Oral Health Needs Assessment
# CONTENTS

**INTRODUCTION** ..................................................................................................................................... 3  
Who is at risk and why? ............................................................................................................................ 3  
**CHILDREN** ................................................................................................................................................ 3  
Three-year-olds ................................................................................................................................... 3  
Five-year-olds ...................................................................................................................................... 4  
Twelve-year-olds ................................................................................................................................. 5  
Dental Extractions under General Anaesthesia (GA) .......................................................................... 6  
**ADULTS** .................................................................................................................................................... 7  
Oral Health Status ............................................................................................................................... 7  
Mildly Dependent Older People (2015/16) ........................................................................................ 8  
Oral Cancer ....................................................................................................................................... 11  
**CURRENT SERVICES IN RELATION TO NEED** .......................................................................................... 12  
Dental Access .................................................................................................................................... 17  
NHS Choices ...................................................................................................................................... 23  
Sedation ............................................................................................................................................ 29  
Domiciliary Care ................................................................................................................................ 30  
Fluoride Varnish ................................................................................................................................ 31  
Fissure Sealants ................................................................................................................................. 33  
Oral Health Promotion Service ......................................................................................................... 35  
**PROJECTED SERVICE USE AND OUTCOMES** .......................................................................................... 36  
**EVIDENCE OF WHAT WORKS** ................................................................................................................ 37  
Fluoride ............................................................................................................................................. 39  
Return on Investment (ROI) .............................................................................................................. 40  
**TARGET POPULATION / SERVICE USER VIEWS** ...................................................................................... 41  
GP Patient Survey.............................................................................................................................. 41  
NHS BSA Dental Services .................................................................................................................... 43  
Healthwatch ...................................................................................................................................... 44  
**FINANCES & RESOURCE ALLOCATION** ................................................................................................... 45  
Dental treatment provision .................................................................................................................. 45  
**UNMET NEEDS & SERVICE GAPS** ......................................................................................................... 47  
**RECOMMENDATIONS FOR CONSIDERATION FOR COMMISSIONERS** ...................................................... 48  
NHS England (Central Midlands) ....................................................................................................... 48  
Northamptonshire County Council (Public Health) .......................................................................... 48  
**RECOMMENDATIONS FOR NEEDS ASSESSMENT WORK** ....................................................................... 49  
**KEY CONTACTS** ...................................................................................................................................... 49  
**REFERENCES** .......................................................................................................................................... 50
INTRODUCTION

Good oral health is integral to general health and the impacts of poor oral health on quality of
cannot be underestimated, affecting everyday activities from smiling and eating to sleeping and
communicating. Oral diseases are largely preventable but remain a major public health problem.
Oral disease varies according to age, ethnicity, geographic locations and socio-economic
Tooth decay remains the most common oral disease. It can result in significant pain and
tooth loss, with an adverse impact on school, work and family life. There are a range of conditions
such as obesity, stroke, cancers, diabetes that share a set of common risk factors that affect oral
health. The common risk factors include diet, tobacco use and alcohol consumption. Tooth decay,
gum disease and mouth cancer all share these common risk factors.

More people are keeping their teeth for longer as they age. As people get older the combination of
frailty, ill health and socioeconomic constraints can make looking after oral health and accessing
services more difficult. This can lead to an increase in the burden and complexity of dental care
needed for this group and can have a significant impact on the general health of the older person.
The management of oral diseases, therefore, extends beyond the cost of NHS treatment services,
through a wide range of broader impacts, both on individuals and society as a whole.

This Oral Health Joint Strategic Needs Assessment aims to highlight the oral health priorities
for the population of Northamptonshire. Population groups with unmet need are discussed
alongside commissioning recommendations to address these issues. This document has
attempted to, where possible, benchmark Northamptonshire to the national picture so that
there is a comparative understanding of the oral health needs of the local population.

Thank you to all from Northamptonshire County Council, Northamptonshire Health
Foundation Trust and Public Health England, who have contributed towards this Oral Health
Joint Strategic Needs Assessment.

Who is at risk and why?

Oral health is defined as a state free from pain and disease. It encompasses all oral diseases
including dental decay, gum disease, tooth wear and mouth cancer. Patients with and without teeth
are at risk of oral disease. The table below identifies cohorts in the population at risk of poor oral
health.
Table 1: Who is at risk and why?

<table>
<thead>
<tr>
<th>Cohort in the population</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those living in areas of higher deprivation</td>
<td>People living in areas of higher deprivation are more likely to experience poor oral health and least likely to access dental services(^2).</td>
</tr>
<tr>
<td>Age</td>
<td>Children are more at risk of developing tooth decay if they are eating a diet with high and frequent consumption of sugar(^3).</td>
</tr>
<tr>
<td></td>
<td>Older people may have difficulty maintaining their oral health regime. There are a number of oral problems and complications that occur in later life such as reduced salivary flow, gum recession and reduced manual dexterity which all increase the risk of oral diseases. There is variation in the delivery of oral health care by care home providers, high levels of unmet needs, the reluctance of staff to support oral hygiene maintenance and lack of staff training(^4). Older people may find travelling to a dental practice more difficult, e.g. transport issues, or require someone to accompany them. Comorbidities (e.g. Parkinson’s disease, dementia, drugs that lead to dry mouth) can have a detrimental effect on oral health. Adults living with dementia may experience difficulties in maintaining good oral health(^5).</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Children from Chinese and Eastern European backgrounds are reported in a national sample survey as having higher prevalence, severity and extent of dental decay than other ethnic groups(^6). People of non-white backgrounds are reported a lower use of dental services(^7) than people of white background. Black and minority ethnic (BME) groups who habitually chew tobacco have a significantly increased risk of developing oral cancer.</td>
</tr>
<tr>
<td>Gender</td>
<td>Men of all ages are reported as less likely to attend for dental check-ups than women, with a greater proportion of men (34%) than women (28%) surveyed having decayed teeth(^8).</td>
</tr>
<tr>
<td>Diabetics</td>
<td>Increased predisposition to periodontal (gum) disease and premature loss of teeth(^9).</td>
</tr>
<tr>
<td>Substance misuse</td>
<td>Drug misusers, including those prescribed methadone syrup (with sugar) are at a higher risk of dental decay and generally have a neglected dentition(^10).</td>
</tr>
<tr>
<td><strong>Tobacco and alcohol</strong></td>
<td>Smoking or chewing tobacco is a risk factor for oral cancer, and when combined with consumption of excessive amounts of alcohol increases the risk of oral cancer even further. Smokers are 6 times more likely to develop oral cancer than non-smokers and drinkers are 6 times more likely to develop cancer than non-drinkers. People who smoke and drink are 38 times more likely to develop oral cancer than those who do not drink or smoke(^\text{11}).</td>
</tr>
<tr>
<td><strong>Children attending special schools</strong></td>
<td>Children with special needs have similar caries experience but significantly different treatment patterns when compared with their peers(^\text{12}).</td>
</tr>
<tr>
<td><strong>Adults with disabilities</strong></td>
<td>Tend to experience more oral disease and have fewer teeth than the general population(^\text{13}). They also have greater unmet dental needs(^\text{14}) such as poor oral hygiene and present of pain, possibly due to difficulty in accessing dental care. Access to oral health care is affected by where people with learning disabilities are living; those living in their own homes community have greater unmet oral health needs than their residential counterparts, and are less likely to have regular contact with dental services(^\text{15}).</td>
</tr>
<tr>
<td><strong>Homeless people</strong></td>
<td>Tend to have poorer health than the rest of the population with a high clinical and perceived need for oral health within this community(^\text{16,17}). Despite high levels of need, homeless people can experience difficulty in accessing dental services(^\text{18}).</td>
</tr>
<tr>
<td><strong>People in prisons</strong></td>
<td>The oral health in prison populations is worse than that of the general population(^\text{19}). Those in prison tend to have more decayed teeth, fewer filled teeth and less natural teeth(^\text{20}).</td>
</tr>
</tbody>
</table>
LEVEL OF NEED IN THE POPULATION

