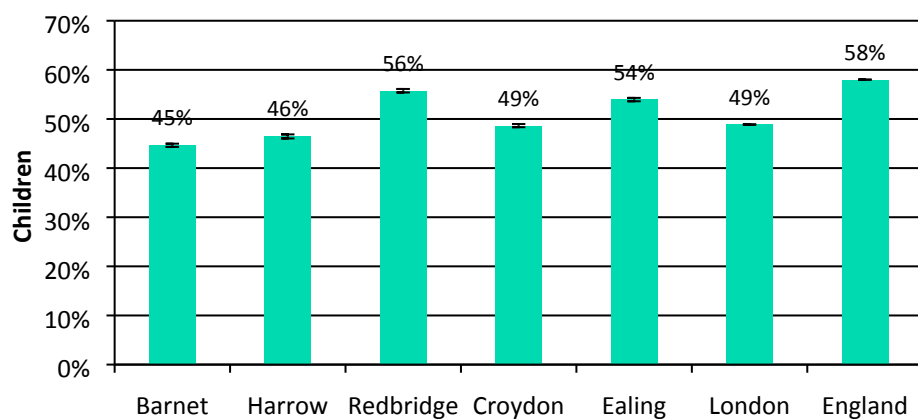
## Appendix B: Oral Health Supporting Data

This shows:

- In 2016/17, levels of underweight in Barnet 10-11 yr olds were comparable to those in statistical neighbours, London and England.
- Levels of overweight and obesity were lower in Barnet than in statistical neighbours and London.
- Note: it is not known whether obesity influences dental caries rates in older children (Public Health England, 2015).

### 3. Dental care

**Proportion of 0-17 yr olds seen in the past 12 mths  
by NHS dentists in Barnet, 4 statistical neighbours,  
London & England, 2015/16**

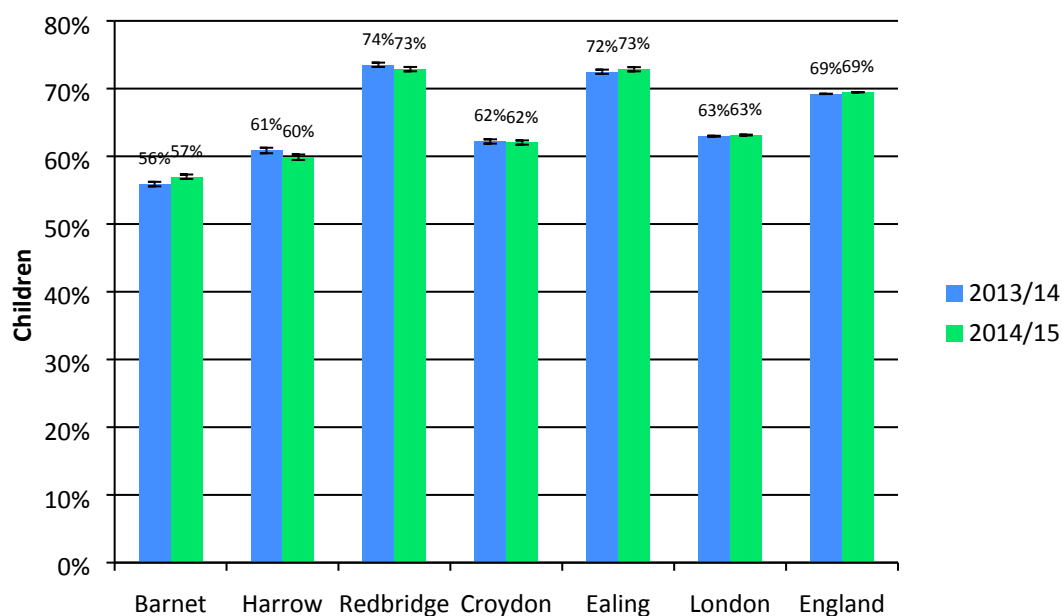


Source: NHS Digital (NHS Dental Activity Statistics)

This shows:

- In 2015/16: the proportion of 0-17 yr olds seen by a dentist in the last 12 months was lower in Barnet than in its four closest statistical neighbours, London and England – Barnet's level was almost one-quarter less than England's.

