



**Designed to Smile**

**Evaluation of a national child oral health  
improvement programme: Part III**

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## Executive Summary

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This report details the final stage evaluation of the Designed to Smile national child oral health improvement programme and relates to the perception of parents involved in the programme. This follows the previous reports on the impact of the programme on Community Dental Service Staff (December 2009) and on schools (December 2010).

A series of face-to-face interviews were conducted with fifteen parents of children involved in the Designed to Smile toothbrushing scheme through their school. Parents were from areas in the Super Pilot regions in South-East and North Wales.

The overall impression of the scheme that arose from the fifteen interviews was positive. Parents supported the scheme and most felt that it had been a positive experience for their child. Many reported that their child had shown an improved attitude towards toothbrushing, and had improved their brushing technique considerably.

As with the implementation of any scheme of this size, there were inevitably a number of opportunities for improvement communicated by the interviewees.

The findings of the evaluation have been categorised into seven main themes.

**Communication of the scheme to parents and dentists:** All parents had received consent forms before taking part in the scheme and were happy with the information they had received. It was felt that parent meetings had been difficult to attend for those working full-time, and most parents reported that they would prefer more ongoing communication about the scheme from the school or the CDS staff. Some parents reported that their dental practitioner was unaware of the scheme.

**Parents' thoughts about the scheme:** Parents' attitude towards the scheme depended partly on their home brushing habits before the scheme began. Nine of the parents interviewed brushed their children's teeth regularly (usually twice a day) at home, while 6 reported brushing less frequently at home.

Those who brushed regularly were still largely supportive of the scheme, feeling that it reinforced their own messages and that many children in their school probably did not brush as often as their own children. A minority of those whose children brushed regularly did however worry that the time spent on toothbrushing might mean that their children missed out on other learning opportunities – they perceived that there was not enough being done to educate parents about home brushing, in conjunction with the toothbrushing sessions in class.

Those parents who did not brush their children's teeth regularly at home were broadly supportive of the scheme. They felt that their children's attitude towards brushing had undergone a positive change, facilitating their own efforts to brush their child's teeth at home.

**Children's reported thoughts about the scheme:** Parents reported that their children had taken very well to the scheme, and most considered it part of their daily school routine. Parents highlighted the positive social aspect of children brushing in class with their friends, which they felt had led to greater enjoyment of toothbrushing in general. Similarly, many parents reported that children benefited from feeling "ownership" of their own toothbrush, both in class and through the 'home packs' of toothpaste and toothbrushes sent home to those taking part.

**Effect of the scheme on children's home brushing habits:** Again, the extent to which parents' home brushing habits were affected by the school scheme was dependent on how often they brushed their children's teeth before the scheme began. Those who brushed regularly typically saw the school sessions as a 'bonus brush', rather than a replacement for what they did at home. However, two parents of children whose school or nursery carried out the brushing scheme in the morning did report that they did occasionally miss brushing their child's teeth before school. Those who brush less frequently at home did not report any adverse effects on home brushing – indeed, a number of parents reported that the school sessions facilitated home brushing, due to improvements in their child's attitude towards brushing.

**Effect of the scheme on children's attitude towards toothbrushing:** Parents reported that their children had particularly enjoyed the oral health promotion talks given by CDS staff, and the involvement of the "Dewi the Dragon" puppet. Many

pointed out that positive oral health messages given by teachers seemed to carry more authority, and so have more of a positive effect, than what they told their children at home.

Parents commonly reported that children enjoyed the social aspect of brushing with friends and that this positive association had carried over to home brushing. Many parents also felt that their child's brushing technique had noticeably improved as a result of the scheme – some were now happy to let their child brush with little or no supervision.

The use of songs in the classroom was seen as a positive. Parents felt it helped them to form a link between home brushing and classroom brushing, as well as helping encourage children to brush their teeth for the recommended two minutes.

Finally, some parents reported that their child's positive experience with the Designed to Smile scheme had helped reduce anxieties related to visiting their own general dental practitioner.

**Effect of the scheme on parents' attitude towards toothbrushing:** Many parents reported that the main effect of the scheme was simply to raise awareness about toothbrushing and oral health, in general. They referred to a 'drip drip' effect of the talks, information sheets and feedback from their children. More than one parent reported that discussions about toothbrushing had prompted them to make dental appointments for their children, or to find them a dentist. Two parents of younger children (2-3 years old) reported that the scheme had made them aware of the need to brush their child's teeth at home, where they had previously been unsure of the appropriate age to begin brushing.

**Home packs:** Parents were extremely positive about the 'home packs' – free packs containing toothpaste and a toothbrush for children to use at home. Children were reportedly enthusiastic about having their own brush and parents felt that children were far more enthusiastic about brushing in the weeks following the receipt of a new pack. Parents were grateful that the brushes and adult toothpaste were similar to those used in school, allowing continuity between school and home brushing.

There did, however, appear to be some discrepancy in how often parents received the home packs, according to which school their child attended. Some parents reported receiving packs each school term, whereas others had only received one or two over the course of a year or more.

## Introduction

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### *Background*

In March 2008, the Welsh Assembly Government laid out plans for the commissioning and implementation of a school-based oral health improvement programme called “Designed to Smile”.

