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Childsmile: An observation of operational, managerial and evaluation practices in Scotland's pioneering oral health promotion intervention



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Acknowledgements

I would like to convey my sincere thanks to all parties who assisted me in the preparation of this elective report.

Particular thanks is paid to Lynn Brewster, Bill Wright, Laura, Denise, Catherine Kelly and the Dental Health Support Workers of the Glasgow South West Community Health and Care Partnership for the time and effort they devoted by agreeing to meet with me to explain their roles within and experiences of the Childsmile Project.

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Summary

Childsmile: An observation of operational, managerial and evaluation practices in Scotland's pioneering oral health promotion intervention

Scotland's Children have a dental health record which is among the worst in Europe. Childsmile is a pioneering dental health promotion intervention which aims to improve the dental health of the nation by targeting high caries risk children for focused oral health promotion in the first 5 years of life.

This elective study took the form of an experiential project, with the specific aim simply of furthering my own interest and understanding in the field of dental public health interventions which aim to reduce social inequalities. This report examines the processes which are involved in the operational, evaluation and managerial levels of the Childsmile programme.

Through a series of meetings, interviews and observations at each level of the programme, I gained a much greater understanding of the processes involved in monitoring the progress of the intervention, the problems which can arise and the way in which they with.

Through the understanding and knowledge attained and experiences gained throughout, I feel I have enhanced my interest and enthusiasm for such dental public health interventions and thus satisfied my aim.

Introduction

Oral Health in Scotland

The rate of dental caries in Scottish preschool children is among the worst in Europe. The National Dental Inspection Programme (NDIP) is carried out yearly to determine the caries experience of primary 1 and primary 7 children. Results from the NDIP 2006 show, as they have done since inspection programmes began in 1987, that the majority of dental disease is found in children from less affluent backgrounds.¹

Postcode sectors in Scotland are assigned a number between 1 and 7 which is known as the deprivation category or DepCat score. This score is derived from information gathered in the census from the area and is influenced by factors including the percentage of unemployed males, overcrowded households and households without cars. A lower score indicates a more affluent area.²

Figure 1 shows the proportion of Primary 1 children with no obvious decay experience by deprivation category. This clearly highlights the link seen between social deprivation and dental caries, with children living in DepCat 7 areas more than 2 times as likely to have obvious dental decay experience. Moreover, in addition to the increased prevalence of decay found in children in the more deprived areas, it is also clear that they suffer from more severe decay, increasing the likelihood of the need for a general anaesthetic during treatment.¹

Figure 1: Proportion of Primary 1 children by deprivation category (DepCat) with no obvious decay experience.

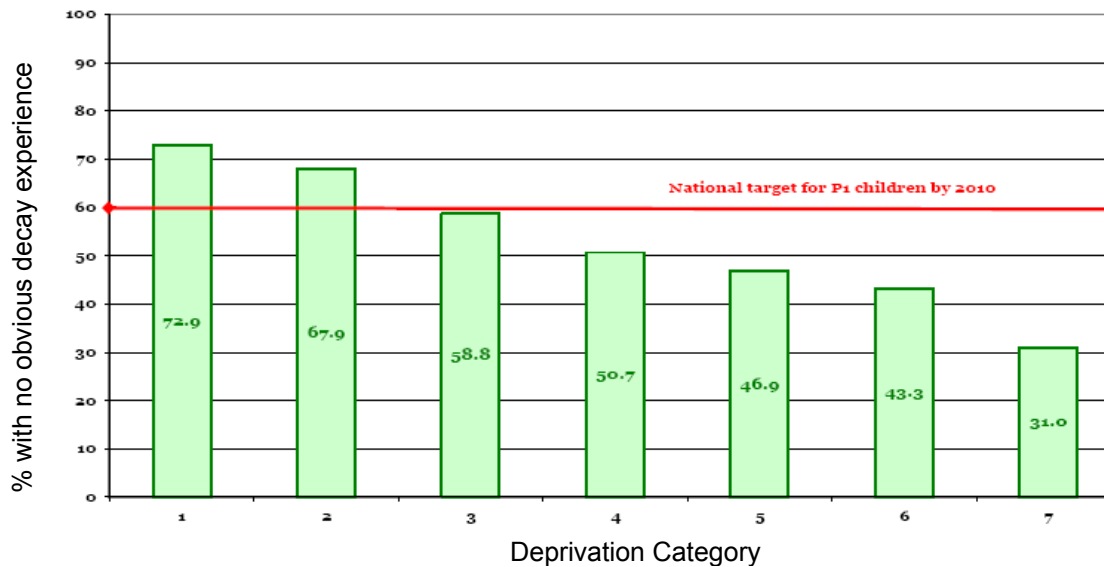


Figure 1 is taken from NDIP 2006¹

Action Plan

In 2005 the Scottish Executive produced a paper titled “An action plan for improving oral health and modernising NHS dental services”. The paper noted improvements in adult dental health over the last 30 years and contrasted this with the “relatively static”³ progress in the oral health of children (figure 2). With this in mind the paper sets out an action plan to improve oral health in Scotland, “with a particular focus on improving the oral health of our children.”³

The paper sets out a number of optimistic targets for the year 2010, including the target that 60% of primary 1 children will have no signs of dental disease.³ Considering at the time of writing the percentage of primary 1 children with no signs of dental disease was 50%¹, this was indeed a very optimistic target. (figure 2)

