Derby City Council

Health and Wellbeing Board
12 March 2015

ITEM 6

Report of the Director of Public Health

Oral Health for Children and Young People in Derby City

SUMMARY

1.1 Poor oral health has the potential to cause significant levels of pain in children due to them having decayed teeth and/ or infections. Children who have toothache or need treatment may need to be absent from school. There is also an impact on hospital admissions for children requiring treatment under general anaesthesia. Parents may also need to take time off work to seek care for their child. Poor oral health is also closely linked to deprivation.

1.2 The Smile 4 Life pilot (report attached in Appendix 2), commissioned by Public Health Derby City Council, has identified high levels of poor oral health in six Derby Primary Schools in nursery (3-4 years) and reception (4-5 years) children participating in the pilot. On average, the children in this pilot had nearly three times higher levels of poor oral health compared to England as a whole. Also nearly half of the children in the pilot identified as having poor oral health did not have a dentist. Poor oral health is a potential indicator for vulnerability and neglect.

1.3 The Council has a statutory responsibility in relation to oral health promotion, as set out in Part 4 of the NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012.

1.4 Some parents have reported difficulties in accessing a dentist for their child. The Derbyshire and Nottinghamshire Area Team (NHS England) have responded to this by making more funding available to local dentists so they can provide care for more patients.

1.5 Opportunities exist to raise awareness of poor oral health across the healthcare economy, and make this an integral part of future contracting and service delivery across the health and social care economy.

1.6 Additional safeguarding arrangements have been put in place as a result of the project to share information between healthcare professionals, and these have been approved by Derby Safeguarding Children's Board. Next steps (see Appendix 2) include developing improved information sharing practices between dental teams and the wider professional healthcare workforce.

RECOMMENDATION

2.1 To note the levels of dental decay identified by the pilot project and the potential unmet oral health needs for young children in Derby City.

2.2 To note the issues raised by the pilot, including the potential impact on health inequalities and school readiness, safeguarding, cultural issues, poor knowledge and behaviours around oral health and access to care.

2.3 To support the need for an integrated approach with oral health promotion being a key element in existing and future mainstream service provision and the steps being taken to address the issue using a multi-agency and an evidence-based approach.

2.4 To support the development of more sustainable information sharing practices between dental teams and other practitioners.

REASONS FOR RECOMMENDATION

3.1 The Council has a statutory responsibility for assessing the oral health needs of the local population (the dental epidemiology survey) and commissioning population based oral health improvement (NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012). Oral health of five year old children is an indicator on the Public Health Outcomes Framework.

3.2 This project has highlighted high levels of need in terms of oral health in children in the most deprived areas of the City including Arboretum, Normanton and Sinfin wards. There are also neighbouring schools that have not taken part in the pilot which are likely to have similar levels of need. Further work is required to address the issues using a multi-agency and evidence based approach to maximise impact.

SUPPORTING INFORMATION

4.1 Oral health is a fundamental part of overall health, which affects a child's ability to learn thrive and develop. Poor oral health can affect school readiness. Tooth decay, which is the most common oral disease affecting children, is largely preventable.

4.2 The rates of decay found in the Smile 4 Life pilot in Derby City found 48% of 4-5 year old children examined had some form of dental decay and needed to be seen by a dentist. This compared to 27.9% in England, and 31 % in Derby City, examined in the national survey of 5 year olds in 2011/12. The average number of decayed filled or missing teeth (dmft) was 2.87 among the children in the pilot, compared to the evidence from the 2011/12 survey, which showed a Derby average of 1.09 dmft and England average of 0.94 dmft.

4.3 Poor oral health is more prevalent in deprived areas and also some ethnic groups, and language and cultural issues present additional barriers to access for both prevention and treatment services. Significant health inequalities remain in the oral health of children in England.

4.4 Poor oral health can affect how well children and young people sleep, eat, speak, play and socialise with other children. It also has the potential to lead to pain, infections, poor diet, and impaired nutrition and growth. Children who have toothache or need treatment may need to be absent from school. Parents may also need to take time off work to seek care for their child.

