NORTH LINCOLNSHIRE COUNCIL

HEALTH AND WELLBEING BOARD

NORTHERN LINCOLNSHIRE ORAL HEALTH STRATEGY 2016/20

1. OBJECT AND KEY POINTS IN THIS REPORT

1.1 The purpose of this report is to provide the Health & Wellbeing Board with an overview of the main elements of the Northern Lincolnshire Oral Health Strategy.

2. BACKGROUND INFORMATION

2.1 Local authorities have a statutory responsibility for improving oral health in the population by commissioning actions and programmes to tackle poor oral health and reduce inequalities. North and North East Local Authorities set up the Northern Lincolnshire Oral Health Partnership Group to take this agenda forward and jointly produced a North and North East Oral Health Improvement Strategy 2016/20 (attached).

2.2 Aims

Despite significant improvements in oral health in the last 40 years at national level, there are still high levels of disease affecting (especially) the most vulnerable groups in our society. The main reason for children of primary school age for being admitted to hospitals in England is for extraction of one or more primary or permanent teeth. This places a significant burden on children, their families and the health service, especially as most oral disease are highly preventable. Although it is acknowledged that poor oral health affects all ages, it is recognised that effective behaviour change in the early years will provide solid foundations for good oral health throughout life.

2.3 Needs Assessment

National data sources have recently been updated as part of a review of the Oral Health Promotion Service, currently commissioned by NHSE on behalf of both Local Authorities (until the existing contract ends in 2019). Key issues for North and North East Lincolnshire are summarised below:

- The percentage of 5-year-old children with decayed missing and filled teeth is still a significant issue with North-East Lincolnshire at 30% and North Lincolnshire at 18%. This situation is even worse in some of the more deprived wards in North-East Lincolnshire, the levels of oral disease reaching over 45%.

Findings directly relevant to North and North-East Lincolnshire include:

- children living in North Lincolnshire experienced good oral health which may be related to water fluoridation and lower levels of deprivation
• five-year-old children in North-East Lincolnshire experienced relatively higher levels of tooth decay and yet a smaller proportion of these decayed teeth were treated with fillings demonstrating an inverse care relationship
• fewer decayed teeth in 12-year-olds were filled in North-East Lincolnshire than in England and Yorkshire and The Humber.
• people living in North-East Lincolnshire were more likely to report poorer oral health compared with those living in other local authority areas
• people in North Lincolnshire were more likely to report a perceived need for treatment – with low levels of access to NHS dentists.

2.4 Current Provision of Oral Health Services

Oral health provision within northern Lincolnshire is comprised of a number of interrelated services:

• Maxillo facial / orthodontics
  – Specialist hospital based services
  – Commissioned by NL Clinical Commissioning Group (CCG) / provided by Northern Lincolnshire & Goole Hospitals (NLaG)
• Community dental practices
  – Providing access to NHS dentists, although they may also provide private dental care (we have limited information about private provision)
  – Commissioned by NHSE
• Community dental service
  – Provides a service for those who do not have access to an NHS or private dentist (includes provision for home visits etc.)
  – Commissioned by NHSE – to be re-commissioned during 2019. Currently provided by NLaG
• Dental epidemiological surveys
  – Commissioned by NHSE on North and NE Lincs. LA behalf
  – Provided by NLaG (as part of community dental service)
• Oral health promotion
  – Commissioned by NHSE North and NE Lincs LA behalf
  – Provided by NLaG (as part of community dental service)
• Fluoridation – commissioned by Public Health England (funded by NLC)
  – Currently all the wards in North Lincolnshire are served with fluoridated water with the exception of the three wards to the west of the Trent; Axholme Central, Axholme North and Axholme South.

2.5 Key themes

The Oral Health Strategy contains a number of recommendations and actions but these can be summarised by the themes set out below:

• Optimising exposure to fluoride
• Healthy nutrition/ diet
• Reducing smoking / alcohol
• Improving access to dental services and prevention
• Workforce development
• Embedding oral health improvement into public health programmes
• PHE Recommendations

2.6 Current Work Programmes

Work has been progressing in all of the above areas but recent efforts have centred on a review of the Oral Health Promotion (OHP) service. This service is currently commissioned by NHSE (reflecting historic commissioning responsibilities) on behalf
of both N and NE councils, along with the provision of epidemiological surveys. These services are “nested” within the overall Community Dental Service (CDS) provided by NLaG.

NHSE will be recommissioning the overall CDS service (likely to be during 2019) and at this point N and NE Local Authorities will pick up responsibility for commissioning (or providing) oral health promotion. The review of the existing oral health promotion service is intended to inform this recommissioning process to ensure the service meets current guidance and local needs.

The OHP review process included a refresh of the underpinning analysis of health needs and a limited stakeholder survey. The review will be completed and report within the next few weeks.

3. **OPTIONS FOR CONSIDERATION**

   3.1 HWB to note the key elements of the Northern Lincolnshire Oral Health & Wellbeing Strategy and the review of the Oral Health Promotion Service due to be completed shortly.

4. **ANALYSIS OF OPTIONS**

   4.1 NA.

5. **RESOURCE IMPLICATIONS (FINANCIAL, STAFFING, PROPERTY, IT)**

   5.1 The production of the Northern Lincolnshire Oral Health Strategy has required resources from partner organisations, and LA directorates, in terms of staff time.

6. **OUTCOMES OF INTEGRATED IMPACT ASSESSMENT (IF APPLICABLE)**

   6.1 NA

7. **OUTCOMES OF CONSULTATION AND CONFLICTS OF INTERESTS DECLARED**

   7.1 No conflicts of interest declared.

8. **RECOMMENDATION**

   8.1 HWB members are asked to note the Oral Health Strategy and that the review of the oral health promotion service is nearing completion.

DIRECTOR OF PUBLIC HEALTH

Civic Centre
Ashby Road
Scunthorpe
North Lincolnshire
DN16 1AB

Author: Adrian Smith
Date: 5 March 2018
North and North East Lincolnshire Oral Health Improvement Strategy

2016-2020
i. Executive Summary

1. Introduction

2. Aims of the strategy

3. National Context
   3.1 Commissioning Framework
   3.2 Local authorities improving oral health
   3.3 Delivering better oral health
   3.4 Oral health NICE Guidance
   3.5 Other policy drivers
   3.6 Local context

4. Population and demographics
   4.1 North East Lincolnshire
   4.2 North Lincolnshire
   4.3 Water fluoridation population coverage

5. Oral health needs assessment
   5.1 Dental caries
   5.2 Adult oral health
   5.3 Oral cancers
   5.4 Access to dental treatment
   5.5 Service User Voice
   5.6 PHE North Yorkshire and Humber Needs Assessment

6. Service provision – commissioned services
   6.1 Oral health promotion
   6.2 Epidemiology programme

7. Key principles

8. Key themes
   8.1 Optimising exposure to fluoride
   8.2 Healthy nutrition/diet
   8.3 Reducing smoking/alcohol
   8.4 Improving access to dental services and prevention
   8.5 Workforce development
   8.6 Embedding oral health improvement into public health programmes
   8.7 PHE Recommendations

9. Recommendations

10. Appendix A: Action plan
    Appendix B: References
    Appendix C: NICE Public Health Guidance 55 Recommendations
    Appendix D: Caries by deprivation quintiles
i. Executive Summary

Since the Oral Health Strategy 2009-2012 for Northern Lincolnshire was written there have been several developments in national policy including 'Choosing Better Oral Health', 'Delivering Better Oral Health: An evidence-based toolkit for prevention', and 'Oral Health: approaches for local authorities and their partners to improve the oral health of their communities. NICE Public Health Guidance 55', along with publication of the North Yorkshire and Humber Oral Health Needs Assessment in 2015 by Public Health England. From April 2013 there have been a number of organisational and commissioning responsibility changes. This updated oral health improvement strategy has been developed in response to these policy drivers and covers both the North and North East Lincolnshire geographical areas.

In line with the public health priorities of the government, the aim of the North and North East Lincolnshire oral health improvement strategy will be to reduce inequalities in oral health, particularly in children and vulnerable people. The main risk factors for poor oral health include poor diet, inadequate exposure to fluoride and tobacco use. The Strategy has been developed in collaboration with a team of relevant professionals and stakeholders.

Poor oral health results in social and financial impacts both for the individual and society as a whole. A wide spectrum of factors has been identified as influencing oral health including economic and social policy and individual health behaviours. However, focusing solely on individual behaviour change has only short term benefits for oral and general health. It is therefore essential to focus on the wider determinants of health and partnership delivery to achieve sustainable improvements.

**Oral Health in North and North East Lincolnshire**

From the information contained within the North Yorkshire and Humber Oral Health Needs Assessment and the additional data analysis undertaken within section 5 of this document, the oral health of North and North East Lincolnshire can be summarised as:

- Children living in North East Lincolnshire have significantly higher tooth decay experience than the England average, whereas children living in North Lincolnshire experienced good oral health which may be related to water fluoridation and lower levels of deprivation. Across both local authority areas inequalities in tooth decay in five-year-olds were seen, with prevalence and severity increasing as deprivation increased.

