



Designed to Smile

Activity Data: April 2014 – March 2015

Monitoring Report

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Contents

Contents	2
Executive Summary.....	3
Targeting - Designed to Smile.....	4
Settings taking part in Designed to Smile	4
Settings offered D2S and participation in constituent elements	7
Supervised tooth brushing	10
Population Coverage – Tooth brushing	11
Consent rates.....	12
Frequency of brushing	14
Children receiving oral health education (OHE)	15
Home packs	17
Wider engagement	19
Parents	19
Setting personnel	21
Primary care personnel	23
.....	23
Integration with wider public health personnel and initiatives.....	24
Quality Assessment	25
Fissure Sealant Activity.....	26
Fluoride varnish.....	28
Staff and resources.....	30
Additional issues.....	33
Abertawe Bro Morgannwg	33
Aneurin Bevan	33
Betsi Cadwaladr.....	34
Additional activity in Cwm Taf.....	35
Hywel Dda.....	36
Successes	36
Barriers	36
Powys.....	36
Conclusions	37
References	38
Appendix	39
Acknowledgements	40

Executive Summary

This report details the Designed to Smile activity which took place between April 2014 and March 2015.

Settings: By the end of March 2015 the total number of schools and nurseries involved in Designed to Smile was 1,509. This includes 1,439 settings which took part in the tooth brushing element of the programme; 453 of these settings also took part in the fissure sealant and fluoride varnish elements of D2S. A further 70 settings were taking part in the fluoride varnish and/or the fissure sealant elements of D2S but were not tooth brushing.

Children tooth brushing: A total of 91,290 children were taking part in the supervised tooth brushing programme by the end of the reporting period. In schools agreeing to take part in the scheme, parental consent remained very high, at 94%.

Population coverage: 59.2% of all children aged from Pre-school-Year 2 in Wales are taking part in the programme (assuming a population denominator based on children aged 3-6). Whereas 7.6% of children in School Years 3-6 are taking part (assuming a population denominator of children aged 7-10).

Home packs: 222,217 home packs were distributed across Wales. On average 2.4 packs were distributed to each child taking part in the supervised tooth brushing element of Designed to Smile in pre-school-Year 2 settings.

Oral health promotion: Across Wales 3748 and 1532 parents attended either group oral health education or one to one sessions respectively.

Overall, 7,486 and 7,508 members of school/nursery staff received training in the implementation of supervised tooth brushing and wider oral health education respectively between April 2014 and March 2015. 88,001 children across Wales received oral health education sessions which incorporated not merely oral health education but also focussed on aspects such as nutrition and healthy food choices.

Quality assessment: A total of 9171 quality assessments (QAs) were carried out across Wales between April 2014 and March 2015. These involved 272 instances of remedial measures being undertaken with 10 settings having to be temporarily suspended.

Fissure Sealant Programme activity: 8,484 children were assessed during April 2014-March 2015; 35 fewer children when compared with the previous year. The total number of teeth sealed during April 2014-March 2015 was 15,763 - 1 less than in April 2013- March 2014.

Fluoride varnish activity: During 2014/15 there has been considerable growth in the Fluoride Varnish element of the programme. Across Wales there were 16,109 children receiving one application with an additional 13,091 having two applications of fluoride varnish.

Staff and costs: During this reporting period an additional 13 individuals were recruited to work on Designed to Smile. Since the scheme was introduced a total of 142 new staff have been recruited to work in the Wales' CDS. A total of £3,691,267 was spent on the Designed to Smile programme during 2014/15; representing 99% of the £3,717,000, allocated.

Targeting - Designed to Smile

- This chapter documents the settings (schools and nurseries) targeted for Designed to Smile, including the supervised tooth brushing (TB) and fluoride varnish (FV) elements. Designed to Smile is specifically aimed at children in Wales with the highest oral health need.
- Early in the planning stages of the project, the Welsh Oral Health Information Unit (WOHIU) produced a priority list of settings for each Community Dental Service (CDS) area, based on levels of deprivation and prevalence of dental caries in five year olds. The CDS teams used these priority lists as a guide to which settings they initially targeted. The original focus was on the supervised tooth brushing element of the programme.

