Evidence from Public Health Wales

GIG CYMRU NHS WALES | Iechyd Cyhoeddus Cymru Public Health Wales

Response to the Children and Young People Committee's Inquiry into Children's Oral Health in Wales

Author: Dr R Hugh Bennett, Consultant in Dental Public Health
Public Health Wales Dental Public Health Team

Date: 7 September 2011	**Version:** Final

TABLE OF CONTENTS

Introduction 3

1 The take-up: 3

2 Whether the investment has delivered improved health outcomes for the most disadvantaged children and young people; 4

3 Whether the programme is operating consistently across Wales in all areas of need; 5

4 How effective the expansion of the programme has been, particularly in relation to 0-3 year olds; 5

5 Whether the programme addresses the needs of all groups of children and young people; 6

6 The extent to which the Designed to Smile programme has been integrated into wider local and national initiatives such as the Welsh Network of Healthy School Schemes and Flying Start; 6

7 The current and potential implications for paediatric dentistry, including reviewing the strengthened role of the Community Dental Service in children's public health. 8

8 Conclusion 9

9 ANNEX 1 10

Introduction

The most common oral disease of childhood is dental caries, often called tooth decay. It is found in deprived and affluent communities but affects more teeth per child in our deprived communities. Therefore, while half of 5 year old children across Wales have no decayed teeth, the other half carry a high burden of the disease, and have on average 4 teeth that are decayed or have been filled or extracted. This average figure itself hides further inequalities between communities because some children carry an even greater burden.

For many years reported levels of tooth decay in Wales were higher than in England and lower than in Scotland. However, in 2005/6 the average number of decayed missing and filled teeth in 5 year olds (dmft) reported in Wales was higher than in Scotland.

Since 2006 Scotland has witnessed further improvement in 5-year old child dental health. In Wales, by contrast, it is believed the trend is static, although changed consent arrangements after 2006 have driven a fault line through the trend data in Wales. Data will be collected in 2011/2012 that we will be able to compare with 2007/2008 data and re-establish a trend line.

One effect of the high prevalence of tooth decay in our young children is the large number of them who receive a general anaesthetic (GA) for tooth extraction (in the order of 8000/9000 annually). This is unacceptable for what is an almost totally preventable disease. It is an avoidable risk to child health and wellbeing that would not be tolerated in other diseases. Designed to Smile (D2S) is capable of making a major contribution in turning this around.

Responses to the Committee's Questions

The questions asked by the Children and Young Peoples Committee are answered in turn.

1 The take-up:

a) **of the supervised tooth brushing scheme for 3-5 year olds,**
b) **the promotional programme for 6-11 year olds;**

The Public Health Wales dental team works closely with the Welsh Oral Health Information Unit. This unit is responsible for collecting and collating data from the local D2S programmes, and for reporting local and national data to the Welsh Government. I understand that the Welsh Government will be making data available to the Committee.

2 Whether the investment has delivered improved health outcomes for the most disadvantaged children and young people;

It is too soon in the D2S programme to assess how effective it has been in reducing the prevalence of dental decay in our children. There is a 5-year old dental epidemiology survey being carried out this year, but that will be too early to conclusively show the benefits. It will be the 2014/15 survey that will provide the first robust information on whether dental decay in our 5-year old child population has been significantly reduced.

The Welsh Government set Child Poverty oral health targets, in summary - *that by 2020 decay level in the most deprived children will fall to the level found in the middle fifth.* In the absence of water fluoridation such targets can only be achieved through sustainable programmes such as D2S.

Scotland has put great effort into preventing decay in children, notably through its Childsmile programme, (a programme not dissimilar to D2S). Scotland has achieved its 2010 dental health targets set in 2005, confirming that a sustained national oral health improvement programme can deliver significant change in a nation's oral health.

<u>Accountability and Monitoring</u>

There are 3 main reporting processes:

- Regular Community Dental Service (CDS) reporting to the Welsh Oral Health Information Unit that in turn reports to the Welsh Government.
- Internal Local Health Board (LHB) accountability e.g. D2S Steering Group to an Executive Director, (in LHBs where Steering Groups exist).
- The CEO of each LHB has the specific responsibility of ensuring that the LHB reports to the Welsh Government on the progress of D2S, including details of programme expenditure, by 30 July every year. Reporting channelled via the Welsh Oral Health Information Unit.

<u>Evaluation</u> will be through:

- Qualitative evaluations of local and national programmes conducted by the Dental Public Health Department Cardiff Dental School reporting to the Welsh Government. These evaluation reports will tell us if the 'process outcomes' have been achieved, and which elements of the programme management and delivery may need improving.

- National child dental health surveys. Ultimately, it is the results of these surveys will show whether child dental health in Wales significantly improves.