CHILDREN

The prevalence of tooth decay in young children has decreased substantially over the past 40 years. The greatest improvement in the decay experience of five-year-olds nationally was seen between 1973 and 1983, during which time the mean number of decayed, missing and filled teeth (DMFT) per child halved and the percentage of children without any tooth decay doubled. This has been associated with the widespread use of fluoride toothpaste. However, a small proportion of the population are still experiencing a high proportion of the disease. Local data on the dental health status of the population is regularly collected through the Dental Public Health Epidemiology Programme which is commissioned by local authorities. This enables population prevalence of decay to be estimated. It should be appreciated that due to sample sizes, the confidence intervals can be large and therefore estimates may be less precise.

Three-year-olds

Overall, the burden of dental decay being experienced by three-year-old children in Northamptonshire is similar to England. Figure 1 illustrates inequalities in oral health experienced by three-year-old children living across Northamptonshire by lower tier local authority. It can be seen that children living in Wellingborough have a significantly higher prevalence of dental decay, when compared against Northamptonshire and England. However, due to the small sample size (n=67) that only represented 0.6% of total eligible population, Wellingborough’s findings have to be interpreted with cautions. In addition, no trend data is available for this indicator, it is hence impossible to investigate whether this high proportion of dental decay in 3-year-olds in Wellingborough is only an ‘unusual’ case or has indeed remained for years.

Figure 1: Proportion of three-year-old children with experience of dental decay across Northamptonshire (2013)

Source: Dental Public Health Intelligence Programme (PHE)
Five-year-olds

Historically, five-year-old children in Northamptonshire have consistently had a significantly higher experience of dental decay when compared against England. Figure 2 illustrates inequalities in oral health being experienced by five-year-old children living across Northamptonshire from 2007/08 to 2016/17. It can be seen that children living in Corby consistently have significantly higher prevalence of dental decay than England. It should be noted that although there appears to be a decrease in the proportion of five-year-old children with experience of dental decay in Corby between 2007/08 and 2014/15, this is not statistically significant due to the confidence intervals overlapping. However, there is a statistically significant decrease in the proportion of five-year-old children with experience of dental decay in South Northamptonshire between 2014/15 and 2016/17.

Figure 2: Proportion of five-year-old children with experience of dental decay across Northamptonshire (2007/08 to 2016/17)

Source: Dental Public Health Intelligence Programme (PHE)

Figure 3 demonstrates that five-year-old children living in the most deprived quintiles across Northamptonshire have a significantly higher prevalence of dental decay. Due to the small sample sizes for the surveys in Northamptonshire, it is not possible to provide more detailed information at a lower geographical level.
Additionally, a survey of five-year-olds attending special support schools was carried out in 2014, however due to a small sample size in Northamptonshire, there was insufficient data to report any results.

**Twelve-year-olds**

Twelve-year-old children in Northamptonshire had a higher prevalence of dental decay when compared against England. Figure 4 illustrates inequalities in oral health being experienced by twelve-year-old children living in Northamptonshire with those residing in Corby and East Northamptonshire having significantly higher prevalence of dental decay than nationally.

**Figure 4: Proportion of twelve-year-old children with experience of dental decay across Northamptonshire (2008/09)**

Source: Dental Public Health Intelligence Programme (PHE)
Figure 5 illustrates the proportion of twelve year old children attending special support schools with experience of dental decay in Northamptonshire. Twelve year old children in Northamptonshire attending special support schools had a comparable prevalence of dental decay when compared against England, but a lower prevalence of dental decay when compared against East Midlands.

**Dental Extractions under General Anaesthesia (GA)**

Dental treatment for young children can be challenging and often GA is the treatment of last resort to manage children with dental infections. The requirement for this treatment modality, whilst undertaken in a safe environment, is a matter of concern as children are exposed to unnecessary risk of complications and it has a negative impact on both the children and their families involved. It also has significant financial implications for the NHS. In 2015, the average cost of an episode of tooth extraction in hospital for a child was £836. In 2016-17, 1044 children (aged 0 to 19 years) had a dental extraction procedure under general anaesthetic in Northamptonshire. Given that tooth decay is largely a preventable condition, this is an unacceptable consequence of poor oral health for some children and young people in Northamptonshire.

Patients are referred for dental extractions under GA by their dentist, using the options of either route below (as appropriate):

1. *Referral via general hospital services, such as Northampton General Hospital and Kettering General Hospital, however patients can choose to access any general hospital, and are not bound by geographic restrictions*

2. *Referral to the Salaried Primary Care Dental Services (SPCDS). This service provides care to precooperative children who are unable to achieve dental care in GDP. Currently the SPCDS provides the majority of GA dental extractions in the county, by service level agreement, within Northampton General Hospital and Kettering General Hospital*
Figure 6 provides data of hospital admissions from 2011/12 to 2016/17 for children and young people aged 0-19 years receiving dental extractions under general anaesthesia in hospital. Extractions for 0-19 year olds represent 0.5% of all hospital based procedures in England; this has remained consistent from 2011 to 2017. It can be seen that the proportion of children aged 0-19 years requiring dental extractions under GA and living in Corby and Kettering is constantly above the national average.

Figure 6: Proportion of children and young people aged 0-19 years admitted to hospital for dental extractions under general anaesthetic (2011/12 to 2016/17)

Source: Dental Public Health Intelligence Programme (PHE)

ADULTS

Oral Health Status

There is a lack of local information on adult oral health. Most information on adult oral health is provided by reports in the Adult Dental Health Survey (ADHS) which is undertaken every ten years. The results of the most recent ADHS in 2009 demonstrated an improvement in most of the indicators of oral health and disease nationally. However, the same evidence also highlighted serious underlying social inequalities, particularly between poverty and oral health. The headlines for England were:

- The proportion of edentulous adults (no natural teeth) fell from 37% in 1968 to 6% in 2009 – a major change within the timeframe of a generation (Figure 7)
- For dentate adults (with teeth), periodontal (gum) disease remains a significant problem with only 17% of adults having “very good” periodontal health
- 23% of adults reporting dental pain had one or more teeth affected
- The highest prevalence of decay was in the age-group 25 to 34 years (36%)
Older people are also at increased risk of dental disease. Compounded with this increased risk, they are also more likely to have general health complications that make dental treatment planning more difficult and may require modification of dental services. Little is known about the oral health of older people who are living independently at home or being cared for by friends, family or formal carers but PHE has undertaken a review of data on oral health of older people who live in residential and nursing care homes in order to gain an insight into their oral health needs.