Settings taking part in Designed to Smile

- There has been a steady increase in the number of settings agreeing to take part in Designed to Smile since its inception (Table 1). It is important to note that during the early years of the programme the focus was on the tooth brushing element of the programme. Monitoring data for the fluoride varnish element of Designed to Smile has only been collected since 2011/12.
- The total number of schools and nurseries agreeing to take part in Designed to Smile was 1,509 by the end of March 2015. This includes 1,439 settings agreeing to take part in the tooth brushing element of the programme; 453 of these settings also took part in the fissure sealant and fluoride varnish elements of D2S. A further 70 settings were taking part in the fluoride varnish and/or the fissure sealant elements of D2S but were not tooth brushing.

Table 1 Number of settings taking part in D2S (TB or FV) in April 2014 -2015 compared with previous years, by reporting LHB

	2009-10*	2010-11*	2011-12**	2012-13**	2013-14**	2014-15**
Abertawe Bro Morgannwg	54	127	139	212	245	270
Aneurin Bevan	21	100	157	208	211	211
Betsi Cadwaladr	166	270	326	394	413	419
Cardiff and Vale	232	341	413	384	186 C&V 198 CT	188 C&V 187 CT
Hywel Dda	42	84	147	162	174	186
Powys	0	22	29	34	34	40
Wales	515	944	1211	1394	1452	1509

**settings originally targeted were for the supervised tooth brushing element of the programme*

***includes settings targeted for tooth brushing and fluoride varnish*

#prior to 2012-13 data for Bridgend was recorded under Cardiff and Vale, from 2012-13 onwards data for Bridgend has been recorded in ABMU figures

- Setting type is presented in Table 2. 36 special educational needs schools as defined by Welsh Government and an additional 19 settings referred to as special needs or with special needs units agreed to take part in the Designed to Smile initiative, with age ranges from 3-18.

Table 2 Types of setting agreeing to take part in D2S (any aspect) by LHB

Row Labels	Pre School (0-2)	Nursery (3-4)	Infants	Juniors	Primary	Special needs WG	Special needs non WG	All taking part in any D2S
Aneurin Bevan	81	1			122	7		211
ABMU	131		5	2	125	6	1	270
Betsi Cadwaladr	233		11	9	154	7	5	419
Cardiff and Vale	73	2	1		101	7	5	189
Cwm Taf	107	3	9	3	67	4	1	194
Hywel Dda	60	25	17	2	72	3	7	186
Powys	10	1	6		21	2		40
WALES	695	32	49	16	661	36	19	1509

Table 3 Proportion of settings taking part in relation to total number of nursery/primary schools and children's day care, by LHB

Local Health Board	Total number of settings in LHB	Number of settings taking part in D2S	% of all settings taking part
Anuerin Bevan	464	211	45.5
ABMU	372	270	72.6
Betsi Cadwaladr	873	419	48.0
Cwm Taf	245	194	79.2
Cardiff and Vale	334	189	56.6
Hywel Dda	428	186	43.5
Powys	176	40	22.7
WALES	2892	1509	52.2