- Five-year-old children in North East Lincolnshire experienced relatively high levels of tooth decay and yet a smaller proportion of these decayed teeth were treated with fillings (compared to national average) demonstrating an inverse care relationship.
The overall trend is for fewer adults to have no natural teeth. However, an ageing population is likely to result in increasing numbers of dependent adults either within their own homes or care homes, increasing dental care access difficulties and creating a challenge for future service provision in meeting this need. Adults living in North East Lincolnshire were more likely to report poorer oral health compared with those living in other local authority areas, and people in North Lincolnshire were more likely to report a perceived need for treatment.

The average UDA (numbers of treatment) per resident adult and child population is considerably lower than national average in North Lincolnshire, as is reported access to dental treatment, with one of the lowest levels of NHS dental provision in the country and the lowest per 100,000 population in the region.

The incidence of mouth cancer has increased slightly in North East Lincolnshire in recent years. The detail and causes of this increase are not yet understood.

Information describing the oral health of vulnerable groups in North and North East Lincolnshire (including children and adults with learning disabilities) is limited.

**Recommendations**

The recommendations of this strategy aim to:

- promote and protect oral health by improving diet and reducing consumption of sugary food and drinks, alcohol and tobacco (and so improve general health too)
- improve oral hygiene
- increase the availability of fluoride
- encourage people to go to the dentist regularly
- Improve access to dental services.

Building on the establishment of the North and North East Lincolnshire oral health promotion partnership group and existing oral health promotion commissioned services this strategy commits all relevant stakeholders to the following areas for action:

- All organisations to embed and reference this strategy and oral health within all existing and future organisational and departmental health and wellbeing strategies to ensure oral health promotion becomes mainstream.

- To work to ensure all health and wellbeing and disease prevention policies for adults, children and young people (including local government health and social care policies and strategies) include advice and information about oral health.
• To work to ensure all public service environments promote oral health by: Making plain drinking water available for free; Providing a choice of sugar-free food including fresh fruit, drinks (water or milk) and snacks including from any vending machines on site; Encouraging and supporting breastfeeding.

• To work to ensure frontline health and social care staff can give advice on the importance of oral health, supported by service specifications, and access to appropriate training in oral health promotion.

• To work to ensure that oral health promotion is incorporated in all existing services for all children, young people and adults at high risk of poor oral health.

• To promote oral health in the workplace and incorporate oral health promotion into respective workplace award schemes.

• To review current approaches in North and North East Lincolnshire to both tooth brushing programmes in schools and fluoride varnishing programmes within the community.

• To raise the profile of oral health promotion in schools and ensure those schools in areas with highest levels of poor oral health are targeted and supported to undertake oral health promotion activities.

• To work with NHS England to review the levels of community dental provision across North and North East Lincolnshire and to ensure that levels of service provision are both equitable and sufficient.

• To transform the community oral health promotion provision commissioned by North and North East Lincolnshire Councils to focus resources on interventions and programmes that deliver the greatest outcomes in oral health improvement.

• To work with all relevant stakeholders to increase the oral health service user voice and through this engagement ensure the needs of the most vulnerable are prioritised.
1. **Introduction**

This strategy replaces the previous North and North East Lincolnshire Oral Health Improvement Strategy (2009-2012). Oral health is important for general health and wellbeing. Poor oral health can affect someone’s ability to eat, speak, smile and socialise normally, for example, due to pain or social embarrassment.³

Oral health problems include gum (periodontal) disease, tooth decay (dental caries), tooth loss and oral cancers. Many of the risk factors – diet, oral hygiene, smoking, alcohol, stress and trauma – are the same as for many chronic conditions, such as cancer, diabetes and heart disease.

As a result, interventions that aim to tackle these risk factors (taking a ‘common risk factor approach’) will improve general health as well as oral health.³

Poor oral health can affect children’s (under 18) ability to sleep, eat, speak, play and socialise with other children⁴. Poor oral health also causes pain, infections, and impaired nutrition and growth.⁶

When children have toothache or need treatment, this can mean school absence and that families and parents have to take time off work. Oral health is an integral part of overall health. When children are not healthy, this affects their ability to learn, thrive and develop. Good oral health can contribute to school readiness.⁶

Dental treatment is a significant cost, with the NHS in England spending £3.4 billion per year on dental care (in addition an estimated £2.3 billion on private dental care), with over a million patient contacts with NHS dental services each week.⁶

People living in deprived communities consistently have poorer oral health than people living in richer communities. These inequalities in oral health run from the top to the bottom of the socioeconomic ladder, creating a social gradient. Some vulnerable groups have poorer oral health, such as those with learning difficulties and disabilities.⁶

2. **Aims of the strategy**

To improve oral health and reduce inequalities, particularly in children and vulnerable groups by:

- Optimising exposure to fluoride through toothpaste and other vehicles.
- Working in partnership with others to improve oral and general health through healthy eating.
- Supporting smoking cessation and alcohol awareness.
To reduce inequalities in oral health or access to dental care across North and North East Lincolnshire.

To promote local leadership and advocacy for oral health improvement at all levels including through elected members, strategic leadership via the Health and Wellbeing boards and council public health teams.

Ensuring oral health promotion and preventive care is a priority and integrated within the strategy and delivery of NHS, council and other partner led services by making every contact count.

Ensure a life course approach to oral health improvement is adopted, acting early and intervening at the right time, including within early years and education settings.

Ensure oral health is integrated into relevant local service specifications.

To listen to the views of service users about their teeth and mouths and involve them in commissioning decisions.

3. National context

3.1 Commissioning Framework

Since the last Oral Health Strategy for North and North East Lincolnshire there has been significant reorganisation of commissioning responsibility for dental care, outlined in the NHS England (NHS CB) 2013 document ‘Securing Excellence in Commissioning NHS Dental Services’.

From April 2013, the NHS England took over commissioning responsibility from primary care trusts for all NHS dental services: primary, community and secondary, including dental out of hours and urgent care. This includes commissioning dental services provided in high street dental practices, community dental services, and dental services at general hospitals and dental hospitals and out of hours services.

In North Lincolnshire this includes:

- 14 general (high street) dental practices.
- A community dental service for adults and children with special needs. The community dental services deliver care in a wide range of settings including dental surgeries, domiciliary services in people’s own homes, care and nursing homes and in hospitals. The service also provides care with inhalation and intravenous sedation and general anaesthesia.
- 2 primary care based oral surgery services.
- Sedation service.
- Endodontic (root treatment) specialist service.
- Primary care based orthodontic services.
- Secondary care services mainly include oral and maxillofacial surgery and orthodontics.
In North East Lincolnshire this includes:

- 16 general (high street) dental practices.
- A community dental service for adults and children with special needs. The community dental services deliver care in a wide range of settings including dental surgeries, domiciliary services in people's own homes, care and nursing homes and in hospitals. The service also provides care with inhalation and intravenous sedation and general anaesthesia.
- 2 primary care based specialist oral surgery services.
- Primary care based orthodontic services.
- Secondary services mainly include oral and maxillo facial surgery and orthodontic services.

3.2 Local authorities improving oral health: commissioning better oral health for children and young people

Under the terms of the Health and Social Care Act (2012)\(^5\) upper tier and unitary authorities became responsible for improving the health, including the oral health, of their populations from April 2013.

Local authorities have a statutory responsibility to provide or commission oral health improvement programmes to improve the health of the local population, to the 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 (formerly known as the national dental epidemiology programme) in order to facilitate:

- assessment and monitoring of oral health needs
- planning and evaluation of oral health promotion programmes
- planning and evaluation of the arrangements for the provision of dental services
- reporting and monitoring of the effects of any local water fluoridation schemes covering their area

In spring 2014 PHE provided a guide for commissioners of oral health improvement programmes: “Local authorities improving oral health: Commissioning better oral health for children and young people”\(^6\).

The document recommends Local Authorities review their oral health commissioning to ensure:

- Oral health improvement is integrated within existing programmes such as the healthy child programme 0-19 years
- Commissioning specific oral health programmes based on the totality of the evidence and needs of the population
- Reviewing commissioned oral health programmes to ensure that programmes:
  - meet local needs
  - involve upstream, midstream and downstream interventions that involve both targeted and universal approaches
- consider the totality of evidence of what works
- engage with partners integrating commissioning across organisations and across bigger footprints as required

From the 1st October 2015 commissioning responsibility for the healthy child programme for 0-5 year olds will transfer from NHS England to local government. This includes the commissioning of health visitors, who lead and support delivery of preventive programmes for infants and children, including providing advice on oral health and on breastfeeding reducing the risk of tooth decay.

3.3 Delivering Better Oral Health: an evidence-based toolkit for prevention

The third edition of Delivering Better Oral Health produced by the Department of Health and the British Association for the Study of Community Dentistry and published by PHE in 2014 to provide guidance for dental teams about the advice they should give and actions they should take to be sure they are doing the best for their patients in preventing disease.

The implementation of the guidance in the 3rd Edition of this evidence-based toolkit for prevention will form part of the oral health improvement strategy for North and North East Lincolnshire. The recommendations in this toolkit should be implemented by general dental practice teams, the local salaried primary dental care service and disseminated to other health, education and social care professionals.

3.4 Oral health NICE Guidance: approaches for local authorities and their partners to improve the oral health of their communities.