4.5 Poor oral health also impacts on hospital admissions for children requiring treatment under general anaesthesia. Where children with tooth decay are not diagnosed early and treated appropriately in primary care, (e.g. through the use of fluoride varnish or fillings). If the teeth are too badly damaged to be restored, it will be necessary to extract them and they will need to be referred to hospital for specialist care. General anaesthetic is often the only way to provide care for young children undergoing multiple tooth extractions to reduce pain and anxiety as they find it difficult to co-operate with treatment. Approximately 46,500 children and young people under 19 were admitted to hospital for treatment of dental caries in 2013–14 in England. These numbers were highest in the five- to nine-year-old age group. It is also costly for the NHS, with £30 million spent on hospital based tooth extractions for children aged 18 years and under in 2012–13.

4.6 The “Local authorities improving oral health: Commissioning better oral health for children and young people” toolkit published in June 2014 by Public Health England (PHE) highlights the need to build oral health into commissioning frameworks to:

- adopt an integrated approach with partners for oral health improvement
    - Locally, we have discussed oral health in Derby City’s Best Start Strategic Group which has attendance from key stakeholders interested in the health and wellbeing of children aged 0-5 years. Partners are committed to incorporating oral health awareness into their work, and supporting the work of our Oral Health Promotion Service.

- use both targeted and universal approaches
    - We have identified further schools where oral health needs are likely to be high, and will be focusing the attention of our oral health promotion service here next. The success of any intervention will require the full support of schools to ensure the service have appropriate access to children.
    - Oral health training will also be provided to key professional groups (health, social care and education) working with children and their families to enable them to recognise poor oral health and provide further support.

- commission to meet local needs
    - Feedback from some parents indicates that they have had problems accessing a dentist for their children. NHS England, who commission dental services, have responded to this by making extra funding available to local dental practices so they are able to take on more patients. Further work is needed with the support of the Local Dental Committee to ensure that dental practices are giving parents consistent messages around the age at which their children can be registered with a dentist.

- consider the evidence base to what works
    - locally, we have used the toolkit published by PHE to ensure our specification for the Oral Health Promotion Service is evidence based, including for example, the roll out of supervised tooth brushing programmes.

4.7 The Local Government Association has also published ‘Tackling poor oral health in children - Local government’s public health role’ (2014), which reinforces the need for local authorities to promote good oral health.

OTHER OPTIONS CONSIDERED

5.1 The Best Start Strategic group will consider all the options available as part of the multi-agency evidence based approach to improving oral health for children and young people, to get the best outcomes within existing resources and services. This will feed into the commissioning of children's services where appropriate.

This report has been approved by the following officers:

Legal officer	Olu Idowu, Head of Legal Services
Financial officer	
Human Resources officer	
Estates/Property officer	N/A
Service Director(s)	Derek Ward, Director of Public Health
Other(s)	Hamira Sultan, Consultant in Public Health Frank McGhee, Director of Commissioning, Children and Young People Directorate Ann Webster, Equalities and Diversity Lead

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Background papers:	
List of appendices:	Appendix 1 – Implications Appendix 2 – Smile 4 Life Pilot report

Appendix 1

IMPLICATIONS

Financial and Value for Money

1.1 The recommended review of oral health provision with a co-ordinated multi-agency approach and evidence based services will maximise the outcomes within existing services across Derby, including LA and NHS.

Legal

2.1 Part 4 of the NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012 imposes statutory obligations on the Council to promote oral health standards within its administrative area.

Personnel

3.1 None arising from this report.

IT

4.1 No impact expected on Derby City Council ICT systems

Equalities Impact

5.1 There are potentially significant health inequalities in oral health needs in children and young people linked to low income, ethnic origin and language that require action. In addition, concerns have been raised about wider issues regarding accessibility of dental practices for disabled people, whether they are disabled children and young people or disabled parents that require action. Further information is being sought on the extent of this issue in Derby City from local commissioners of dental services.

Health and Safety

6.1 Oral health is a fundamental part of overall health, which affects a child's ability to learn thrive and develop.

Environmental Sustainability

7.1 None arising from this report.

Property and Asset Management

8.1 None arising from this report

Risk Management

9.1 None arising from this report

Corporate objectives and priorities for change

10.1 This report is in line with the Health and Wellbeing board priorities regarding early intervention and the Derby Children and Young People's Plan (2013-2015) which has a strategic objective to improve health and wellbeing in children and young people.