**Denominator for settings sourced from WG central school lists and CCSIW registered childcare*

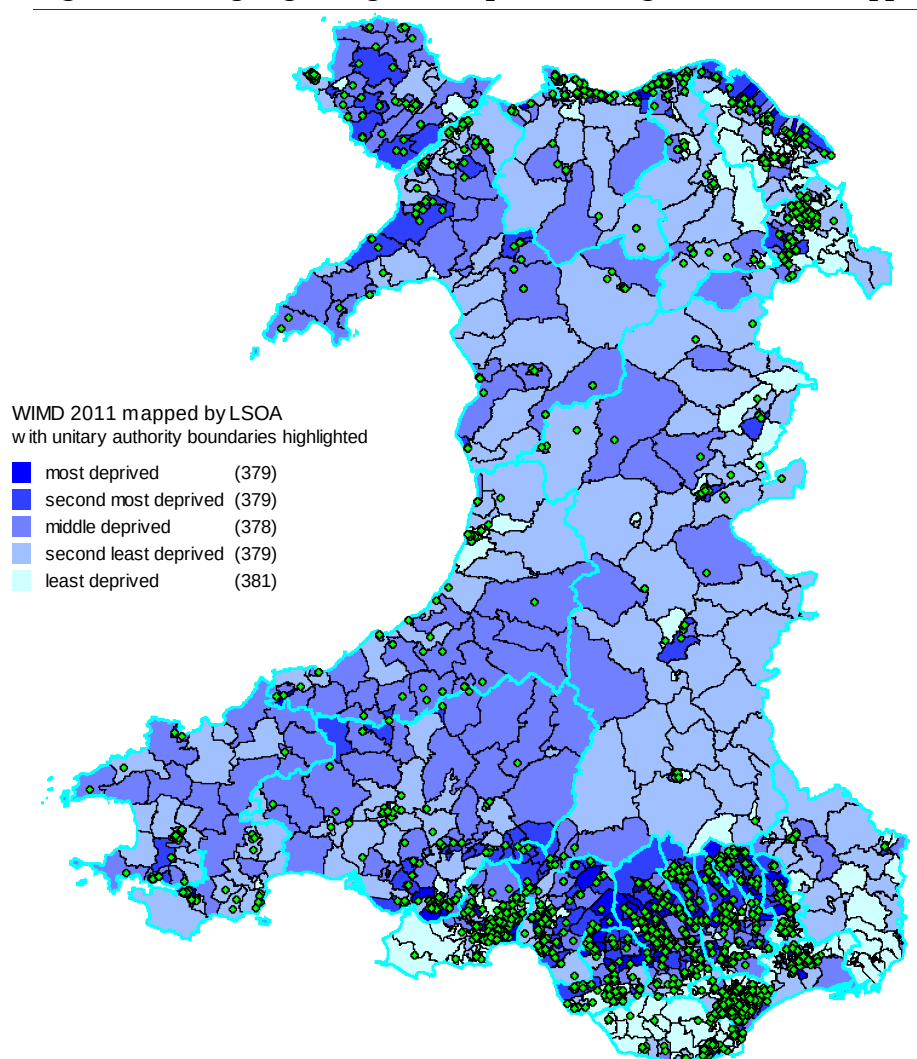
- Table 3 provides an indication of setting coverage across Wales. The total number of settings has been calculated using centralised Welsh Government data on nursery and primary schools and CCSIW¹ data on registered child care. Designed to Smile is active in 52.2% (1509/2892) of these settings.
- Figure 1 and Table 4a provide details of settings taking part in any element of Designed to Smile by the Welsh Index of Multiple Deprivation (WIMD) 2011².
- Across Wales 56.4% of the 1507 (2 not geocoded) settings taking part in Designed to Smile come from the second most and the most deprived categories Table 4a.

¹ Sourced CCSIW website 5th November 2014 – child care settings incorporating (children's day care, crèches, full day care, sessional day care and open access play provision).

² For information on WIMD2011 consult the following: <https://stats.wales.gov.uk/Catalogue/Community-Safety-and-Social-Inclusion/Welsh-Index-of-Multiple-Deprivation/Archive/WIMD-2011>

- Table 4a provides a breakdown of the deprivation quintiles for settings taking part in D2S for each LHB. Local D2S coordinators have justified the inclusion of some settings from the less deprived areas of Wales because their catchment areas include children from more deprived areas.

Figure 1 Settings agreeing to take part in Designed to Smile mapped by WIMD 2011



- It is however recommended that local organisers review their targeting policies for those settings from the least and second least deprived categories in line with the 2014 How To Guide.
- Some of the variation can be explained by relative deprivation across geographical areas. In Blaenau Gwent for example 77% of settings come from the two most deprived groups because the deprivation is more concentrated within the unitary authority.
- In other parts of Wales the pockets of deprivation will result in a lower percentage of settings which are in the most deprived categories e.g. in Ceredigion where 15.9% come from the two most deprived groups (Table 4a). Although, in Ceredigion there has been some residual activity in less deprived areas because of pre-existing tooth brushing schemes which pre-dated D2S. This activity is currently being faded out.