The main findings from this review are as follows:

- Signs of severe untreated dental decay appear to be more common across all settings and current pain also appears to be slightly higher than in the general adult population
- Older adults are less likely to rate their oral health as good, and appear to have poorer oral health related quality of life than the general adult population
- Care home managers experience much more difficulty in accessing dental care for their residents compared to older adults in the general population
- For older adults living in care homes, dental services are patchy and often no bespoke regular or emergency dental care arrangements exist

### Mildly Dependent Older People (2015/16)

An oral health survey of mildly dependent older people (65 years +) was carried out in 2015/16. This was the first oral health survey of this population group and therefore there is no directly comparable data to use which could help to show trends. The survey found:

- Poorer oral health tended to be found among participants who were older and those who reported an increased length of time since the last dental visit, being restricted in their ability to attend a dental practice or being in receipt of various services in their home.
- Those with a reduced cognitive recall and those with a lower level of education also tended to have worse oral health.
Some measures of oral health were found to be worse in the youngest age group. It is hypothesised that this is related to the circumstances surrounding admission to supported housing which may have changed over time.

Figure 8 shows that the proportion of participants in Northamptonshire who had not seen a dentist within two years was lower than the national average. The proportion of participants who would require domiciliary treatment was lower than the national average. Similarly, the proportion of participants with any oral health impacts (including pain, difficulties with eating and talking and self-consciousness) fairly or very often in Northamptonshire was also lower than national average. Figure 9 shows the most common reasons why the responding participants had not visited the dentist in the last two years. It can be seen that there is a higher proportion of participants in Northamptonshire who have reported they are unable to find an NHS dentist and they are unable to afford NHS charges as reasons for not accessing dental services when compared to the national average.

Figure 10 shows the oral-cleanliness in dentate participants and the condition of dentures in participants wearing partial or full dentures. Presence of plaque and calculus deposits are signs of an inadequate oral hygiene routine and increases the risk of tooth decay and gum disease; in this particular population group, it may also indicate that these individuals require additional support to carry out their oral hygiene routine. It can be seen that the proportion of participants with poor oral hygiene were higher in Northamptonshire than the national average in all the categories. Figure 11 shows the proportion of participants who reported current pain upon being examined, the presence of PUFA conditions (open pulp, traumatic ulceration, fistula or abscess) and those requiring urgent treatment. It can be seen that whilst the proportion of participants with urgent need for treatment in Northamptonshire was similar to the national average, the proportion of dentate participants with one or more PUFA conditions in Northamptonshire was higher than the national average.
Figure 9: Reasons why participants had not seen a dentist in the last two years (2015/16)

Figure 10: Proportion of participants with poor oral hygiene (2015/16)

Figure 11: Proportion of participants reporting current pain, experiencing PUFA and requiring urgent treatment (2015/16)

Source: Dental Public Health Intelligence Programme (PHE)
Oral Cancer

Oral cancer refers to cancers of the tongue, lips, lining of the mouth, cheeks and oropharynx. Risk factors for oral cancer include tobacco use (smoking, paan, betel quid, gutka and chewing tobacco), alcohol consumption, diet and exposure to the human papillomavirus (HPV). There were approximately 12,061 new cases of oral cancer in the UK in 2015 with half of the oral cancer cases being diagnosed in people aged 65 and over. However in recent years, incidence and mortality rates in young and middle-aged adults have been rising. It is the 4th most common cancer in men and the 12th most common cancer in women. Oral cancer incidence rates have increased by 23% over the last decade and are projected to rise by 33% between 2014 and 2035, to 20 cases per 100,000 people by 2035. Over the last decade, oral cancer mortality rates have increased by around 21% in the UK, with increase being similar in both males and females. Almost half (45%) of oral cancer deaths in the UK are in people aged 70 and over; mortality rates are higher in people aged 90+. Oral cancer mortality rates are projected to rise by 37% between 2014 and 2035. Survival rates increase dramatically if the disease is diagnosed in its early stages, but low awareness and the painless nature of early oral cancer means people generally only seek treatment when the cancer is more advanced and difficult to treat.

Figure 12 demonstrates the incidence of lip, oral cavity and pharyngeal cancer across Northamptonshire. It can be seen that the incidence in Corby and Kettering is higher than the national and regional average, though this is not statistically significant. Additionally, figures 13 and 14 show the incidence and mortality rate of lip, oral cavity and pharyngeal cancer in all persons and ages across Northamptonshire compared to England. It can be seen that both the incidence and mortality rates of oral cancer for both Northamptonshire and England have been rising over the recent years.

Figure 12: Incidence of lip, oral cavity and pharynx cancer across Northamptonshire (2013-2015)

Source: Hospital Episodes Statistics (NHS Digital)
CURRENT SERVICES IN RELATION TO NEED

NHS England has statutory responsibilities to commission NHS dental services that meet the needs of the local population and address health inequalities. Access to NHS dentistry is commissioned by NHS England for anyone who seeks it, regardless of where they live. Therefore, patients may choose to access NHS dental services in any locality of their choice. Those in employment may choose to access an NHS dentist close to where they work rather than where they live. In doing so, all family members may also follow suit. To improve access to primary dental services NHS England (Central Midlands) has also commissioned a full range of mandatory services available to all groups of
patients (children, fee-paying adults and exempt adults) including 5 NHS dental services that are open from 8.00am to 8.00pm, 365 days per year, in Corby, Kettering, Wellingborough, Northampton and Daventry. The first 8-8 service opened in Kettering in 2009; the additional 4 were a staged roll out throughout 2010 and 2011. These 8-8 services provide routine dental care and encompass unscheduled (urgent) dental care for patients in pain that do not have a routine dental practice or when their routine dental practice is closed i.e. at weekends or bank holidays.

NHS England’s over-arching aims for primary dental service provision are:

- To improve oral health and to reduce inequalities in health and wellbeing
- To improve access to NHS dental services and to improve the experience of all service users
- To develop excellent integrated and more localised services
- To ensure that key evidence based, preventive, consistent messages and interventions are communicated and delivered by all
- To ensure access to unscheduled and elective dental care is available to all
- To provide evidence informed care according to identified need
- To promote choice by service users, by ongoing consultation and engagement

The NHS General Dental Services should be designed to fit closely with the needs of all sectors of the population whilst maximising the opportunity for those with the greatest need to receive appropriate and timely dental care. The vast majority of NHS dental care in Northamptonshire is provided by high street dentists known as General Dental Practitioners (GPDs). In 2018, there were 74 high street NHS dental practices and 12 Specialist Orthodontic practices across Northamptonshire. Figure 15 demonstrates that there is more provision of dental services in areas of increased population density. Figure 16 demonstrates that the most deprived quartiles in Northamptonshire are the areas with the highest population density with more provision of NHS dental services. However, there is a lack of service provision in the third IMD quintiles in Northamptonshire. Figure 17 shows the location of NHS dental practices with a five-mile radius against deprivation depicting there are areas within Daventry, East Northamptonshire and South Northamptonshire where residents may be facing issues accessing a dental practice. This would need to be investigated further before drawing any definitive conclusions.