The initial aim was to establish a supervised toothbrushing scheme in two Super Pilot areas involving nurseries and schools in North and South East Wales. This targeted 3-5 year-olds in nursery, reception and Year 1 classes. The pilot areas in South Wales, comprised Cardiff, Vale of Glamorgan, Bridgend, Rhondda Cynon Taf and Merthyr Tydfil. The North Wales pilot involved, Denbighshire, Conwy, Flintshire, Anglesey and Gwynedd. As well as providing a mixture of urban and rural localities, the pilot areas also cover almost a third of the Welsh population.

The Community Dental Service (CDS) has been responsible for organising, coordinating and delivering the programme, including the production of resources, translation of written materials, the sourcing of materials and recruitment of new staff members to the project.

In both South and North Wales, the CDS has extensive experience of providing oral health promotion programmes and, through work with the Fissure Sealant Programme and other toothbrushing schemes, has existing relationships with schools in the targeted areas.

Each local team was provided with a priority list of high-need schools for their area, produced by The Welsh Oral Health Information Unit (WOHIU) on the basis of deprivation and epidemiological survey data on oral health. In South Wales, Designed to Smile staff began to approach schools to take part in the scheme in the autumn school term of 2008, while schools in North Wales were approached early in 2009.



### *Evaluation process*

The Welsh Assembly Government has contracted the Dental Public Health Unit at Cardiff University to carry out a formal evaluation of the Designed to Smile programme. Figure 1 shows the three stages of the evaluation project, with the current interim report highlighted.

| Stage        | Subject             | Method  | Report date   |
|--------------|---------------------|---|---------------|
| Stage 1<br>✓ | CDS staff           | Face-to-face interviews with staff in South Wales and North Wales                         | December 2009 |
| Stage 2<br>✓ | School staff        | Questionnaire survey sent out to all participating schools in South Wales and North Wales | December 2010 |
| Stage 3      | Parents of children | Face-to-face interviews with parents in South Wales and North Wales                       | December 2011 |

We have previously reported on the perspective of the CDS staff on their management of the toothbrushing programme, and headteachers and classroom teachers on their day-to-day experience of implementation of the scheme.

### *Method*

The current report describes the views of parents of children taking part in the scheme. A series of 15 face-to-face interviews were conducted between June 2011 – September 2011, with 8 parents from South-East Wales and 7 parents from North Wales. Their children were aged between 3-6 years old, and attending nurseries or schools in the two Super Pilot regions.

There was no obligation for any parent to take part in the interviews, and each provided informed consent for their participation.

All participants were provided with an information sheet explaining that their views would remain strictly anonymous and that they could withdraw their data from the study at any point. The information sheet also explained that the interviews would be digitally recorded, simply to aid transcription.

The interviews were semi-structured, lasting roughly 30-60 minutes and sought to examine the following topics:

- Parents' views on the scheme, and whether they felt that it was needed in their school
- Parents' impressions of whether or not their children enjoyed taking part in the scheme
- Parents' views about whether or not the scheme had changed how often they brushed their children's teeth at home
- Parents' views about whether or not the scheme had resulted in a change in either their own, or their child's attitude towards toothbrushing
- Parents' experience of the free 'home packs' (packs sent home to children containing a toothbrush and toothpaste).

## Findings

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The findings are presented under seven topic headings, covering the main themes that emerged from the fifteen interviews with parents. Illustrative quotes from interviewees are provided for each section.

Where appropriate, suggested improvements have been highlighted at the end of a section.

The seven topics are:

- *Communication of the scheme to parents and dentists*
- *Parents' thoughts about the scheme*
- *Children's reported thoughts about the scheme*
- *The effect of the scheme on children's home brushing habits*
- *The effect of the scheme on children's attitude towards toothbrushing*
- *The effect of the scheme on parents' attitude towards toothbrushing*
- *Home packs*

## ***1 Communication of the scheme to parents and dentists***

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### ***1.1 Consent***

- Parents were asked whether they recalled having been provided with a consent form before the scheme began, and whether the form had been easy to understand and informative.
- The children of many of the parents began taking part in the Designed to Smile scheme over a year ago. Nevertheless, all interviewees recalled having received and signed a consent form from the school before the classroom toothbrushing began.
- There were no problems reported with regard to the consent forms: the overall feeling was that the form gave enough information to provide informed consent, without burdening the parent. Several reported that they were happy that they only needed to sign one form at the beginning of the scheme, rather than a new consent form each school year.

**“ ”** *Oh yeah,, the consent forms were fine, they explained it pretty well. You get so many of these things with school that it's always good to get forms that get to the point!*

**“ ”** *Yeah, I definitely remember the consent forms. We had to sign those before anything happened. No, they were fine, made sense to me anyway!*

**“ ”** *We had just the one, when she began. To be honest, it's better that way, 'cause you have so many forms for things now, it just gets too much!*

### ***1.2 Parent meetings***

- A minority of the parents reported having attended a parents' meeting at the school before the scheme began, and were generally positive about the information and the oral health messages that they received.
- Most of the parents, however, did not recall being invited to a parent meeting, or had been unable to attend due to work commitments.