**Proportion of 0-17 yr olds seen in the past 24 mth\* by dentists in Barnet, 4 statistical  
neighbours, London & England, in 2013/14 & 2014/15**



\*This statistic was unavailable after 2014/15

Source: NHS Digital (NHS Dental Activity Statistics)

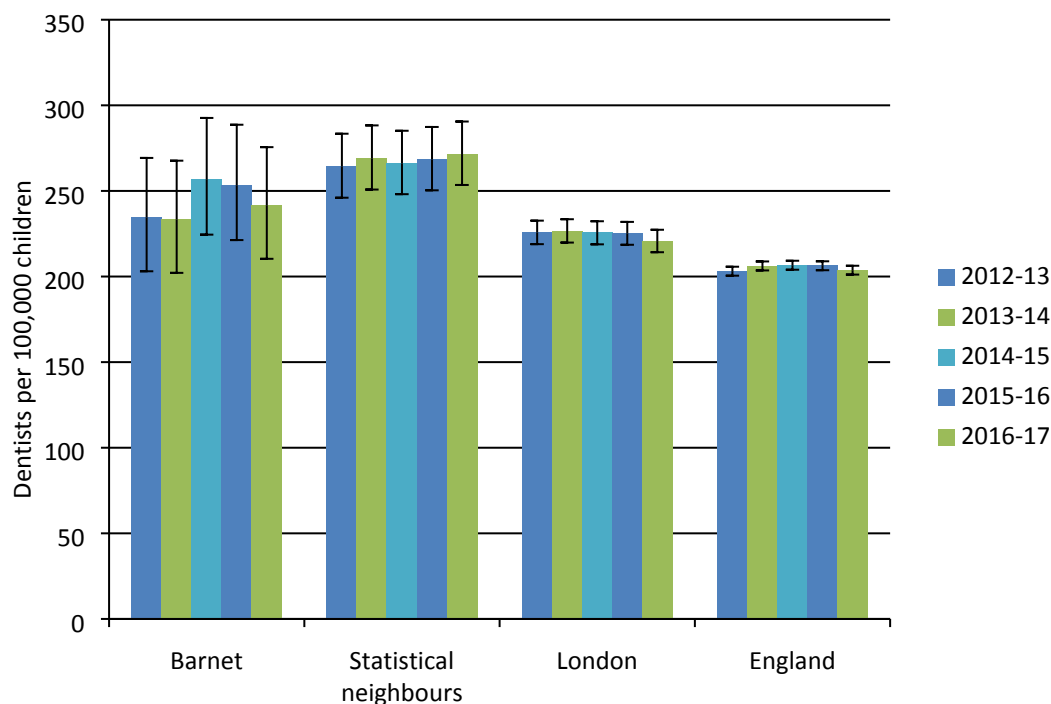
This shows:

- In 2013/14 and 2014/15, the proportion of 0-17 yr olds seen by a dentist in the past 24 mths was lower in Barnet than in four statistical neighbours, London and England.
- Barnet levels were one-fifth lower than England levels in 2013/14 and almost one-fifth lower in 2014/15.

## Appendix B: Oral Health Supporting Data

- However, Barnet's levels rose from 2013/14 to 2014/15, as did levels in London and England (levels in the four statistical neighbours either fell or did not change).

**NHS Dentists per 100,000 0-17 yr population in Barnet, statistical neighbours aggregate, London & England, 2012/13 to 2016/17**