GDP care is supported by hospital services and the Salaried Primary Care Dental Services (SPCDS). Hospital services provide tooth extraction and advice regarding complex restorative solutions; both are consultant led services.

The SPCDS aims to provide a comprehensive treatment service for those adults and children who would not or could not, by virtue of their special needs, access dentistry in GDP. SPCDS provides care that is complementary to general dental services and hospital services. This includes:

- Children requiring treatment under sedation or general anaesthetic
- Patients with diagnosed moderate to severe learning disabilities, with diagnosed mental health problems, with diagnosed behavioural issues e.g. Autism
- Patients with complex co-morbid health conditions which restrict dental treatment
Figure 15: Location of NHS dental practices in Northamptonshire against population density

Source: NHS England
Figure 16: Location of NHS dental practices in Northamptonshire against deprivation

Source: NHS England
Figure 17: Location of dental practices in Northamptonshire with 5 mile buffer

Source: NHS England
Dental Access

Under the current dental contractual arrangements (introduced in April 2006), patients do not have to be registered with a NHS dentist to receive NHS dental care. The closest equivalent measure to ‘registration’ is the number for patients receiving NHS dental services (‘patients seen’) over a 24-month period as a proportion of the resident population. In order for data to reflect NICE recommendations, the data from March 2017 represents the number of child patients seen in the previous 12 months rather than the previous 24 months as in earlier reporting. These ‘access rates’ can be affected and influenced by many features including the amount of dental provision in an area, the oral health needs of population, the deprivation or indeed prosperity of the resident population and so on. A low access rate therefore may not solely be due to a lack of provision; elements such as patient choice, for example opting for private treatment, can have an impact on the rate.

Figure 18 below demonstrates the proportion of children aged 0-17 years that attended an NHS dentist in the 24-month period from 2012 to 2016 and in the 12-month period in 2017. Figure 19 demonstrates the proportion of adults aged 18+ years that attended an NHS dentist in the 24-month period from 2012 to 2017. It can be seen that dental ‘access rates’ for both children and adults in Northamptonshire have consistently been higher than the national average between 2012 and 2015. However, from March 2016, the dental access rates for both adults and children have fallen, with the rates for Northamptonshire no longer being above the national average. Direct comparisons for the child population should not be made between March 2017 and the dates prior to this due to a distinct break in the time series for child data.

Figure 18: Proportion of child population in Northamptonshire (0-17 years) attending NHS dental services in the 24 month period from 2012 to 2016 and 12 month period in 2017
The figures 20 to 25 demonstrate the dental ‘access rate’ for those aged 0-14 years (Figure 20), aged 15 to 29 (Figure 21), aged 30 to 44 (Figure 22), aged 45 to 59 (Figure 23), aged 60 to 74 (Figure 24) and aged 75+ (Figure 25) from 2014/15 to 2015/16 by local authority in Northamptonshire. For those aged 0 to 4 years, it can be seen that dental ‘access rates’ are lower than national average in Corby, East Northamptonshire, Northampton and Wellingborough. It should be noted that 3-year-old children living in Wellingborough have a significantly higher prevalence of dental decay, when compared against Northamptonshire and England and 5-year-old children living in Corby consistently have significantly higher prevalence of dental decay than England. For adults aged 40 to 69 years, it can be seen that dental ‘access rates’ are lower than the national average in all age groups in Daventry, East Northamptonshire and South Northamptonshire. In Corby, it can be seen that dental ‘access rates’ are lower than the national average in all age groups from 65+ years. This could be an indication that there are access issues to NHS dentistry in these areas or that patients are choosing to access private dentistry instead.
Figure 20: Dental ‘access rate’ by age groups (0-14 years) across local authorities in Northamptonshire (2014/15 to 2015/16)

Figure 21: Dental ‘access rate’ by age groups (15-29 years) across local authorities in Northamptonshire (2014/15 to 2015/16)
Figure 22: Dental ‘access rate’ by age groups (30-44 years) across local authorities in Northamptonshire (2014/15 to 2015/16)

Figure 23: Dental ‘access rate’ by age groups (45-59 years) across local authorities in Northamptonshire (2014/15 to 2015/16)
Figure 24: Dental ‘access rate’ by age groups (60-74 years) across local authorities in Northamptonshire (2014/15 to 2015/16)

Figure 25: Dental ‘access rate’ by age groups (75-90+ years) across local authorities in Northamptonshire (2014/15 to 2015/16)

Source: Public Health England LKIS
The levels of urgent care can indicate an issue with access to NHS dental services, however it may also be the patient’s choice not to access dental care regularly/routinely. The figures below provide a breakdown by local authority for those accessing urgent dental care for children (aged 0-17 years) (Figure 26) and adults (aged 18+) (Figure 27). It can be seen that the proportion of children requiring urgent treatment in Corby is higher than England. Similarly, the proportion of adults requiring urgent treatment is higher than the national average in Corby and Kettering.

Figure 26: Proportion of children (0-17 years) requiring urgent dental treatment by local authorities in Northamptonshire (2014/15 to 2015/16)

Source: Public Health England LKIS

Figure 27: Proportion of adults (18+) requiring urgent dental treatment by local authorities in Northamptonshire (2014/15 to 2015/16)

Source: Public Health England LKIS
The service finder on NHS Choices enables individuals to find local NHS services, including dentists. Practices are able to update their NHS Choices page to provide the public with information on whether they are accepting new adult/child patients, wheelchair access, contact details, etc. Figures 28 to 32 show insight into the information provided by practices in Northamptonshire on NHS choices.

Figure 28 shows the distribution of dental practices across Northamptonshire that are updating information on NHS Choices. It can be seen that there are practices in the first and second most deprived quartiles that are not updating the data on their NHS choices page within 90 days. Figure 29 and 30 show a similar distribution of practices accepting new adult patients who pay for treatment and those who are exempt from paying for NHS dental treatment. It can be seen that a number of these practices are situated in the 40% most deprived areas of the county. It should be noted that some dental practices hold contracts to see ‘children-only’ under the NHS and consequently are unable to accept NHS adult patients. Similarly figure 31 shows lack of service provision for new child patients in the first and second most deprived quintiles in Northampton, Wellingborough, Corby and Kettering. It should be noted that 3-year-old children living in Wellingborough have a significantly higher prevalence of dental decay, when compared against Northamptonshire and England, and 5-year-old children living in Corby consistently have significantly higher prevalence of dental decay than England.

