REPORT TO THE HEALTH AND WELLBEING BOARD

9 August 2016

Oral Health Improvement Action Plan

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1. Purpose of Report

1.1 To present the oral health improvement action plan which outlines local ambitions to improve oral health and to present key facts on water fluoridation.

2. Recommendations

2.1 Health and Wellbeing Board members are asked to:-

- Support and agree the oral health improvement plan.

3. Introduction/ Background

3.1 National context

3.1.1 From April 2013, local authorities became responsible for improving the oral health of their communities and for commissioning oral health improvement services and water fluoridation schemes *(NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012 SI 3094).* Performance is monitored through the public health outcomes framework (rate of tooth decay in five-year-old children). BMBC Public Health has identified oral health as a key area for action.

3.1.2 Tooth decay 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.

3.1.3 Poor oral health can affect CYP's ability to sleep, eat, speak, play and socialise with other children. Poor oral health also causes pain, infections, and impaired nutrition and growth.

3.1.4 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.

3.1.5 Tooth decay was the most common reason for hospital admissions in children aged five to nine years old in 2012-13. Dental treatment under general anaesthesia (GA), presents a small but real risk of life-threatening complications for children.

3.1.6 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.

4. Local Context

4.1 The dental public health epidemiology programme for England oral health survey of 5year old children (2015) shows that dental health among five-year-olds in Barnsley has improved over a three-year period. Between 2012 and 2015 the severity of tooth decay in Barnsley five-year-olds dropped from 1.6 teeth per child which were decayed, missing or filled to 1.1.

4.2 Barnsley is compared among 16 statistical neighbours in the PHE oral health survey of five-year-olds. This comparison shows between 2012 and 2015 Barnsley progressed from fourth highest in terms dental decay severity among five-year-olds to sixth lowest. However, Barnsley's latest figure of 1.1 decayed, missing or filled teeth per child is still significantly higher than the England rate of 0.8. Yorkshire and Humber range from York 0.5, Wakefield to 1.6.

5. Oral Health Improvement Action Plan

5.1 The Oral Health Improvement Action Plan's vision is for all Barnsley residents to achieve a standard of oral health that enables them to feel physically, mentally and socially well and socially engaged. This will be achieved through improving overall oral health and reducing oral health inequalities with a particular focus on those children and young people who experience the worst oral health.

5.2 *Commissioning Better Oral Health* (PHE 2014) sets out guidance for LAs and provides a framework for the strength of evidence against a number of oral health improvement recommendations. As well as prioritising actions based on their level of evidence, the range of activities cross the five Ottawa Charter areas for health improvement (WHO, 1986) form the basis of the Oral Health Improvement Action plan for Barnsley.

5.3 Key objectives of the plan include:

- Build healthy public policy by working collaboratively through Barnsley's Oral Health Improvement Advisory Group.

- Creating supportive environments by establishing tooth-brushing clubs across a range of early years and educational settings.

- Reorienting health services to prevention by the increased use of fluoride varnish by dental practices in Barnsley.

- Developing personal skills through the promotion of Making Every Contact Count.

- Strengthen community actions using media campaigns to raise community awareness.

Whilst the plan focuses on optimising exposure to fluoride to prevent tooth decay through the establishment of tooth brushing clubs, it does not consider the possibility of a community water fluoridation scheme, which is recommended in *Commissioning Better Oral Health*.

6. Consultation with stakeholders

6.1 The action plan has been developed in consultation with Public Health England, Adult Joint Commissioning BMBC, Healthwatch Barnsley, Person Shaped Support, Early Start and Families BMBC, SWYPFT, BHNFT, Local Dental Committee, Rotherham Foundation Trust (Community Dental Service) BMBC Communications, NHSE.

7. Further consideration - Water fluoridation

Following the approval of the oral health action plan at the Senior Strategy Development Group, members recognised that the single most effective intervention which will impact on reducing oral health inequalities is fluoridation of the water supply.