Table 4a The proportion deprivation status of settings taking part according to WIMD 2011, by Unitary Authority

LHB	Unitary Authority	Number of settings taking part in D2S	% settings taking part in each deprivation quintile				
			Least deprived	Second least deprived	Middle deprived	Second most deprived	Most deprived
Aneurin Bevan	Blaenau Gwent	47	0.0	4.3	19.1	31.9	44.7
Aneurin Bevan	Caerphilly	67	3.0	1.5	23.9	28.4	43.3
Aneurin Bevan	Monmouth	11	9.1	18.2	0.0	63.6	9.1
Aneurin Bevan	Newport	42	0.0	0.0	7.1	23.8	69.0
Aneurin Bevan	Torfaen	43	0.0	20.9	16.3	44.2	18.6
ABMU	Bridgend	75	20.0	12.0	8.0	20.0	40.0
ABMU	Neath Port Talbot	84	8.3	16.7	14.3	28.6	32.1
ABMU	Swansea	111	23.4	9.0	18.9	18.9	29.7
Betsi Cadwaladr	Anglesey	58	1.7	0.0	36.2	36.2	25.9
Betsi Cadwaladr	Conwy	69	10.1	18.8	18.8	31.9	20.3
Betsi Cadwaladr	Denbighshire	57	15.8	19.3	40.4	3.5	21.1
Betsi Cadwaladr	Flintshire	64	7.8	14.1	7.8	37.5	32.8
Betsi Cadwaladr	Gwynedd	80	1.3	18.8	37.5	37.5	5.0
Betsi Cadwaladr	Wrexham	91	9.9	12.1	28.6	29.7	19.8
Cwm Taf	Merthyr Tydfil	52	3.8	0.0	15.4	28.8	51.9
Cwm Taf	Rhondda Cynon Taf	142	6.3	7.0	10.6	33.1	43.0
Cardiff & Vale	Cardiff	136	14.7	13.2	14.7	15.4	41.9
Cardiff & Vale	Vale of Glamorgan	53	35.8	11.3	22.6	15.1	15.1
Hywel Dda	Carmarthenshire	85	1.2	20.0	25.9	38.8	14.1
Hywel Dda	Ceredigion	44	18.2	18.2	47.7	11.4	4.5
Hywel Dda	Pembrokeshire	56	0.0	32.1	32.1	25.0	10.7
Powys	Powys	40	17.5	25.0	20.0	37.5	0.0
	WALES	1507	9.9	12.8	21.0	27.5	28.9

**It was not possible to geocode 2 postcodes*

Settings offered D2S and participation in constituent elements

- Between April 2014 and March 2015, a total of 1,609 settings were offered Designed to Smile across Wales. 1,509 settings took part culminating in a Principality wide participation rate of 94%. (Tables 4b and 5).
- Table 4b provides a picture of settings offered D2S by deprivation quintile for each health board. Table 5 provides details of unitary authority participation rates within each health board.
- Setting participation rate for any aspect of Designed to Smile ranged from 78% (40/51) in Powys Health Board area to 100% (211/211) in Aneurin Bevan Health Board (Table 5).