Figure 32 shows the distribution of dental practices that are offering wheelchair access. It can be seen that there are practices in the more deprived areas of Northamptonshire that do not offer wheelchair access. However, the figure also shows that all practices in Corby offer wheelchair access.
Figure 28: Dental practices in Northamptonshire updating data on NHS choices

Source: NHS Choice/ NHS England
Figure 29: Dental practices in Northamptonshire accepting new adult patients who pay for NHS treatment.
Figure 30: Dental practices in Northamptonshire accepting new adult patients who do not pay for NHS treatment

Source: NHS Choice/ NHS England
Figure 31: Dental practices in Northamptonshire accepting new child patients

Source: NHS Choice/ NHS England
Figure 32: Dental practices in Northamptonshire offering wheelchair access

Source: NHS England/NHS Choices
Sedation

Some people may require dental sedation to help them cope with dental treatment. Dental sedation can be given in many ways; the medication can be taken as a drink, breathed in, intranasal or injected into a vein. The figures below show the proportion children (Figure 33) and adults (Figure 34) in Northamptonshire where sedation was indicated compared to national levels. It can be seen that the proportion of children and adults receiving sedation in Northamptonshire is less than the national levels. However, it should be noted that there are additional patients who are provided with sedation for minor oral surgery procedures and the data below does not capture this. Patients could also be accessing dental sedation on a private basis. NHS England do not currently commission dental sedation services (other than within the Salaried Primary Care Dental Services) and this could indicate a gap in service provision for anxious patients.

NHS England is currently working with clinicians to review the pathway for children and adults who have dental anxiety. PHE is also supporting NHS England with the specific population needs assessment on this. The outcome of this work is expected to lead to the commissioning of additional conscious sedation provision in order to accommodate unmet need within the adult population and reduce the number of children who are treated in hospital under GA.

Figure 33: Proportion of children receiving dental sedation in Northamptonshire (2015)

Figure 34: Proportion of adults receiving dental sedation in Northamptonshire (2015)

Source: Public Health England LKIS
**Domiciliary Care**

Domiciliary dental services provide access to oral health care for people who, due to physical or mental health issues, cannot access the services independently or for whom access using specialist transport services would be indicated. The Northamptonshire Healthcare Foundation Trust, Salaried Primary Care Dental Service is commissioned by NHS England to provide domiciliary service to the population of Northamptonshire. The service provides a domiciliary dental service to care homes and patients confined to their own homes including a full clinical examination, oral health risk assessment, appropriate preventative care and treatment. People accessing the service include those experiencing long term and/or progressive medical conditions (e.g. mental illness or dementia) causing disorientation and confusion in unfamiliar environments and patients with increasing frailty who are unable to travel to a dental surgery and who could not otherwise access dental care. In addition, the service provides care to patients who require urgent dental treatment whilst in hospital.

Figure 35 below shows the number of domiciliary contacts made by the Salaried Primary Dental Care Service per financial year. It can be seen that there is a decrease in the number of domiciliary contacts made between 2014 and 2016, however there is an increase from 2016 onwards. It is important to note that the number of contacts usually indicates the number of journeys to specific locations rather than the number of patients seen by the service. The increase in activity occurred following a transformation of the SPCDS workforce during 2015.

**Figure 35: Number of domiciliary contacts made by the Salaried Primary Dental Care Service by financial year**

![Graph showing number of domiciliary contacts per financial year](source: Northamptonshire Healthcare Foundation Trust)
Fluoride Varnish

While historically general dental services have been treatment focused, the new 2006 dental contract was designed to encourage dentists to focus on prevention. However, preventive activity undertaken in general dental practices tends to be largely undocumented and based on oral hygiene education. Professionally applied fluoride varnish has been demonstrated to be effective in reducing dental caries, and is recommended for:

- All children from the age of three years: to be applied twice yearly
- All children at high risk from birth: two additional applications per year (four in total)
- All adults at high risk of dental decay: two applications per year

Fluoride varnish can be applied by dentists, therapists, hygienists or extended-duty dental nurses. Figure 36 shows that there are more courses of treatment that include fluoride varnish application for children in Northamptonshire when compared against England and the East Midlands. Furthermore, the figure shows there is a steady increase in the number of courses between 2013 and 2017. Whilst the increase in fluoride varnish applications is encouraging, there are still inequalities in the number of applications across the county. Figure 37 shows that there was a higher proportion of fluoride varnish applications for those residing in East Northamptonshire and a lower proportion of fluoride varnish applications for those living in Corby and much of Daventry in 2014/15 to 2015/16.

In 2010, NHS Northamptonshire commissioned a fluoride varnish programme across Corby, Kettering and Northampton. The service provided fluoride varnish applications in targeted schools and nurseries bi-yearly, as well as oral education to children, carers and school/nursery staff. A total of 106 nurseries and schools took part in this service which was discontinued when public health responsibility went over to the local authority. Currently, there is no supervised tooth brushing programme being delivered across Northamptonshire; the PHE Return on Investment Toolkit estimates a return on £2.20 for every £1 spent on supervised tooth brushing after 5 years.

Figure 36: Percentage of child courses of treatment that contain fluoride varnish application (2013-2017)

Source: NHS BSA
Figure 37: Proportion of courses of treatment with fluoride varnish application across Northamptonshire (2014/15 to 2015/16)

Source: NHS BSA
**Fissure Sealants**

Fissure sealants are recommended for those at high risk of developing caries from approximately the age of 7 years. Fissure sealants can only be applied by dentists, therapists or hygienists and can be resource and time intensive. Figure 38 shows that the percentage of courses of treatment for children containing fissure sealants in Northamptonshire has consistently been lower than the England average. Furthermore, a decline can also be seen between 2014 and 2016. Figure 39 shows the proportion of courses of treatment with fissure sealants across Northamptonshire. It can be seen that there is a higher proportion of fissure sealants applications in Corby and areas of Kettering and Wellingborough. A lower proportion of fissure sealants applications can be seen in parts of Daventry and East Northamptonshire.

**Figure 38: Percentage of child courses that contain fissure sealant application (2013-2017)**

![Graph showing percentage of child courses containing fissure sealants](image)

Source: NHS BSA
Figure 39: Proportion of claims with fissure sealants across Northamptonshire (2014/15 to 2015/16)

Source: NHS BSA
Oral Health Promotion Service

Northamptonshire County Council (NCC) commissions the delivery of oral health promotion (OHP) from Northamptonshire Health Care Foundation Trust (via First for Wellbeing).

The service provides oral health advice, information, training, referrals to dental services and signposting to other organisations. It develops and delivers dental displays and interactive oral health education sessions within libraries, children’s centres, schools, colleges, community/support groups and care homes. The service works with children and adults at greater risk of dental disease i.e. living in areas of deprivation, those with a disability and long term and life limiting medical conditions, by mainly providing oral health education sessions (including support and information on accessing NHS dental services). The service provides training to health and educational professionals and supports them to impart standardised and consistent oral health advice to their service users.

The service is represented at local and county health events, takes part in national health promotion campaigns and develops and shares educational materials and resources. Table 2 below outlines the current Key Performance Indicators (KPIs) that are reported by the service. The table indicates the target for sessions delivered to children between 5-17 years is lower than expected whereas the other settings attended approximate closely to the KPI.

Children and young adults with additional needs are seen in conjunction with the mobile dental unit for tooth brushing advice, dietary advice and fluoride applications where appropriate with the support of the Community Dental Service (CDS). Additionally the OHP service supports residents and staff within care and nursing homes with oral health training, and where appropriate, applications of fluoride; this service is again provided with the support of the Community Dental Service. Centres which support vulnerable adults are visited to ensure oral health advice is available, support on how to access dental services is shared and where appropriate oral cancer awareness and screening is delivered by dentists from the CDS. Any patients that screen positive for oral cancer are referred to the maxillofacial department at Northampton General Hospital. This additional activity is not captured by the KPIs.