Figure 2: Trends over time in the proportion of primary 1 children with no obvious decay experience

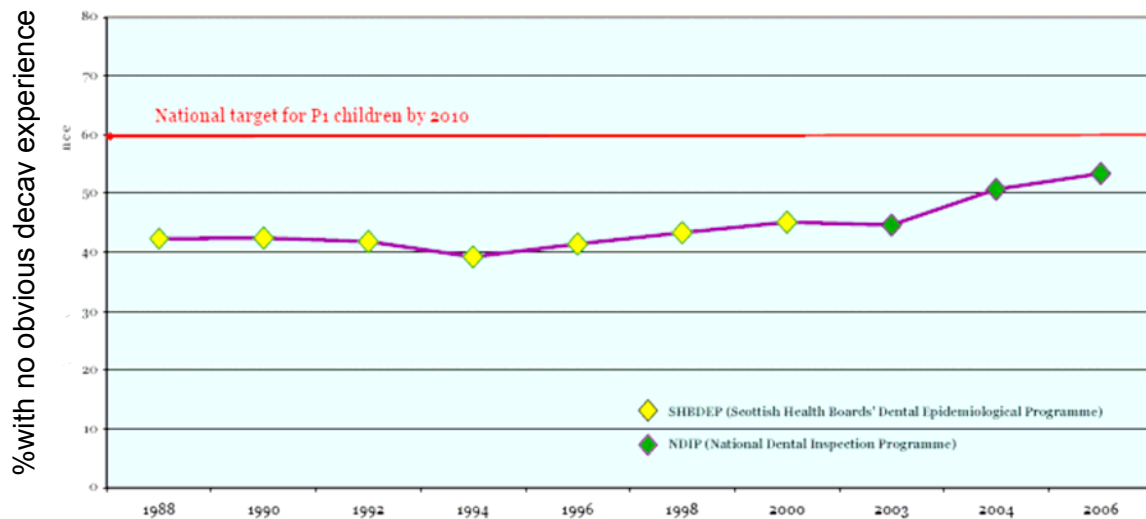


Figure 2 is taken from NDIP 2006.¹

With a view to achieving this goal the paper sets out a number of recommendations with which it is hoped this target can be achieved. The recommendations are based upon those made in the consultation document “Towards better oral health in Children”.⁴

Specific key points of note in the action plan include:

- “Services for children and young people should be focused on prevention and meet the oral health needs of those in the most disadvantaged circumstances.
- Opportunities exist for better diet promotion in the community with health professionals requiring to present a greater consistency of message and joined up approaches.
- Dental services should be underpinned by a preventive philosophy, supported by a suitably modernised service.

- Effective oral hygiene practice should be established at a young age, supervised by parents and carers.”³

These key points in the action plan³ and other suggestions in the consultation document,⁴ were clearly the basis upon which the Childsmile programme was created.

Childsmile

Childsmile is a comprehensive new preventative oral health care programme funded by the Scottish Government. Childsmile currently operates three separate programmes: the Core Programme, the East Programme and the West Programme.⁵

The Core Programme uses and builds upon the many of the interventions used in previous programmes with a holistic approach to healthy living such as those implemented in the Pre-5-Year-Old Oral Health Gain Project in Possilpark.⁶ The Core Programme uses a population approach, ensuring all children in Scotland will be provided with free toothbrushes and fluoride toothpaste on at least six occasions. It will also offer free daily supervised brushing with fluoride toothpaste to all children over 3 who attend nursery, and promote healthy snacks and drinks.⁵

The East Programme is being piloted in five NHS Board areas in the East of Scotland, it targets high caries risk children in nurseries and primary schools for additional preventative measures. These measures can include fluoride varnish application in combination with oral and general health promotion.⁵

The West Programme is currently over one and a half years into a three year pilot in three NHS Board areas in the West of Scotland. The areas involved are NHS Greater

Glasgow and Clyde, NHS Lanarkshire and NHS Ayrshire and Arran. The West Programme differs from the East Programme in that it aims to promote oral health from birth, targeting families with newborn children in more deprived areas. Children are assessed against evidence based criteria for increased caries risk by the health visitor within the first 8 weeks of life. Families of children deemed to be high caries risk are invited to participate in the Childsmile programme. Those who accept will be visited by a Dental Health Support Worker (DHSW) who will explain the benefits and methods of the programme. The DHSW will help the family select an appropriate Childsmile dental practice to attend throughout the programme.⁵

The West programme involves regular visits to a Childsmile dental practice from 3 months of age.⁷ At these visits Childsmile trained dental nurses will give the parents oral health promotion advice appropriate to the development of the child. The visits are also used as an opportunity to provide toothbrushing kits and free flowing drinking cups to help the family implement the advice given at visits. The DHSW should liaise regularly with the families and practice teams to ensure regular attendance.^{5,7} Appendix 1⁷ details the child/parent contact dates.

As the child matures practice teams can provide oral health assessments and provide preventative measures such as application of fluoride varnishes and fissure sealants to help maintain oral health.^{5,7}

This report focuses on the practices of the Childsmile West programme. For the remainder of the report, any use of the word 'Childsmile' refers to the Childsmile West programme.

Aims

I aim to conduct an experiential project observing the practices of the Childsmile West Programme. Throughout the project I intend to achieve an understanding of the organization and ongoing maintenance required to facilitate a public health intervention on such a large scale. I intend to gain an appreciation of some of the complexities and problems which arise and look at how they are remedied.