Table 4b Targeting by quintile of deprivation

	Settings taking part in at least one element of Designed to Smile							Settings not taking part in Designed to Smile						
	All settings offered D2S during period	TB only	TB & 1 other element	All D2S: TB, FV & FS	No to TB but participating in at least one other element	Withdrawn from TB, another element continues	TB suspended, another element continues	Not yet targeted	Refused all D2S	Refused TB, not participating in other D2S	Refused TB, not offered another element	TB suspended, no other activity	Withdrawn from D2S	Closed
Aneurin Bevan	211	94	31	64	19	3								
not geocoded	1	1												
Least deprived	3	2		1										
Second least deprived	14	8	3	2	1									
Middle deprived	35	13	8	11	2	1								
Second most deprived	70	29	11	21	8	1								
Most deprived	88	41	9	29	8	1								
ABMU	278	182	64	16	8						8			
Least deprived	48	42	6											
Second least deprived	35	27	5	1							2			
Middle deprived	40	29	9	1							1			
Second most deprived	61	30	23	4	3						1			
Most deprived	94	54	21	10	5						4			
Betsi Cadwaladr	467	343	50	13	8	4	1			11		5	15	17
Least deprived	38	27	3	2									2	4
Second least deprived	69	49	9	1						2		1	5	2
Middle deprived	133	102	9	1	2	4				7		2	3	3
Second most deprived	138	104	17	3	2					1		2	3	6
Most deprived	89	61	12	6	4		1			1			2	2
Cardiff and Vale	208	95	50	23	12	9		2	2		6		4	5
not geocoded	1							1						
Least deprived	40	26	6	3	2	2								1
Second least deprived	28	13	5	2	2	2			1		2			1
Middle deprived	36	14	11	3	2	2					2		1	1
Second most deprived	32	13	10	2	3	1			1				1	1
Most deprived	71	29	18	13	3	2		1			2		2	1
Cwm Taf	203	115	44	29	3	3			1	1			2	5
not geocoded	1													1
Least deprived	11	10		1										
Second least deprived	10	10												
Middle deprived	24	12	8	3						1				
Second most deprived	66	38	14	8	1	1			1				1	2
Most deprived	91	45	22	17	2	2							1	2
Hywel Dda	191	164	6	16				3					2	
not geocoded	1	1												
Least deprived	10	9						1						
Second least deprived	44	42		1				1						
Middle deprived	62	56	3	2									1	
Second most deprived	52	42	3	7										
Most deprived	22	14		6				1					1	
Powys	51	13	27							4	4		3	
Least deprived	10	3	4							2			1	
Second least deprived	13	3	7							1	1		1	
Middle deprived	10	1	7							1	1			
Second most deprived	18	6	9								2		1	
WALES	1609	1006	272	161	50	19	1	5	3	16	18	5	26	27

- The supervised tooth brushing participation rate for Wales was 89% (1006+272+161/1609 or 1439/1609). An additional 50 settings were classified as taking part in the supervised tooth brushing element of the programme during this reporting period when compared with April 2013-March 2014, where a total of 1389 settings were taking part.
- In Betsi Cadwaladr the 16 settings noted as withdrawn in Table 4, relates to settings who have withdrawn since the programme began; 6 settings withdrew during 2014-15.

Table 5 Settings targeted for Designed to Smile by UA within each LHB

AREA	All settings offered D2S	Yes to any D2S element	All D2S elements	TB only	TB & 1 other element	No to TB but participating in another element	Withdrawn from TB, another element continues	TB suspended, another element continues	Not yet targeted	No to TB, not offered other element	Refused D2S	Withdrawn D2S	TB suspended, no other activity	Closed
Aneurin Bevan	211	211	64	94	31	19	3							
Blaenau Gwent	48	48	12	24	3	6	3							
Caerphilly	67	67	23	25	12	7								
Monmouth	11	11	4	5	2									
Newport	42	42	12	18	6	6								
Torfaen	43	43	13	22	8									
ABMU	278	270	16	182	64	8				8				
Bridgend	80	75		59	16					5				
Neath Port Talbot	87	84	1	56	20	7				3				
Swansea	111	111	15	67	28	1								
Betsi Cadwaladr	467	419	13	343	50	8	4	1			11	15	5	17
Anglesey	64	58	2	54	2						3			3
Conwy	80	69		54	10	5						5	2	4
Denbighshire	61	57	2	38	11	2	4					2		2
Flintshire	68	64	8	42	12	1		1			1	1		2
Gwynedd	88	80		69	11						3	2		3
Wrexham	106	91	1	86	4						4	5	3	3
C&V	208	189	23	95	50	12	9		2	6	2	4		5
Cardiff	147	136	19	65	36	9	7		1	5		2		3
Vale	61	53	4	30	14	3	2		1	1	2	2		2
Cwm Taf	203	194	29	115	44	3	3				2	2		5
Merthyr	54	52	6	28	16		2				1			1
RCT	149	142	23	87	28	3	1				1	2		4
Hywel Dda	191	186	16	164	6				3			2		
Carmarthenshire	88	85	8	75	2				1			2		
Ceredigion	47	45	3	40	2				2					
Pembrokeshire	56	56	5	49	2									
Powys	51	40		13	27					4	4	3		
WALES	1609	1509	161	1006	272	50	19	1	5	18	19	26	5	27