Table 2: Current Key Performance Indicators for the Oral Health Promotion Service (2017/18)

<table>
<thead>
<tr>
<th>Indicator name</th>
<th>Frequency</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Total</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of sessions delivered to children under 5 settings</td>
<td>Quarterly</td>
<td>24</td>
<td>29</td>
<td>43</td>
<td>33</td>
<td>129</td>
<td>130</td>
</tr>
<tr>
<td>Number of sessions delivered to aged 5-17 years settings</td>
<td>Quarterly</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Number of sessions delivered to adults of working age and older people settings</td>
<td>Quarterly</td>
<td>19</td>
<td>35</td>
<td>16</td>
<td>21</td>
<td>91</td>
<td>90</td>
</tr>
</tbody>
</table>
PROJECTED SERVICE USE AND OUTCOMES

Northamptonshire was designated by the Government as a National Growth Area by the 2003 Sustainable Communities Plan, and as such will see over 125,000 new homes developed by 2026. The county is therefore set for major population growth in the run up to 2020, according to figures released by the Office of National Statistics. Three of the 20 UK hotspots projected to see the fastest population growth are in the county, including Corby, Northampton and Kettering. With this in mind, it is vital that Northamptonshire has the necessary service provision in place to support this projected population growth. Figure 42 demonstrates that Northamptonshire is likely to see an increase in the following age-groups by 2020:

- 10-14 years
- 55-59 years
- 70-74 years

Figure 42: Population growth to 2020

The age profile and table present demographic information for the residents of the area and England. They include a 2014-based population projection (to 2020), the percentage of people from an ethnic minority group (Annual Population Survey, October 2014 to September 2015) and the dependency ratio.

The dependency ratio estimates the number of dependants in an area by comparing the number of people considered less likely to be working (children aged under 16 and those of state pension age or above) with the working age population. A high ratio suggests the area might want to commission a greater level of services for older or younger people than those areas with a low ratio.

Source: PH Fingertips
EVIDENCE OF WHAT WORKS

Commissioning Better Oral Health for Children and Young People and Oral Health Improvement for Local Authority and Partners provide guidance for local authorities on commissioning evidence-based oral health improvement programmes. The guidance advocates a population approach with advice and actions for all, with additional interventions aimed at those at higher risk of developing disease. Population prevention can adopt many different approaches and options. Marmot suggests that focusing solely on the most disadvantaged will not reduce health inequalities sufficiently as everyone experiences some degree of health inequality and proportionate universalism is advocated. Figure 43 shows upstream and downstream approaches that can be taken to improve population oral health.

Figure 43: Upstream/downstream approaches to oral health improvement

Oral diseases and conditions share risk factors with other diseases such as cancer, cardiovascular disease and obesity. The common risk factor approach integrates general health promotion by focusing on a small number of shared risk factors that can potentially impact a large number of chronic diseases, which includes oral health. Applying a common risk factor approach to multiple public health strategies would impact on multiple health outcomes and ensure more effective use of limited resources.
The Ottawa Charter describes five priority areas for health promotion:

- building healthy public policy
- create supportive environments for health
- strengthen community action for health
- develop personal skills
- reorient (change the focus of) health services

Table 3 below provides evidence-based recommendations on oral health promotion interventions in accordance with the Ottawa Charter principles.

<table>
<thead>
<tr>
<th>Ottawa Charter Principle</th>
<th>Oral Health Improvement Intervention</th>
<th>Overall Level Evidence-Based Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reorienting health services</td>
<td>Targeted community-based fluoride varnish programmes</td>
<td>Recommended</td>
</tr>
<tr>
<td></td>
<td>Targeted provision of toothbrushes and toothpaste (through postal schemes or through health visitors)</td>
<td>Recommended</td>
</tr>
<tr>
<td></td>
<td>Targeted community-based fissure sealant programmes</td>
<td>Limited value</td>
</tr>
<tr>
<td></td>
<td>Targeted community-based fluoride rinse programmes</td>
<td>Limited value</td>
</tr>
<tr>
<td></td>
<td>Facilitating access to dental services</td>
<td>Limited value</td>
</tr>
<tr>
<td></td>
<td>Using mouth guards in contact sports</td>
<td>Limited value</td>
</tr>
<tr>
<td>Developing personal skills</td>
<td>Oral health training for the wider professional workforce (e.g. health education)</td>
<td>Recommended</td>
</tr>
</tbody>
</table>
Table 3: Evidence-based oral health improvement interventions (Commissioning Better Oral Health, 2014)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration of oral health into targeted home visits by health/social care workers</td>
<td>Recommended</td>
</tr>
<tr>
<td>Social marketing programmes to promote oral health and uptake of dental services by children</td>
<td>Limited value</td>
</tr>
<tr>
<td>Person-centred (one-to-one) counselling based on motivational interviewing outside of dental practice settings</td>
<td>Limited value</td>
</tr>
<tr>
<td>One off dental health education by dental workforce targeting the general population</td>
<td>Discouraged</td>
</tr>
<tr>
<td>Fluoride varnishes are applied professionally, usually six monthly and have a preventive fraction of 37% in baby teeth and 43% in adult teeth. Fluoride rinses can be prescribed for people aged eight years and above for daily or weekly use in addition to twice daily brushing with fluoride toothpaste. Rinses require compliance and should be used at a different time to tooth brushing to maximise the effectiveness of the intervention.</td>
<td></td>
</tr>
<tr>
<td>Fluoride varnishes are applied professionally, usually six monthly and have a preventive fraction of 37% in baby teeth and 43% in adult teeth. Fluoride rinses can be prescribed for people aged eight years and above for daily or weekly use in addition to twice daily brushing with fluoride toothpaste. Rinses require compliance and should be used at a different time to tooth brushing to maximise the effectiveness of the intervention.</td>
<td></td>
</tr>
</tbody>
</table>

The interventions with limited value indicate there is a small evidence base supporting these interventions, however, they should not be considered to have no value at all.

**Fluoride**

Fluoride acts in several ways to slow and prevent the decay process and also to reverse decay in its early stages. The most important modes of action are to reduce demineralisation and promote re-mineralisation so that minerals are deposited back into the tooth surface. The effectiveness of fluoride in reducing levels of tooth decay at an individual and community level is well documented.

**Individual level**

Fluoride has been added to toothpaste since the 1970s and this is widely recognised as the main reason for improved oral health in the UK. The preventive fraction that is the relative effectiveness of fluoride toothpaste in reducing tooth decay is 24%. Programmes such as Brushing for Life have been commissioned in some parts of the country and involve the promotion of tooth brushing as soon as the teeth erupt in order to increase the delivery of fluoride to children from lower socio-economic groups.
topical effect of fluoride, which relates to frequency of availability. The preventive fraction for fluoride rinses is 26%.