*“ ” I know they had a meeting in the hall to begin with, a meeting at 9 o'clock, but because of my work commitments, I couldn't go to that meeting. So it wasn't really explained how it was going to work. So ideally, I think it would have been nice if the teachers sat us down, or showed us how it was going to work.*

### 1.3 Ongoing communication

- Parents typically reported that they had heard very little about the scheme from the school, since it had begun, and in many cases were unsure exactly how often their child brushed in class on a week-to-week basis.
- As mentioned above, parents were grateful for not having to fill out consent forms each term or school year; however, most reported that they would prefer slightly more communication or feedback about how the scheme was progressing.
- In some cases, where parents had children who had been taking part in the scheme for more than year, they admitted that they were unsure, prior to being asked to take part in an interview, whether or not their child still participated in the scheme. Several were keen to know whether the scheme would continue into the next school year.

*“ ” Um, pretty much nothing since. They haven't really discussed it since. I often ask X if he's brushed his teeth in school – I can generally tell, because he's often got toothpaste down him – but yeah, they haven't really talked about it much afterwards. It's kind of, have the consent form and that's it – we've left the teachers to it.*

*“ ” No I think they pretty much just get on with it, we haven't had, sort of, updates on what they're doing*

### 1.4 Wider awareness

- Parents were not directly asked about their dentists' knowledge of the Designed to Smile scheme, but several mentioned that they were surprised that their GDP was unaware of the toothbrushing programme when they mentioned it to them.

**“ ”** *I will let you know however, when I spoke to the dentist, I told them they were doing this at the school, and he didn't know anything about it – he was quite surprised and he was quite interested in it. And he was quite pleased. He said well that's good, and everything, and he was quite interested in what they were doing and everything. I suppose do they need to know, or don't they? I don't know. But he was very keen on it, and he seemed to think it was a good idea.*

## **SUGGESTIONS**

> It is important to seek ways to improve ongoing communication of the scheme to parents. While parents appreciated not having to consent to their child's participation each term or each year, some did feel that they heard little about the scheme after it began – one or two whose children had been brushing for more than a year were even unsure whether they were still taking part.

> Consider whether it would be worth informing / further reminding GDPs about the scheme, in appropriate areas.

## 2 *What do parents feel about the scheme?*

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### 2.1 *Brushing habits*

- Of the 15 parents interviewed, 9 reported that they typically brushed their children's teeth twice a day or more. A further five reported that they brushed once a day, while one parent reported that they brushed their child's teeth only occasionally at home. It should be noted that, due to the difficulty of recruiting parents willing to take part in a 30-60 minute interview, this cohort may not be entirely representative of parents of Designed to Smile children in their home brushing habits.
- Unsurprisingly, parents' attitudes toward the toothbrushing scheme were influenced somewhat by their home brushing. The following two sections separately consider the views of parents who brush their children's teeth regularly at home (typically twice a day or more), and parents who brush their children's teeth less regularly (less than twice a day).

### 2.2 *Parents who brush children's teeth regularly at home*

- The majority of parents whose children brushed their teeth regularly at home were supportive of the scheme.
- Several felt that the Designed to Smile scheme reinforced the messages about maintaining healthy teeth that they gave their children at home, and were grateful of the oral health promotion as much as the toothbrushing itself. A few parents reported that they were happy that their child was brushing an extra time after eating lunch.

*“ ” I mean personally, I think it's a good scheme. It's just another incentive for the children to do it too, it's fun, it's in a group, everybody's doing it, so it becomes more of a natural process. Yeah, I think it's good.*

*“ ” I think we all think it's a good idea. I think it's promoting good hygiene. Some children I think go to school with quite poor lunchboxes, which schools are trying to change slowly, but at least this brushing their teeth after lunch, it keeps their teeth clean after any bad lunch they may have had.*

**“ ”** *I just hope it continues really. You know, that schools are able to brush their teeth after lunch, I think it's really important. I don't know what age it works until, I don't know if it will extend in the junior school, but I hope it does, because I think it's something that should continue. I think if there was money available – even if the children could take their own toothbrush, parents supply the toothbrushes to the school to do it – I think it really does reinforce a healthy lifestyle.*

- Other parents reported that, although their own child brushed regularly at home, they felt that there were many other children in the school who did not have the same routines at home, and so were in need of the extra toothbrushing sessions carried out in the classroom.

**“ ”** *It's mixed, I think. I would think there's some who don't brush their teeth at all, they rely on the school. You can tell, I reckon there's a few, maybe three in her class, that I'd guess don't do that. Again, it's divided. We're lucky that the school isn't too bad, I don't think, and there's a lot of parents who are fairly switched on, and they'll brush their kids' teeth twice a day, but you can see there's a small amount, I would bet they don't and they rely on the school*

**“ ”** *Um, yeah. Initially – and I'll admit to this – I was like 'what a waste of money, blah blah, I'm a tax payer, why do we need to waste money on that?' However, I can see, I know of parents who – one parent said to me, when they start toothbrushing again, because my little girl only brushes her teeth in school. And then that's when the penny dropped – you've got some parents who don't bother, who don't worry about their kids getting their teeth brushed. So that's the kind of thing I get from – parents who will care for their children's teeth no matter what, and some parents who rely on the state to do everything for them, that kind of attitude. There's not many like that, but there are a few. Overall, I think that parents are quite positive towards it.*

**“ ”** *Well you know... in all seriousness, I think when the scheme started, like I say, some people were moaning about the time it might take, it'll take away from other things, but not all parents brush their children's teeth, you can tell that just looking around. There are lots of different people around, in society, and definitely some people who don't have good hygiene. There's a girl in my younger daughter's class who's already had a couple of teeth out, and you think that's terrible, she's only six. So they do need this, definitely.*



- A minority of the parents whose children brushed regularly were somewhat more critical about the scheme, feeling that it wasn't an ideal use of resources. They felt that classroom brushing was a poor use of the teachers' time, and there was a general concern – in conjunction with the fact that many felt that there wasn't enough emphasis on educating parents themselves - that the scheme might be seen to shift responsibility for toothbrushing away from the parents toward the school.