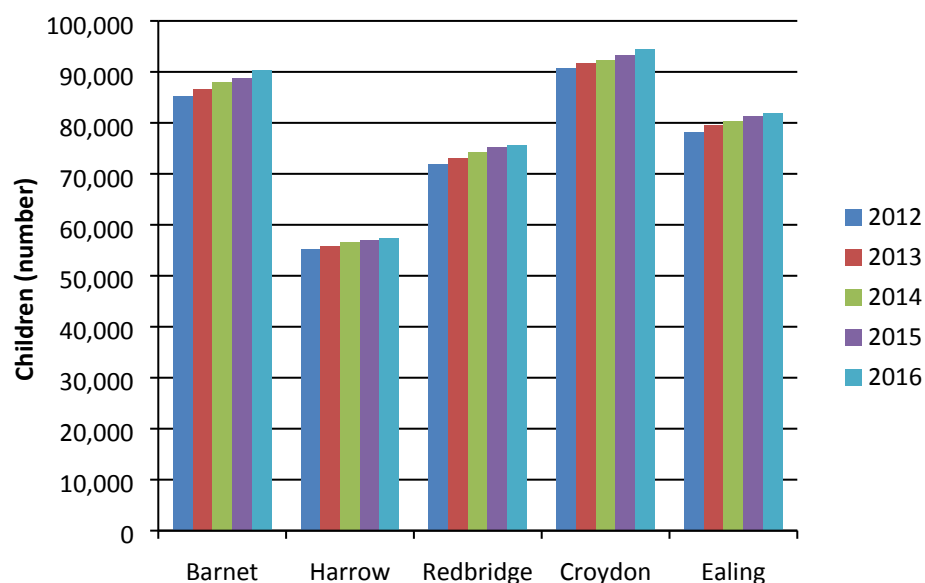
Sources: NHS Digital (NHS Dental Activity Statistics), Office for National Statistics (population mid-year estimates)

This shows:

- From 2012/13 to 2016/17, the number of NHS Dentists per 100,000 0-17 yr olds did not alter significantly in Barnet, a statistical neighbours aggregate, London or England.
- Over this period, Barnet levels remained similar to statistical neighbour aggregate and London levels, but rose significantly compared with England levels (Barnet levels were similar to England's in 2012/13 and 2013/14 but significantly higher thereafter).

## 4. Demographics

**Estimated 0-17 yr population in Barnet and 4 statistical neighbours, 2012 to 2016**



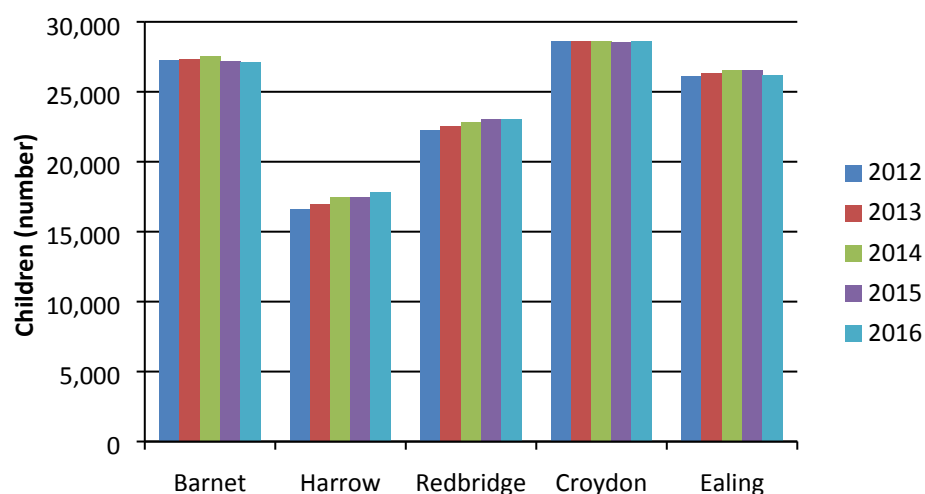
Source: Office for National Statistics (population mid-year estimates)

This shows:

- From 2012 to 2016, the estimated child population increased steadily in Barnet and in four statistical neighbours.

(Results not statistically assessed)

**Estimated 0-4 yr population in Barnet and 4 statistical neighbours, 2012 to 2016**



Source: Office for National Statistics (population mid-year estimates)

