

Section A:	
Name:	Graham Ball
Job title:	Childsmile Programme NHS Director and Consultant in Dental Public Health
Address:	Dental Public Health Office Ward 8 Cameron Hospital Cameron Bridge Leven Fife KY8 5RG
Guidance title:	Oral health: local authority oral health improvement strategies
Committee:	PHAC B
Subject of expert testimony:	Overview of the Childsmile programme
Evidence gaps or uncertainties:	
The practicalities of delivering the Childsmile programme in Scotland, a multi-component caries prevention programme, including issues of cross-sectorial working.	
Section B:	
Summary testimony:	
<p>Childsmile is the Scottish Government's oral health improvement programme for children.</p> <p>The programme commenced in 2006 against a background of the poor oral health and oral health inequalities observed in children in Scotland. This had been evidenced since the current national dental epidemiological programme commenced in 1988 – the programme collects data from 5 and 11 year old children on alternate yearsⁱⁱⁱ. The significant inequalities in oral health are also observed in 3 year old children.</p> <p><i>An action plan for improving oral health and modernising NHS dental services in Scotland</i> was published in 2005ⁱⁱⁱ and provided the basis for the development of the Childsmile programme (although no detailed blueprint was included at this point). The action plan included new investment for improving oral health and successive</p>	

administrations have continued to provide this funding since 2005.

The process of establishing and developing the Childsmile programme have been previously described^{iv}, as have the arrangements for monitoring and delivery^v.

The programme aims are to:

- Improve the oral health of children in Scotland; and
- Reduce inequalities in dental health and access to services.

Childsmile includes several distinct but integrated components – some universal and some targeted. These are:

- A core programme – including universal daily toothbrushing in all nurseries and targeted toothbrushing in primary schools;
- A targeted nursery and school fluoride varnish programme; and
- A universal dental practice programme.

The core nursery toothbrushing programme pre-dates 2005 as several Health Boards had developed their own toothbrushing programmes by the time that the action plan was published. However, from 2005 onwards, Childsmile has ensured a more systematic approach such that all nurseries (local authority and private) and all 5 and 6 year old primary school children in the most deprived population quintile are now offered daily supervised toothbrushing with a fluoride toothpaste. In addition, oral health packs (containing an age appropriate toothbrush, a tube of fluoride toothpaste and a promotional leaflet) are given to children at various key stages in their pre-school lives. This includes a free feeding cup given to every child during the first year of life. The toothbrushing programmes in nursery and school are supported by national standards which are used by a number of stakeholders including the Care Inspectorate – the independent scrutiny and improvement body for care services in Scotland. This joint approach has been particularly helpful. A recent study has shown that an improvement in the dental health of Scottish 5 year olds was associated with the uptake of nursery toothbrushing^{vi}.

The targeted fluoride varnish programme delivers twice yearly fluoride varnish applications to children in nurseries and primary schools in the most deprived quintile of the population. This is done by mobile teams of extended duty dental nurses and dental health support workers who have successfully completed a 5/6 day training course and clinical assessment delivered through NHS Education for Scotland and local Health Boards. In some Boards with higher levels of multiple deprivation, a larger proportion of children are offered fluoride varnish – these decisions are taken at local Health Board level. Entry to the nursery and school fluoride varnish programme is on the basis of a single initial consent with rolling twice yearly updates to the medical questions. There is a detailed application protocol which underpins the intervention and an electronic database which is commissioned from the University of Dundee Health Informatics Centre.

The Practice programme is the largest element of Childsmile. Its principal objectives are to:

- Raise parental awareness of good oral health behaviours and support

parents/carers to put them into practice;

- Increase the provision of oral health promotion and clinical prevention within dental primary care.

Every newborn child in Scotland is linked to Childsmile via their Health Visitor. At the universal 6-8 week child health assessment the Health Visitor must complete a mandatory referral box on the assessment form to indicate whether a formal referral for additional Dental Health Support Worker (DHSW) support is required. DHSWs essentially support families to register and regularly attend a dental practice and they may provide enhanced home/community visits and link families to community health improvement activity (e.g. healthy eating). Attendance at a dental practice usually commences by the time that the child is 6 months old. Evidence based advice and support is provided to the parent/carer, with key messages on toothbrushing and healthy eating tailored to the age and needs of the child/family. Fluoride varnish applications commence from the age of two years, together with oral health assessments and on-going care through childhood. The elements of Childsmile Practice were incorporated into the dental payments system from 2011 onwards and it is now mainstreamed into primary care dental practice.

The Childsmile programme has undergone significant further development since its inception in 2005 and this process continues. Current work includes incorporation of child level data on dental registration and dental attendance in the preceding year for public health staff undertaking the 27-30 month child health assessment. This will enable health care professionals to provide targeted support to those families who may require it.

There is a significant programme of evaluation for Childsmile. The overall aims are as follows:

- Can the programme improve health and oral health?
- Can the programme reduce health-related inequalities?
- If so..which components of the intervention are responsible for the biggest sustained improvements?
- Is Childsmile a cost-effective use of resources?

The characteristics of the evaluation and the challenges presented pointed to the utility of using a Theory Based Evaluation approach. The Childsmile website^{vii} contains a number of documents which set out the detail of the evaluation and record the current list of monitoring and evaluation reports and publications.

References:

ⁱ Report of the 2013 Detailed National Dental Inspection Programme of P7 children and the Basic Inspection of P1 and P7 children. Information Services Division, NHS National Services Scotland

ⁱⁱ Report of the 2012 Detailed National Dental Inspection Programme of P11 children and the Basic Inspection of P1 and P7 children. Information Services Division, NHS National Services Scotland

ⁱⁱⁱ An Action Plan for Improving Oral Health and Modernising NHS Dental Services in Scotland. Scottish Executive, Edinburgh 2005 ISBN 0-7559-4577-8

^{iv} Macpherson LM et al Childsmile – the national child oral health improvement programme in Scotland. Part 1: establishment and development. *Br Dent J* 2010; **209**: 73-78

^v Turner S et al Childsmile – the national child oral health improvement programme in Scotland. Part 2: monitoring and delivery. *Br Dent J* 2010; **209**: 79-83

^{vi} Macpherson LM et al. National supervised program and dental decay in Scotland. *J Dent Res.* 2013. **92**(2): p109-13

^{vii} <http://www.child-smile.org.uk/professionals/research-and-evaluation.aspx>