

POLICY DEVELOPMENT & REVIEW 2019/20: APPROACH TO THE REVIEW & SETTING THE SCENE**REPORT OF THE DIRECTOR OF PEOPLE, COMMUNICATIONS AND PARTNERSHIPS****1. Purpose of Report**

- 1.1 The purpose of this report is to establish background information and set out an approach to undertaking a review to assess the oral health of the Sunderland population and the case for interventions to improve oral health.

2. Background

- 2.1 Tooth decay, sometimes known as dental decay or dental caries, remains a serious, yet preventable, health problem affecting approximately 28% of all 5-year olds and is the most common cause of hospital admissions among children aged between five and nine.
- 2.2 There have been improvements in oral health over the past 40 years, but the rate of reduction in tooth decay levels has slowed in the past decade. Those from the most deprived areas experience the highest levels of decay and the consequences are lifelong; extracted teeth are lost for ever; fillings need to be replaced.

Oral Health: Facts and Figures

- 2.3 74% of all British adults have had a tooth removed, this works out to more than 60 million adults who have lost a tooth.
- 2.4 27% of people only visit their dentist when they have a problem. Over half of the UK population have admitted that they wished they had taken better care of their teeth.
- 2.5 Only half of the UK population is happy with their smile. A survey from the British Dental Health Foundation found that discoloured or crooked teeth are the biggest reasons people are unhappy with their smiles. With a third of people identifying a good smile as the most important attribute when it comes to attractiveness. However, one in 10 people in the UK would cut oral care products from their shopping list for financial reasons.
- 2.6 A third of children are starting school with visible signs of tooth decay, with an estimated quarter of a million primary school children having developed tooth decay.
- 2.7 Adding to the issue is the statistic that 14% of people in the UK are frightened to visit the dentist and such a visit is ranked top in a poll on what makes people nervous¹.

¹ <https://www.dentistry.co.uk/2015/07/29/fourteen-facts-need-know-oral-health/>

3. The Current State of Oral Health in Sunderland

- 3.1 Public Health England, through its National Dental Epidemiology Programme for England, undertakes intermittent surveys into the oral health of 5-year old children. These surveys provide information on the prevalence and severity of dental decay for local authority areas.
- 3.2 The most recent survey for which data are available was undertaken in 2017, this was undertaken as a “full census” as requested by Sunderland City Council, therefore this sample size should be large enough to provide updated ward level data.
- 3.3 Sunderland performs extremely poorly in relation to measures of prevalence of tooth decay in 5-year olds. Results from the 2017 survey show that:
- 71.6% of 5-year olds examined were free from tooth decay; the remaining 28.4% of 5-year olds had tooth decay. Equivalent figures for England are 76.7% free from decay and 23.3% experiencing decay.
 - The prevalence of tooth decay is higher than the England average and Sunderland is ranked 11 of 12 when compared with other local authorities in the North East.
- 3.4 Sunderland also performs poorly in relation to measures of severity of tooth decay in 5-year olds. Results from the 2017 survey show that:
- The average number of teeth affected by decay (decayed, missing or filled teeth) was 1.5 compared to 0.8 across England.
 - 4.8% of Sunderland 5-year olds had had at least one tooth extracted, compared to 2.5% across England.
 - When limited to children experiencing some decay, the average number of teeth affected by decay (decayed, missing or filled teeth) was 3.8 compared to 3.4 across England.
 - The Care Index shows that only 8.3% of decayed teeth were filled, compared with 12.0% across England. This may indicate lower use of restorative activity by local dentists, though it should be noted that evidence of the benefits of filling primary (milk) teeth is not clear.
 - 8.3% of 5-year olds had sepsis compared to 1.4% across England resulting from the dental decay process or, in some cases, from traumatic injury of the teeth.
- 3.5 The survey concludes by stating that Sunderland local authority has levels of decay that are higher than the average for England. With the higher levels concentrated in clusters in Sunderland North, Sunderland West and Washington².