**columns with pale grey header add up to “Yes to any D2S element” column.*

- Unitary authority level participation rates in any element of D2S ranged from 78% in Powys to 100% in Swansea, Pembrokeshire and all Aneurin Bevan unitary authorities (Table 5).
- It should be noted however, there remain 10 settings in the Aneurin Bevan Health Board area who have consistently refused to take part in any aspect of the programme. They are contacted from time to time to see if they are in a position to take part – but they have not taken up the offer. As this has been a longstanding situation they are no longer included in the targeting figures.
- 19 settings declined to take part in the scheme between April 2014 – March 2015. The highest numbers of refusals were reported by Betsi Cadwaladr University Health Board and Powys Health Board with 11 and 4 refusals respectively (Table 5). Reasons included staffing issues, wanting to observe other settings before taking part and concentrating on other performance related issues. A further 26 settings withdrew from the scheme and 27 settings closed during 2014/15.
- It should be noted that those not yet targeted were not necessarily scheduled to be targeted during 2014/15 but will be during the next reporting period.

Supervised tooth brushing

Total settings in D2S **1509**

Total settings brushing **1,439**

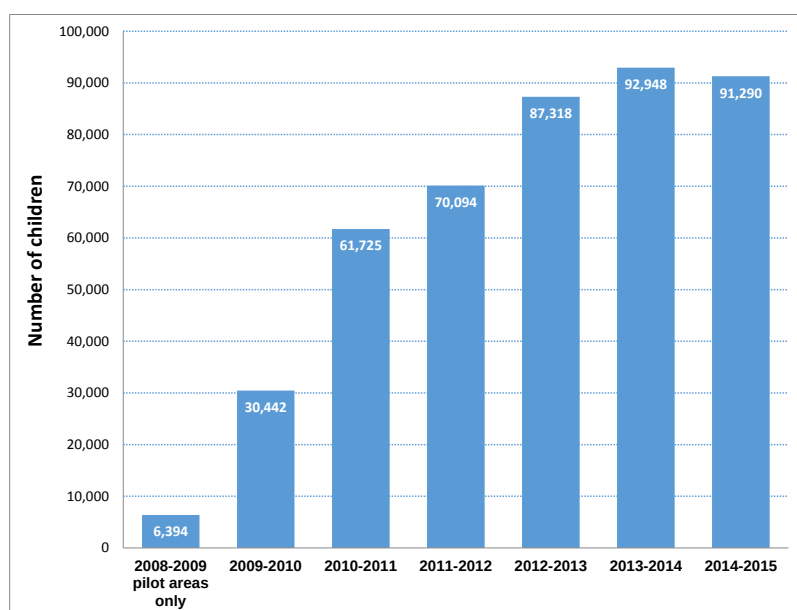
Total children brushing **91,290**

Total money spent **£3,691,267**

AREA	TOTAL SETTINGS BRUSHING	TOTAL CHILDREN BRUSHING
Blaenau Gwent	39	2160
Caerphilly	60	3725
Monmouth	11	619
Newport	36	2353
Torfaen	43	3583
Aneurin Bevan	189	12440
Bridgend	75	5049
Neath Port Talbot	77	5604
Swansea	110	11665
ABMU	262	22318
Anglesey	58	2140
Conwy	64	2919
Denbighshire	51	2530
Flintshire	62	4808
Gwynedd	80	2897
Wrexham	91	4909
Betsi Cadwaladr	406	20203
Cardiff	120	8998
Vale	48	3203
Cardiff & Vale	168	12201
Merthyr	50	2957
RCT	138	8619
Cwm Taf	188	11576
Carmarthenshire	85	4375
Ceredigion	45	2095
Pembrokeshire	56	3327
Hywel Dda	186	9797
Powys	40	2755
WALES	1439	91290