In doing so I believe I will contribute usefully to my main aim: To further my interest in the field of reducing social inequalities in dentistry through the implementation of dental public health measures.

Methods

The elective I have undertaken has taken the form of an experiential study. To fulfill my aim there were three main activities which were performed:

- Locating and reading a number of books, journals and reports to gain an appropriate background knowledge of and relating to:
 - The need for the intervention in the population
 - The evidence base to support the predicted success of the intervention
 - The government support for the intervention
 - Evaluation of previous dental public health interventions
 - Details of the current practices within the Childsmile programme

- I had a number of meetings with personnel involved in the project at multiple levels including:
 - Personnel at the managerial level
 - Personnel involved in the evaluation process
 - Personnel at the operational level

- Observation of practices at the operational level.

The meetings with personnel at different levels of the programme formed the main practical element of the project. I initially met with Lynn Brewster, the programme manager for Childsmile West. This meeting gave the chance to talk to someone at the top level. Having explained what I was wishing to see at an operational level, Lynn was able to give me contact details for Catherine Kelly the lead health visitor for the Glasgow Southwest Community Health and Care Partnership (CHCP). We arranged to get together along with the other members of the South West CHCP including the DHSWs. Catherine was also able to organize two separate visits to Childsmile dental practices. One practice visit was to Pollok Health Centre, part of the community dental service, here I was able to meet with one of the dental care professionals who talked about her role in the project. The second visit was to a general dental practice in Pollok where I talked with the dental nurse providing the oral health promotion and observed family visits. Visiting Childsmile practices within the community and general dental services allowed for interesting comparisons to be made.

I also met with Bill Wright the programme evaluator who plays a key role in the evaluation and monitoring of the project.

The background reading I performed throughout the project was essential, the knowledge I gained from the various sources allowed me to guide the meetings with personnel towards areas which I felt would better aid my understanding.

Findings and Reflections

Development and Management of Childsmile

Lynn Brewster was the first member of the Childsmile team I spent any considerable amount of time with. She was able to give a clear overview of the project as a whole, clarifying my previous areas of uncertainty. As programme manager for Childsmile West, Lynn was well placed to expand upon what is involved in initiating and administering a project on such a scale. It is important to note that while, as programme manager of the initiative, Lynn bears the majority of the managerial load, there are other individuals who may possess responsibilities for tasks which contribute to the 'management' of the programme. Therefore not all aspects discussed are necessarily the sole responsibility of Lynn.

Key tasks performed:

- Formation of the program structure
- Formation of financial procedures
- Formation of training procedures for previously qualified dental care professionals
- Formation of training procedures for new personnel (DHSWs)
- Provision of documentation for all levels of the project

- Provision of materials for use in the project (toothbrushing packs, free-flowing drinks cups)
- Enlisting dental practices for the programme
- Constant liaison with evaluation personnel
- Implementation of changes resulting from feedback
- Support for all levels of the hierarchy

While Lynn played important roles in aspects of the formation of the programme, in the following section I elaborate on some of the ongoing management duties which Lynn performs:

Enlisting dental practices

One of the most important aspects of the management of the programme is to ensure that there are sufficient members of personnel at each level to allow the programme to function correctly. With salaried DHSWs and health visitors already in place, dental nurses and consequently co-operative dental practices are the final and important link in the chain. It is the responsibility of the programme manager to encourage practices to participate in the program. Since dental practices generally have high overheads, the prospect of paying a nurse and using a room to give detailed preventative advice to families and children is often not seen as a desirable option. It is therefore important that the programme has a system to support practices financially.

The programme gives the practice payment in 3 forms:

- A yearly standard payment, subject to continued participation in the programme.

- A training allowance, a yearly payment subject to continued participation in the programme.
- A monthly capitation fee for each child participating in the programme, the level of the payment increases with the age of the child.

For full details of remuneration see Appendix 2

Support for all levels of the hierarchy

In all organizations there is a hierarchy. If a problem is noticed at the lowest level of that hierarchy it is possible the problem can be corrected without involving anyone higher up. If the problem is of sufficient concern, it may be passed up a step in the hierarchy. As programme manager Lynn is essentially at the top of this hierarchy and as a result all problems have the potential to lead to her.

A problem may be brought to the attention of the DHSWs by participating families. If it becomes clear that the problem is a result of the system and not of an operational error, the DHSW would pass the information on to the lead health visitor for the CHCP who would then pass the information to the programme manager. The programme manager would then have the responsibility to ensure the problem was rectified.

Constant liaison with evaluation personnel

As the Childsmile programme is still in the pilot phase, there are many areas of the programme which are constantly changing. Ongoing evaluation can recognise areas of the programme which may require alteration. A good example of this is the implementation of a number of changes to the dental nurse training programme which resulted directly from feedback recorded as part of the evaluation programme. Areas in

need of change had to be approved, the nature of the change then needs identified and implemented. These processes all required approval and supervision from management.

Provision of documentation

Management is responsible for the construction and distribution of many of the materials used in the running of the scheme, a good example of this is the Childsmile Care Manual. This document was produced to give an all encompassing guide for dental care professionals involved in the provision of oral health promotion activities. The manual gives a step by step illustrated guide for each of the practice visits, also providing a series of learning aids to help families understand the oral health messages. This manual was constructed by Lynn Brewster and Lorna Macpherson and is just one example of such documentation.