Public Health Guidance 55 by the National Institute for Health and Care Excellence (NICE) is for local authorities, health and wellbeing boards, commissioners, directors of public health, consultants in dental public health and frontline practitioners working more generally in health, social care and education. It makes recommendations on undertaking oral health needs assessments, developing a local strategy on oral health and delivering community-based interventions and activities.

The guideline focuses, in particular, on people who’s economic, social, environmental circumstances or lifestyle place them at high risk of poor oral health or make it difficult for them to access dental services. Please see Appendix B for further details and the list of 21 Recommendations.

3.5 Other Policy Drivers
The public health outcomes framework (2013-16)\(^7\) includes “tooth decay in five year old children” as an outcome indicator.

The NHS outcomes framework (2015-16)\(^8\) includes indicators related to patients’ experiences of NHS dental services and access to NHS dental services.

The Children and Young People’s Health Outcomes Forum report\(^6\) published in 2012 and its 2014 annual report\(^10\) recommended improved integration and greater action to reduce regional variation in child health outcomes.

3.6 Local context (link to local priorities)

Oral health is part of both North Lincolnshire and North East Lincolnshire health and wellbeing strategies.

North East Lincolnshire Joint Strategic Needs Assessment\(^11\)

North East Lincolnshire Health and Wellbeing Strategy 2013-16\(^12\)

A comprehensive report on children’s dental health\(^13\) in North Lincolnshire is contained within the developing well section of the 2013-14 JSNA.

For further information on wider public health priorities in North Lincolnshire please consult the North Lincolnshire Joint Strategic Assessment\(^14\) and the North Lincolnshire Joint Health and Wellbeing Strategy 2013-18\(^15\).

4. Population and demographics

4.1 North East Lincolnshire

North East Lincolnshire has a population of approximately 159,800 with children (0-19) accounting for 24.0% of the population compared to the national average of 23.9% (ChiMat, 2014).

North East Lincolnshire has an ageing population with 20,000 people aged 70 plus. There are more older people than the national average, and the number is increasing more quickly than nationally. People are living longer, but they are also living longer in poor health.

Health in Summary

The health of people in North East Lincolnshire is generally worse than the England average. Deprivation is higher than average and about 28.6% (8,600) children live in poverty. Life expectancy for both men and women is lower than the England average.
For further information on local demographics please consult the North East Lincolnshire Joint Strategic Needs Assessment\textsuperscript{10}.

4.2 North Lincolnshire

North Lincolnshire has a population of approximately 168,800 with children (0-19) accounting for 23.3% of the population compared to the national average of 23.9% (ChiMat, 2014).

Between 2012 and 2020, the projections are for 13% growth in the school aged population of North Lincolnshire, so the demand for children’s dental health services is likely to increase as the child population grows.

North Lincolnshire has an ageing population. Life expectancy is at its highest ever level in North Lincolnshire, with around 32,500 people aged 65 years or older. This is 23% more than in 2003, and compares with a national growth of 17%.

Health in Summary
The health of people in North Lincolnshire is varied compared with the England average. Deprivation is lower than average, however about 20.4% (6,100) children live in poverty. Life expectancy for men is lower than the England average.

For further information on local demographics please consult the North Lincolnshire Joint Strategic Assessment\textsuperscript{14}.

4.3 Water fluoridation population coverage.

All water contains the mineral fluoride naturally in varying amounts. Water fluoridation involves adjusting the fluoride level in drinking water supplies to a level that is optimal for dental health.

Locally a water fluoridation scheme initiated over 40 years ago supplies fluoridated water to the population living east of the Trent in North Lincolnshire which includes Scunthorpe and Barton upon Humber, and the rural communities in North East Lincolnshire.

However, due to a water pumping station (Little London) being off-line for the last 5 years, parts of Immingham and the surrounding area have received variable rates of fluoridation during that time. The pump is now fully operational and supplying fluoridated water at the required levels.

5. Oral health needs assessment

5.1 Dental caries
Tooth decay (dental caries) is the most common oral disease affecting children and young people (CYP) in England, yet it is largely preventable. While children’s oral health has improved over the past 20 years, almost a third (27.9%) of five-year olds in England still had tooth decay in 2012.\cite{17}

Tooth decay was the most common reason for elective hospital admissions in children aged five to nine years old in 2012-13 (nationally and locally). Dental treatment under general anaesthesia (GA), presents a small but real risk of life-threatening complications for children. Tooth extractions under GA are not only potentially avoidable for most children but also costly. Extracting multiple teeth in children in hospitals in 2011-2012 cost £673 per child with a total NHS cost of nearly £23 million.\cite{6}

Dental caries remains a significant public health problem nationally, particularly in more deprived areas: it affects 40% of five-year-old children, has a significant impact on individuals and on the costs to society although it is largely preventable. The main risk factors for dental caries are a diet high in sugar and lack of exposure to daily fluoride.

The level of dental decay in five-year-old children is a useful indicator of the success of a range of programmes and services that aim to improve the general health and wellbeing of young children. In the Public Health Outcomes Framework\cite{7} one of the indicators is the dental decay level in children aged five years.

In the 2012 Dental Epidemiology Survey, 3,391 children were sampled across North and North East Lincolnshire (North and North East) of whom 2,048 consented to take part in the survey and were clinically examined at school by trained and calibrated examiners.

**Figure 1: The average number of decayed, extracted or filled teeth (d3mft) and the proportion of children (5 yr olds) affected by dental decay (% d3mft>0) among five-year-old children in North and North East Lincolnshire compared with England and the rest of the local authorities in Yorkshire and the Humber region.**
Figure 1 and Table 1 show that North Lincolnshire local authority has levels of decay among 5 year-olds that are lower than the average for England whilst North East Lincolnshire local authority has levels of decay that are higher than the average for England. Both areas have lower levels of decay than the regional average, with North Lincolnshire the lowest levels of childhood decay in the region (0.60 d₃mft).

Table 1: The average number of decayed, missing (due to decay) or filled teeth (d₃mft), the proportion of children (5yr olds) affected by dental decay, along with the average d₃mft in those children with decay experience in North and North East Lincolnshire compared with England and the rest of the local authorities in Yorkshire and the Humber region.

<table>
<thead>
<tr>
<th>Local authority</th>
<th>Average d₃mft</th>
<th>% with decay experience</th>
<th>Average d₃mft in those with decay experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradford</td>
<td>1.98</td>
<td>46.0</td>
<td>4.30</td>
</tr>
<tr>
<td>Calderdale</td>
<td>1.88</td>
<td>39.2</td>
<td>4.80</td>
</tr>
<tr>
<td>Kirklees</td>
<td>1.75</td>
<td>43.6</td>
<td>4.03</td>
</tr>
<tr>
<td>Wakefield</td>
<td>1.66</td>
<td>40.6</td>
<td>4.08</td>
</tr>
<tr>
<td>Barnsley</td>
<td>1.61</td>
<td>41.0</td>
<td>3.94</td>
</tr>
<tr>
<td>Kingston upon Hull</td>
<td>1.54</td>
<td>43.4</td>
<td>3.56</td>
</tr>
<tr>
<td>Rotherham</td>
<td>1.44</td>
<td>40.4</td>
<td>3.56</td>
</tr>
<tr>
<td>Doncaster</td>
<td>1.33</td>
<td>33.6</td>
<td>3.95</td>
</tr>
<tr>
<td>Sheffield</td>
<td>1.30</td>
<td>35.8</td>
<td>3.62</td>
</tr>
<tr>
<td>YORKSHIRE and the HUMBER</td>
<td>1.23</td>
<td>33.6</td>
<td>3.65</td>
</tr>
<tr>
<td>Leeds</td>
<td>1.19</td>
<td>33.7</td>
<td>3.54</td>
</tr>
<tr>
<td>North East Lincolnshire</td>
<td>1.19</td>
<td>31.4</td>
<td>3.78</td>
</tr>
<tr>
<td>ENGLAND</td>
<td>0.94</td>
<td>27.9</td>
<td>3.38</td>
</tr>
<tr>
<td>York</td>
<td>0.81</td>
<td>24.7</td>
<td>3.27</td>
</tr>
<tr>
<td>East Riding of Yorkshire</td>
<td>0.75</td>
<td>22.7</td>
<td>3.29</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>0.72</td>
<td>25.0</td>
<td>2.88</td>
</tr>
<tr>
<td>North Lincolnshire</td>
<td>0.60</td>
<td>20.8</td>
<td>2.89</td>
</tr>
</tbody>
</table>

Source: PHE, 2014.

Table 2 shows levels of decay across North and North East Lincolnshire in more detail, including comparison with regional, nation and statistical
neighbours. North Lincolnshire has very low levels of decay, far below national regional and statistical neighbour comparators, which is likely to be a direct result of water fluoridation.

North East Lincolnshire has far higher levels of childhood decay, higher than the England average. However, the levels of decay are lower than both the regional average and that of their statistical neighbour (Redcar & Cleveland).

Table 2: A range of measures of disease among five-year-olds in North & North East Lincolnshire local authorities compared with their statistical neighbours, in England and the rest of Yorkshire and the Humber.