- Since Designed to Smile was introduced into Wales there has been a steady increase in the numbers of children tooth brushing in schools and nurseries (Figure 2).
- Between 2013-14 and the current reporting period the total number of children brushing has fallen slightly by 1,658 (to 91,290). In 2013-14 the total number of children brushing was 92,948. Now that the programme has targeted most eligible settings the numbers taking part have plateaued.

Figure 2 The numbers of children taking part in the tooth brushing element of Designed to Smile since the inception of the programme



Population Coverage – Tooth brushing

- Population coverage rates are presented below. CDS data returns highlight whether children are nursery aged, in reception or school year 1, 2, 3 etc. Unfortunately it is not possible to disentangle data relating to age for mixed age classes.
- Consequently various population coverage rates have been calculated with different numerators and denominators. Assuming a population denominator based on children aged 2-6, 47% of children from Pre-school-Year 2 in Wales are taking part in the programme (Tables 6 & 7). Using the same denominator, the coverage for this age group ranged from 36.1% in Aneurin Bevan to 63.2% in ABMU and Hywel Dda (Table 7).
- Whereas 7.6% of children in School Years 3-6 are taking part (assuming a population denominator of children aged 7-10).

Table 6 Population coverage across Wales – various denominators

Agegroup	Number of children brushing	Denominator	% coverage
Pre-school - Year 2	81,508	137684*	59.2
Pre-school - Year 2	81,508	173,342**	47.0
Pre-school - Year 1	70,341	104196***	67.5
School Year 3-6	9782	129473****	7.6

*based on single year age bands from 2011 Census - ages 3-6

**based on single year age bands from 2011 Census - ages 2-6

***based on single year age bands from 2011 Census - ages 3-5

****based on single year age bands from 2011 Census - ages 7-10

~numerator excludes school year 2 but includes school year 1 and younger (i.e. Pre-school, Reception, Year1 and SN Primary) - best approximate to 5 and unders brushing. Also note that some mixed classes include under and over 5s. So it is difficult to get an exact numerator here.

Table 7 Population coverage by Health Board

	Number brushing nursery-Yr2	Denominator children aged 2-6	Coverage	Number brushing Years 3-6	Denominator children aged 7-10	Coverage
WALES	81508	173342	47.0	9782	129473	7.6
ABMU	17863	28251	63.2	4455	21781	20.5
Aneurin Bevan	12297	34034	36.1	143	25695	0.6
Betsi Cadwaladr	16471	38869	42.4	3732	28609	13.0
Cardiff and Vale	12073	27921	43.2	128	19627	0.7
Cwm Taf	11053	17501	63.2	523	12662	4.1
Hywel Dda	9180	20101	45.7	617	15653	3.9
Powys	2571	6665	38.6	184	5446	3.4

Consent rates

- The CDS are required to obtain informed consent from parents or guardians of each child before they can take part in the tooth brushing programme. This can be difficult and time consuming to obtain, particularly within the most deprived quintile.
- Tables 8 and 9 present data on children brushing by Preschool-Year 2 and Years 3-6 respectively. The total number of children eligible for inclusion across Wales in the tooth brushing element of the programme was 97,280; with parents/guardians providing consent for 91,324 children (93.9%); and 91,290 (93.8%) actually brushing during the period.
- Consent rates again were very high for the scheme. The overall consent rate for Wales was 93.9% (94% and 92.8% for PS-Yr2 and Years 3-6 respectively). There was a range of experience across Wales, for example amongst Preschool-Year 2 children unitary authority consent rates ranged from 91.2% in Aneurin Bevan to 99.1% in Powys (Table 8).
- Reporting LHB consent rates are presented in Figure 3.