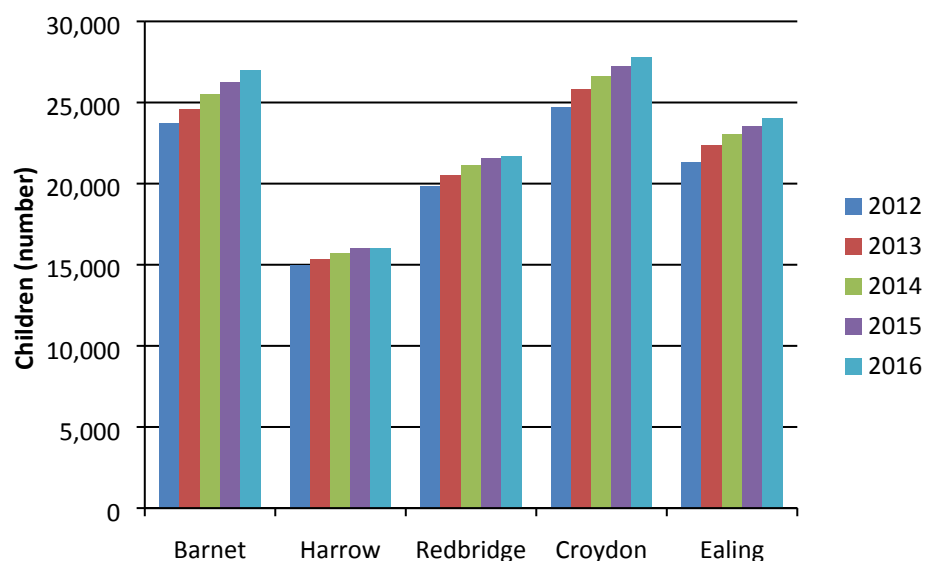
This shows:

- From 2012 to 2016, the 0-4 yr population in Barnet fell by over 100, while levels generally rose in its closest statistical neighbours.

## Appendix B: Oral Health Supporting Data

(Results not statistically assessed)

### Estimated 5-9 yr population in Barnet and 4 statistical neighbours, 2012 to 2016



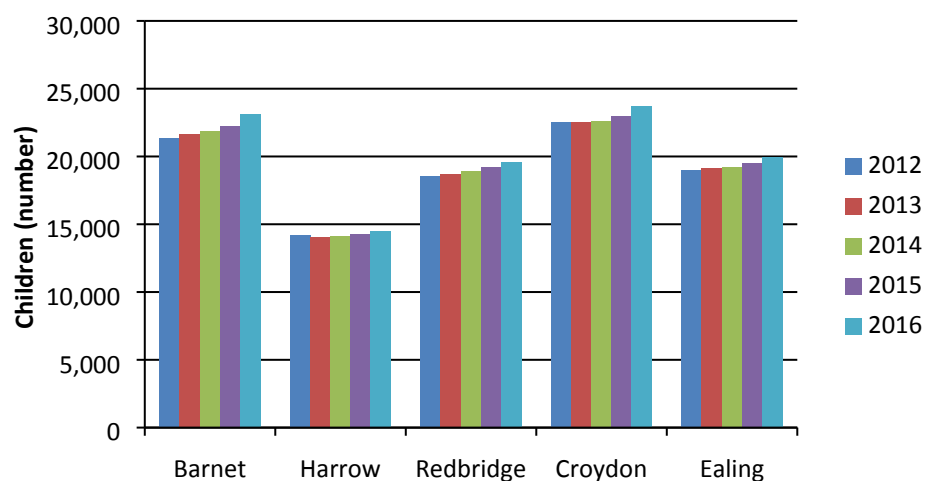
Source: Office for National Statistics (population mid-year estimates)

This shows:

- From 2012 to 2016, the 5-9 yr population rose by over 3300 in Barnet, a bigger increase than in any of its four closest statistical neighbours.

(Results not statistically assessed)

### Estimated 10-14 yr population in Barnet and 4 statistical neighbours, 2012 to 2016



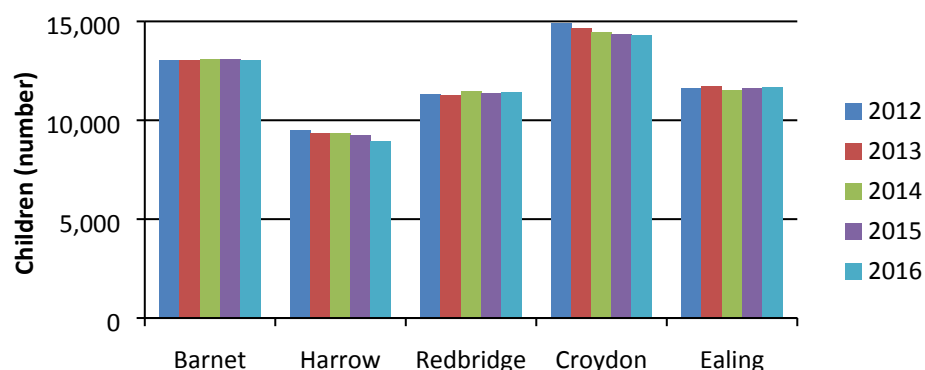
Source: Office for National Statistics (population mid-year estimates)

This shows:

- From 2012 to 2016, the 10-14 yr population rose by over 1800 in Barnet, a bigger increase than in any of its four closest statistical neighbours.