Evaluation

Bill Wright was kind enough to devote a considerable amount of time to help me understand the basics of the evaluation programme. Evaluation of such a large public health intervention is extremely complex and consists of multiple evaluation components each of which may have multiple levels and dimensions. The project uses a multi-centre approach with help from a number of universities including staff from St Andrews, Dundee and University College London. A summary of the evaluation elements follows:

Health Professional Training

Evaluation of the training methods used for dental nurses and DHSWs is performed to determine if they can deliver the programme effectively and maintain their effectiveness over time. Evaluation methods include:

- Pre and post training questionnaires
- Post training focus groups
- A randomised control trial comparing the communication skills of two groups of nurses, one group having received the basic training package and the second having received an enhanced version with additional sessions including role play with actors.

As mentioned previously, feedback gained from these operations has already led to a second and third iteration of the training programme used for the dental nurses. This helps to emphasise the need for such evaluation showing that it allows for quick intervention in areas where problems may have arisen.

Psychology

There is also ongoing evaluation looking at the participation of families and health professionals in the programme.

The evaluation of health professionals looks specifically at the barriers and facilitators to recruitment and retention within Childsmile. Evaluation methods include postal questionnaires and semi structured interviews for both participants and non participants. For families, the evaluation is carried out with the use of an administered questionnaire.

For health professionals who have participated in the programme semi structured interviews are performed to assess whether participation has influenced their behaviour. Similarly, administered questionnaires are used to determine any behaviour change in participating families.

Economics

An evaluation is to be made of the costs and relative effectiveness of Childsmile. This evaluation is also to be used to estimate the cost of a Scotland-wide rollout of the programme. All costs have to be considered including allowance of health visitor time and donated equipment.

Dental Health

The NDIP is responsible for assessing the caries prevalence in 5 and 11 year old children, however there are currently inspections running in nurseries within the Greater Glasgow and Clyde area as part of NDIP. These inspections are being used to establish a baseline for the prevalence of caries in 3 year old children. This data can be used for comparison when children within the Childsmile programme reach 3 years old.

General Health

Using the unique Community Health Index or CHI number of each child in the programme, it is possible to link with a number of other health databases at the Information Services Division. This data will be used in an epidemiological study to look at the impact of the programme on general health. The CHCP of Glasgow West is not yet involved in the programme and can be used as a control to make comparisons between participants and non participants

Oral health related quality of life study

In addition to evaluating the health outcomes of the participants the evaluation programme also intends to carry out an oral health related quality of life study. There are currently no existing instruments to allow for such an evaluation in this age group, so a tool needs to be created, tested and validated. This tool is being created with the help

of staff from both University College London and St Andrews University, showing the benefits of the multi-centre evaluation approach used.

Data Collection

There is a considerable amount of documentation to complete for all personnel on each occasion where contact is made with the family. Some of this is necessary as legal documentation, however the data collected from these monitoring forms also plays a vital role in the evaluation of the programme. Basic database enquiries on data collected from these forms can provide information such as the proportion of families invited into the programme who agreed to take part, or the drop out rate. All monitoring forms also show the child's CHI number allowing links to be made with other databases. A brief summary of the information contained and the purpose of each of the monitoring forms follows:

Health Visitor Caries Risk Assessment – 'The yellow form'

Filled in by the health visitor at a routine visit within the first 8 weeks of life, to invite families to take part in the programme. This form gives data regarding: the number of families invited; the number who accepted the invitation; the number who declined the invitation; and gives a reason in instances where the invitation was declined.

This form has already seen 3 revisions, each revision was implemented to make the form less ambiguous, and therefore quicker and easier to complete. Note the difference between appendix 3 and appendix 4.

Invitation to Childsmile – ‘The blue form’

This form is almost identical to the caries risk assessment form used by the health visitor and is used as an alternative referral route for children into the Childsmile programme. This was produced in response to feedback from practices where a desire was expressed for an alternative method of referral for children who met the inclusion criteria. These could be from families which were missed by health visitors or previously declined an invitation into the programme. The form was introduced in May 2007. It provides the same data as ‘the yellow form’.

Dental Health Support Worker – First Visit – ‘The purple form’

The purple form is filled out by the DHSW during their first visit to the family. The form confirms parental consent for enrollment in the programme and accordingly gives the family the option to opt out. A Childsmile dental practice is chosen and the date for a first visit to the practice arranged and documented.

Record of Child/Parent Contact – ‘The pink form’

The pink form records every occasion where contact is made with a family enrolled in the project. It is filled out at each visit made by the DHSW and at each visit made by the family to the dental practice. The form records what stage of visit occurred, what advice was given and what resources were issued. The pink form will also record occasions where the family failed to attend, and can be used to generate data regarding drop out rates. The pink forms are also used by practices to ensure they receive the correct payment in accordance with the terms set out earlier.

Dental Health Support Worker – Courtesy Visit – ‘The green form’

The green form is completed by the DHSW at their visit to a family’s home following their first visit to the Childsmile dental practice. The form records the family’s views on the first visit, recording any issues they may have had.

The fact that it is standard to devote 10 to 15% of the overall budget of a public health intervention to evaluation costs gives an indication of the importance of the work carried out. Having gained a superficial understanding of some of the evaluation processes utilised in this intervention, I found the scale of the task genuinely staggering. The time Bill Wright spent explaining the processes was enlightening and has given me a better idea of the importance of evaluation in such a programme.

