

Oral Health in Norfolk

Introduction

Oral health is widely considered to be an important aspect of our general health and wellbeing.

Poor oral health can have a significant impact on quality of life, such as eating, speaking and comfort and can also have an impact on a child's ability to learn at school. Poor oral health is also largely preventable.

Like many health outcomes, there are also inequalities relating to the impact of poor oral health. Some groups are more vulnerable to poor oral health than the general population.

This document reviews the oral health of people living in Norfolk and Waveney using the most up to date data available.

Wherever possible data has been provided for Norfolk and Waveney. However, some sources of information are available for Norfolk only.

The information on access and activity is provided for NHS dentistry only. Information on activity carried out under private dentistry is not available.

Key points

Oral Health in Children

- Oral health for children is generally better in Norfolk than for England but it is not as good as some other areas in the East of England. Children in Norfolk experience better outcomes in terms of hospital tooth extractions, hospital admissions for dental caries, and decayed, missing, filled teeth. However, this masks inequalities. In some of the most deprived communities more than a third of five-year-olds are estimated to experience tooth decay.
- During the pandemic the number of children seen by a dentist declined (in line with England) and is now slowly picking up again. However, the difference between Norfolk and Waveney and England in terms of the percentage of children seen by a dentist in the previous 12 months deteriorated between 2019 and 2022.

Oral Health in Adults

- Across Norfolk and Waveney, the percentage of adults seen by a dentist declined over the period of the pandemic, in line with England, although the decline in Norfolk and Waveney was slightly quicker. Rates have started to increase since a low in March 2022 (a year later than that seen for children). The percentage of adults seen by a NHS dentist in the previous 24 months in Norfolk and Waveney is now the same as England at about 37% - after having experienced a higher proportion than England previously.

- Norfolk has a similar rate of oral cancer to England but the rate is increasing. Each year there are about 150 cases of oral cancer.

Access to a dentist

- The number of dentists with NHS activity in Norfolk and Waveney has reduced since 2018/19. In 2020/21 Norfolk was ranked 147 out of 150 local authorities for successfully obtaining a dental appointment, the bottom 10% of the country.
- There is considerable geographic variation in dentist access rates, with Great Yarmouth and Waveney having higher access rates, while King's Lynn and Thetford have lower access rates. Generally, there are lower access rates in the more deprived communities and some lower access rates in more rural communities.
- Drive time access shows that the majority of Norfolk and Waveney can access a dental practice (either NHS or private) using a car in 20 minutes or less but there are gaps in access to services by public transport for those that do not own a car
- Analysis of A&E attendance rates for dental related conditions highlights those market town localities that have few (or no) dental practices offering NHS services. There are also generally higher rates for more deprived communities.

Oral health in children summary

Oral health for children is generally better in Norfolk than for England but it is not as good as some other areas in the East of England. Children in Norfolk experience better outcomes in terms of hospital tooth extractions, hospital admissions for dental caries, and decayed, missing, filled teeth.

However, this masks inequalities. In some of the most deprived communities more than a third of five-year-olds are estimated to experience tooth decay.

During the pandemic the number of children seen by a dentist declined (in line with England) and is now slowly picking up again. However, the difference between Norfolk and Waveney and England in terms of the percentage of children seen by a dentist in the previous 12 months deteriorated between 2019 and 2022.

Norfolk has considerably lower rates of admissions to hospital for the 0 to 5s in relation to tooth decay.

Tooth decay in children

The National Dental Epidemiology Programme (NDEP) carries out surveys of children's teeth, across a sample children in each local authority, most recently for children at age three (2020) and age five (2019). In 2020 the sample size was reduced due to COVID restrictions.

In 2020 the survey found that the proportion of three year-olds in Norfolk with visible tooth decay (6.2%) is lower than the England average (10.7%). The average number of decayed, missing or filled teeth (dmft) in three year-olds was 0.22 teeth per child, which was also better than the England average (0.31).

In 2019 the National Dental Epidemiology Programme found the proportion of five year-olds in Norfolk with visible tooth decay (17.3%) was lower than the England average (19.0%). The average number of decayed, missing or filled teeth (dmft) in five year-olds was 0.69 teeth per child, which was also better than the England average (0.80) but higher than the regional average (0.63).

Variation in tooth decay in children by deprivation and geography

People living in more deprived areas often have poorer health outcomes than people living in more affluent areas. For Norfolk children, this is evident when looking at the prevalence of dental decay in 5-year-olds. Children living in the most deprived areas are up to three times more likely to have had dental decay than children living in the least deprived areas.

In 2019 the prevalence of tooth decay in England in five year olds was 23.4%. The most deprived communities of Norfolk experience higher rates of tooth decay than this. The districts in Norfolk with the highest percentage of children with tooth decay are Great Yarmouth and Norwich.

Within Great Yarmouth, the highest levels of experience of dental decay are clustered around the communities of Yarmouth Central & Northgate (59% with decay), Gorleston North (51%), Gorleston South & Beach (50%), Yarmouth Parade and Yarmouth North. Within Norwich the highest levels of experience of dental decay are clustered within the communities of Mancroft and Bowthorpe.