(Results not statistically assessed)

**Estimated 15-17 yr population in Barnet and 4 statistical neighbours, 2012 to 2016**

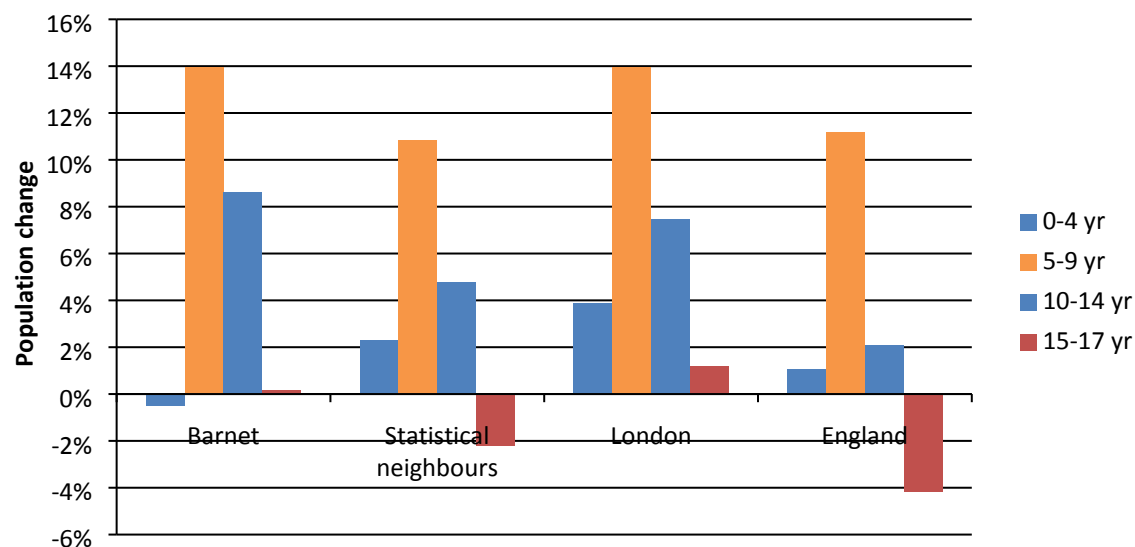


Source: Office for National Statistics (population mid-year estimates)

This shows:

- From 2012 to 2016, the 15-17 yr population remained stable in Barnet. (Results not statistically assessed)

**Proportional change in child population in Barnet, statistical neighbours aggregate, London and England, by age group, 2012 vs 2016**