Operational Level

Dental Health Support Workers

My first encounter of proceedings at an operational level was meeting with the Dental Health Support Workers (DHSWs) for the Glasgow South West Community Health and Care Partnership (CHCP) along with Gill Hannah, an Oral Health Promoter, and Catherine Kelly, the Lead Health Visitor for the area. I was allowed to sit in on a feedback session, where the DHSWs had a chance to report back to Catherine, commenting on issues which may have arisen and on the general progress of the programme. Afterwards I was given an opportunity to ask questions of the group which allowed me to gain a greater appreciation of their roll in the programme, and also a first hand account of problems they have encountered.

The Dental Health Support Worker is a new health professional role which was created specifically to perform new tasks and deal with new responsibilities which resulted from the creation of the Childsmile programme.

Within a particular CHCP, a DHSW is assigned to a particular area. When a family within their area is invited to take part in the Childsmile programme the DHSW will meet with the family. At this meeting it is the responsibility of the DHSW to explain the purpose of the programme, what is involved and arrange for a link with a specific dental practice. Following this visit, the DHSW will form a link between the family and the practice, regularly liaising with both parties ensuring the family attends appointments and addressing concerns they may have.

The programme started in January 2006, and accordingly is still very much in its infancy. The DHSWs in this CHCP had all been trained, and working for around a year. In this CHCP all of the DHSWs are women and most have children of their own. This undoubtedly gives an advantage when trying to work with young parents, who are often mothers, as they understand some of the stress and emotions resulting from sleepless nights and tiresome days. As can be seen in appendix 1⁷ the scheduled visits which the DHSW requires to make occur at roughly 6 weeks, 3-4 months and 30 months. Accordingly none of the DHSWs have yet made any 30 month visits and the experiences they relayed to me were mainly from the 6 week and 3-4 month visits.

The DHSWs were in agreement that their first visit is generally mostly concerned with ensuring a good relationship with the parents. While there are forms to be filled out and arrangements to be made for a practice visit, the families are generally happy to co-operate at this stage. The second visit occurs after the family makes their first practice

visit. At this stage the DHSWs can get a good indication of how much the family have taken from the session, many of the DHSWs reported that it is often quite clear at this stage whether a family is going to continue with the programme.

The DHSWs noted that there was a fairly steep drop off from the programme after 6 months. Feedback which the DHSWs have received suggests this is to do with the fact that maternity leave ends after 6 months. In instances where the family misses a practice visit, they are given 3 opportunities to attend before they are removed from the programme. However DHSWs have recognised that if parents miss the first 6 month practice visit they are unlikely to attend another.

I found it very interesting that despite having only been in the role for a short while, the DHSWs had already noticed a number of patterns, and could recognise signs that indicated which parents had lost interest in the programme.

General Dental Services

Through my contact with Catherine Kelly, I was able to attend a general dental practice within her CHCP which had signed up for the Childsmile programme. At the practice I met with Denise a nurse within the practice who had recently completed the Childsmile dental nurse training.

In addition to discussing the views Denise had regarding the programme and problems which she had encountered. I was allowed to sit in on several practice visits made by families in the area. Of the 5 visits which were scheduled to take place when I was at the practice, two of the families failed to attend. These were both 6 month visits. The remaining appointments were 3 month visits and while Denise adhered closely to the

prescribed oral health messages as noted in the Childsmile Care Manual, it was good to see how well she dealt with deviations from the prescribed teaching when questions were asked by the families. One visit was particularly challenging as the mother had brought her 2 other children and was interested in advice for all 3 children, which were of different ages.

Denise was exceptionally enthusiastic about the programme as a whole and clearly relished to opportunity to pass on her knowledge.

Community Dental Service

Through Catherine Kelly, I was also able to arrange a meeting with Laura, one of the dental care professionals at Pollok Health Centre. She had been working as a dental nurse within the community for a number of years and had recently taken part in the training to allow her to give oral health promotion advice as part of Childsmile.

I was unable to observe any oral health promotion with families at Pollok health centre, however was still able to discuss the programme with Laura. Laura was clearly grateful for the additional training which she had been able to attend, but it occurred to me that Laura found difficulty in realising the benefit of this particular programme over the work she had been doing previously.

There appeared to be a distinct difference in the attitudes between the dental nurses of the community and general dental services towards the Childsmile programme. Having only discussed opinions with one nurse from each area of the dental service it would be foolish to make generalisations. It did however occur to me that one of the lures of the

programme for dental nurses is considered to be the increased job satisfaction from increased responsibilities and variety of work. While this will undoubtedly be the case for nurses in the general dental services, the more lenient time schedule prevalent in community dentistry often allows for a greater emphasis to be placed on prevention and oral health promotion, with which community dental nurses often have a very active role. Perhaps the Childsmile programme is not as big a deviation from the normal work carried out by community dental nurses when compared with nurses in the general dental services.

Conclusion

The link between social deprivation and poor oral health has been established for some time, and continues to be a problem. It seems clear to many, myself included, that if these discrepancies are to be redressed there is the need for continuing public health interventions which target high risk groups and aim to provide evidence based oral health promotion.