*“ ” No, no. I think teachers have got enough to do teaching children in the day. I don't see why teachers should be teaching children how to brush their teeth really. Because they're not really dental professionals anyway... I'm sure they get training in it, but, it's that thing, I can sympathise with them, it's time taking out of their learning. They'll be feeding the kids breakfast next!*

*“ ” But there is that thing at the back of my mind that they could be doing other things with their time, especially for those of us who do it at home anyway. You wonder if they're losing out on other things because of other parents who aren't brushing their children's teeth.*

*“ ” It's definitely not the school's problem really. Which brings me back to the point that I don't really think it's the school's problem, the best use of their time. Again, I know, some parents probably won't bother because they know it probably will get done in school. And it begs the question, you know, are they teachers or are they minders, social workers, you know! It really shouldn't be up to teachers to do that kind of thing, in my personal opinion.*

*“ ” I mean I think I'd support it, support it more... if it was more aimed at educating parents as well, but you know, and this is my impression anyway, but I don't think that there's much of that. There hasn't been anything for the parents to be taught about brushing, it's just brushing the children's teeth in school and hoping that makes it better.*

### 2.3 *Parents who brush children's teeth irregularly*

- Those parents who reported brushing their children's teeth less than twice a day were all broadly supportive of the scheme.

- A few of the parents reported that they felt the toothbrushing in school acted as a ‘safety net’ for them, or a way of ensuring that their child brushed twice a day when they were unable to carry that out at home.

*“ ” I think it’s great, yeah. I mean you try and brush in the morning and evening, but it’s hard, especially after school – they’re tired, or they’ve been out playing football or rugby, or my husband gets back late. So it’s good to know on those days that they’re brushing in school anyway, and being taught about that.*

*“ ” It does, yeah, it does make you feel a bit better, or it does for me... knowing that they brush in school, so if I can’t brush her teeth every day, you know, it’s still getting done, isn’t it?*

- A couple of parents reported that the scheme had improved their child’s attitude towards brushing, and had made it easier for them to establish a routine for brushing at home (see section 4 and section 5 for full details).

*“ ” It’s been really helpful for me, anyway. It was always like a struggle, fighting with him to get him to brush his teeth, because he’s very um.. very stubborn when he gets an idea. So you want to try and get him do it every day, but it’s not that simple. But you can tell, can’t you, it’s getting easier now, he’s not so down about brushing his teeth, he’s not so bad, you know.*

## SUGGESTIONS

> There is a perception among some parents that the scheme is shifting responsibility for brushing teeth away from parents towards the school. Whether through improved communication or more parent meetings, it would be helpful to address this concern.

### 3 What do children feel about the scheme?

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#### 3.1 General experience

- Parents reported that children were very enthusiastic about the scheme, overall. All parents were asked directly if there was any aspect of the scheme that their child disliked, but no problems were reported.

*“ ” I think it's fine yeah, it's definitely not something she comes home saying she doesn't like doing it. Yeah, there's no issues, it's fine.*

*“ ” Yeah, he seems quite happy, he really enjoyed it you know*

- There were three aspects of the brushing scheme that were consistently mentioned by parents: the benefit of brushing together with friends in school; the concept of children having their own toothbrush; and the idea of the brushing scheme being part of the children's daily routine. These three aspects are considered separately.

#### 3.2 Group dynamic of brushing in school

- Most parents reported that their child enjoyed the social aspect of brushing their teeth with their classroom friends. They felt that children came to associate toothbrushing with being an enjoyable activity, rather than a chore.
- These findings are consistent with comments provided by classroom teachers in a previous survey. Teachers reported that children enjoyed brushing together and would actively remind teachers about the brushing if they forgot to carry it out.

*“ ” The main thing is that he's doing it with all his mates, you know. So it's different then, they're having fun doing it, it's more like just playing for them.*

*“ ” Miss X, the teacher, was saying to us at a parents' evening that they properly look forward to brushing, like, they're actually saying that they want to do the brushing if they do it late, or something! If only he was like that at home!*

### 3.3 *Having own toothbrush*

- Several parents made reference to the fact that their child enjoyed ‘having their own toothbrush’, both in terms of the toothbrushes allocated to them in class, and the toothbrushes that were sent home as part of the home packs.
- Again, parents felt that children were more motivated to brush their teeth because they felt a sense of ownership of the process, rather than seeing as it something that their parents were asking them to do.