3 Whether the programme is operating consistently across Wales in all areas of need;

D2S has already become a well "branded" national programme, but it also has to be flexible to suit local circumstances. The Chief Dental Officer for Wales organises a National D2S Forum where all D2S teams, Public Health Wales and the Welsh Government meet to report and share best practice. This provides the platform for standardisation of protocols and guidance at national level, while still allowing for local flexibility.

In addition, the Consultant led Public Health Wales Dental Public Health team support local D2S planning and delivery (although the type and amount of input varies between LHB areas), this also encourages consistency across Wales.

The CDS in North Wales has provided leadership in the development of resource materials in the Welsh language, sharing these with the other D2S teams. The North Wales and the Cardiff and Vale CDS services, the two original pilot services, worked together in the development of joint procurement processed and the D2S website.

4 How effective the expansion of the programme has been, particularly in relation to 0-3 year olds;

Prior to the launch of D2S, oral health promotion for 0-3 year olds was patchy and uncoordinated at national and local level. In some areas of Wales a variety of service teams e.g. Health Visitors, Flying Start and CDS might have delivered some oral health promotion to this age group with varying degrees of co-ordination. Parents, children and carers often received inconsistent oral health and diet/nutritional advice. Many non-dental health professionals working with children did not have links with oral health promotion teams in the CDS and vice versa. D2S is working to bring all partners into a more integrated approach so that consistent messages are sent out.

In terms of reducing tooth decay levels in 0-3 year olds the key component in D2S is the use of fluoride toothpaste by children in the most deprived areas. Oral health promotion and prevention should start as soon as the baby is born, indeed oral health promotion can begin with the parent/s to be. These are the underpinning principles to which all D2S teams across Wales work. However, local factors have dictated exactly

how this 0-3 year old element of D2S has been implemented in different areas.

In Wales we do not carry out dental surveys of three year olds, but we do survey five year olds. Hence, the effect of D2S programmes for 0-3 and 3-5 yr olds will be shown in reports of tooth decay levels in five year olds. However, like many other public health measures, effectiveness has to measured when the programme has been in place for sufficient time to have an effect on behaviour.

5 Whether the programme addresses the needs of all groups of children and young people;

D2S is a targeted programme, targeting those children with the highest dental need from the most deprived areas. The evidence shows that the children from these areas suffer the highest prevalence of dental decay, and carry the greatest burden of the disease.

However, it has always been a strength of the programme that it can, despite the need to be targeted on the basis of the prevalence of tooth decay and deprivation levels, embrace groups of children defined in other ways e.g. the inclusion of Special Education Units in some local programmes.

Representatives from the Public Health Wales dental team are working with the 1000 Lives Plus team on dental initiatives. Work on the Fundamentals of Care audit, to improve oral assessment of patients in hospital, will include children. There may be scope to link this work with D2S for children in long stay hospital, and this issue is to be raised with the group leading on Fundamentals of Care work.

6 The extent to which the Designed to Smile programme has been integrated into wider local and national initiatives such as the Welsh Network of Healthy School Schemes and Flying Start;

The Inquiry is asked to recognise the size of the challenge that LHBs and their CDS teams were set during the period 2008/10 in launching and extending the programme against extremely tight deadlines.

However, all LHB areas the D2S teams have now moved beyond the initial implementation into development and sustaining phases, and the opportunities to engage with other local and national initiatives become increasingly feasible. That said there are already good examples of integration.

In Mid and West Wales the Public Health Wales dental team took a leadership role supporting the LHBs in setting up D2S Implementation and Steering Groups in Powys, Abertawe Bro Morgannwg (ABMU) and Hywel Dda Health Boards. These groups have inclusive memberships e.g. including health visitors, healthy school coordinators, education and others. Indeed, the ABMU and Hywel Dda D2S Steering Groups are chaired by Specialist Health Promotion Officers from Public Health Wales, and therefore by default bring in the wider health promotional overview.

These Steering Groups have built into their costed programmes the allocation of funding for support of health promotion initiatives such as Healthy Schools. In Hywel Dda there are links between the local D2S team, the area`s Healthy Pre-School Coordinator and organisations such as the Network Childminders Association.

Aneurin Bevan Health Board has recently formed an 'Oral Health Promotion Steering Group' which is chaired by the Director of Public Health. This group provides support and guidance to the CDS in delivering oral health promotion programmes, including D2S and has representation from a wide range of stakeholders. An oral health promotion strategy/ action plan has been drawn up which emphasising the importance of working in partnerships. The vision is set to deliver oral health promotion as a part of Our Healthy Future and integrate oral health into general health and care plans in that Health Board`s area.

The Mid and West Wales approach of forming D2S Steering Groups has been highlighted as best practice through the D2S National Forum. The Chief Dental Officer has strongly encouraged other Health Board areas, where this level of integration has not developed, to work towards a similar approach. This will ensure that D2S is not delivered in isolation of other health promotion initiatives.