<table>
<thead>
<tr>
<th></th>
<th>North East Lincolnshire local authority</th>
<th>Statistical neighbour: Redcar and Cleveland</th>
<th>North Lincolnshire local authority</th>
<th>Statistical neighbour: Doncaster local</th>
<th>Yorkshire and the Humber</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average d3mft</td>
<td>1.19</td>
<td>1.3</td>
<td>0.6</td>
<td>1.33</td>
<td>1.23</td>
<td>0.94</td>
</tr>
<tr>
<td>% with decay experience</td>
<td>31.40%</td>
<td>35.90%</td>
<td>20.86%</td>
<td>33.60%</td>
<td>33.60%</td>
<td>27.90%</td>
</tr>
<tr>
<td>Average d3mft in those with decay experience</td>
<td>3.78</td>
<td>3.62</td>
<td>2.89</td>
<td>3.95</td>
<td>3.65</td>
<td>3.38</td>
</tr>
<tr>
<td>% with active decay</td>
<td>29.50%</td>
<td>30.10%</td>
<td>18.40%</td>
<td>28.90%</td>
<td>29.30%</td>
<td>24.50%</td>
</tr>
<tr>
<td>% with experience of extraction\textsuperscript{ii}</td>
<td>6.40%</td>
<td>6.90%</td>
<td>1.80%</td>
<td>6.70%</td>
<td>4.60%</td>
<td>3.10%</td>
</tr>
<tr>
<td>% with dental abscess</td>
<td>3.60%</td>
<td>2.60%</td>
<td>0.50%</td>
<td>5.40%</td>
<td>2.40%</td>
<td>1.70%</td>
</tr>
<tr>
<td>% with teeth decayed into pulp</td>
<td>4.00%</td>
<td>5.90%</td>
<td>4.40%</td>
<td>8.30%</td>
<td>5.30%</td>
<td>4.40%</td>
</tr>
<tr>
<td>% with ECC\textsuperscript{iii}</td>
<td>8.00%</td>
<td>8.30%</td>
<td>2.70%</td>
<td>7.40%</td>
<td>7.70%</td>
<td>6.30%</td>
</tr>
<tr>
<td>% with high levels of plaque present on upper front teeth\textsuperscript{iv}</td>
<td>0.20%</td>
<td>0.10%</td>
<td>1.80%</td>
<td>0.80%</td>
<td>0.90%</td>
<td>1.70%</td>
</tr>
</tbody>
</table>

Source: PHE, 2014.

\textsuperscript{i} Generated by the Chartered Institute of Public Finance and Accountancy (CIPFA) Nearest Neighbours Model, post April 2009, comparator 1.3

\textsuperscript{ii} Experience of extraction of one or more teeth on one or more occasions. The majority of children attending hospital for extractions have general anaesthetics for these procedures.

\textsuperscript{iii} Early childhood caries – the definition selected was ‘caries involving one or more surfaces of upper anterior teeth’. This pattern of decay is often linked with long term use of a feeding bottle with sugar-containing drinks.

\textsuperscript{iv} Indicative of a non-brasser.

Similar trends are present in the 2013 Oral Health Survey of three-year-olds (PHE), with North East Lincolnshire having levels of decay significantly above the England average, and North Lincolnshire just below the England average.

However, from the 2008/09 Oral Health Survey of 12-year-olds we know that by the age of 12 the average number of decayed, missing (due to decay) or filled teeth (d3mft) in North East Lincolnshire is not significantly different from the England average. Dental decay amongst 12-year-olds in North Lincolnshire remains well below the England average.
Deprivation is strongly associated with dental decay and one would expect to see the highest levels of caries within the most deprived quintiles. This inequitable distribution is clearly present for the North East with the highest prevalence (45%) within the poorest quintile of the population, with the prevalence reducing as affluence increases (see Appendix C).

This picture is somewhat different within North Lincolnshire (see Appendix C) with near identical prevalence of caries between quintiles 1 (most deprived) to 3 (average). Only the two least deprived quintiles show a reduction in prevalence. This distribution is likely due to the protective effects of the fluoridation of the water supply across much of North Lincolnshire, although there is no conclusive evidence of this relationship.

**Figure 2: Map showing decay prevalence by ward in North East Lincolnshire local authority**

There is variation across the North East Lincolnshire (Figure 2) with higher proportions of children living in wards in the north east sector being affected by caries, particularly those in East Marsh ward and wards neighbouring it, having rates over double that of Yarborough, Park, Havestoe and Waltham.

Figure 3 shows there is variation across North Lincolnshire also, with higher proportions of children living in wards in the west being affected by caries,
particularly those in Crosby and Park ward. Water Fluoridation is present for all areas east of the River Trent and with the exceptions of the Scunthorpe wards there is very low rates of dental decay experience in this area.

Figure 3: Map showing decay prevalence by ward in North Lincolnshire local authority

Source: PHE, 2014.

5.2 Adult oral health

There has been a significant improvement in the oral health of adults (18 years and older) over the last 40 years. National surveys have been conducted on a ten yearly cycle and in the latest survey conducted in 2009\textsuperscript{18}, 6% of adults nationally did not have any natural teeth at all (edentate), down from 28% in 1978\textsuperscript{18}. The current figure is 7% in Yorkshire and the Humber. The overall trend is for fewer adults to have no natural teeth. This trend is in spite of an ageing population across the UK, including North and North East Lincolnshire.

However, an ageing population is likely to result in increasing numbers of dependent adults either within their own homes or care homes increasing dental care access difficulties and creating a challenge for future service provision in meeting this need.
A postal survey of adult oral health was conducted across Yorkshire and Humber in 2008 and this highlighted:

- significantly fewer adults in North East Lincolnshire have at least 20 natural teeth and consequently more of them have dentures when compared to the Yorkshire and Humber average.
- Adults in North Lincolnshire are more likely to have not been to the dentist in the last 2 years, the main quoted reason being lack of dental NHS services.
- 32% assess themselves as needing NHS treatment now compared to 29% in North East Lincolnshire and 25% in the region.

The results are summarised in Figure 4 below.

**Figure 4. Adult Oral Health 2008 – results of a postal survey**

5.3 **Oral Cancers**

Oral cancers make up 1-2% of all new cancers in the UK. Although oral cancer is relatively uncommon it has a very significant impact on the lives of those people affected.

Historically, oral cancer has been twice as common in men as in women, with increasing incidence with age. However, the incidence of oral cancer is
increasing in women and is now being seen in a younger age group. The risk of developing oral cancer is greater in areas of deprivation.

The main risk factors are use of tobacco combined with increased alcohol consumption. These two factors act synergistically and multiply the risk of oral cancer. The mean 5-year survival rate is only 50% but this increases to 80% if the cancer is detected at an early stage. Low awareness and the painless nature of early oral cancer means that people often only seek help when the cancer is more advanced and difficult to treat.

5.4 Access to Dental Treatment

The recommended interval between routine dental check-ups should be determined specifically for each patient and tailored to meet his or her needs, on the basis of an assessment of disease levels and risk of or from dental disease. The shortest interval between oral health reviews for all patients should be 3 months. The longest interval between oral health reviews for patients younger than 18 years should be 12 months. The longest interval between oral health reviews for patients aged 18 years and older should be 24 months.\textsuperscript{16}

Whilst dental attendance does not itself prevent dental disease it is an important factor when considering how oral health promotion could be delivered through the dental practice or clinic team.

Figure 5: Proportion of Adult Patients seen in the previous 24 months, by Area (PCT) from June 2010 to June 2014.

Figures 5, 6, 7 and 9 show current levels against historic trends. We can see from figure 5 that the proportion of adults seen by a dentist in the previous 24 months has remained constant in recent years both locally and nationally. This figure is higher than the England average (52.3%) and that of Yorkshire and Humber (55.2%) within North East Lincolnshire (61.2%); but below these averages for North Lincolnshire (47.3%).

Interpreting these figures is complex. A low proportion of adults accessing a dentist could be seen as a positive outcome (they don’t require the dentist, therefore lower demand). Equally it could be a reflection of barriers to access and a shortage of dentists (unmet demand).

**Figure 6: Proportion of Child Patients seen in the previous 24 months, by Area (PCT) from June 2010 to 2014.**

![Graph showing the proportion of child patients seen in the previous 24 months by area from June 2010 to 2014.](image-url)

*Source: HSCIC NHS Dental Statistics for England 2010-11, 2012-13, & 2013-14*

Figure 6 shows the proportion of children who have visited a dentist in the preceding 24 months. These proportions have been relatively stable from 2010 to 2014 figures for NE Lincolnshire (70.6%), Yorkshire and Humber (71.4%), and England as a whole (69.2%), although the data suggests a small rise in access in NE Lincolnshire since 2011 (68.2%). However, the trend for North Lincolnshire since 2011 (67.0%) is one of a steady decline in the proportion of children seeing a dentist in the last 24 months to 61.2% by June 2014.
Once again the data should be interpreted with caution. Much of North Lincolnshire has a fluoridated water supply and the low access rates in that area may be suggestive of ever increasing dental health and therefore less demand for dental visits. However it is also indicative of a low provision of dental services, a view confirmed both by figures 7 and 9 and the PHE North Yorkshire and Humber Needs Assessment (5.6).

**Figure 7: Units of dental activity per 100,000 population, by Area (PCT) 2006/07 to 2013/14 (excluding orthodontic treatment).**

Again, looking at the number of units of dental activity commissioned per 100,000 population we see that the rates for England, Yorkshire and Humber, and North East Lincolnshire are following a similar trajectory of gradual increase, with NE Lincs slightly higher than the national average. However, the trend for North Lincolnshire is one of no increase, and with signs of a decrease since 2010/11 to a current level of 115,393/100,000, much lower than the national average of 165,798/100,000. NHS practices are commissioned to deliver a set number of Units of Dental Activity as per their NHS contract with NY&H area team.