Appendix 2

Smile 4 Life Pilot

Summary

The purpose of this paper is to raise awareness of a local oral health pilot programme, Smile 4 Life, taking place in six Derby primary schools in areas of deprivation, and the serious health issues it has raised. Questions have been raised about wider safeguarding procedures and how poor oral health issues for individual children are followed up.

Background

Tooth decay is largely preventable and the most prevalent disease of childhood. Poor oral health may result in pain and infection leading to problems with nutrition, growth, school attendance and speech. The results of the 2011/12 epidemiological survey of 5 year old children demonstrated that in Derby children attending schools in the more deprived areas of the City had higher levels of dental disease (decay). Oral health of five year old children is also an indicator on the Public Health Outcomes Framework.

Establishing early good oral health habits should save public resources in the long-term by minimising treatment need, and preventing children from suffering needless pain. Therefore an 18 month pilot was proposed to deliver a school based oral health programme involving fluoride varnish, supervised brushing and oral health & diet education in schools in the 1st & 2nd most deprived quintiles of Derby City.

The Smile 4 Life pilot

The Smile 4 Life pilot was commissioned by Derby City Council Public Health Team in March 2013 and runs until April 2015. It is provided by Derbyshire Community Health Services (DCHS) Oral Health Promotion Team. The population coverage in the service specification includes at least 300 children in 6 schools within the most deprived quintiles of Derby City;

- Harrington Nursery School
- Arboretum Primary School

- St James Infant School
- Pear Tree Infant School (reception)
- Firs Estate Primary School
- Cottons Farm Primary School (previously Sinfin Primary)

Currently, the programme is designed to reach up to 500 children to accommodate the fluctuations in school populations and flows in and out of the programme. The programme started in schools in September 2013 in nursery (age 3-4 years) & reception (age 4-5 years) and aims to move with the children as they move into their next academic year. The pilot programme specification includes the delivery of the following activity;

- Pre-programme and post-programme dental examination for decayed, missing and filled teeth (dmft) and oral cleanliness, carried out by dentists.
- Two applications of fluoride varnish to teeth carried out by a member of the dental team within 18 months.
- Support for implementation of tooth-brushing programmes in schools.
- Development of a curriculum pack and educational resources to promote oral health messages.
- Dissemination of take-home tooth brushing kits for children (up to four during the course of the programme).
- Pre-programme and post-programme parent questionnaires on children's oral health promoting behaviours such as visiting the dentist, tooth-brushing and diet, and parent's social norms, perceived behavioural control and attitudes towards these behaviours.

<u>The Smile 4 Life pilot findings so far</u>

Baseline examination, 2013

A total of 338 children were examined with an average age of 4.26 years. Children at this age normally have 20 primary teeth. The average number of decayed, missing or filled teeth found was 2.87 teeth, which is higher than the England average of 0.94 and Derby City average of 1.09 teeth (5 year old survey, 2011/12).

National data shows that 27.9% of children will have some level of dental decay at age 5 years, whereas the baseline examinations in the pilot is showed that 48% (161 children) had dental decay and needed to be seen by a dentist, of these children 75 (47%) their parents reported that they did not have a dentist. Out of all the children examined 69% reported that they did not have a dentist. See Figure 1 below for a tabular version of these results. Schools have not been identified as some numbers in the columns are less than 5, meaning there is potential for individual children to be identified.

Figure 1 – Baseline examinations in pilot schools, Autumn 2013

Number surveyed	Number refused survey	Number need to be seen by a dentist	Number need to be seen and have a dentist	Number need to be seen and have no dentist
338	21	161 (48%)	86 (53%)	75 (47%)

Fluoride varnishing visit to schools

Fluoride varnishing reduces the risk of developing carious (decayed) teeth. The initial fluoride varnish visits were carried out in February, March and April 2014. A total of 381 children had fluoride varnish applied to their teeth. It was observed that 75 children (20%) who had varnish applied had evidence of dental decay and needed to be seen by a dentist, of those 75 children 39 (52%) had previously reported not having a dentist. See Figure 2 below for a tabular version of these results. Schools have not been identified as some numbers in the columns are less than 5, meaning there is potential for children to be identified.