The Welsh Government is developing a national scheme, the All Wales Healthy & Sustainable Pre School Scheme, and a Consultant in Dental Public form Public Health Wales "represented" D2S on the working group. This Scheme presents another opportunity to strengthen D2S linkages across Wales.

Into the future the programme's added strength must be its developing emphasis on strong partnership working with others.

Public Health Wales have adopted a pathfinder approach to the development of a "Public Health Institute". 'To give every child in Wales a healthy start' was identified as a priority topic. The Public Health Wales Dental Team will be working to link the oral health of children and D2S into this work.

7 The current and potential implications for paediatric dentistry, including reviewing the strengthened role of the Community Dental Service in children's public health.

Historically, reviews of the CDS have highlighted the variable level of CDS provision across Wales, and a lack of investment in CDS infrastructure and workforce. In 2008 the Welsh Government made a commitment to develop a broadly based role for the CDS in Wales, as set out in *Ministerial Letter EH/ML/014/08: Dental Services for Vulnerable People and the Role of the Community Dental Service*. This broadly defined role will provide the flexibility the service requires to serve a country like Wales with contrasting urban and rural areas. Therefore, the CDS in Wales plays an important role in providing dental services to vulnerable children, and this will be a strength of the service as it develops into the future.

As a demonstration of this Welsh Government commitment, the CDS was given prime responsibility for delivering D2S. This has resulted in a considerable investment in terms of general resources, staff and equipment into the CDS, and most importantly has had a positive effect on morale of the service.

D2S funding has meant that the CDS across Wales has been able to recruit and develop staff so that they can deliver the programme without affecting clinical services to vulnerable groups. D2S has allowed the skilling-up of some staff and given them an opportunity to work with wider partners in oral health e.g. dental nurses for the first time will be trained to apply fluoride varnish to children`s teeth.

The CDS has also recruited support staff from their local communities, who are not dentally qualified, but are trained to deliver certain elements of the programme. The CDS has also invested in mobile dental units and other equipment which are not only useful in delivering of D2S, but also in delivering wider clinical services in D2S "downtime" i.e. school holidays.

The level of dental disease of children in Wales is high, and a high proportion of the dental decay in children remains untreated. Currently, there is no consensus among the dental professionals and academics with regard to best approach to manage dental decay in deciduous teeth (baby teeth).

A multi-centre clinical trial has started recently to find out the best method of managing dental decay in deciduous teeth-
http://www.hta.ac.uk/project/1783.asp

The majority of the dental disease in co-operative children can be managed and treated by general dental practitioners. However, some

children require additional management and treatment. Depending upon a child`s need this can be provided by CDS teams experienced in caring for children, by specialists/consultants in paediatric dentistry or by a general dentist with a Special interest in Paediatric Dentistry (DwSI). However, there are relatively few specialists in paediatric dentistry in any of the dental services in Wales. Most of the specialists in paediatric dentistry are located at the Cardiff Dental School/Hospital.

In the long term D2S has the potential of reducing the prevalence of dental decay in children, and as a consequence referrals to Cardiff Dental Hospital, other Hospitals, and other centres providing dental general anaesthesia should decrease. However, there will remain a need to plan and deliver comprehensive child dental services, including provision of treatment under sedation or general anaesthesia.

The Public Health Wales Consultant in Dental Public Health covering Mid and West Wales recently carried out a review of Specialist Paediatric Dental Services in the ABMU LHB area, the principles that underpin the recommendations have some application for other areas of Wales, especially those areas not covered by the Cardiff Dental Hospital. Extracts of the review most relevant to the Inquiry are set out in annex 1.

The Public Health Wales dental team is supporting the Welsh Government in a developing General Dental Services (GDS) Contract Pilots. One of the pilots developed is focused upon a preventive approach to the care of children, and includes a requirement for the pilot practices to link with their local D2S teams.

8 **Conclusion**

D2S, together with Welsh Government's Dental Contract Pilots attempt to place prevention in the heart of NHS dentistry in Wales. A good start has been made a good start, but there is a long way to go.

We can deliver improved oral health for children in Wales, as the Scottish Government has achieved for children in Scotland, but we need more time to enable this.

In the absence of water fluoridation we urge the Committee to support a sustainable D2S programme. Indeed, the model being developed has the potential to embrace other vulnerable groups given appropriate resources.

ANNEX 1

Extracts from a Review of Specialist Paediatric Dental Services ABMU Health Board	
Author: Hugh Bennett, Consultant in Dental Public Health	
Original report dated 11.05.11 Distribution: Director of Planning ABMU Health Board	

The Public Health Wales Consultant in Dental Public Health covering Mid and West Wales carried out a review of Specialist Paediatric Dental Services in the ABMU LHB area, *the principles that underpin the recommendations* in that review have some application for other areas of Wales, especially those areas not covered by the Cardiff Dental Hospital. Extracts of the review most relevant to the Inquiry are set out below.