4. Key Interventions in Oral Health

- 4.1 Key interventions to prevent tooth decay include the following:

² Dental Health Profiles, Sunderland. Public Health England. July 2017

Advice and support to parents for breastfeeding, bottle and cup feeding, and weaning.

Reducing sugar consumption in the diet in line with national recommendations that for all persons aged 2 years and over no more than 5% of total dietary energy intake should come from “free” sugars.

Twice daily tooth brushing with a fluoride toothpaste including last thing at night and using the “spit, don’t rinse” approach; young children should be supervised by an adult.

Early access to a dentist, beginning when the first tooth erupts and regularly thereafter.

4.2 Key interventions to improve dental health are as follows:

Targeted supervised tooth brushing within a suitable supportive environment (e.g., nurseries, schools) teaches children to brush their teeth from a young age and encourages support for home brushing. These approaches are particularly important in areas where children are at high risk of poor oral health. For every £1 invested, the return on investment is £3.06 after 5 years, rising to £3.66 after 10 years.

Toothbrushes and toothpaste by post schemes targeted to areas with highest levels of tooth decay and delivered in a timely way (at around the time when the first tooth erupts) can encourage parents to adopt good oral health practices and reduce oral health inequalities. Strong engagement from health visitors can make the programme more cost effective. This could be delivered as part of the 3-4 month developmental check by the health visitor. For every £1 invested, the return on investment is £1.03 after 5 years, rising to £1.54 after 10 years. With strong health visitor engagement these figures are £4.89 and £7.34.

Fluoride varnish schemes targeted at children of all ages with tooth decay or those at high risk of developing it can strengthen tooth enamel making it more resistant to decay. The process involves painting a varnish containing high levels of fluoride onto the surface of the tooth every six months. For every £1 invested, the return on investment is £2.29 after 5 years, rising to £2.74 after 10 years.

4.3 Key structural interventions that do not require behaviour change are as follows:

Water fluoridation provides a universal programme which can result in a 28% reduction in the prevalence of tooth decay and 55% fewer hospital admissions in very young children for tooth extraction and a reduction in oral health inequalities. Decisions about water fluoridation are a local authority responsibility and offer them the opportunity to take decisive action to improve oral health. Any authority considering water fluoridation will be met with claims that it does not work and that it causes harm. Both statements are untrue. For every £1 invested, the return on investment is £12.71 after 5 years, rising to £21.98 after 10 years.

5. Title of the Review

- 5.1 The title of the review is suggested as 'Oral Health in Sunderland'.

6. Overall Aim of the Policy Review

- 6.1 To provide a better understanding of the state of oral health in Sunderland and investigate the arguments for and against a number of interventions to inform Sunderland's strategy to improve the oral health of the local population.

7. Proposed Terms of Reference for the Policy Review

- 7.1 The following Terms of Reference for the policy review are proposed: -
- (a) To determine the oral health of the population of Sunderland understanding the significant factors contributing to oral health issues and identifying the key risk groups within the city;
 - (b) To determine the effectiveness of a number of interventions including adding fluoride to the water supply as a means of improving dental health, reducing dental decay in children and addressing dental health inequalities;
 - (c) To explore the ethical issues associated with oral health interventions;
 - (d) To identify the benefits, risks and wider health concerns in respect of adding fluoride to the water supply;
 - (e) To understand the current legal position, procedural process and financial implications for making changes to the water supply;
 - (f) To provide an agreed report that can be discussed by Cabinet.

8. Gathering the Evidence

- 8.1 Research activities over the coming months will be co-ordinated by this Committee's Scrutiny Officer in consultation with the relevant directorate staff and Members. Although alternative opportunities may present themselves during the review, data collection techniques may include a combination of the following:
- Desktop research
 - Use of secondary research e.g. surveys, questionnaires
 - Evidence presented by key stakeholders
 - Evidence from members of the public at meetings or focus groups
 - An Expert Jury Event
 - Site visits.
- 8.2 The review will gather evidence from a variety of sources. The main evidence will come from information provided by council officers and external partners likely to include, though not exhaustive, the following:
- (a) Relevant Cabinet Portfolio Holder(s);

- (b) Local MP's;
- (c) Director of Public Health;
- (d) Sunderland City Council Officers;
- (e) NHS England;
- (f) Public Health England;
- (g) Northumbrian Water;
- (h) Sunderland CCG;
- (i) Public Interest Groups;
- (j) Dental Professionals;
- (k) Oral Health Academics.