Trends in NHs dental access for children

Regular check-ups with dentists can help prevent the advancement of tooth decay and help educate children and parents with oral hygiene. Across Norfolk and Waveney the percentage of children aged 0-17 seen by a dentist declined over the period of the pandemic (in line with England) but has started to increase since a low in March 2021. About 38% of children in Norfolk and Waveney had been seen in the previous 12 months compared to 46% in England and the gap between Norfolk and Waveney and England was larger in 2022 than it was in 2019.

Hospital admissions for tooth decay in children

Hospital admission for tooth decay in the youngest of the population may also be considered a measure of oral health, and a proxy measure of child health and diet, and possibly access to healthcare. National profiles shows that Norfolk still has considerably lower rates of admissions for the 0 to 5s, despite proportionally fewer Norfolk children seeing a dentist in the previous 12 months than the England average, although the gap has reduced over the pandemic.

Tooth extractions in hospital for children

When we consider all ages up to 19, tooth extractions in hospital for one or more primary or permanent teeth are also lower in Norfolk compared to England. This is the case across all Norfolk districts. Norfolk districts continue to have consistently significantly lower rates than England, although all areas have seen rates drop during 2020/21 due to the pandemic.

However, across England tooth extraction rates are higher in the most deprived communities and this is likely to be the case in Norfolk. This might reflect poorer oral health in more deprived communities.

Oral health in adults summary

Across Norfolk and Waveney, the percentage of adults seen by a dentist declined over the period of the pandemic, in line with England, although the decline in Norfolk and Waveney was slightly quicker.

Rates have started to increase since a low in March 2022 (a year later than that seen for children). The percentage of adults seen by a NHS dentist in the previous 24 months in Norfolk and Waveney is now the same as England at about 37% - after having experienced a higher proportion than England previously.

Norfolk has a similar rate of oral cancer to England, but the rate is increasing. Each year there are about 150 cases of oral cancer.

Vulnerable groups

Some groups are more vulnerable to poor oral health than the general population. These include: people with some long-term conditions, older people and care home residents. Norfolk has a relatively high number of older people so this need is likely to be higher in Norfolk than elsewhere. Other groups more likely to experience poor oral health include; looked after children, people with learning difficulties, the homeless, migrant workers, refugees, asylum seekers and those dental anxiety and dental phobia.

Trends in NHs dental access for adults

Across Norfolk and Waveney the percentage of adults seen by a dentist declined over the period of the pandemic, in line with England. However, the decline in Norfolk and Waveney was slightly quicker. Rates have started to increase since a low in March 2022 (a year later than that seen for children). The percentage of adults seen by a NHS dentist in the previous 24 months in Norfolk and Waveney is now the same as England at about 37% - after having experienced a higher proportion than England previously.

Trends in Oral Cancer in adults

Many dentists routinely check for mouth and oropharyngeal cancer, so they are often the first people to spot the early signs of cancer. Each year in Norfolk there are about

150 cases of oral cancer. This is about 2% of all cancers each year. The biggest risk factors for oral cancers are smoking, alcohol and poor diet. Norfolk has a similar rate of oral cancer as England but rate is increasing.

Survival rates from oral cancer are better if cancer is diagnosed at an early stage. Between 55% and 60% of people with oral cancer survive five years or more. There are about 40 deaths per year in Norfolk from oral cancer this is similar to the East of England during the most recent time period. This represents a decline in health outcomes, as Norfolk previously had lower mortality rates than the East of England average.

Access to dentists and A&E related dental activity summary

The number of dentists with NHS activity in Norfolk and Waveney has reduced since 2018/19. In 2020/21 Norfolk was ranked 147 out of 150 local authorities for successfully obtaining a dental appointment, the bottom 10% of the country.

There is considerable geographic variation in dentist access rates, with Great Yarmouth and Waveney having higher access rates, while King's Lynn and Thetford have lower access rates. Generally, there are lower access rates in the more deprived communities and some lower access rates in more rural communities.

Drive time access shows that the majority of people living in Norfolk and Waveney can access a dental practice using a car in 20 minutes or less but there are gaps in access to services by public transport for those that do not own a car

Analysis of A&E attendance rates for dental related conditions highlights those market town localities that have few (or no) dental practices offering NHS services. There are also generally higher rates for more deprived communities.

Number of dentists with NHS activity across Norfolk and Waveney

The number of dentists with NHS activity has reduced since 2018/19 and the relative reduction is greater for Norfolk and Waveney than East of England or England. This accelerated between 2019/20 and 2020/21 but has recovered slightly in the most recent year.

Over the last 10 years, the number of dentists with NHS activity per 100,000 population has declined in Norfolk and Waveney compared to England and the East of England. This decline accelerated between 2019/20 and 2020/21 but has shown a slight increase in the most recent year. This decline could have a greater impact in Norfolk due to higher levels of need (e.g. an older population).

Variation in NHS dentist activity for children and adults by deprivation and geography

Dental activity rates vary by location. Across both time periods, Broadland, Great Yarmouth, South Norfolk, and Waveney have higher activity rates than the East of

England and other districts in Norfolk and Waveney. Breckland, King's Lynn and West Norfolk, North Norfolk and Norwich have lower activity rates than the East of England average. Activity rates across all districts experienced about the same relative level of decline between 2019/20 and 2020/21.