Within my own year group of dental students it is clear that dental public health issues are not among those which many consider to be the most interesting or important. My aim in participating in this experiential project was to ensure that I furthered my current interest in the field of reducing inequalities in dentistry through dental public health measures. I found observing and investigating this pioneering dental public health intervention, to be fascinating at all levels. I feel I have gained a good overall understanding of the processes involved in such a programme and further to this I now certainly have a greater interest of work in the field.

It has occurred to me that for interventions of this nature to be successful, enthusiastic individuals are required at each level of the programme. It is my hope that as a qualified dentist I can be one such individual within an initiative with aims as optimistic as Childsmile.

References

Levine R S, Stillman-Lowe C R. *The Scientific Basis of Oral Health Education*: British Dental Journal Books, 2004.

Murray J J, Nunn J H, Steele J G. *Prevention of Oral Disease*. Fourth edition: Oxford University Press, 2004.

Kimbrough V J, Henderson K. *Oral Health Education*: Pearson Prentice Hall, 2006

Burt B A, Eklund S A. *Dentistry, Dental Practice and the Community*. Sixth edition: Elsevier Saunders, 2005

Blair Y, Macpherson L et al. Dental health of 5-year-olds following community-based oral health promotion in Glasgow, Scotland. *International Journal of Paediatric Dentistry* **16**: 388-398, 2006.

Blair Y, Macpherson L et al. Glasgow nursery-based caries experience, before and after a community development-based oral health programmes's implementation. *Community Dental Health* **21**: 291-298, 2004.

Towards Better Oral Health in Children a Consultation Document on Children's Oral Health in Scotland - A Consultation Document on Children's Oral Health in Scotland. 2002: Edinburgh, Scottish Executive.

Naven LM and Macpherson L. Process evaluation of a Scottish pre-fives toothpaste distribution programme. *International Journal of Health Promotion & Education* **44**: 71-77, 2006.

Carstairs V, Morris R. *Deprivation and Health in Scotland*: Aberdeen University Press, 1991.

Ottawa Charter for Health Promotion. 1986: Geneva. World Health Organisation.

SIGN 83 Prevention and management of dental decay in the pre-school child. 2005: Edinburgh. NHS Quality Improvement Scotland

Harris N, Nicoll AD, Adair PM et al. Risk factors for caries in young children: a systematic review of the literature. *Community Dental Health*. **21**: 71-85, 2004.

<http://www.scot.nhs.uk/introduction.html>. 09/2007: NHS Scotland

Evaluation of NHS Greater Glasgow Oral Health Action Teams. 2005. NHS Greater Glasgow.

Kerr A. A National Framework for Service change in the NHS in Scotland – Building a Health Service Fit for the Future. 2005: Edinburgh. Scottish Executive.

Acknowledgement of Sources

1. Merrett MCW, Goold S et al. *National Dental Inspection Programme of Scotland: Report of the 2006 Survey of P1 Children*: Scottish Dental Epidemiological Coordinating Committee, 2006.
2. Carstairs V, Morris R. *Deprivation and Health in Scotland*: Aberdeen University Press, 1991.
3. An Action Plan for Improving Oral Health and Modernising NHS Dental Services in Scotland. 2005: Edinburgh, Scottish Executive.
4. Blair Y, Macpherson L et al. Dental health of 5-year-olds following community-based oral health promotion in Glasgow, Scotland. *International Journal of Paediatric Dentistry* **16**: 388-398, 2006.
5. An Introduction to the Childsmile Programme. 2006. NHS Scotland.
6. Pre-5-Year-Old Oral Health Gain Project, Possilpark. Four year report. 2001, Greater Glasgow Health Board.
7. A guide to Childsmile oral health sessions. 2006 NHS Scotland.