9. Scope of the Review

9.1 The review will consider, as part of the review process, the following issues related to oral health in Sunderland:

- What do we mean by oral health?
- What is the current state of oral health in Sunderland?
- Which groups are most vulnerable or at risk?
- What are the major oral health issues in the City?
- What methods are available to improve the dental health of the population?
- How do oral health interventions compare and work in other local authority areas?
- How is oral health education communicated in schools?
- What current Public Health guidance or strategies exist in relation to improving oral health in a local population?
- What are the arguments for and against the introduction of fluoride into the water supply?
- What is the evidence to the dental health benefits of fluoridated water?
- What is the process, legal obligations and associated costs to the commencement of a fluoridated water scheme?

9.2 As the review investigation develops Members need to remain focused on the key terms of reference to ensure the review is conducted within the time constraints, as well as being robust and based on the evidence and research gathered.

10. Timescales

10.1 Attached for Members information is a draft timetable (**Appendix 1**) for the policy review which outlines the various activities and evidence gathering that will be undertaken throughout the review process. The timetable forms the basis of the review process and allows members to see the range of activities and methodologies to be employed during the evidence gathering stage. The timetable is subject to amendment and throughout the review process members will be provided with an up-to-date timetable reflecting any changes.

10.2 Members of the scrutiny committee will be invited to attend the various focus groups and visits that are to be undertaken as part of the policy review and will be kept informed of all review activities as and when they are arranged.

11. Recommendations

- 11.1 That the Health and Wellbeing Scrutiny Committee agrees the title of the review as 'Oral Health in Sunderland'.
- 11.2 That the Health and Wellbeing Scrutiny Committee agree the terms of reference for the policy review.
- 11.3 That Members of the Health and Wellbeing Scrutiny Committee agree the proposed timetable for the review.

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APPENDIX 1

Timeline	Review Task	Aims & Objectives	Methodology	Contributors*
July/August 2019	Setting the Scene on oral health in Sunderland.	To understand the current state of oral health in Sunderland.	Meeting	Director of Public Health Public Health Officers Sunderland CCG Local Dentists Public Health England Academics British Dental Association
September 2019	Oral Health Interventions	To gain an understanding of the oral interventions available to a local authority.	Meeting	Public Health Officers Public Health England Local Dentists Officer/Members
September 2019	Oral Health in Schools and other Local Authorities	To investigate how oral health is communicated in schools and how other local authorities tackle oral health issues.	Meeting	Public Health Officers Local Authority Reps School Nurses/Reps
October 2019	Water Fluoridation	To understand what water fluoridation is, how it works, the health benefits, legal framework and costs of a scheme.	Meeting/Site Visit	Northumbrian Water Public Health England Local Authority Solicitors Public Health Officers
October 2019	The Ethics of Fluoridated Water	To understand the arguments against fluoridating water supplies and what alternative options are available.	Meeting	Fluoridation Interest Groups Portfolio Holder(s) Local MP's
November/December 2019	The Reflection of Evidence	To discuss the evidence findings and develop the report and recommendations of the review.	Meeting	Scrutiny Officer Public Health
December 2019	Final Report	To agree the final report and recommendations.	Scrutiny Meeting	Scrutiny Officer
January 2020	Submission to Cabinet	The final report is submitted to Cabinet for consideration.	Cabinet Meeting	Chair of the Scrutiny Committee

* Please Note that Members of the Health and Wellbeing Scrutiny Committee are classed as contributors in all stages of the review process