Community level
In areas with high levels of tooth decay water fluoridation is an effective and safe public health intervention. The level of fluoride, which is naturally present in water supplies, can be adjusted to the optimal level, one part per million (ppm) to improve dental health. In the West Midlands 70% of the population consumes fluoridated water and children living in these areas have better oral health at every level of deprivation. None of the public water supplies across Northamptonshire is fluoridated. Water fluoridation became the responsibility of local authorities from April 2013. Local authorities are responsible for conducting public consultations and for meeting the costs the water companies incur for implementing and operating water fluoridation schemes. Fluoride toothpaste, fluoride varnish and supervised tooth brushing may also be provided at a community level.

Return on Investment (ROI)
Public Health England’s (PHE) rapid evidence review and ROI tool were commissioned from the York Health Economics Consortium and developed in partnership with PHE. The ROI tool allows effectiveness data on oral health interventions to be used to estimate the potential economic benefits from each intervention. The tool uses the best available evidence to estimate the reduction in tooth decay as a result of the intervention, the costs of delivering each of the programmes and the cost savings. Local authorities can use the ROI tool to inform their commissioning decisions, providing an estimate of the return on investment of these programmes using the oral health profile of their local population. Based on a typical oral health profile and indicative costs, the infographic below illustrates the 5 and 10 year return on investment in targeted programmes in the community for:

- supervised tooth brushing
- fluoride varnish
- provision of toothbrushes and paste by post
- health visitors distribution of toothbrushes and toothpaste
- water fluoridation
Figure 45: Return on investment of oral health improvement programmes (0-5 years)

Target Population / Service User Views

GP Patient Survey

NHS England has published the Outcomes Benchmarking Support Packs at Clinical Commissioning Group level. The packs present high level comparative information on the NHS, Adult Social Care and the Public Health Outcomes Framework. The survey’s relevant dentistry indicator is ‘patient experience of dental services’. The dental questions in the GP Patient Survey have been analysed to report on the patient experience indicator in the Outcomes Benchmarking Support Packs. The GP Patient Survey is sent to a sample of patients registered with a GP in Northamptonshire. This does not necessarily mean that the patient surveyed is receiving dental treatment in Northamptonshire, although the majority of Northamptonshire dentists do see patients who are living in Northamptonshire and who are registered with a GP in the county. Patients are asked about their overall experience of primary care services, which includes dental services, and specifically asked questions about access. Figure 46 shows the proportion of people who tried to gain a dental appointment and were successful (not including those who can’t remember). It can be seen that there has been a decline for the respondents of NHS Corby who were successful in obtaining an appointment from Jan to March 2017.
Figures 47 and 48 show all the respondents who have not tried to get an NHS dental appointment in the last 2 years and their reason why. In both 2016 and 2017, it can be seen that the majority of respondents within the Corby CCG did not try to get an NHS dental appointment because they believed they have not needed to visit a dentist; this is in contrast to majority of respondents in England who had not tried to gain an NHS dental appointment because they preferred to visit a private dentist. Additionally, there was a higher percentage of respondents from the Corby CCG who find NHS treatment too expensive in comparison to the others.
The NHS BSA Dental Services include in their Vital Signs report, details of patients satisfied with the:

- NHS dentistry services they have received
- Time they have waited for an appointment

It should be noted that the national average figures were requested from the NHS BSA, however were not received and therefore comparisons to the national average could not be carried out. Figures 49 and 50 show:

- A decline in patient satisfaction with appointment wait time in South Northamptonshire
- A decline in patient satisfaction with appointment wait time between 2014/15 and 2015/16 in Kettering, Corby, Northampton, South Northamptonshire and Wellingborough.
- A decline in the number of patients satisfied with NHS dental services delivered in Daventry, Kettering, Northampton and Wellingborough between 2015/16 and 2016/17.
- The percentage of patients satisfied with appointment wait time has consistently been below the Herts and South Midlands average in Corby and South Northamptonshire.
- The percentage of patients satisfied with dentistry has consistently been higher than the Herts and South Midlands average in Kettering.
Healthwatch

Healthwatch is an independent consumer champion that gathers and represents the public view on health and social care services in England. It operates at both a national and local level. Local Healthwatch organisations were established in 2013 and are commissioned by their respective local authority. Their role is to capture the experiences people have of local health and care services and use the information to help shape local services. Healthwatch Northamptonshire was contacted to gain an understanding of concerns or enquiries received from local residents regarding NHS dental services.

Source: NHS BSA
Concerns relating to local NHS dental practices:
10 people have contacted Healthwatch with an issue or complaint since December 2014. One practice was mentioned twice.

Concerns around national issues e.g. NHS charges:
3 of the 10 people complained about dental charges, including a patient not given a scale and polish as part of their Band 1 dental treatment but being recommended to visit the hygienist at a higher charge.

Enquiries about ‘registering’ with a dentist:
5 people have contacted Healthwatch for advice/help about ‘registering’ with an NHS dentist since February 2015. No information has been provided by Healthwatch on the outcomes of these queries. It should be noted that registration with an NHS dentist ceased in 2006 and individuals now find a dental practice that is convenient and contact for any available appointments.

FINANCES & RESOURCE ALLOCATION

Dental treatment provision

For an agreed contract value, dentists are now expected to deliver an agreed number of Units of Dental Activity (UDAs), which are related to the complexity of dental care. There are 3 bands of NHS dental treatment and the number of UDAs a dentist can claim ranges from 1 to 12 UDAs:

- **Band 1** equates to 1 UDA and covers examination, diagnosis and preventative dental treatment such as fluoride varnish and fissure sealants
- **Band 2** equates to 3 UDAs and include Band 1 plus further treatments such as fillings, root canal treatment and extraction of teeth
- **Band 3** equates to 12 UDAs and includes Band 1 and 2 plus further dental treatment requiring laboratory work such as crowns, bridges and dentures
- **Unscheduled urgent care** equates to 1.2 UDAs under a Band 1 course of treatment

Table 4 shows there has been a decrease in the provision of Band 2 dental treatment in Northamptonshire. The reduction is at thrice the rate being observed in England. It can be seen that while there is a negative decrease in the total number of UDAs delivered in both England and Northamptonshire, the decrease is higher for Northamptonshire. However, there has been a positive increase in the delivery of Band 3 dental treatment in Northamptonshire, when compared against England.

Table 4: Units of Dental Activity by treatment band, 2015/16 and 2016/17

<table>
<thead>
<tr>
<th></th>
<th>Band 1</th>
<th></th>
<th>Band 2</th>
<th></th>
<th>Band 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015/16</td>
<td>2016/17</td>
<td>% change</td>
<td>2015/16</td>
<td>2016/17</td>
<td>% change</td>
</tr>
<tr>
<td>England</td>
<td>22437889</td>
<td>22939419</td>
<td>2.2</td>
<td>33755826</td>
<td>33242544</td>
<td>-1.5</td>
</tr>
<tr>
<td>Northamptonshire</td>
<td>305522</td>
<td>313186</td>
<td>2.5</td>
<td>436602</td>
<td>416805</td>
<td>-4.5</td>
</tr>
</tbody>
</table>
Table 5 below shows there has been an approximate 9% increase in NHS England’s commissioning budget for NHS Primary Care general dental services in Northamptonshire from 2014 to 2016. It is important to note that the commissioning budget also includes minor oral surgery and community dental services, as well as general dental services. Minor oral surgery is not captured in UDAs and not all elements of the community dental services are captured in UDAs either.