Figure 2: Data from fluoride varnish visits during February, March and April 2014

Number applied with fluoride varnish	Number Refused fluoride varnish	Number need to be seen by a dentist	Number need to be seen and have a dentist	Number need to be seen and have no dentist
381	15	75 (20%)	36 (48%)	39 (52%)

The average number of carious teeth amongst the cohort of 75 children was 7 teeth; 18 of these children had ten or more carious teeth, which represent at least half of their normal dentition.

Parents views on oral health

175 parents returned a baseline questionnaire, which asked about their use of dental services. When asked for their reasons for visiting or not visiting a dentist in the last 6 months:

- 46% had reported taking their child to see a dentist in the last 6 months
- 19% said there was no need
- 1% said there was a language barrier
- 10% said they were not registered with one

1 in 10 parents also reported that taking their child to a dentist was not a priority for them.

Further comments provided by parents when asked to explain why their child had not been to a dentist in 6 months are provided in the box below:

- *"because I cannot find one, everywhere I go they said is full booked. I am trying to look in other area"*
- *"can't get appointment"*
- *"every dentist I've try getting her in they have no places - I don't know any more"*
- *"I was told that she couldn't be registered until she was 4"*
- *"on waiting list"*
- *"we took before - they said bring him when he is three"*

A recent survey of dental practices demonstrated that of the 57 NHS dental practices in the Southern Derbyshire Clinical Commissioning Group area, 30 practices were accepting new patients. Out of these 30 practices, 12 were accepting only children and/or exempt adults, and 18 were accepting all categories of patients.

Key issues identified through the pilot and actions taken to date:

Poor knowledge and behaviours relating to oral health practice

- The pilot has identified high numbers of children where children are not brushing regularly and are delaying when they brushing

Actions:

- Presentations at the Best Start Strategic Group have raised awareness of the pilot and its findings and discussed actions required by all partners.
- Potential links with the Flying Start programme in the city have been made which focuses on oral health promotion. This programme offers free nursery places for 15 hours per week to 2 year old children in Derby City who meet certain requirements.
- The need to ensure oral health is integral to current and future contracts and specifications.
- The specification for oral health promotion within Derby City and Derbyshire has been revisited and redeveloped to emphasise working more closely with frontline health care professionals, as well as more focus on supervised tooth brushing programmes in the most deprived areas.
- Integration of oral health promotion into the proposed integration of 0-19 years children's public health services specifications.

Barriers to seeking care

- Anecdotal reports from parents, school health teams and school staff in the pilot schools suggests that that there are difficulties in accessing care from local dental practices. Some practices are cited as either not taking on new patients or having long waiting lists. There also appear to be conflicting messages regarding the age at which some dentists will see a child.
- Language barriers add an additional layer of complexity. There have also been anecdotal reports of instances where families have been turned away as they could not speak English.

Action:

- Where issues with particular practices have been raised with the NHS England Area Team, concerns have been addressed directly with the practice. In addition, funding has recently been made available to commission additional recurrent capacity in Derby City practices with a focus on providing additional access in the more deprived areas. Thirty six practices were eligible to apply for this funding, of which eight practices expressed an interest and have been awarded additional recurrent activity that equates to more than three additional dentists.

Safeguarding

- The programme has highlighted the barriers and challenges that exist in sharing information between GPs and other practitioners, including dental practices, who do not use an IT system called SystmOne (used by Health Visitors in Derby City).

Actions:

- An information sharing process has been agreed with the local Health Visiting Operational Lead. All letters to parents recommending children should see a dentist have been copied to Health Visiting teams IT systems and onto Child Health Records. This can then be viewed by GPs who use SystmOne.
- For those children with GPs who do not use SystmOne, the Commissioners have recommended that the Health Visiting team work with the Oral Health Promotion Service to forward letters to the relevant GP.
- These actions have been approved by the Derby Safeguarding Children's Board.
- There is also recognition that information sharing between dental teams in general and health teams such as Health Visitors and School Nurses is limited due to IT systems. A way forward, to address how dental staff share information more widely in a sustainable manner, needs to be addressed.

- A working group will be formed to address this issue. The group will identify how information is currently shared between health professionals, and then develop protocol(s) on how information sharing can become more systematic.
- The group will have Public Health (Local Authority and Public Health England), dental (Local Professional Network and Local Dental Committee), oral health promotion and safeguarding representation.

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