There are 4 bands of NHS treatment. Band 1 which covers exam, prevention and radiographs Band 2 – fillings and extractions including root canal (endodontics) treatments and Band 3 dentures crowns and bridges Urgent care.

Breaking down the total number of clinical treatments items into Bands (type of treatment) in figures 7 and 8 suggests that rates of check-ups and simple treatments for both adults and children are more similar across North and North East Lincolnshire as a whole, with both areas lower than the national
average. However, for Band 2 treatments for both adults and children, and band 3 treatments for adults, North Lincolnshire has significantly lower rates of treatment than North East Lincolnshire and England. As an example, the rate of Band 2 treatments for children in North Lincolnshire (6,340/100,000) is almost half that of North East Lincolnshire (11,182/100,000). The reasons behind these differences require further investigation through discussions with NHS England as the community dental commissioner.

Figure 7: Estimated total number of clinical treatment items (per 1000 population) provided to adults by Local Authority, 2013/14

![Figure 7](image)


Figure 8: Estimated total number of clinical treatment items (per 100,000 population) provided to children by Local Authority, 2013/14

![Figure 8](image)
The number of dentists with NHS activity per 100,000 population (Fig. 9) demonstrates that North East Lincolnshire (43/100,000) is very much in line with national (44/100,00) and regional trends (48/100,000) in 2013/14. North Lincolnshire falls short of these figures, with only 34 dentists per 100,000 population.

**Figure 9: Number of dentists with NHS activity per 100,000 population by Area (PCT) in the specified years ending 31 March.**

Access to dental services in North East Lincolnshire has improved and is now better than the regional and national averages for adults.

Attendance by children varies across wards in both areas with those from the poorer areas much less likely to have seen a dentist but overall levels are similar to other authorities in the region.

Overall, North Lincolnshire has one of the lowest levels of NHS dental provision in the country and the lowest per 100,000 population in the region. Access to NHS provision remains a key local public concern in North Lincolnshire, in spite of efforts by local commissioners to improve levels of service provision in the NHS sector in the last 3-5 years. Provision of NHS dentists is also lowest in the rural areas of North Lincolnshire.

### 5.5 Service Users Voice

The voice and opinions of the service users especially adults is a clear gap within the needs assessment, with no recent adult oral health survey.
undertaken. Within North Lincolnshire an older people lifestyle survey is to be conducted early in 2016 of a representative sample of over 65’s which will include several questions on oral health and access.

5.6 PHE North Yorkshire and Humber Needs Assessment

The North Yorkshire and Humber Oral Health Needs Assessment was published in September 2015 by PHE. Findings directly relevant to North and North East Lincolnshire include:

Epidemiology

- the prevalence of tooth decay in three-year-olds in Yorkshire and The Humber was higher than the England average
- the severity of tooth decay in three-year-olds in Yorkshire and The Humber is the fourth worst area in the country
- the prevalence of early childhood caries in Yorkshire and The Humber was significantly higher than the England average
- there was an association between tooth decay in three-year-olds and deprivation
- the prevalence of tooth decay in five-year-old children in Yorkshire and The Humber was significantly higher than the England average.
- the severity of tooth decay in five-year-old children in Yorkshire and The Humber was the third worst in England. Children living in North East Lincolnshire, have significantly higher tooth decay experience than the England average
- children living in North Lincolnshire experienced good oral health which may be related to water fluoridation and lower levels of deprivation
- across all local authority areas in North Yorkshire and Humber inequalities in tooth decay in five-year-olds were seen with prevalence and severity increasing as deprivation increased
- children in the most deprived quintile had over three times more decay experience than those in the least deprived quintile
- five-year-old children in North East Lincolnshire experienced relatively higher levels of tooth decay and yet a smaller proportion of these decayed teeth were treated with fillings demonstrating an inverse care relationship
- the prevalence of tooth decay in 12-year-old children in Yorkshire and The Humber was significantly higher than the England average
- the severity of tooth decay in 12-year-olds in Yorkshire and The Humber was significantly higher than the England average.
- across all local authorities within North Yorkshire and Humber inequalities in tooth decay in 12-year-olds were seen with prevalence and severity increasing as deprivation increased Children in the most deprived quintile had over 1.8 times more decay experience than children in the least deprived quintile
- fewer teeth with tooth decay in 12-year-olds were filled in North East Lincolnshire than in England and Yorkshire and The Humber.
• in Yorkshire and The Humber 12-year-old children reported problems with eating and cleaning of their teeth as impacting them the most
• an estimated 9,725 of 12-year-old children in North Yorkshire and Humber need orthodontic treatment
• in Yorkshire and The Humber, 30% of adults had tooth decay and 2% had severe gum disease
• men from materially deprived backgrounds were more likely to experience higher levels of tooth decay and gum disease but least likely to visit a dentist
• people living in North East Lincolnshire were more likely to report poorer oral health compared with those living in other local authority areas
• people North Lincolnshire were more likely to report a perceived need for treatment
• people in Yorkshire and Humber were more likely to wear a denture than nationally
• the incidence of mouth cancer has increased slightly in North East Lincolnshire
• information describing the oral health of vulnerable groups in North Yorkshire and Humber is limited
• North Lincolnshire and North East Lincolnshire have significantly more children with learning disabilities relative to the national average
• children with learning disabilities are more likely to have teeth extracted than filled and have poorer gum health
• North East Lincolnshire has significantly more adults with learning disabilities known to general medical practitioners relative to the national average
• adults with learning disabilities are more likely to have poorer oral health than the general population
• adults with learning disabilities living in the community are more likely to have poor oral health than their counterparts living in care.
• approximately a quarter of the population experience some kind of mental health problem in any one year. However there is no local information on the oral health needs of this group
• homeless people are more likely to have greater need to oral healthcare services than the general population
• severely obese people may be at higher risk of oral disease. Dental services for severely obese people are available in all the local authority areas apart from North Yorkshire and York
• looked after children are likely to have greater oral health needs than their peers.

**Oral Healthcare Services**

• access to care is not reflective of need. In more deprived areas where oral health tends to be poorer lower proportions of adults and children access primary care dental services
• access to services is inequitable in terms of deprivation and age.
• the average UDA per resident adult and child population varies across local authorities in North Yorkshire and Humber however it is considerably lower in North Lincolnshire
• fluoride varnish application rates are increasing however a significant proportion of children in North Yorkshire and Humber who visit the dentist do not receive fluoride varnish applications with children in North East Lincolnshire having amongst the lowest levels.

• there is low provision of domiciliary services in North Yorkshire and North Lincolnshire compared with Yorkshire and The Humber and England.

• a higher proportion of patients accessed urgent dental care in North Lincolnshire which were well above levels across North Yorkshire and Humber and England

6. Service provision – commissioned services

6.1 Oral Health Promotion

Current oral health promotion in the community across North and North East Lincolnshire is co-ordinated through the Oral Health Promotion team of the Salaried Primary Dental Care Service (NLaG Hospital Trust). The main areas of activity currently include:

Current commissioned oral health improvement activity includes:

• A dental resource box programme which supports teachers in delivery of evidence based prevention advice to primary school children. Linked to the national curriculum this resource box is accessible to all key stage 1 and 2 primary school children with a view to helping children adopt healthier lifestyle habits to improve their oral and general health. This is underpinned by partnership work with schools to reduce access to sugary drinks and snacks on school sites, through vending machines, tuck shops and school restaurants.

• Oral health training to provide training and regular updates for health and social care professionals & carers with a particular focus on vulnerable young families and children to support the ethos of giving children a healthy start. This training reflects the key messages included in Delivering Better Oral Health – an evidence based tool kit for prevention.

• Partnership work with staff, young families and their children at children centres including the distribution of toothbrushes and toothpaste, with a view to improving and reducing inequalities in oral health in children by encouraging twice daily tooth brushing from an early age. This supports the overarching principle of giving every child a healthy start. This includes advice on food choices, weaning and self-care to support children enjoying a good standard of oral and general health.

• Supporting national campaigns aimed at improving oral health which will include the following public health campaigns: National Smile Month, National No Smoking Day and Mouth Cancer Action Month.
• Supporting general dental practices adopt a preventative approach. This includes supporting the implementation of Delivering Better Oral Health, provision of ‘Making Every Contact Count’ training for dental practice teams and helping practices support national public health campaigns.

• Support teaching staff with the daily tooth brushing programme that takes place in special schools within North Lincolnshire only.

The oral health promotion service specifications and contracts are to be reviewed for both North and North East Lincolnshire. A joint commissioning approach will be taken, with a review of the health promotion activity against current NICE guidelines and ‘delivering better oral health’ in order to transform the service delivery and maximise the impact and value of investment. This may include the addition of new oral health promotion activities (e.g. fluoride varnishing), the extension of some current activities (tooth brushing programmes), and the reduction or ceasing of other activity.