Year 1 Ready Reckoner																	
A	C	E	F	H	J	K	M	O	P	R	T	U	W	Y	Z	AA	AB
No. of children aged 0-11 mths	Programme Capitation Fees per annum		No. of children aged 12-23 mths	Programme Capitation Fees per annum		No. of children aged 24-35 mths	Programme Capitation Fees per annum		No. of children aged 36-47 mths	Programme Capitation Fees per annum		No. of children aged 48-59 mths	Programme Capitation Fees per annum		Standard Payment (Year 1)		Training Allowance in Year 1
0	£0.00		0	£0.00		0	£0.00		0	£0.00		0	£0.00				
1	£15.00		1	£20.00		1	£25.00		1	£30.00		1	£35.00				
2	£30.00		2	£40.00		2	£50.00		2	£60.00		2	£70.00				
3	£45.00		3	£60.00		3	£75.00		3	£90.00		3	£105.00				
4	£60.00		4	£80.00		4	£100.00		4	£120.00		4	£140.00				
5	£75.00		5	£100.00		5	£125.00		5	£150.00		5	£175.00				
6	£90.00		6	£120.00		6	£150.00		6	£180.00		6	£210.00				
7	£105.00		7	£140.00		7	£175.00		7	£210.00		7	£245.00				
8	£120.00		8	£160.00		8	£200.00		8	£240.00		8	£280.00				
9	£135.00		9	£180.00		9	£225.00		9	£270.00		9	£315.00				
10	£150.00		10	£200.00		10	£250.00		10	£300.00		10	£350.00				
11	£165.00		11	£220.00		11	£275.00		11	£330.00		11	£385.00				
12	£180.00		12	£240.00		12	£300.00		12	£360.00		12	£420.00				
13	£195.00		13	£260.00		13	£325.00		13	£390.00		13	£455.00				
14	£210.00		14	£280.00		14	£350.00		14	£420.00		14	£490.00				
15	£225.00		15	£300.00		15	£375.00		15	£450.00		15	£525.00				
16	£240.00		16	£320.00		16	£400.00		16	£480.00		16	£560.00				
17	£255.00		17	£340.00		17	£425.00		17	£510.00		17	£595.00				
18	£270.00		18	£360.00		18	£450.00		18	£540.00		18	£630.00				
19	£285.00		19	£380.00		19	£475.00		19	£570.00		19	£665.00				
20	£300.00		20	£400.00		20	£500.00		20	£600.00		20	£700.00				
21	£315.00		21	£420.00		21	£525.00		21	£630.00		21	£735.00				
22	£330.00		22	£440.00		22	£550.00		22	£660.00		22	£770.00				
23	£345.00		23	£460.00		23	£575.00		23	£690.00		23	£805.00				
24	£360.00		24	£480.00		24	£600.00		24	£720.00		24	£840.00				
25	£375.00	+	25	£500.00	+	25	£625.00	+	25	£750.00	+	25	£875.00	+			
26	£390.00		26	£520.00		26	£650.00		26	£780.00		26	£910.00				
27	£405.00		27	£540.00		27	£675.00		27	£810.00		27	£945.00				
28	£420.00		28	£560.00		28	£700.00		28	£840.00		28	£980.00				
29	£435.00		29	£580.00		29	£725.00		29	£870.00		29	£1,015.00				
30	£450.00		30	£600.00		30	£750.00		30	£900.00		30	£1,050.00				
31	£465.00		31	£620.00		31	£775.00		31	£930.00		31	£1,085.00				
32	£480.00		32	£640.00		32	£800.00		32	£960.00		32	£1,120.00				
33	£495.00		33	£660.00		33	£825.00		33	£990.00		33	£1,155.00				
34	£510.00		34	£680.00		34	£850.00		34	£1,020.00		34	£1,190.00				
35	£525.00		35	£700.00		35	£875.00		35	£1,050.00		35	£1,225.00				
36	£540.00		36	£720.00		36	£900.00		36	£1,080.00		36	£1,260.00				
37	£555.00		37	£740.00		37	£925.00		37	£1,110.00		37	£1,295.00				
38	£570.00		38	£760.00		38	£950.00		38	£1,140.00		38	£1,330.00				
39	£585.00		39	£780.00		39	£975.00		39	£1,170.00		39	£1,365.00				
40	£600.00		40	£800.00		40	£1,000.00		40	£1,200.00		40	£1,400.00				
41	£615.00		41	£820.00		41	£1,025.00		41	£1,230.00		41	£1,435.00				
42	£630.00		42	£840.00		42	£1,050.00		42	£1,260.00		42	£1,470.00				
43	£645.00		43	£860.00		43	£1,075.00		43	£1,290.00		43	£1,505.00				
44	£660.00		44	£880.00		44	£1,100.00		44	£1,320.00		44	£1,540.00				
45	£675.00		45	£900.00		45	£1,125.00		45	£1,350.00		45	£1,575.00				
46	£690.00		46	£920.00		46	£1,150.00		46	£1,380.00		46	£1,610.00				
47	£705.00		47	£940.00		47	£1,175.00		47	£1,410.00		47	£1,645.00				
48	£720.00		48	£960.00		48	£1,200.00		48	£1,440.00		48	£1,680.00				
49	£735.00		49	£980.00		49	£1,225.00		49	£1,470.00		49	£1,715.00				
50	£750.00		50	£1,000.00		50	£1,250.00		50	£1,500.00		50	£1,750.00				
															x4 quarterly payments of £500. i.e. £500 payable on start date, £500 payable at end of 3 mths , £500 payable at end of 6 mths if at least 10 children registered into programme at end of 6th mth, £500 payable at end of 9 mths if at least 20 children registered into programme by end of 9th mth.		£1,400.00

Full year payments (for illustrative purposes only)

Appendix 1

Dates of Child/Parent Contact

Documentation/Resource Checklist

Age of child at contact	Professional	Documentation	Resources
Weeks 0-8	Health Visitor	<ul style="list-style-type: none"> Caries Risk Assessment form 	<ul style="list-style-type: none"> Introduction leaflet
6-10 weeks (ideally)	DHSW	<ul style="list-style-type: none"> DHSW First Visit form 	<ul style="list-style-type: none"> Programme Folder, Map, and Dental Nurse Appointment Card
3 months	DCP (or DHSW)	<ul style="list-style-type: none"> Child/Parent Contact form Medical History form <i>Childsmile</i> – The Family <i>Childsmile</i> – The Family Consent Form Action Point card 	<ul style="list-style-type: none"> Baby's First Teeth Leaflet Inform family that a 0-3 dental pack will be given at age 6 month visit. If a tooth starts to come through earlier, please contact DHSW for a dental pack
3-4 months	DHSW follow up visit/telephone call	<ul style="list-style-type: none"> DHSW – Courtesy Visit form 	<ul style="list-style-type: none"> 0-3 dental pack if requested
6 months	DCP (or DHSW)	<ul style="list-style-type: none"> Child/Parent Contact form Check Medical History Action Point card 	<ul style="list-style-type: none"> Drinks for 0-2 year olds leaflet Tommee Tippee cup 0-3 dental pack Refer to Fun First Foods (Issue if not already received via Health Visitor)
12 months	DCP (or DHSW)	<ul style="list-style-type: none"> Child/Parent Contact form Check Medical History Action Point card 	<ul style="list-style-type: none"> 0-3 dental pack Snacks Placemat
18 months	DCP (or DHSW)	<ul style="list-style-type: none"> Child/Parent Contact form Check Medical History Action Point card 	<ul style="list-style-type: none"> 0-3 dental pack
24 months	DCP (or DHSW)	<ul style="list-style-type: none"> Child/Parent Contact form Check Medical History Action Point card 	<ul style="list-style-type: none"> 0-3 dental pack Sports bottle
30 months	DHSW preparation visit	<ul style="list-style-type: none"> Food Diary – explain to parent what it is, how to complete and bring along to 30 months practice visit. 	<ul style="list-style-type: none"> Food Diary Replace previous resources as required
30 months	DCP (or DHSW)	<ul style="list-style-type: none"> Check Food Diary Child/Parent Contact form Check Medical History Action Point card 	<ul style="list-style-type: none"> 0-3 dental pack Drinking straws
36 months	DCP (or DHSW)	<ul style="list-style-type: none"> Refer back to 30 month Food Diary Child/Parent Contact form Check Medical History Action Point card 	<ul style="list-style-type: none"> 0-3 dental pack