Extracted Paragraphs

6.1 Besides directly providing treatment, Specialist Paediatric

Dentists can:

- provide a consultation service for dentists in primary care
- work jointly with other dental Specialties and Maxillofacial colleagues
- offer professional leadership, promoting children's oral health and enabling the development of clinical care networks for the effective and efficient provision of care for children

- work with health care managers to develop and deliver efficient cost effective strategies for the improvement of the oral health in the child population
- offer advice and support to health professionals in other disciplines, with the aim of contributing to effective holistic care of children.

Research has demonstrated that children whose dental treatment is planned by Paediatric Dentists *are far less likely to require a repeat general anaesthetic for further dental treatment.*

Managed clinical networks and Clinical care pathways

6.2 If, over time, Specialists in Paediatric Dentistry are injected into provision, and backed up by non-specialist CDS and GDS practitioners, a managed clinical network (MCN) will be required to assist delivery of high quality care to a population across a large geographical area. The All Wales National Standards for Children and Young Peoples' Specialised Healthcare Services (see page 3) views the development of MCNs as a way of ensuring that all Welsh children and young people receive equitable and high quality specialised services wherever they live in Wales.

6.6. There should be a fourth underpinning recognised i.e. the local programme of Designed to Smile, the national child oral health improvement initiative. This is rolling out across the whole area primarily targeted at the most deprived areas. Over the next 2-4 years, this will begin to reduce the prevalence of child dental decay. The knock on effect should be a reduction in the need for child dental GA services.

7.2 / 7.3 There is a need for additional Specialist Paediatric Dental Services. The whole region is losing out through the lack of such services, and the cost is both the compromise on children's health ....Based on the information provided there is a need for additional hospital based Consultant Paediatric dental services. This additional Consultant time is not required for increasing the current work linked to the core work of the Maxillofacial Unit, but rather for "stand alone" paediatric dental cases, primarily diagnostic and treatment planning, that may be referred by local dentists..................

7.5 There is an opportunity for additional Specialist Paediatric Dental Services based outside of the acute hospital environment e.g. placing some Specialist Paediatric Dental provision into the Port Talbot Resource Centre would further enrich the Specialty/service/training mix at that location.

7.6 There needs to be greater emphasis on clinical leadership in Paediatric Dentistry. Development of clinical pathways, referrals protocols and a

Managed Clinical Network for Paediatric Dental Services will be required as Specialist Paediatric Dental capacity across the services is increased. The MCN would have a role to play in training and possibly, in the longer-term, accreditation of DwSI's in Paediatric Dentistry.

Extracts from the Recommendations

Recommendation 1 – It is recommended that an additional 0.6 WTE Consultant in Paediatric Dentistry input is required in ABMU. This additional Consultant time is not required for work linked closely with Celft Lip and Palate, but for "stand alone" paediatric dental cases referred by dentists from Swansea, NPT and Hywel Dda. These cases will primarily require diagnosis and treatment planning, but the appointee will need appropriate nursing and secretarial support and access to theatre time and beds.

Nb Bridgend referrals are currently directed to the Cardiff Dental Hospital.

Recommendation 3 – It is recommended that the Specialist Paediatric Dentistry capacity with primary /community services is developed.

Recommendation 3a – It is recommended that priority is given to the recruitment of a Specialist in Paediatric Dentistry into the ABMU CDS.

This would complement both the development of Special Care Dentistry in the CDS and the work of the Consultant/s in Paediatric Dentistry based at Morriston. It would also fit well with a recommendation in the earlier review of the CDS that –

- *A senior clinician should take a lead role for <u>Child Services within the CDS</u>; the CDS should retain a strong input into providing services to schoolchildren from the most deprived communities. However, the service must review its acceptance and discharge policies for children, and this should be done in liaison with LHB primary care administrators and the Local Dental Committee through the LHB Dental Advisory structures.*

Nb - It would be logical for Hywel Dda LHB to also prioritise the recruitment of a Specialist in Paediatric Dentistry into its CDS to build the capacity across the whole region creating a clinical network. This Specialist could also lead reform of the current Paediatric dental services provided by the Hywel Dda CDS, something that is urgently required.

Recommendation 4 - If the other recommendations of this review are accepted it is recommended that a MCN for Paediatric Dentistry is developed across ABMU and Hywel Dda.

A Paediatric Dentistry MCN would need to include Hospital Consultants in Paediatric Dentistry, the CDS, LDC and any other relevant stakeholders........Initially this would need to be headed up by a Consultant in Paediatric Dentistry, and be made up of a mix of Specialists and non-specialists. It would be able to take forward development of referral criteria and clinical pathways, training and also provide advice to the Health Board. It would need to interface closely with the developing services in Special Care Dentistry.