6.2 Epidemiology Programme

The Oral Health Promotion team of the Salaried Primary Dental Care Service (NLaG Hospital Trust) is commissioned to undertake oral health surveys across North and North East Lincolnshire in accordance with the Public Health England Dental Public Health Epidemiology Programme and timetable (currently includes surveys of five-year-old children every four years and older children and other groups of the population in the intervening years).

It is essential that good quality local data are available for monitoring oral health needs and evaluation of oral health improvement programmes.

7. Baseline Assessment

A review of the baseline position in North and North East Lincolnshire has been undertaken, using the NICE Guidance 55 Baseline Assessment tool by the North and North East Lincolnshire oral health partnership group. The output from this exercise, combined with the needs assessment within this strategy group.

8. Key themes

8.1 Optimising exposure to fluoride

Fluoride is an effective means of preventing dental caries. Various vehicles for the delivery of fluoride exist at the individual, community and population levels. The significant improvements in dental health over the last 40 years are largely attributed to the wide use of fluoride, especially fluoride toothpaste. Fluoride toothpaste, mouthwash and fluoride varnish work well on the surface of the tooth (topical) and are effective at reducing tooth decay. Fluoride
varnish can be applied to patients’ teeth by dentists or dental care professionals.

Fluoride is a naturally occurring mineral in water and it is possible through a process called water fluoridation to top up the levels to one part fluoride per million parts of drinking water (1ppm), a level associated with significantly less tooth decay. Water Fluoridation has been in place in North Lincolnshire for over forty years and the benefits in reduced levels of dental decay in 5 year old children, compared with areas which are not fluoridated, as evidenced amongst local children, has been clearly demonstrated across Yorkshire and Humber and nationally.

Water fluoridation remains a cost-effective population based public health intervention that has the ability to reach more people, including those at greatest need with the opportunity of reducing unacceptable inequalities in oral health. On average, children in fluoridated areas have 2.2 fewer decayed teeth and 15% more children are free from tooth decay as compared with those in non-fluoridated areas (PHE, 2014).

A Public Health England monitoring report on fluoride, (2014), reported that:

- 28% fewer five year olds have dental decay in fluoridated areas compared with non fluoridated areas
- 21% fewer 12 year olds with tooth decay in fluoridated areas compared with non fluoridated areas
- The reduction in tooth decay amongst 5 and 12 year olds is greatest in fluoridated areas
- In fluoridated areas there are 45% fewer hospital admissions of children aged 1 – 4 years of age for dental extractions
- There is no evidence of increased rates of hip fractures or kidney stones in fluoridated areas

However, extending water fluoridation to the remaining areas of North Lincolnshire and to North East Lincolnshire is a difficult and complex task. Water can only be fluoridated at specific water treatment sites and the catchments of these sites do not match those of local authority boundaries. For water fluoridation to happen in one area, all neighbouring areas whose water supply is provided on the same network would also have to agree to water fluoridation. In reality, a full public consultation covering a substantial part of Yorkshire and the Humber would need to take place before any further water fluoridation scheme could be approved.

8.2 Healthy nutrition / diet

Healthier eating advice should routinely be given to patients to promote good oral and general health.
The main message is to reduce both the amount and frequency of consuming foods and drinks that have added sugar. Added sugar is defined as sugars or syrups added to foods and drinks by the manufacturer, cook or consumer, plus sugars present in honey, syrups, fruit juices and fruit concentrates. It does not include sugars found in whole fresh fruit and vegetables and those naturally present in milk and milk products.

The Scientific Advisory Committee on Nutrition, a committee of independent experts who advise the government on nutrition issues, are currently reviewing the evidence on sugars and other carbohydrates in diet as part of their report ‘carbohydrates and health’. This will include evaluating the evidence on oral health as well as other health outcomes. A draft report is expected to be published for consultation on 26 June 2014. The healthier eating guidance in ‘Delivering better oral health’ will be updated in the light of this publication.

Source: PHE 2014

8.3 Reducing smoking / alcohol

Tobacco use in England continues to kill more than 70,000 people every year, nearly 1,900 of these people die from oral cancer. Action by dental teams to reduce tobacco use will help to improve dental treatment outcomes, promote oral and general health and ultimately save lives.

The following are key recommendations made in the publication ‘Smoke free and smiling’:

- people who use tobacco receive advice to stop and are offered support to do so with a referral to their local stop smoking service
- dental schools, postgraduate deaneries and other providers and commissioners of dental teaching should ensure that tobacco cessation training is available and meets national standards
- dental teams are routinely proactive in engaging users of tobacco
- commissioning bodies implement appropriate measures that support the above recommendations

8.4 Improving access to dental services and prevention

The forecast growth in the school aged population of North and North East Lincolnshire, and likely increased demand for children’s dental health services is unlikely to be matched by additional investment.

However, the national dental contract pilots are testing a prevention-based pathway approach to the delivery of primary care dental services, underpinned by a system of registration, capitation and quality. It is expected that the introduction of the new dental contract will encourage dental practices
to adopt more of a preventative approach. In the long term, it likely that this will reduce the costly impact of dental disease in the general population.

8.5 Workforce development

NICE Guidance 55 recommendations have a clear focus on the importance of embedding oral health promotion within universal service provision including health, education and social care, and making every contact count.

Key to this aim is the training of frontline staff to ensure health, education and social care staff can give advice on the importance of oral health especially the commissioning of training for staff working with children, young people and adults at high risk of poor oral health.

8.6 Embedding oral health improvement into public health programmes

Incorporating oral health promotion within all existing services for all children, young people and adults at high risk of poor oral health is a key recommendation of the NICE Guidance 55.

Including oral health promotion in specifications for all early years’ services is particularly important to ensure the best start in life for children’s oral health.

The specifications should ensure all early years’ services provide oral health information and advice, and provide additional tailored information and advice for groups at high risk of poor oral health.

Raise awareness of the importance of oral health, as part of a ‘whole-school’ approach in all primary schools is a key aspiration, as is promoting a ‘whole school’ approach to oral health in all secondary schools.

Oral health improvement should be a visible component of services for high risk adults including substance misuse, smoking cessation and alcohol services.

8.7 PHE Recommendations

The following considerations for local authorities in developing commissioning strategies were included in the PHE North Yorkshire and Humber Oral Health Needs Assessment:

- oral health and oral health improvement strategies should seek to address the health inequalities between and within local authority areas across North Yorkshire and Humber
- a common risk factor approach focusing on the wider determinants as well facilitating healthy choices will impact not only on oral health but wider general health
• oral health improvement strategies should include actions to address the increasing incidence of mouth cancer in North East Lincolnshire
• undertaking a more detailed oral health needs assessment of vulnerable groups should be considered by NHS England and local authorities
• NHS England, local authorities, PHE and clinical commissioning groups should work together to ensure access to dental and oral health improvement services for people with mental health problems
• the feasibility of undertaking a health equity audit of access to dental services should be explored in view of variations in availability of and access to dental services across and within local authority areas and across different groups
• information should be collated to support commissioning intentions to ensure more vulnerable groups with more complex and special care needs are able to access appropriate care
• local authorities should consider including oral health in joint strategic needs assessments and health and wellbeing strategies
• all local authorities should consider reviewing their oral health improvement programmes in line with Commissioning Better Oral Health and NICE guidance
• local authorities may wish to consider engaging with partners integrating commissioning across organisations and across bigger footprints to support the efficient management of limited resources
• all local authorities in North Yorkshire and Humber should ensure that contracts are supported by service specifications which detail a process of assuring quality of programmes
• a combination of evidence based universal and targeted activities are required to support reducing inequalities in oral health. Upstream interventions should be complemented by downstream interventions
• local authorities should consider the case for water fluoridation in the context of local needs and the range of oral health improvement programmes currently commissioned and with reference to Commissioning Better Oral Health and NICE guidance
• consideration should be given to ensuring programmes support oral health improvement for more vulnerable adults group
• evaluation should be an integral part of all oral health improvement programmes to guide future commissioning
• local authorities should consider integrating oral health improvement into existing commissioned programmes
• oral health improvement should be an integral part of the work of health visitors and schools nurses and should be included in the service specification for these services
• service specification for care homes should include a responsibility for oral health that incorporates an oral health assessment on entry, daily mouth care in care plans for residents and regular access to an NHS dentist
• a Making Every Contact Count trained dental workforce should be developed across North Yorkshire and Humber
• local authorities may wish to explore using cost benefit analysis tools to evidence effective use of resources to support improvements in oral health
• all local authorities should continue to commission oral health surveys, including surveys to support the public health outcomes framework
- NHS England, local authorities and PHE should engage with local Healthwatch to ascertain public views regarding access to and quality of dental services. Local people’s views should be reflected when commissioning services and developing oral health improvement strategies.

9. **Recommendations**

The recommendations of this strategy aim to:

- promote and protect oral health by improving diet and reducing consumption of sugary food and drinks, alcohol and tobacco (and so improve general health too)
- improve oral hygiene
- increase the availability of fluoride
- encourage people to go to the dentist regularly
- increase access to dental services.

