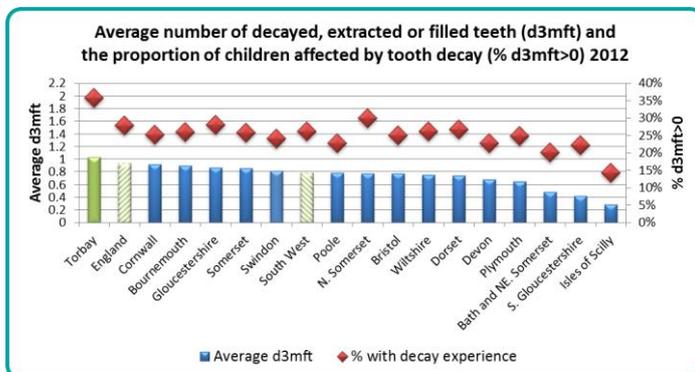


Tooth decay or dental caries is a common problem that occurs when acid in the mouth dissolves the outer layer of the teeth. Although levels of decay have decreased in recent years; it is still one of the most widespread health problems in the UK, despite simple prevention strategies such as regular tooth brushing, flossing, using mouthwash and a sensible sugar intake (NHS Choices, 2014).

In England, around 12% of three-year old children (PHE, 2013) and around 28% of five-year old children (PHE, 2012) experience tooth decay, having one or more teeth that are decayed to dentinal level, extracted or filled because of caries (henceforth abbreviated to %d3mft>0). The severity of decay is well correlated with higher levels of deprivation (PHE, 2012).

Dental caries – In 2012 the National Dental Epidemiological Programme survey of five-year old children reported that more than one in three (36%) children in Torbay had experience of tooth decay. This is above the England average (28%). Torbay also has the highest average number of decayed, extracted or filled teeth (d3mft) in the South West region (Fig 1).

Fig 1: Number of decayed teeth Vs decay prevalence



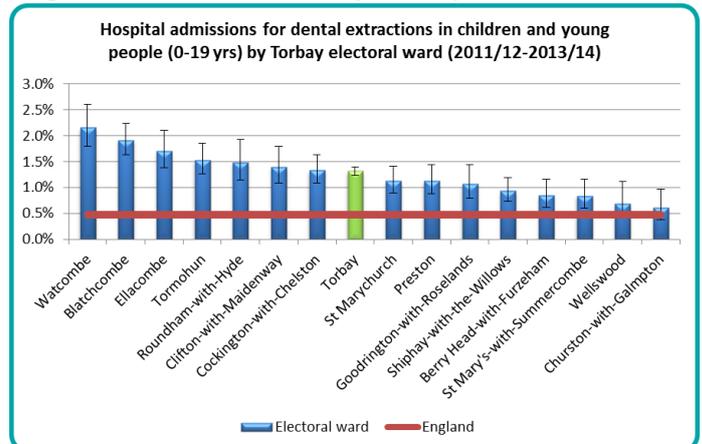
Source: PHE Dental Health Profile, 2014

Extractions – Without preventative measures, dental caries can result in a hospital admission for tooth/teeth removal. The vast majority of extractions will be as a direct result of decay (PHE, 2013); however we cannot make this assumption for all extractions. From survey data, it is estimated that 2.3% of five year old children in Torbay have had an extraction(s). This compares to 3.1% in England.

Extractions (0-19yrs) – Around 360 (1.3%)

young people aged 0-19 years in Torbay are admitted to hospital for a dental extraction(s). This is significantly higher than the England average of 0.5% (Fig 2). The wards of Watcombe, Blatchcombe and Ellacombe have the highest prevalence in Torbay.

Fig 2: Dental extractions by Torbay electoral ward

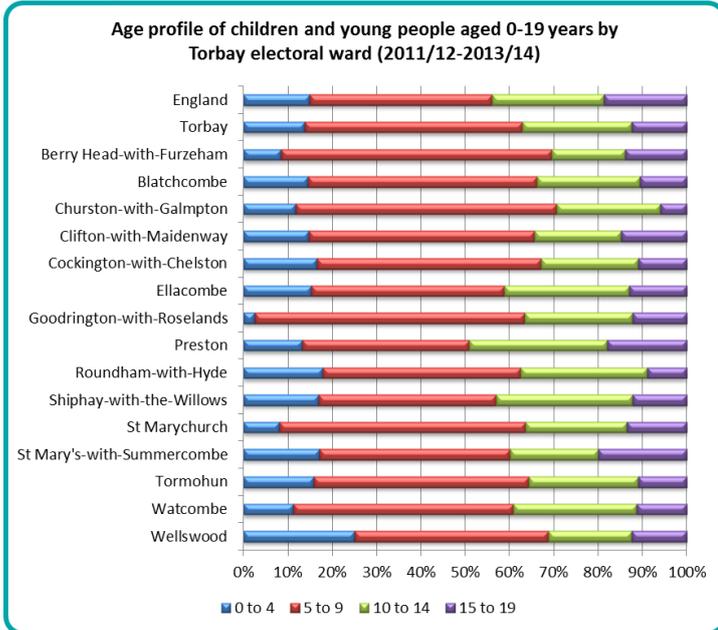


Source: SUS, PHE, ONS mid-year resident population

Sex – In the 0-19 year age group, there is little difference between male (1.3%) and female (1.4%) prevalence of dental extractions.

Age – Comparing five-year age bands (e.g. 0 to 4 years) over 0-19 years shows there is a higher prevalence of dental extractions in the 5 to 9 year age group (2.2%). This is highlighted by the prominent red bars below (Fig 3). This may suggest that preventive intervention would be most beneficial aimed at pre-school infants and in younger primary school children.