NHS dental activity rates across Norfolk and Waveney are generally lower the more deprived the community. The lower activity rate for NHS dental activity in the least deprived area may reflect ability to access private dental treatment in more affluent areas. Activity rates across all deprivation deciles experienced about the same relative level of decline between 2019/20 and 2020/21.

In Norfolk the communities with significantly lower than expected NHS dental activity rates for children are also some of the most deprived. Adults in most of the communities across King's Lynn and West Norfolk, North Norfolk, Norwich and to some extent, Breckland also have NHS dental activity rates lower than expected for their age profile.

This is similar to findings from the local government association that show that more deprived communities and rural communities are less likely to access dentists.

Travel time access to Dentists

It is estimated that the majority of the Norfolk and Waveney population can access a dental practice (private or NHS) using a car within 20 minutes. For those who can't afford private care this depends on a) having access to a car and b) the practice offering NHS services.

For those without access to a car and who rely on public transport, it is estimated that around 120,000 people cannot access a dental service by bus, rail, or tram service within 30 minutes. Areas in west Norfolk have worse access via public transport than around Norwich, Great Yarmouth and Waveney.

Variation in activity rates by market town localities across Norfolk and Waveney

Analysis of A&E attendance rates for dental related conditions together with location of dental practices offering NHS services highlights those market town localities that have few practices offering NHS services.

NHS activity rates are lower than expected in the market towns of King's Lynn, Thetford, Swaffham, Stalham, Holt, Norwich West.

Lower dentist access rates may put increased pressure on A&E departments in the system. Looking at three year trends by deprivation quintile shows that rates of A&E attendances for dental conditions are higher in more deprived communities and increased faster in the more deprived communities across all age bands. The A&E attendance rate for dental conditions in the core 20 most deprived communities in 2022 was almost three times that of the least deprived communities.

Higher A&E attendance rates in market towns appear more likely to be associated with higher deprivation than number of NHS dental practices. However, there is also the issue of access to A&E and local population behaviour to consider. To some extent, for market towns across Norfolk and Waveney higher dentist access rates are associated with lower A&E attendance rates.

Prevention of tooth decay through Fluoridation of water

Tooth decay is largely preventable but major oral health inequalities remain.

Preventative interventions include reducing the consumption of sugary food and drink, brushing teeth twice daily and taking a child to the dentist regularly. Fluoride is known to have preventative benefits and there are a range of fluoride related interventions that can be adopted to help reduce the risk of tooth decay - including supervised toothbrushing schemes for children and fluoride varnishing.

Water fluoridation is another intervention that does not require behaviour change and is considered a safe and effective public health measure for areas with concerning high levels of dental decay and naturally low levels of fluoride in the local water supply.

Fluoride occurs naturally in the environment and can be present in water and some foods in varying concentrations. Water fluoridation schemes in England aim to achieve the equivalent to one part fluoride per million of water (1 mg/l). In England, around 10% of the population receives public drinking water served by a fluoridation scheme.

There are no water fluoridation schemes in Norfolk and Waveney.

Across Norfolk and Waveney the areas with the lowest fluoride naturally occurring in the water are in King's Lynn and West Norfolk and some parts of Broadland / South Norfolk.

Useful links

Location of NHS and private dentists

<https://digital.nhs.uk/data-and-information/publications/statistical/nhs-dental-statistics/2021-22-annual-report>

Oral health toolkit

<https://www.gov.uk/government/publications/delivering-better-oral-health-an-evidence-based-toolkit-for-prevention>

OHID fingertips data

<https://fingertips.phe.org.uk>

NHS Digital dental statistics

<https://app.powerbi.com/view?r=eyJrljoiYTRIMzJiYTEtMTgwMi00ZTdiLTgzMWUtZGM5Y2NmMTI5MGE4IiwidCI6IjUwZjYwNzFmLWJiZmUtNDAxYS04ODAzLTY3Mzc0OGU2MjllMmI5MmMiOj9>

Tooth extractions

<https://www.gov.uk/government/statistics/hospital-tooth-extractions-of-0-to-19-year-olds-2021>

Cancer related statistics

<https://www.cancerresearchuk.org/about-cancer/mouth-cancer/survival>

https://www.cancerdata.nhs.uk/incidence_and_mortality

Access Travel times

<https://app.shapeatlas.net/>

Oral health in older people

<https://www.gov.uk/government/publications/oral-health-of-older-people-in-england-and-wales>

<https://www.nice.org.uk/about/nice-communities/social-care/quick-guides/improving-oral-health-for-adults-in-care-homes>

Population projections

<https://www.ons.gov.uk/releases/subnationalpopulationprojectionsforengland2018based>

Oral health in looked after children

<https://arc-swp.nihr.ac.uk/research/projects/dental-care-looked-after-children/>

<https://ijpds.org/article/view/324>

Fluoridation

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1060471/water-fluoridation-health-monitoring-report-2022.pdf

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