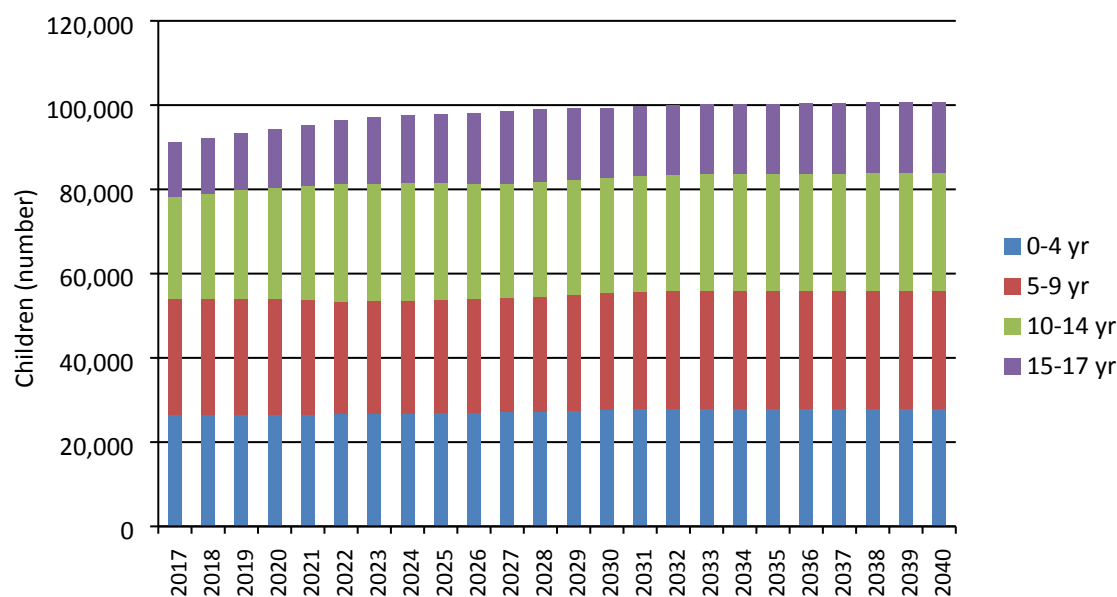


Source: Office for National Statistics (population mid-year estimates)

This shows:

- Between 2012 and 2016, the proportionate rise in the 5-9 yr population was almost one-third greater in Barnet than in a statistical neighbours aggregate. The proportionate rise in Barnet's 10-14 yr population was over three-quarters greater than in the statistical neighbours aggregate. (Results not statistically assessed)

**Projected Barnet child population 2017 to 2040, by age group  
(housing-led model\*)**



\*Population projections incorporating expected births, deaths and migration plus future development expectations based on the 2013 Strategic Housing Land Availability Assessment (SHLAA) survey.

Source: Greater London Authority (SHLAA)

**Projected increase in Barnet child population from 2017, total and by age group (housing-led model)**

	To 2020	To 2025	To 2030	To 2035	To 2040
0-4 yr	86	432	1302	1522	1478
5-9 yr	-226	-720	-67	334	376
10-14 yr	2413	3700	3450	3785	4028
15-17 yr	952	3361	3453	3599	3713
Total	3224	6772	8138	9240	9595

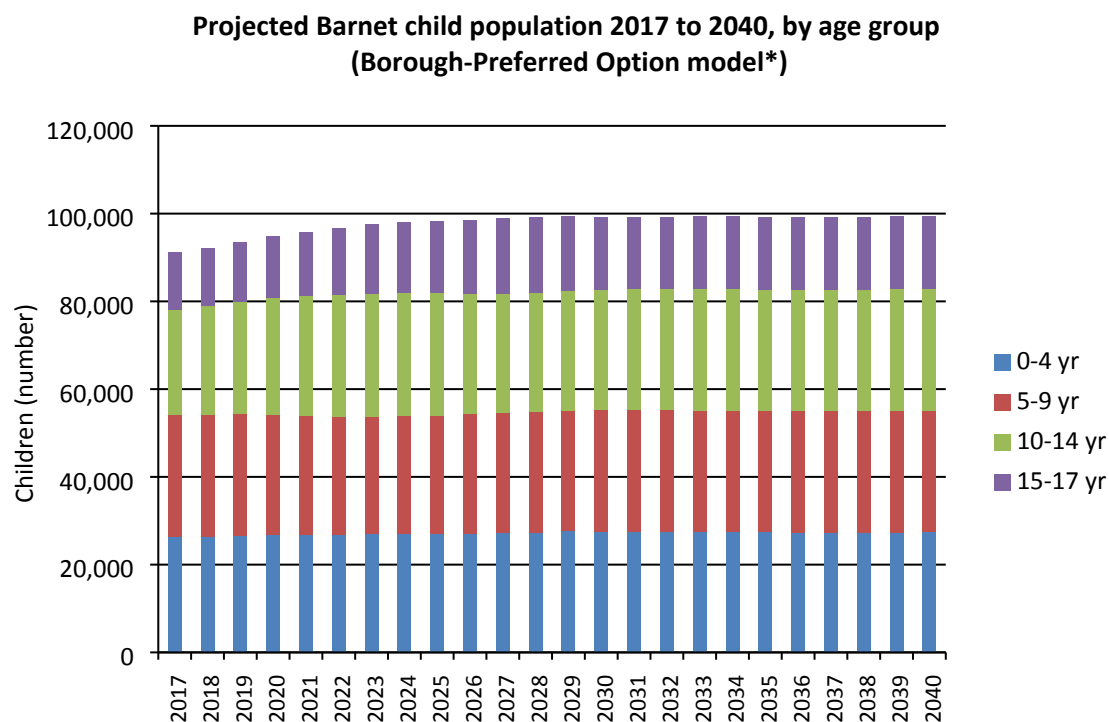
(Source: Greater London Authority (SHLAA))

This shows:

- Between 2017 and 2040, the total Barnet 0–17 yr population is expected to increase by almost 9600, based on the SHLAA population growth model.
- The greatest increase is expected in 10–14 yr olds.

