**Children’s Oral Health**

The Dental Public Health Intelligence Programme runs a rolling series of surveys on oral health to provide robust and reliable information on the oral health needs of local populations. Oral health in children is monitored by surveys of three year olds, five year olds and 12 year olds. A key indicator of oral health is the percentage of children with decayed, missing or filled teeth (DMFT) and for five and 12 year olds the percentage of decayed teeth treated by filling (Care Index) gives an indication of the restorative activity of dentists in each area.

Tooth decay is a predominantly preventable disease which is a significant public health problem in England. Sizeable inequalities in the incidence of tooth decay exist between affluent and deprived communities, and it is a common cause of hospital admissions in children (Public Health England). Tooth decay results in pain, sleep loss, time off school and, in some cases, treatment in hospital under general anesthetic.

**Percentage of children with decayed teeth and percentage of decayed teeth treated by filling**

Looking at the most recent surveys of three, five and 12 year olds, Cheshire West and Chester consistently experiences lower percentages of children with decayed, missing or filled teeth compared to the England average. Although the percentage of decayed teeth treated by filling is lower in five year olds compared to the England average, in 12 year olds the percentage of decayed teeth treated by filling is equal to the England average. It is important to note that opinions differ regarding the appropriateness and benefit of filling decayed primary teeth and there is a lack of definitive evidence-based guidance on this. Care should be taken in making assumptions about the extent or the quality of clinical care available when using the care index as a result of this.

For children aged 12, the most recent survey was in 2008/9. Results showed that 30.4% of local children had DMFT experience, this was significantly lower than the England average of 33.4%. Whilst the oral health survey of five year olds from 2007/8 cannot be compared with more recent surveys we can observe that, at that time, the percentage of children experiencing DMFT at age five (26.7%) was equivalent to seven eighths of the percentage experiencing DMFT at age 12 in 2008/9. This suggests that the vast majority of children who will experience decay by age 12 will have already experienced some decay by age five.

The most recent survey of oral health in children was the 2015 survey of five year olds. When compared against other local authorities Cheshire West and Chester is in the best quartile of ranked Local Authorities in England in terms of the percentage of children aged five who have experienced decay. This can be seen in the chart on page two.
The 2015 oral health survey of five year old children in Cheshire West and Chester, had a relatively small sample size of 205. By aggregating ward data level using mean Index of Multiple Deprivation scores, Public Health England have produced a stratified analysis of the sampled children.

**Average number of decayed, extracted or filled teeth among five year olds in Cheshire West and Chester by wards, clustered by deprivation scores, 2015**

Surveyed children living in the Cheshire West and Chester wards identified as most deprived (with a mean IMD score of less than 11.00), experienced significantly higher numbers of decayed, missing or filled teeth compared to children living in the Cheshire West and Chester wards identified as the least deprived (with a mean IMD score of more than 27.00).

In terms of the care index (the proportion of teeth with decay which have been filled) Cheshire West and Chester is in the lowest quartile compared to other local authorities. The rate of 5.8% of decayed teeth filled is significantly lower than the England average of 11.2%. Opinions differ regarding the appropriateness and benefit of filling decayed primary teeth and there is a lack of definitive evidence-based guidance on this. Care should be taken in making assumptions about the extent or the quality of clinical care available when using this index as it does not take into account evidence based preventative care.
Evidence of what works

The Government has set out its ambitions for improving dental health in its publication ‘A Framework for Dental Health Improvement in England (2013).’ This recognised that while individuals’ needs may vary, there are certain core needs common to everyone including:

- Access to timely information that helps people to make informed decisions about preventative interventions that build personal resilience and self-esteem and promote healthy choices.
- Rapid access to confidential, integrated dental health services, in a range of settings, accessible at convenient times.
- Early, accurate and effective diagnosis and treatment of dental disease.
- Joined-up provision that enables seamless patient journeys across a range of dental health and other services.

Recommended actions

- Introduce the Happy Smiles program for two year olds and under, distributing toothbrush packs via children’s centres and health visitor teams over the next three years, in a program linked to the progress checks performed by the health visiting service.
- Promote PHE Sugar Smart Campaign via schools, childminders and Health Visitors.
- Education and support given to Health Visitors, School Nurses and teaching staff to deliver the correct, preventative dental messages which are:
  - Use a family fluoride toothpaste.
  - Spit, don’t rinse excess toothpaste.
  - Brush last thing at night and one other time.
  - Restrict sugary drinks and snacks to meal times.
- Engage with NHS England commissioners to review preventative dental care data.
- Collaborate with the local dental network to optimize delivery of prevention.

At risk groups

In 2014 a survey of five year olds and 12 year olds in special schools was undertaken as these children are identified as an at risk group. Small numbers of participants in Cheshire West and Chester mean local reporting is not valid. At a national level however it was seen that in both age groups, the percentage of children in special schools experiencing decay was lower than that of their mainstream school counterparts. In England, 22% of five year olds in special schools experienced DMFT compared to 28% in mainstream schools. In 12 year olds, 29% of pupils in special schools compared to 33% in mainstream schools experienced DMFT.

For children with DMFT the extent of decay was higher in special schools compared to those with DMFT in mainstream schools. Five year olds in special schools experienced an average of 3.90 teeth affected compared to 3.38 teeth in their mainstream counterparts. In 12 year olds, 2.37 teeth were affected compared to 2.21 teeth in their mainstream counterparts.

This evidence indicates that while children attending special schools are in general less likely to experience decay, those who do will be affected more severely.

Health care assessments of children in care who have been looked after continuously for at least 12 months showed that in 2015, 68% (n=245) of 360 eligible children had their teeth checked by a dentist in Cheshire West and Chester. This is lower than the England average of 84.1%.