*“ ” They have their own brush, with the labels on them and things, and I think she likes that. She knows she has her own brush in school, and it’s a red one, and so she’s always telling me about that!*

*“ ” Oh yeah, yeah. It’s great – the girls love getting new toothbrushes! That’s great excitement, yeah. At five or six, these things make you smile. Yeah, they get a little tube of toothpaste too.*

### 3.4 *Part of school routine*

- Most parents said that their son or daughter considered the supervised toothbrushing to be part of their ‘school routine’, and was something that they didn’t necessarily think about on a day-to-day basis.

*“ ” He just thinks it’s part of normal life, I think. I don’t think he thinks anything of it, you know. It’s something he always did at home, and now he’s doing it in school so it must be normal. It’s part of the routine that he does there.*

#### 4 *What effect does the scheme have on children's toothbrushing at home?*

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- The extent to which a school toothbrushing scheme can bring about sustainable improvements in children's oral health is dependent upon its ability to facilitate long-term changes in their home environment.
- One concern with children brushing in school hours is that parents (particularly those who already brushed their children's teeth twice a day at home) might potentially come to see the scheme as a replacement for either morning or evening brushing at home. Given that children only take part in the toothbrushing programme for a set number of years, any interference with an existing home brushing habit would arguably negate the benefits of the programme in the long-term.
- Accordingly, all parents were asked about how often they had brushed their child's teeth before the scheme, and how often they brushed their child's teeth now that they took part in the scheme in school. More directly, they were asked whether they felt that the scheme had changed how often they brushed at home.
- Again, parents' answers to the questions were influenced by whether or not they brushed regularly at home (twice a day or more), and the two groups are considered separately.

##### 4.1 *Parents whose children brush regularly at home*

- The vast majority of parents who regularly brushed their children's teeth reported that their home routines were unaffected by the extra toothbrushing session carried out in school. Parents referred to the brushing in school as a 'bonus brush' or similar. Ironically, some parents mentioned that the lack of ongoing communication about the scheme meant that they were not always consciously aware of the school brushing and so less likely to be affected by it.

*“ ” It hasn't had any effect on how often we do it at home, no. It's, I think it's an added bonus that they're doing it in school, but I'd always think that you must always brush children's teeth morning and night, because of all the bacteria that develops overnight and before bed, all that bacteria in the mouth before bed. So I'd never not do that at home.*

*“ ” Um, I think with the school brushing it's a bonus. For some parents, I guess it might be very useful for them – the area we live in, some parents aren't as strong in setting a routine for their children, and they might not get their kids to brush their teeth when they get home. So in that sense, it's a bonus for those parents, but for us it's just an extra.*

*“ ” Oh no, no, we don't brush any less at home because of it. It promotes it if anything. I think it's a really good scheme, because it's important you know, that they do brush their teeth during the day as well. Yeah, it's a bonus brush!*

*“ ” No, no, it doesn't affect what I do at home. Well yeah, I suppose once it stops – when they go up to juniors and this all stops – if they miss it at home, then they won't start again maybe. That was my thought process. If you stop brushing in the morning because you do it in school, what happens in juniors because they don't do it? They won't be used to brushing their teeth. I know they say once a day is fine probably, but yeah.*

*“ ” Oh no. I think it's important to do it in the morning and evening, so I wouldn't miss out on doing at home just because they were doing it in school, no.*

*“ ” Well like I say, I don't know how often they do it in school really – I mean I guess if he comes back with toothpaste all over his trousers, that's a clue! But I wouldn't not brush at home, because I don't know if he's going to brush in school or not, mostly.*

- A couple of parents, however, did report that they were perhaps more inclined to miss brushing their children's teeth in the morning because of the scheme. In both instances, the school or nursery that their child attended tended to brush early in the morning, rather than after lunch as most schools are encouraged to do.

*“ ” But like I say, often X will say ‘oh I don’t need to do them’, and I say she does, but they’re told they need to brush their teeth twice a day, so she’s obviously worked out that she thinks she doesn’t need to do them in the morning now! So well it does have an effect, because it lessens the amount she does it, I think. Because she can probably tell me... I mean, she’s got a bit wise to the idea now, she doesn’t have to tell me if she’s brushed her teeth, because she knows she’s going to be doing it in school, because she feels fine now, doesn’t she? You know, she says ‘hey, you can smell my breath’ and I’m like ‘yeah, it smells minty but it doesn’t mean you’ve actually cleaned your teeth!’. The toothbrush is still clean and dry in the bathroom!*

*“ ” I’d say, if I’m honest, that we might skip brushing in the morning if we’re in a big rush, or something. I mean, it seems silly if he’s going to be brushing his teeth 10 minutes later anyway! It’s not like he’s eating loads of sweets on his way to school!*

*“ ” I think they do it every morning. I don’t know how useful that is, I don’t know. My daughter comes from home, drop her off, and she’s doing her teeth at half past nine again. Within half an hour, you know, she’s doing them again. But also I’ve noticed now, if we’re in a rush to leave the house, if we’re in a rush and I’ll shout ‘have you washed, have you brushed your teeth?’ and both of them now – because they can both get themselves washed and dressed and whatever – and she’ll just reply ‘I don’t need to brush my teeth, because I’m doing it in school’. And I’m thinking that’s not the point, you have to do them, do you know what I mean? She probably thinks I’m mad.*

#### 4.2 Parents who brush less than twice a day at home

- The parents whose children brushed less than twice a day at home also reported that their home brushing behaviour was not negatively influenced by the scheme, in any way. There was no suggestion that parents perceived the classroom brushing to be a ‘replacement’ for brushing at home.
- Instead, a few of the parents who had experienced resistance from their child towards brushing at home reported that their involvement in the scheme actually made it easier to brush their teeth after school. They felt that their aversion to toothbrushing had softened – in some cases, children were actually asking to brush at home. Section 5 deals with the effect of the scheme on children’s attitude towards toothbrushing in more detail.