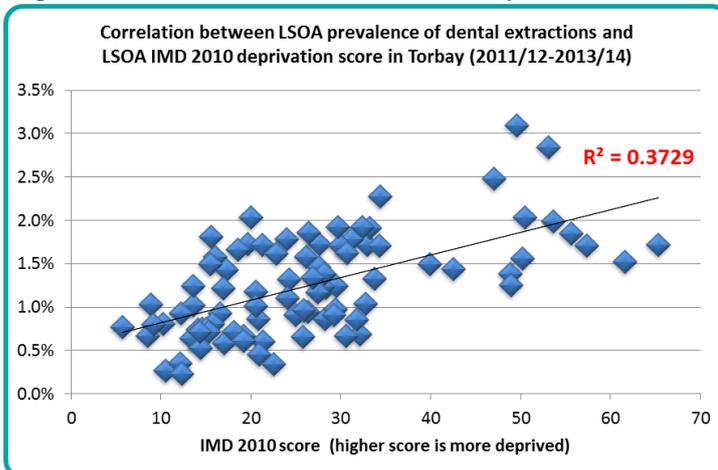
Fig 3: Age distribution of dental extractions



Source: SUS, ONS mid-year resident population

Deprivation – There is a weak association between dental extractions and deprivation. The prevalence of extractions does show a modest increase with rising levels of multiple deprivation (Fig 4). This is similar to England.

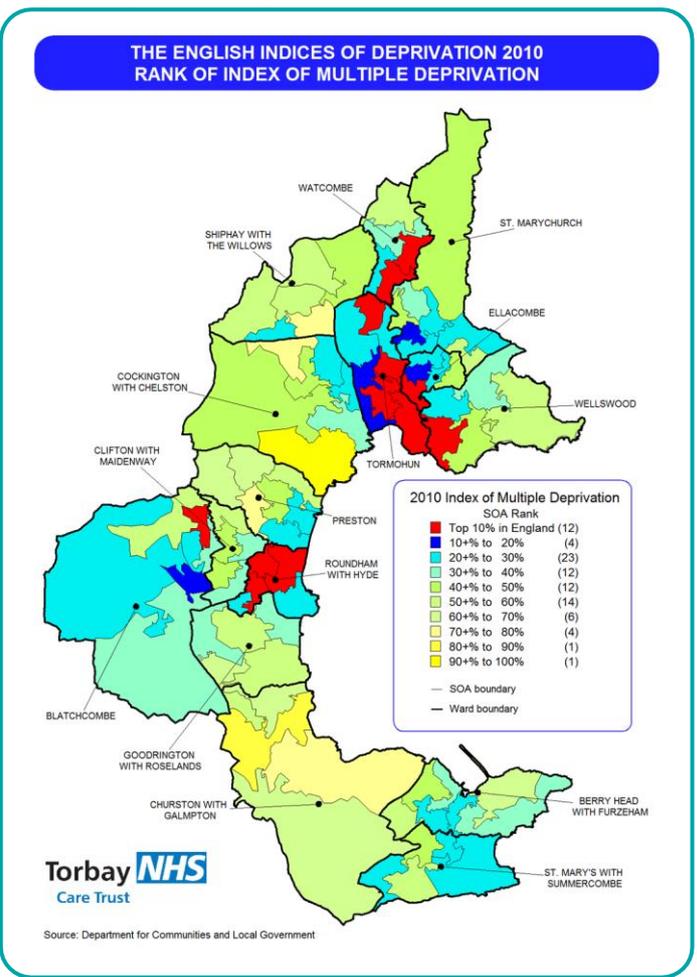
Fig 4: Association – extractions and deprivation



Source: SUS, ONS, Dept. for Communities and Local Government

The most deprived areas in Torbay, shown in red on the map in Fig 5 (across the page), are consistent with the five wards with the highest prevalence of dental extractions shown in the bar chart in Fig 2. These 'hot spot' wards are as follows: Watcombe (2.2%); Blatchcombe (1.9%); Ellacombe (1.7%); Tormohun (1.5%) and Roundham-with-Hyde (1.5%).

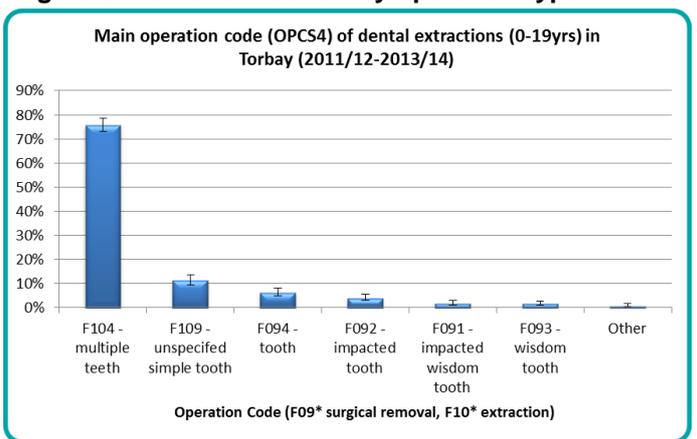
Fig 5: Deprivation by LSOA and electoral ward



Admission type – The majority (97.2%) of hospital admissions for dental extractions are classified as day case elective admissions. The remainder are emergency or inpatient elective.

Operation type – The majority (75.8%) of operations are for the extraction of multiple teeth, followed by unspecified simple tooth extractions (11.4%) as shown in Fig 6.

Figure 6: Dental extraction by operation type



Source: SUS, OPCS4