Table 5: NHS England Expenditure for NHS Dental services in Northamptonshire

<table>
<thead>
<tr>
<th>Service Area</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care general dental services, minor oral surgery and community dental services</td>
<td>£24,648,682.85</td>
<td>£26,521,327.68</td>
<td>£26,880,013.04</td>
</tr>
</tbody>
</table>

Local authorities have a statutory role to provide or commission oral health promotion programmes to improve the health of the local population, to an extent that they consider appropriate in their areas. They are also required to provide or commission oral health surveys. The oral health surveys are carried out as part of the Public Health England (PHE) dental public health intelligence programme. Table 6 shows the funding for the Oral Health Promotion service and Dental Epidemiology Surveys from 2015 to 2017. It can be seen that there has been a 5% decrease in the funding for oral health promotion, while the budget for dental epidemiology has remained static.

Table 6: Oral Health Funding by Northamptonshire County Council

<table>
<thead>
<tr>
<th>Year</th>
<th>Oral Health Promotion</th>
<th>Dental Epidemiology Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-2016</td>
<td>£49000</td>
<td>£69,132</td>
</tr>
<tr>
<td>2016-2017</td>
<td>£49000</td>
<td>£70,000</td>
</tr>
<tr>
<td>2017-2018</td>
<td>£46550</td>
<td>£69,000</td>
</tr>
</tbody>
</table>

NCC Public Health have commissioned the distribution of toothbrushes and toothpastes through the 0-19s Public Health Nursing Service. At the 8-12 month development check, health visitors will distribute a toothbrush and toothpaste pack, an oral health book and oral health leaflets. They will also reinforce key oral health messages to parents. This is expected to commence in January 2019.
UNMET NEEDS & SERVICE GAPS

It has been demonstrated that oral health needs are high for those living in Corby. However, routine dental access is low (there has been a steep decline for those living in Corby in gaining access to NHS dentistry recently) with access rates for urgent dental care being high. At the time of investigation, there were dental practices in Corby that are not accepting new child patients and preventative interventions, i.e. fluoride varnish applications, are also lower for those living in Corby. The patient experience of NHS dental services within NHS Corby has fallen drastically between 2016 and 2017. Residents have also reported that NHS dental charges are an issue in gaining access and that for some, they do not perceive any need to seek NHS dental care routinely.

It is not known to what extent dentists are engaged with Making Every Contact Count, particularly around advice on lifestyle issues, although it is noted that oral cancer incidence rates in Northamptonshire has been increasing over time.

It has also been demonstrated that dental ‘access rates’ for both children and adults across Northamptonshire have consistently been higher than the national average between 2012 and 2015 but that this has seen a continued decline since 2015 with dental access rates for Northamptonshire now being below the national average, although there has been a 6% increase in terms of dental spend on NHS dental services by NHS England. Furthermore, there has been a decrease in the provision of Band 2 dental treatment for residents of Northamptonshire.

There is little information on dental sedation and domiciliary services provision; it is not known if this is sufficient to meet the needs of the population. PHE is currently supporting the development of a needs assessment for dental care supported by sedation; due no later than March 2019. It is also not known if there is a difference in access to NHS dental services between men and women living in Northamptonshire as this has not been investigated in this assessment. This assessment has not determined if people who are homeless are facing any barriers in accessing NHS dental services. Similarly, dental services provision for those in prison has also not been investigated.

It is not known what the prescribing patterns are for dentists practicing in Northamptonshire as the data is only reported at Hertfordshire and South Midlands level (which includes Northamptonshire).

Due to small sampling numbers (large confidence intervals), the true extent of the burden of dental disease being faced by children living in Wellingborough is hard to determine.

The oral health promotion service is currently commissioned to focus on delivering oral health education sessions. It should be noted that one off dental health education by dental workforce targeting the general population is discouraged in Commissioning Better Oral Health with the act of facilitating access to dental services being of limited value in terms of improving population oral health. The oral health promotion service has not been commissioned to deliver oral health improvement interventions such as supervised tooth brushing and fluoride varnish programmes in the community. It should be noted that if a community fluoride varnish programme is commissioned, it is a requirement of the General Dental Council that such community based programmes have clear written protocols and are overseen by a consultant or registered specialist in
dental public health. Furthermore, Northamptonshire does not benefit from any fluoridation of its public water supplies.

**RECOMMENDATIONS FOR CONSIDERATION FOR COMMISSIONERS**

**NHS England (Central Midlands)**
- Dental access for residents of Corby should be investigated further and assured.
- Ensure that people understand how to access NHS dentistry in Northamptonshire by providing and promoting:
  - up-to-date and accurate information regarding the availability of NHS Dentistry
  - information regarding the NHS low income scheme (particularly targeting those in Corby)
  - how NHS dentistry works including charges and exemption information
- Investigate the need for dental sedation and domiciliary services and the outcomes to inform future commissioning intentions.
- Ensure equity in access for vulnerable groups such as those who are mildly dependant including those who are physically disabled and require wheelchair access.
- Local Professional (Dental) Network to work with the local dental profession:
  - in improving the patient experience of NHS dental services in Northamptonshire (including the Friends and Family Test information)
  - in improving the delivery of preventive interventions (particularly for patients living in Corby)
  - in improving the updating of NHS Choices by practices
  - in decreasing referrals for dental extractions under GA by providing preventive interventions early for those at high risk
  - in decreasing the prescribing of antibiotics
  - in embedding Making Every Contact Count within the delivery of NHS dental services

**Northamptonshire County Council (Public Health)**
- Establish a partnership Board/Group and provide leadership to take forward an oral health strategy/plan for Northamptonshire.
- Place oral health on a wider agenda for change in order for collaboration with relevant agencies and sectors to take effect.
- Revise the Key Performance Indicators for the Oral Health Promotion Service to ensure that the service focuses on interventions that are evidence-based. Dental screening activity should conform to the National Screening Committee’s requirements on sensitivity and specificity in order not to inadvertently increase inequalities with false positives and false negatives. Consideration should be given to the development of targeted peer (lay) oral health support workers in Corby.
- Consider targeted supervised tooth brushing programmes in Early Years Settings.
- Consider a targeted fluoride varnish programme.
- Ensure the continued commissioning of the dental epidemiology programme and consider commissioning extended sampling for Corby, Northampton and Wellingborough for
children’s surveys to obtain data on a smaller geographic level, allowing for more focused oral health promotion activity in high need areas.

• Consider fluoridation of the public water supplies.

RECOMMENDATIONS FOR NEEDS ASSESSMENT WORK

• Dental access for residents of Corby should be reviewed and be assured that access is available given this is the area of the county with the poorest dental health in some cohorts.
• Seek to understand any differences between men and women living in Northamptonshire in accessing NHS dentistry

KEY CONTACTS

• Northamptonshire County Council: JaPitchfork@northamptonshire.gov.uk
• NHS England: amanda.borland@nhs.net; diane.fenton@nhs.net
• Public Health England: jasmine.murphy@phe.gov.uk

Key commissioning groups:
• NHS England Primary Care Commissioning Panel for NHS dental services
• Northamptonshire County Council (Public Health) for oral health promotion and dental epidemiology
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