**“ ”** *Well it was mostly, before the scheme... it is hard work. I was mostly trying to do it bed time, and I was trying to do it just with a mouthful of toothpaste so she keeps it in and doesn't just spit it out. Because we used to have, like, screaming every night. She's one of these children, you know, and most parents find it as well that it's a nightmare to get the children to brush their teeth... But yeah, it's a lot less of a struggle now, so that's definitely helped, yeah.*

**“ ”** *No, no, we don't miss any because of school, no. If anything, we might brush a bit more now, because he's not throwing a tantrum every time we go to brush his teeth together, you know? It's more like 'okay then Mummy', with the songs and everything.*

## **SUGGESTIONS**

> There was some evidence that schools having brushing sessions in the morning may have an adverse effect on parents' home brushing before school. Schools should be discouraged from early morning brushing where possible.



## 5 *What effect does the scheme have on children's attitudes towards toothbrushing?*

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### 5.1 *The effect of talks and teachers*

- Most parents mentioned that their children had enjoyed the oral health promotion talks given by Community Dental Service staff, and made particular reference to the “Dewi the Dragon” puppet and other, interactive parts of the talks. They felt that the talks had made children more aware of the importance of looking after their teeth.

*“ ” Well like I say, initially, it was all new and exciting and if you've got little ones, you know, anything that's different, it's great excitement and they listen to the person who's come in to give a chat – they could be talking about anything and they're all excited. So initially the excitement was there and they listen and take it all in. They're little sponges really.*

*“ ” When somebody comes in to show them, all of a sudden they're showing me how to brush their teeth. So it improves their toothbrushing, if that makes sense. Do you see what I mean? It's like when the school nurse came in and told them about hand washing, all of a sudden 'we must wash our hands, Mummy' and all the time they're talking about germs and things. Although I've told them that, it doesn't seem to have the same effect as somebody coming in, somebody important. So I'd say it's a good thing.*

*“ ” And he was talking about the puppet they have – what's it called? The dragon. And they love that stuff, you know, so that helps right away to get them thinking that brushing is fun.*

- Parents also noted the positive effect on children of having their classroom teacher talk to them about toothbrushing and supervising their brushing sessions. They felt that messages given by the teachers carried more authority, and were glad to have a third party endorsing what they taught children at home.

**“ ”** *It gives you peace of mind I suppose. Because she's doing it in school, they seem to listen to the teachers a bit more than your parents. With us, she argues with us. So this is what the problem was when she was younger, she'd argue, and she'd be screaming, and you'd almost have to pin her down to brush her teeth. But because the teachers are talking about this stuff, they listen to the teachers a lot better, so they can understand that we're not sort of lying, it is the right thing. The teachers are backing you up then. When she went in to this year, I think she realised that it is important, because they've done all the stuff in class*

**“ ”** *Like I say, because he's listened to the teacher, it's reinforced it for him, because if a teacher says you have to do something, you do, my son's like that! – but yeah, it's reinforced the importance of it, but only really on top of our daily routine.*

**“ ”** *But she seems to be more, since they're doing it in school, it's less of a battle I'd say, she obviously has the education in school and so she knows that these things can be bad for your teeth.*

## 5.2 The effect of brushing with friends / classmates

- The most common reason that parents gave for a change in their child's attitude towards brushing was the social aspect of brushing in class. Parents felt that children genuinely enjoyed brushing their teeth with their friends, and that this positive association had carried over to home brushing as well.

**“ ”** *So that's why I do like this toothbrushing in school. Because they can see their classmates doing it then, and they know it's not just something that they're made to do in the house. That everybody has to do it.*

**“ ”** *It's obviously more fun, isn't it, when they do it in class with all their friends? And then he's much better about it at home, because it's something good now, it's something he does with his friends.*

- One example which was mentioned by numerous parents was that children had become more used to the adult toothpaste that they used in class – parents had previously found that children found the paste too strong, or ‘minty’, but that they were more willing to use it in class with their friends.

*“ ” But it’s amazing what they’ll do when their friends are around. If his friends are there, he’s not going to chicken out and say it’s too burny for me! So I wouldn’t mind betting he’d just use whatever he’s given!*

*“ ” Yeah, ‘cause before, he really wouldn’t have anything to do with the grown up toothpaste, you know, the minty one, so we were using the strawberry ones, the kids’ ones. But he’s obviously gotten used to that now, so he doesn’t mind when we have the adult toothpaste sent home, now.*

### 5.3 The effect on brushing technique

- Both the oral health promotion talks and the supervised toothbrushing place an emphasis on teaching correct brushing technique to children. Accordingly, several parents observed that their child’s brushing technique had noticeably improved since they had been brushing in school, to the point that some parents of older children were happy to let their child brush with less, or no supervision.