(Results not statistically assessed)





\*Population projections incorporating expected births, deaths and migration plus future development expectations supplied by the London Borough of Barnet.

Source: Greater London Authority (Borough-Preferred Option)

**Projected increase in Barnet child population from 2017, total and by age group (Borough-Preferred Option model)**

	To 2020	To 2025	To 2030	To 2035	To 2040
0-4 yr	296	602	1234	1010	1088
5-9 yr	-108	-575	-25	9	-82
10-14 yr	2505	3790	3500	3648	3712
15-17 yr	1002	3407	3452	3531	3607
Total	3695	7224	8161	8199	8326

Source: Greater London Authority (Borough-Preferred Option population projection)

- Between 2017 and 2040, the total Barnet 0–17 yr population is expected to increase by over 8300, based on the Borough-Preferred Option model.
  - The greatest increase is expected in 10–14 yr olds.
- (Results not statistically assessed)

## 5. Notes on methods

Bar chart whiskers indicate 95% confidence intervals. These are based on statistical calculations, and mean that we can be 95% confident that the true value of the statistic (i.e. whatever is being measured) will fall somewhere within this range.

Comments on difference between values are based on statistical significance unless stated otherwise.

'Statistical neighbours' refers to the four London boroughs which are statistically closest to Barnet (Harrow, Croydon, Redbridge and Ealing), as calculated by the Chartered Institute of Public Finance Accounts (CIPFA) 'statistical neighbours' tool, default setting (based on factors such as population, age structure, income and illness rates).

### *Dental Public Health Epidemiology Programme*

This survey uses a measure of decay which is widely accepted to under-represent the actual prevalence of disease.

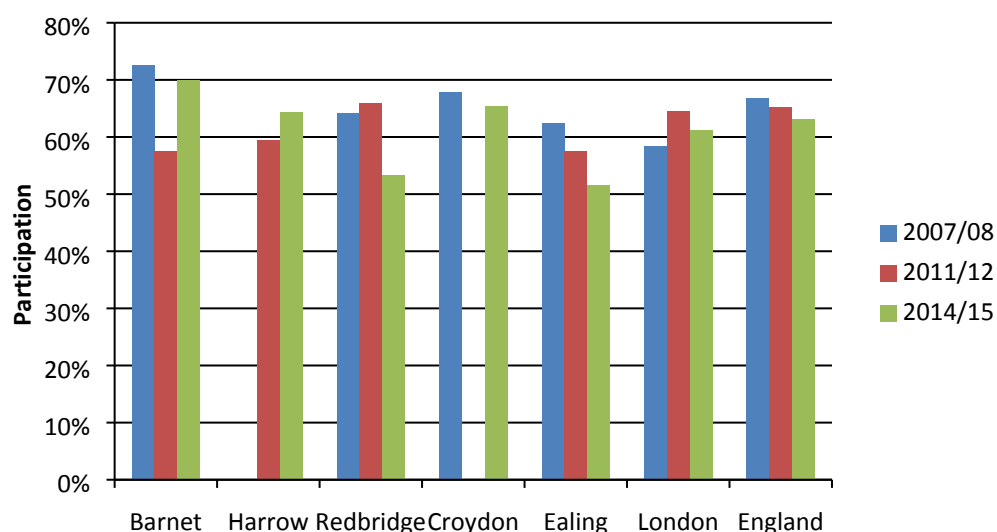
Participants were 5 year old children attending mainstream schools, and were ascribed to their local authority of residence.

Children in the 2007/08, 2011/12 and 2014/15 surveys required the positive consent of their parents (i.e. the survey was 'opt in'), in contrast to earlier surveys.