7.1 Water fluoridation is associated with reductions in tooth decay in populations. Other sources of fluoride for dental health include toothpaste and professionally applied fluoride varnish. Water fluoridation is felt to have an effect over and above that achieved by these other methods. Advantages of water fluoridation over other fluoride delivery mechanisms are that it does not require any individual behaviour change or attendance at a dental service, there is no direct cost to the individual and it does not involve a healthcare professional to administer it. Water fluoridation involves adjusting the fluoride level in drinking water supplies to an amount that is optimal for dental health

7.2 Following implementation of the Health and Social Care Act 2012, responsibility for making proposals and undertaking public consultation on water fluoridation schemes transferred from primary care trusts to local authorities.

7.3 If public consultation supports water fluoridation, the relevant local authority or authorities will request the secretary of state for health to ask the water company to fluoride the drinking water supplies.

7.4 Evidence on effects of fluoridation

7.4.1 The effects of water fluoridation have been studied extensively over the last 50 years. Water fluoridation is found to have an effect over and above that of other sources of fluoride, particularly toothpaste.

7.4.2 A report from PHE on water fluoridation in March 2014 found that:

- Five-year-old schoolchildren were 15% less likely to have tooth decay and when deprivation and ethnicity were taken into account, they were 28% less likely to have tooth decay;

- Twelve-year-old schoolchildren were 11% less likely to have tooth decay and when deprivation and ethnicity were taken into account, they were 21% less likely to have tooth decay;

- Reductions in tooth decay levels appeared greatest in children living in the most deprived local authorities; and
- There were 45% fewer hospital admissions of children aged 1-4 years for tooth decay.

7.4.3 The safety of water fluoridation has been confirmed in several studies, which failed to find any evidence that water fluoridation has a negative effect on general health. The only proven associated effect, other than a reduction in tooth decay levels, is dental fluorosis which appears as mottling of the tooth surface. In the UK, fluorosis is mainly a cosmetic problem.

7.5 Costs of water fluoridation schemes

7.5.1 The annual operating costs of a water fluoridation scheme have been estimated to be in the region of £0.35 to £0.40 per person. For the Barnsley population of 231,220 this would mean annual operating costs of approximately £81,000 to £92,500. The capital costs of developing a scheme include the cost of installing plants and equipment and the costs of a public consultation would also need to be considered and benchmarked against an estimated cost to Barnsley of £403,800 per year, based on an average of 600 children admitted to BHNFT per year for tooth extraction at a cost of £673 per child.

7.6 Feasibility of a water fluoridation scheme in Barnsley

7.6.1 The feasibility of a water fluoridation scheme in Barnsley is dependent on water flows and water treatment works and their accessibility. A feasibility study would have to be commissioned and there would need to be clarity over who would meet the costs of this.

7.7 Steps to be taken in considering a water fluoridation scheme in Barnsley

7.7.1 The steps to be taken in considering a water fluoridation scheme are shown below (Table 1).

Table 1 Summary of key steps towards a new fluoridation scheme

Phase	Content
1	Preliminary scoping phase (non-statutory) and informal discussion with any other affected local authorities.
2	Commencement of statutory process – making an initial proposal, perhaps with multiple proposers.
3	Assessment of operability and efficiency, including agreement of secretary of state to proceed.
4	Consultation with other affected local authorities (if any), and securing their consent to proceed.
5	Public consultation and subsequent decision-making including, in the case of multiple local authorities, joint committee arrangements. In the latter instance, decisions may need to be made by a process of weighted population voting
6	Making an agreement between the secretary of state and the water company including issuing an indemnity to the company.
7	Scheme implementation.

8. Conclusion / Next Steps

8.1 Further exploration of fluoridation of Barnsley's water supply if required by the Health and Wellbeing Board

9. Financial Implications

9.1 The financial implications are identified in 7.5 Costs of water fluoridation schemes.

10. Appendices

10.1 Appendix 1 – Oral Health Action Plan

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11. Background Papers

11.1 Improving Oral Health: A community Water Fluoridation Toolkit for Local Authorities

https://www.gov.uk/government/publications/improving-oral-health-community-water-fluoridation-toolkit

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