*“ ” It’s had an increased interest in brushing his teeth correctly. And that can always be a battle sometimes when you’re trying to explain to him how they do it. But by them showing that in school as well and singing them a rhyme, if he’s having a lazy day, I can use that and go over that with him to increase his interest in doing it correctly.*

*“ ” I think, I tell you something I do find that’s a benefit. Although I’ve taught them from a young age to brush their teeth and shown them – when somebody comes in to show them, all of a sudden they’re showing me how to brush their teeth. So it improves their toothbrushing, if that makes sense*

*“ ” It’s taught him – well it’s reinforced – brushing his teeth properly. They don’t always listen to what you say, but they listen to what their teachers say. So that’s helpful, that reinforcement.*

*“ ” Yeah, it’s improved their technique, definitely. They listened to whoever came in far more than they listen to me!*

*“ ” I used to until they did at school, I used to always be – I mean I’ll watch, but they’ll do it, they’re quite confident and competent to do it themselves now. I don’t know what they showed them at school but it was very good, obviously it worked, so I just keep an eye on them to make sure they’re doing it properly.*

*“ ” But I think it’s made him more aware of doing it [toothbrushing] correctly. Rather than us telling him that he’s doing it wrong, he’s being told how to do it properly in school so we’ve almost got back-up that way, as a parent. It’s nice that someone else is saying it to him.*

*“ ” She sings the song, though. And you can see that she concentrates more on the circling of the teeth, you know, she does the proper movements, you can see that, that she’s learnt that in school as well as the song.*

- The use of songs in the classroom appeared to have a further benefit, both for increasing awareness about how long children should brush for, and for building a link between school and home brushing.

*“ ” Two minutes, always two minutes. Got to brush two minutes. That’s ingrained in their heads, and that’s through school as well. They must time them in school, because we “guesstimate” obviously at home, but they know roughly how long it takes them to brush their teeth and how long they should be brushing for.*

*“ ” And when they used to do it in nursery, they used to sing a song to it, so in the evenings it happened every night that we had to sing the same song that they sang in school.*

*“ ” Sometimes, occasionally he’ll come home with a rhyme that they’ve taught him of how to brush his teeth – related to the wheels on the bus, because they’ve got to brush their teeth in circles, so sometimes they come home with that rhyme*

#### 5.4 The effect on wider oral health behaviour

- A couple of parents felt that the brushing sessions had made their children more comfortable when visiting their dentist.

*“ ” I think I took them to the dentist first when they were two and a half, when they started nursery. But they didn’t really open their mouth until about four. I think in fact, I can tell you, it was when they started reception, it was when they did the toothbrushing. And I remember thinking ‘oh wow’ you know, they were quite happy to go and open their mouth to the dentist then after that. So whatever that woman said at that talk, it had a very positive effect!*

**“ ”** *Well he was a bit scared – actually, I'd say he was properly terrified! – when we went before. I don't know, but I think this brushing in school and the talks, I think that's stopped him being like that now, you can tell when I say 'right, we have to go to the dentist', he's not worried about it so much now.*

## **SUGGESTIONS**

- > Both the oral health promotion talks and teacher-lead classroom education were seen by parents as very positive, and should continue to form an important part of the overall Designed to Smile scheme.
- > Techniques such as the use of songs appear important in encouraging appropriate duration of brushing and linking home and school brushing. Their use should be exploited wherever possible.

## 6 What effect does the scheme have on parent's attitudes towards toothbrushing?

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### 6.1 The effect on awareness

- The most commonly reported effect of the brushing scheme was simply to raise parental awareness of toothbrushing and oral health, in general. Parents referred to a cumulative 'drip drip' effect of the information sheets, the feedback from their children, the parent talks, the home packs and even the conversations that they had with other parents as a result of the scheme.

*“ ” And I suppose yeah, the school thing does start making you think about it a bit more, at the back of your mind. It's like a drip drip thing, hearing about teeth somehow or another every few weeks*

*“ ” It's hard to know for sure, because there is that thing where it might be in the back of your head because you're hearing about it more often.*

*“ ” Yeah, it's like you're suddenly talking about teeth all the time! So yeah, it's definitely made me think about it a lot more than I used to!*

### 6.2 The effect on dental attendance

- One example of this increased awareness having a benefit on children's wider oral health was with regard to dental attendance. More than one parent said that the discussions about toothbrushing that arose from the scheme had either prompted them to find a family dentist, take their child to their own dentist, or to make an appointment with the child's current dentist.

*“ ” We only started taking him to the dentist in the last 18 months really, for a checkup. Just because myself and my husband, we've never got around to it, but I'd say our teeth are in pretty good nick anyway. So I suppose you did ask me earlier – maybe it did, without realising it, get me to register him with the dentist. That might have been an effect, yeah.*

*“ ” I think one of the main things was just making me try and find them a dentist again. Because it was like ‘it’s silly, if she’s doing all this in school, but he hasn’t got a dentist’. So like I say, we managed to get her and her older sister seen by the one in town, in the end.*

### 6.3 *The effect on the age to start brushing*

- Two parents of younger children (2-3 years old) reported that they hadn’t made a habit of brushing their children’s teeth before the scheme had started, because they weren’t sure that it was necessary at such a young age. The scheme had made them realise that they should begin brushing their children’s teeth at home, which they had both begun doing to some extent.