In Barnet in 2014/15, only 70% of children invited to participate in the survey actually took part; this was better than averages for London (61%) and England (63%). Results for local authorities were weighted to more accurately reflect the distribution of deprivation in the area, so that results could be compared to other areas.

### **DPHEP participation rates\* in Barnet, 4 statistical neighbours, London & England, for 2007/08, 2011/12 and 2014/15 surveys**

(source: Public Health England (Dental Public Health Epidemiology Programme))



\*The proportion of selected children who actually participated in the survey. DPHEP = Dental Public Health Epidemiology Programme.

Different rates of participation may bias (i.e. introduce systematic error into) dental measurement results collected from different areas. The researchers randomly selected children in each area to enter the survey. However, actual participation of those children required: (a) their parents to 'opt in' by giving written consent; (b) the child to be present at school on the day of dental examination; and (c) the child to agree to dental examination. Children who participated in the survey may have different dental health, as a group, compared with those who did not participate. Survey results from areas with low levels of participation (e.g. 50% or less) are more likely to be affected by this problem.

### *Breastfeeding*

Between April 2013 and October 2015, breastfeeding data was collected and reported by NHS England (through Unify2 data collection tool), via maternity providers, midwives in acute trusts and information recorded at delivery. Previously, data has been directly requested from all Primary Care Trusts (PCTs) by the Department of Health.

## Appendix B: Oral Health Supporting Data

In order for data to be validated and published, Public Health England (PHE) requires three criteria to be met:

- The number of mothers initiating breastfeeding combined with the numbers of mothers not initiating breast feeding should be equal to or less than the number of maternities submitted via Unify2
- The number of maternities submitted via Unify2 must be within +20% / -10% of the live births of that particular area.
- The total number of mothers for whom breast feeding status is unknown must be less than 5%

New breastfeeding at 6–8 weeks indicator from 2015/16: Since October 2015, data on breastfeeding at 6–8 weeks has no longer been collected by NHS England. Instead, data is collected by Public Health England (PHE), through an interim reporting system set up to collect health visiting activity data at a local authority resident level; data is submitted by local authorities on a voluntary basis (PHE, 'Breastfeeding at 6 to 8 weeks after birth: annual data'.

<https://www.gov.uk/government/statistics/breastfeeding-at-6-to-8-weeks-after-birth-annual-data>, viewed 1/9/17). Because of these changes in data collection, data for 2015/16 onwards is not comparable to earlier data. This move to residence based reporting requires joint working between neighbouring local authorities to ensure children on authority borders are included in the correct data return form. In 2015/16, data on breastfeeding at 6–8 weeks was published for only 72 out of 150 local authorities, as 78 failed PHE validation. No data is available for 2015/16 Barnet prevalence of breastfeeding at 6–8 weeks (i.e. using the new collection method), due to data quality issues.

## 6. References

Chartered Institute of Public Finance Accountants: Nearest Neighbours tool, 2017.

<http://www.cipfastats.net/resources/nearestneighbours/profile.asp?view=select&dataset=england>

NHS Dental Statistics for England: Dental Activity, 2017. <https://data.gov.uk/dataset/nhs-dental-statistics-for-england-units-of-dental-activity-by-ccg>

NHS Digital: NHS Outcomes Framework, 2017. <http://content.digital.nhs.uk/nhsf>

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Office for National Statistics: mid-year estimates (datasets), 2017.

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>

Public Health England, 2015. The relationship between dental caries and obesity in children: an evidence summary.

<https://www.gov.uk/government/publications/dental-caries-and-obesity-their-relationship-in-children>

Public Health England: Dental Public Health Epidemiology Programme, 2017. <http://www.nwph.net/dentalhealth/>

Public Health England: National Dental Epidemiology Programme for England: Oral health survey of five-year-old children: A report on the prevalence and severity of dental decay, 2016.

[http://www.nwph.net/dentalhealth/14\\_15\\_5yearold/14\\_15\\_16/DPHEP%20for%20England%20OH%20Survey%205yr%202015%20Report%20FINAL%20Gateway%20approved.pdf](http://www.nwph.net/dentalhealth/14_15_5yearold/14_15_16/DPHEP%20for%20England%20OH%20Survey%205yr%202015%20Report%20FINAL%20Gateway%20approved.pdf)