Appendix 3

Current 'Yellow Form'



Health Visitor Caries Risk Assessment

Dental Health Support Worker Copy

<p>1. Child details <i>(block capitals)</i></p> <p>Surname _____ First name(s) _____ Address _____ _____ _____</p> <p>Full postcode <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>CHI <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>DOB ____ / ____ / 20__ Age (weeks) <input type="text"/> <input type="text"/></p> <p>Tel _____</p> <p>Ethnicity _____ Main language spoken _____</p> <p>Interpreter required YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>Gender M <input type="checkbox"/> F <input type="checkbox"/> Child's position in the family <input type="checkbox"/></p> <p>Age of mother at child's birth date <input type="text"/> <input type="text"/> years</p>	<p>2. Health Visitor details <i>(block capitals or ink stamp on each copy)</i></p> <p>Surname _____ First name _____ Address _____ _____ _____</p> <p>Full postcode <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>Tel _____</p> <p>3. Name(s) of legal parent/guardian</p> <p>_____</p> <p>Relationship to child _____</p> <p>_____</p>															
<p>4. Caries Risk Assessment</p> <p style="text-align: center;">Please answer YES or NO as appropriate at <u>each</u> of the following statements:</p> <table style="width:100%; border: none;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 15%; text-align: center;">YES</th> <th style="width: 15%; text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>This child lives in an area of DepCat 5/6/7 or 1st quintile SIMD <i>(Please refer to the list of high DepCat postcode sectors available via your local CHP)</i></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Someone in this household smokes.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>The reason for the parent/carer's last dental visit was to obtain relief of pain.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>After considering all other known caries risk factors, this child may be more likely to get tooth decay</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table> <p style="text-align: right; margin-right: 10%;"> If YES ticked for ANY of the statements please invite the child into Childsmile </p> <p style="text-align: right; margin-right: 10%;"> If ALL ticked NO, Advise to seek routine dental care <input type="checkbox"/> </p>			YES	NO	This child lives in an area of DepCat 5/6/7 or 1st quintile SIMD <i>(Please refer to the list of high DepCat postcode sectors available via your local CHP)</i>	<input type="checkbox"/>	<input type="checkbox"/>	Someone in this household smokes.	<input type="checkbox"/>	<input type="checkbox"/>	The reason for the parent/carer's last dental visit was to obtain relief of pain.	<input type="checkbox"/>	<input type="checkbox"/>	After considering all other known caries risk factors, this child may be more likely to get tooth decay	<input type="checkbox"/>	<input type="checkbox"/>
	YES	NO														
This child lives in an area of DepCat 5/6/7 or 1st quintile SIMD <i>(Please refer to the list of high DepCat postcode sectors available via your local CHP)</i>	<input type="checkbox"/>	<input type="checkbox"/>														
Someone in this household smokes.	<input type="checkbox"/>	<input type="checkbox"/>														
The reason for the parent/carer's last dental visit was to obtain relief of pain.	<input type="checkbox"/>	<input type="checkbox"/>														
After considering all other known caries risk factors, this child may be more likely to get tooth decay	<input type="checkbox"/>	<input type="checkbox"/>														
<p>5. INVITATION made ←</p> <p><i>If child invited into the Childsmile Programme, please complete remainder of form</i></p> <p>Accepted invitation into Childsmile <input type="checkbox"/> Declined <input type="checkbox"/> Why declined? _____</p> <p>The named child received this Caries Risk Assessment on/...../20..... The outcome has been explained and the legal parent/guardian has agreed to be contacted by a Dental Health Support Worker.</p> <p>Will be contacted by: _____ (DHSW) Base: _____</p> <p>DHSW to contact HV prior to visit <input type="checkbox"/></p> <p>Signed: _____ (Assessing HV) Date _____</p>																
<p>6. Parental consent <i>(block capitals)</i></p> <p>I (name) _____ legal parent/guardian of _____ (child's name) agree to be contacted by a Dental Health Support Worker to receive further information on my child taking part in the Childsmile Programme. I agree to my child's details being passed to the Dental Health Support Worker.</p> <p>Signed: _____ Date _____</p>																