Building on the establishment of the North and North East Lincolnshire Oral Health Promotion Partnership Group and existing oral health promotion commissioned services this strategy commits all relevant stakeholders to the following areas for action:

- All organisations to embed and reference this strategy and oral health within all existing and future organisational and departmental health and wellbeing strategies to ensure oral health promotion becomes mainstream.
- To work to ensure all health and wellbeing and disease prevention policies for adults, children and young people (including local government health and social care policies and strategies) include advice and information about oral health.
- To work to ensure all public service environments promote oral health by: Making plain drinking water available for free; Providing a choice of sugar-free food including fresh fruit, drinks (water or milk) and snacks including from any vending machines on site; Encouraging and supporting breastfeeding.
- To work to ensure frontline health and social care staff can give advice on the importance of oral health, supported by service specifications, and access to appropriate training in oral health promotion.
- To work to ensure that oral health promotion is incorporated in all existing services for all children, young people and adults at high risk of poor oral health.
- To promote oral health in the workplace and incorporate oral health promotion into respective workplace award schemes.
• To review current approaches in North and North East Lincolnshire to both tooth brushing programmes in schools and fluoride varnishing programmes within the community.

• To raise the profile of oral health promotion in schools and ensure those schools in areas with highest levels of poor oral health are targeted and supported to undertake oral health promotion activities.

• To work with NHS England to review the levels of community dental provision across North and North East Lincolnshire and to ensure that levels of service provision are both equitable and sufficient.

• To transform the Community Oral Health Promotion provision commissioned by North and North East Lincolnshire Councils to focus resources on interventions and programmes that deliver the greatest outcomes in oral health improvement.

• To work with all relevant stakeholders to increase the oral health service user voice and through this engagement ensure the needs of the most vulnerable are prioritised.

For full details of the action plan please refer to Appendix A – this has been produced in readiness for the transfer of funds from NHSE to the Local Authorities when the existing Community Dental Service contract ends in October 2018. Some of the timescales in the action plan are indicative pending this transfer of resources.
## 10. Appendix A: Action Plan

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Action Title</th>
<th>Action Description</th>
<th>Footprint</th>
<th>Implementation</th>
<th>Lead</th>
<th>By when?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North and North East Lincolnshire Oral Health Partnership Group</td>
<td>Ensure continued development of the Partnership Group including representation from relevant partners including NHS England, PHE, and community representation in addition to all relevant local authority directorates.</td>
<td>North and North East Lincolnshire</td>
<td>All partners</td>
<td>Chair/Co-Chair of partnership Group</td>
<td>Ongoing</td>
</tr>
<tr>
<td>2</td>
<td>Strategy</td>
<td>All agencies within the North and North East Lincolnshire oral health partnership commit to incorporating the oral health priorities within key strategies and commit to the development of appropriate services and specifications. Each area to identify relevant services and strategies with their timescales for review.</td>
<td>North Lincolnshire; North East Lincolnshire</td>
<td>All statutory partners</td>
<td>Oral health leads for N &amp; NE Lincolnshire Councils, and N &amp; NEL CCG's</td>
<td>Oral health strategy out for consultation with the community by end June 2016; Strategy agreed by all agencies end September 2016</td>
</tr>
<tr>
<td></td>
<td>Include information and advice on oral health in all local health and wellbeing policies</td>
<td>Seek partner commitment to including oral health as part of their overall health priorities and ensure that partners commit to include advice and information about oral health. This should be based on the ‘advice for patients’ in Delivering better oral health. It should be included with information about the common risk factors for ill health. A template with suggested policy wording to be produced.</td>
<td>North Lincolnshire; North East Lincolnshire</td>
<td>All statutory partners</td>
<td>Organisational Leads and Directors in LA’s; H&amp;WB Boards.</td>
<td>Partners to confirm commitment to this approach on adoption of the strategy from October 2016</td>
</tr>
<tr>
<td></td>
<td>Ensure frontline health and social care staff can give advice on the importance of oral health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Partners to identify key services areas which have an opportunity to engage with service users about oral health. Ensure service specifications (through provision of template and suggested wording) include the requirement for frontline health and social care staff (including early years) to receive training in promoting oral health. This should include: - the 'advice for patients' in Delivering better oral health - the fact that tooth decay and gum disease are preventable - the importance of regular tooth brushing - links between dietary habits and tooth decay - how fluoride can help prevent tooth decay - links between poor oral health and alcohol and tobacco use including the use of smokeless tobacco - where to get advice about local dental services, including costs and transport links. Ensure frontline health and social care staff (including early years) can advise carers on how to protect and improve the oral health and hygiene of those they care for.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>North Lincolnshire, North East Lincolnshire</td>
<td>NELC, NLC, NEL CCG, NL CCG, Providers</td>
<td>Commissioning &amp; contracting leads in each organisation, oral health leads</td>
<td>Template produced June 2016. Implementation ongoing process, completion reviewed every 12 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incorporate oral health promotion in existing services for all children, Identify all community health and social care services (including early years) and review specifications to ensure oral health is included in care plans and is in line with safeguarding policies.</td>
<td>North Lincolnshire; North East Lincolnshire</td>
<td>NELC, NLC, NEL CCG, NL CCG, Providers</td>
<td>Commissioning &amp; contracting leads in each organisation, oral health leads</td>
<td>Template produced June 2016. Implementation ongoing process, completion reviewed every 12 months</td>
<td></td>
</tr>
</tbody>
</table>
young people and adults at high risk of poor oral health

Ensure service specifications (including early years) include a requirement to promote and protect oral health in the context of overall health and wellbeing. Relevant services include substance misuse services, midwives and health visiting, school nursing, early years' services, children's centres, nurseries, childcare and childminding services, and those supporting people living independently in the community. Template/suggested wording to be produced.

Ensure service specifications (including early years) include:
- an assessment of oral health, including a referral, or advice to go to a dentist or other clinical services (this may be because of pain, concerns about appearance or difficulty in eating)
- making oral health care, including regular dental check-ups, an integral part of care planning – through self-care or clinical services
- support to help people maintain good oral hygiene (including advice about diet)
- staff training in how to promote oral health – during inductions and then updated on a regular basis
<p>| 7  | Training for health and social care staff (including early years) working with children, young people and adults at high risk of poor oral health | Extend the existing commissioned oral health training to frontline health and social care staff working with groups at high risk of poor oral health. This should be based on 'advice for patients' in Delivering better oral health. The aim is to ensure they can meet the needs of adults, children and young people in groups at high risk of poor oral health. Review e-learning oral health training and how this can be rolled out to H&amp;SC staff, and investigate additional funding streams to enable this (e.g. NHSE Primary Care Infrastructure Fund), Oral health hygiene to be incorporated into all relevant staff induction training. Amend future community oral health promotion specification to reflect this training requirement. | North and North East Lincolnshire | NELC, NLC, NEL CCG, NL CCG, Providers | Oral health leads for N &amp; NE Lincolnshire Councils, NLaG Community Dental | Ongoing, progress to be reviewed every quarter |
| 8  | Promote oral health in the workplace | Consider ways to raise awareness of evidence-based oral health information and advice in the workplace and ways to improve access to dental services, for example, by giving people information about local advocacy services. This could include amending current workplace awards for health. May include work with occupational health and human resource services to promote and protect oral health using the 'advice for patients’ in Delivering better oral health, and making information available to staff about local dental services and about national guidelines on oral health and self-care. | North Lincolnshire; North East Lincolnshire | NELC, NLC, Employers | Public health; Workplace health leads; occupational health services | Review workplace awards by April 2016. |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Action Description</th>
<th>Responsible Bodies</th>
<th>Responsible Body Contact Details</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Commission targeted oral health promotion services for adults at high risk of poor oral health</td>
<td>North and North East Lincolnshire</td>
<td>NELC, NLC</td>
<td>Oral Health Leads, PHE Dental Consultants</td>
</tr>
<tr>
<td></td>
<td>Using information from the oral health needs assessment to identify local areas and groups at high risk of poor oral health and ensure oral health promotion service specifications and outcomes reflect this resource prioritisation, to ensure that tailored interventions are available to help people at high risk of poor oral health who live independently in the community. (See action 15) Specific settings to be identified and a schedule of targeted activity to be signed off by the partnership board.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Tooth brushing programme</td>
<td>North and North East Lincolnshire</td>
<td>NELC, NLC, PHE</td>
<td>June 2016</td>
</tr>
<tr>
<td></td>
<td>Explore the cost and feasibility of commissioning a supervised tooth brushing scheme for early years settings (including children's centres), and primary schools in areas where children are at high risk of poor oral health.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Fluoride varnish programme</td>
<td>North and North East Lincolnshire</td>
<td>NELC, NLC, PHE, NHS E</td>
<td>June 2016</td>
</tr>
<tr>
<td></td>
<td>Engage with NHSE to establish current fluoride varnishing rates across North and North East Lincolnshire and consider methods for increasing provision/uptake, including exploring the cost and feasibility of commissioning a community-based fluoride varnish programme for nurseries as part of early years services for children aged 3 years and older, and in primary schools, in areas where children are at high risk of poor oral health.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oral health promotion in schools</td>
<td>Raise awareness of the importance of oral health, as part of a ‘whole-school’ approach in all primary and secondary schools (including academies), with targeted resources (school resource boxes) for priority schools identified by need. Use information from the oral health needs assessment to identify areas where children are at high risk of poor oral health and map gaps in current provision. Ensure schools in these areas, identify school staff who could be trained to provide advice and support to promote and protect pupils’ oral health. Train these staff to give: - age-appropriate information adapted to meet local needs and based on the 'advice for patients' in Delivering better oral health - advice and information about where to get routine and emergency dental treatment, including advice about costs (for example, transport costs) - advice and help to access local community networks offering information, advice and support about general child health and development.</td>
<td>North Lincolnshire; North East Lincolnshire</td>
<td>Education Departments in LA's</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>13</td>
<td>Fluoridation of Water</td>
<td>Review learning from Wakefield’s current feasibility study into water fluoridation. Consider the reinstatement of water fluoridation in Immingham To participate in any regional initiative to scope the feasibility of extending water fluoridation to populations currently not receiving fluoridated</td>
<td>Regional</td>
<td>PHE, NELC, NLC</td>
</tr>
</tbody>
</table>
water and where relevant to undertake local authority consultations if required.