*“ ” I don’t know, I guess I hadn’t really thought about it that much, it just seemed like something they do when they’re older. But if they’re alright to do it in nursery, then you’ve got all the letters and stuff saying you should brush them as soon as they get any, so yeah.. that’s probably been the main thing.*

7.1 *Overall effect*

- Overall, the ‘home packs’ – free packs given to children, containing a toothbrush and toothpaste - were very positively received. Parents were asked if they felt there was anything missing from the packs, but all felt that their contents were more than adequate.
- As previously referenced, children were reportedly very enthusiastic about having ‘their own’ brush - even though most of them already had a brush that their parents had bought them, they felt particular ownership of those sent home from school. Parents reported that children were particularly enthusiastic about brushing in the weeks after they had their own home packs.

*“ ” Oh yeah, yeah. It’s great – the girls love getting new toothbrushes! That’s great excitement, yeah. At five or six, these things make you smile. Yeah, they get a little tube of toothpaste too.*

*“ ” Not just that, but the brushes they get home as well. I think it has yeah, it’s had a positive effect, yeah, because it’s done in school. It’s made them, how would you say, more – when they were younger, just as they started reception it was ‘come on let’s brush your teeth’ and ‘open your mouth’ and it’s almost like you know, you’re trying to force them literally, to open your mouth. But since the school, and they’re doing it themselves and they’re taking ownership of it, it’s more like an adult thing, it’s more like Mummy and Daddy – do you know what I mean? It’s given them ownership of doing it and it makes them feel more grown up, whereas before I was doing it, you know – yanking them here, there and everywhere, nicely I hasten to add! But yeah, it’s been positive.*

- Parents of children who had been more reluctant to brush at home were particularly grateful that the brushes and (adult) toothpaste were similar to those used in class, allowing some continuity in their home brushing.



**“ ”** *And it's good that they have – I think they have the same ones in those packs that they have in school. Because I'm listening to him saying how great it is brushing in school, and thinking 'yeah, I bet he's not going to be like that at home though!', but it's definitely helped, because he's got the same toothpaste, and we have the songs, you know, so he's still pretty good with it.*

## 7.2 Discrepancy in how often parents received home packs

- Although they were well received, there appeared to be discrepancies in how often parents received the home packs, according to the school that their child attended. The children of the 15 interviewees attended four different schools and while some parents reported receiving home packs most school terms, others recalled only receiving one or two, despite their child participating in the scheme for almost two years.

**“ ”** *I think just the one? I don't remember any others, we had one near the beginning but that's all.*

**“ ”** *Um. Maybe one, or two? No, it's not like every term or anything. Because we have to throw them away after a while, you're meant to get new ones every few months, aren't you?*

**“ ”** *Oh, I think we get them every six or seven weeks, most terms yeah. We've definitely had a lot of them over the last year and half, with the two of them doing it!*

## SUGGESTIONS

> It is important that the process of sending out the free 'home packs' is standardised across schools, to ensure that all children receive them at appropriate intervals. They appear to have a very positive effect on children's home brushing.

## Conclusions

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The two previous evaluation reports have focused on the extent to which Designed to Smile is functioning as planned in the schools and nurseries taking part in the Super Pilot areas. Both CDS staff and school teachers painted a positive picture of the scheme in its early stages, suggesting that it was well on course to meet its aims.

To examine whether the scheme can be successful in facilitating lasting changes in children's oral health, however, it is necessary to understand the impact of school brushing beyond the classroom. The current report describes the views of the parents of children taking part in the scheme and so represents the first opportunity to evaluate the effect of the scheme on parents' and children's attitude towards brushing, as well as their home brushing habits.

Overall, the findings are very encouraging. The vast majority of parents support the scheme and believe it to have brought about positive changes for both their own and other children. Parents reported that children particularly enjoy brushing their teeth with friends, and were very positive about the oral health promotion sessions carried out in class. Almost all parents – whether they brushed their children's teeth regularly before the scheme or not – saw the brushing sessions as an addition to home brushing rather than a replacement. Indeed, some parents felt that their child's improved attitude towards brushing had helped facilitate home sessions, and reduced anxiety about visiting their own dentist. Most parents felt that their child's brushing technique had noticeably improved as a result of brushing in school.

Inevitably, there are some areas for improvement. Parents were grateful that they didn't have to sign termly or yearly consent forms, but felt that there wasn't enough on-going communication about the scheme. A minority of parents who regularly brushed their children's teeth at home questioned the use of classroom time, and felt that there wasn't enough emphasis on educating parents about oral hygiene in conjunction with the toothbrushing sessions. Two parents whose child brushed in school during the morning did report that they were slightly more likely to skip brushing their child's teeth before school, emphasising the importance of encouraging schools to carry out brushing sessions in the afternoon. While the free 'home packs'

were very popular, there appeared to be inconsistencies in how often parents had received them according to the school that their child attended.

Despite these opportunities for improvement, the overall impression of the scheme was very good. In conjunction with findings from previous reports, focusing on the views of CDS staff and school staff, these findings suggest that the Designed to Smile scheme has been very successful in its first few years.

While the current report is based on interviews with parents of children who attend schools in the Super Pilot regions, it is hoped that the findings and suggestions provided may prove useful to all CDS teams.

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