<table>
<thead>
<tr>
<th></th>
<th>Community Dental Provision</th>
<th>To initiate discussions with NHS England and Public Health England to assure the local authority that its area (NL) is receiving an equitable share of community dental budget and services and that this is reflected in access to NHS dental care including units of dental care, and numbers of dentists per 100,000 population.</th>
<th>North Lincolnshire</th>
<th>NLC, NL CCG, NHS England</th>
<th>Oral health leads, NHS E Primary Care</th>
<th>March 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Mouth Cancer</td>
<td>Further exploration of the rise in rates of mouth cancer in North East Lincolnshire, the causes and possible health improvement strategies to reduce the incidence.</td>
<td>North East Lincolnshire</td>
<td>NELC, PHE</td>
<td>Oral Health leads, Public Health Intelligence, PHE Dental Consultants</td>
<td>June 2016</td>
</tr>
<tr>
<td>15</td>
<td>Community Oral Health Promotion Services</td>
<td>To review the current service specifications for community oral health promotion ensuring the efficacy and cost-effectiveness of the service and to tender for joint North and North East Lincolnshire Service to be in place by April 2017</td>
<td>North and North East Lincolnshire</td>
<td>NELC, NLC, NLaG Community Dental</td>
<td>Oral Health leads, Provider Manager, LA Contracting / Procurement</td>
<td>Ongoing</td>
</tr>
<tr>
<td>16</td>
<td>User voice</td>
<td>To continue and find new ways to engage with the public, to hear the user voice and provide commitment to Patient Participant Groups and links with Healthwatch. To target engagement activities at the most vulnerable groups/those with highest needs.</td>
<td>North and North East Lincolnshire</td>
<td>All stakeholders, especially vol-comm sector</td>
<td>Oral Health Leads, LA Engagement Officers, NHS E Primary Care,</td>
<td>Ongoing, reviewed every 6 months</td>
</tr>
</tbody>
</table>
Appendix B: References


Appendix C: Oral Health: approaches for local authorities and their partners to improve the oral health of their communities. NICE Public Health Guidance 55\textsuperscript{9}.

The guideline focuses, in particular, on people whose economic, social, environmental circumstances or lifestyle place them at high risk of poor oral health or make it difficult for them to access dental services. They include:

These groups include people:
- who are homeless or frequently move, such as traveller communities
- who are socially isolated or excluded
- who are older and frail
- who have physical or mental disabilities
- who are from a lower socioeconomic group
- who live in a disadvantaged area
- who smoke or misuse substances (including alcohol)
- who have a poor diet
- from some black, Asian and minority ethnic groups for example, people of South Asian origin
- who are, or who have been, in care.

There are 21 Recommendations:

1. Ensure oral health is a key health and wellbeing priority
2. Carry out an oral health needs assessment
3. Use a range of data sources to inform the oral health needs assessment
4. Develop an oral health strategy
5. Ensure public service environments promote oral health
6. Include information and advice on oral health in all local health and wellbeing policies
7. Ensure frontline health and social care staff can give advice on the importance of oral health
8. Incorporate oral health promotion in existing services for all children, young people and adults at high risk of poor oral health
9. Commission training for health and social care staff working with children, young people and adults at high risk of poor oral health
10. Promote oral health in the workplace
11. Commission tailored oral health promotion services for adults at high risk of poor oral health
12. Include oral health promotion in specifications for all early years services
13. Ensure all early years services provide oral health information and advice
14. Ensure early years services provide additional tailored information and advice for groups at high risk of poor oral health
15. Consider supervised tooth brushing schemes for nurseries in areas where children are at high risk of poor oral health
Consider fluoride varnish programmes for nurseries in areas where children are at high risk of poor oral health

Raise awareness of the importance of oral health, as part of a 'whole-school' approach in all primary schools

Introduce specific schemes to improve and protect oral health in primary schools in areas where children are at high risk of poor oral health

Consider supervised tooth brushing schemes for primary schools in areas where children are at high risk of poor oral health

Consider fluoride varnish programmes for primary schools in areas where children are at high risk of poor oral health

Promote a 'whole school' approach to oral health in all secondary schools
Appendix D: Caries by deprivation quintiles

Prevalence of caries (5 yr olds) by Index of Multiple Deprivation 2010 quintiles for North East Lincolnshire local authority (including 95% confidence limits shown as black bars).

Source: PHE, 2014.

Prevalence of caries (5 yr olds) by Index of Multiple Deprivation 2010 quintiles for North Lincolnshire local authority (including 95% confidence limits shown as black bars).

Source: PHE, 2014.
Appendix E: Sample Specification/Contract Wording

Below is suggested wording to be included within specifications and contracts for services provided and/or commissioned by the North and North East Lincolnshire Oral Health Partnership Group, to ensure all public services promote good oral health.

“Local authority and health and wellbeing commissioning partner provided / commissioned public services should promote and protect good oral health by:

- Making plain drinking water available for free.
- Providing a choice of sugar-free food, drinks (water or milk) and snacks (including fresh fruit), including from any vending machines on site (see the NICE guidelines on obesity and obesity: working with local communities) where food and drink is offered.
- Encouraging and supporting breastfeeding (see the NICE guideline on maternal and child nutrition). This includes services based in premises wholly or partly owned, hired or funded by the public sector such as: leisure centres; community or drop-in centres; nurseries and children's centres; other early years services (including services provided during pregnancy and for new parents); schools; and food banks.

Local authority and health and wellbeing commissioning partner provided / commissioned public services should:

- Ensure frontline health and social care staff receive training in promoting oral health. This should include:
  - the fact that tooth decay and gum disease are preventable
  - the importance of regular tooth brushing
  - links between dietary habits and tooth decay
  - how fluoride can help prevent tooth decay
  - links between poor oral health and alcohol and tobacco use including the use of smokeless tobacco.
  - where to get advice about local dental services, including costs and transport links
- Ensure staff understand the links between health inequalities and oral health and the needs of groups at high risk of poor oral health.
- Ensure frontline health and social care staff can advise carers on how to protect and improve the oral health and hygiene of those they care for.
- Ensure oral health is included in care plans.

Where service specifications include substance misuse services and those supporting people living independently in the community. (For example, people who are homeless or living in hostels, those who experience physical or mobility
problems, people with learning difficulties, and people experiencing mental health problems, services should include:

- an assessment of oral health, including a referral, or advice to go to a dentist or other clinical services (this may be because of pain, concerns about appearance or difficulty in eating)
- making oral health care, including regular dental check-ups, an integral part of care planning – through self-care or clinical services
- support to help people maintain good oral hygiene (including advice about diet)
- staff training in how to promote oral health – during inductions and then updated on a regular basis

All early years services provided and/or commissioned by Local Authority and health and wellbeing commissioning partners should:

- promote oral health and train staff in oral health promotion. This includes services delivered by:
  - Midwives and health visiting teams,
  - Early years services
  - children's centres and nurseries,
  - Child care services (including childminding services).
  - Frontline health and social care practitioners working with families who may be at high risk of poor oral health. (For example, families with complex needs, teenage parents and families from minority ethnic communities where poor oral health is prevalent and people may find it difficult to use services.)

- Ensure all frontline staff in early years services, including education and health, receive training at their induction and at regular intervals, so they can understand and apply the principles and practices that promote oral health.

- Ensure all early years services include advice about oral health in information provided on health, wellbeing, diet, nutrition and parenting. This should be in line with the ‘advice for patients’ in Delivering better oral health. If possible, oral health activities such as tooth brushing should be listed with other general routines recommended for children by established parenting programmes (such as Parenting UK).

- Ensure all frontline staff can help parents, carers and other family members understand how good oral health contributes to children's overall health, wellbeing and development. For example, by:
  - promoting breastfeeding and healthy weaning, including how to move from breast or bottle feeding to using an open cup by 12 months (see box 1)
  - promoting food, snacks (for example, fresh fruit) and drinks (water and milk) that are part of a healthier diet
  - explaining that tooth decay is a preventable disease and how fluoride can help prevent it
- promoting the use of fluoride toothpaste as soon as teeth come through (see Delivering better oral health for appropriate concentrations)
- encouraging people to regularly visit the dentist from when a child gets their first tooth giving a practical demonstration of how to achieve and maintain good oral hygiene and encouraging tooth brushing from an early age
- advising on alternatives to sugary foods, drinks and snacks as pacifiers and treats using sugar-free medicine
- giving details of how to access routine and emergency dental services
- explaining who is entitled to free dental treatment
- encouraging and supporting families to register with a dentist
- providing details of local advocacy services if needed.”