Figure 3: Percentage children with consent by reporting LHB and targeted age groups

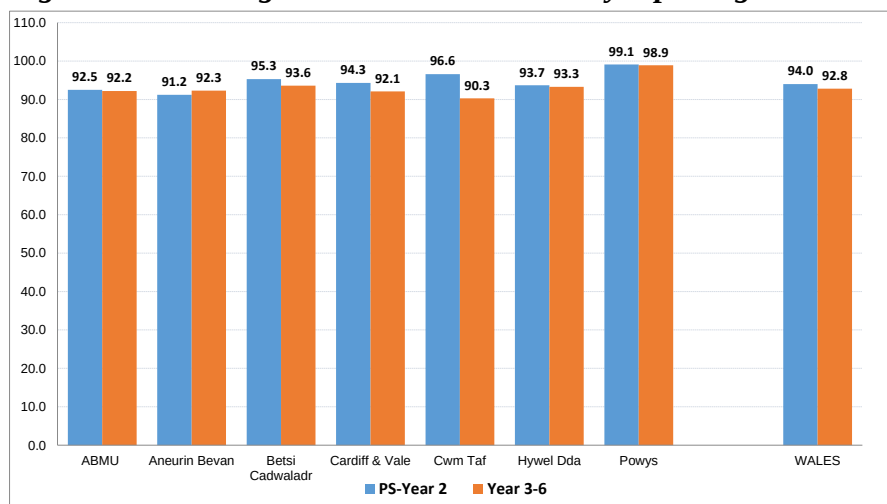


Table 8 Children brushing across Wales: Preschool-Year 2

AREA	Number of settings	Number of classes	Children eligible for inclusion	Number whose parents consent	% children with consent	Total number of children brushing
ABMU	255	599	19304	17863	92.5	17863
Bridgend	74	145	5196	4823	92.8	4823
Neath Port Talbot	76	177	4697	4229	90.0	4229
Swansea	105	277	9411	8811	93.6	8811
Aneurin Bevan	189	447	13477	12297	91.2	12297
Blaenau Gwent	39	84	2386	2117	88.7	2117
Caerphilly	60	150	3831	3642	95.1	3642
Monmouth	11	26	696	619	88.9	619
Newport	36	68	2794	2342	83.8	2342
Torfaen	43	119	3770	3577	94.9	3577
Betsi Cadwaladr	398	754	17287	16471	95.3	16471
Anglesey	55	108	1795	1600	89.1	1600
Conwy	62	106	2841	2654	93.4	2654
Denbighshire	50	85	2203	2143	97.3	2143
Flintshire	62	137	3513	3511	99.9	3511
Gwynedd	79	158	2632	2415	91.8	2415
Wrexham	90	160	4303	4148	96.4	4148
Cardiff & Vale	160	364	12809	12083	94.3	12073
Cardiff	113	261	9413	8870	94.2	8870
Vale Glamorgan	47	103	3396	3213	94.6	3203
Cwm Taf	188	385	11445	11053	96.6	11053
Merthyr	50	100	3022	2870	95.0	2870
RCT	138	285	8423	8183	97.2	8183
Hywel Dda	182	345	9797	9180	93.7	9180
Carmarthenshire	85	170	4380	4211	96.1	4211
Ceredigion	44	80	1991	1887	94.8	1887
Pembrokeshire	53	95	3426	3082	90.0	3082
Powys	39	122	2595	2571	99.1	2571
WALES	1411	3016	86714	81518	94.0	81508

Table 9 Children brushing across Wales: Year 3-6

	Number of settings	Number of classes	Children eligible for inclusion	Number whose parents consent	% children with consent	Total number of children brushing
ABMU	70	215	4834	4455	92.2	4455
Bridgend	4	8	254	226	89.0	226
Neath Port Talbot	22	72	1503	1375	91.5	1375
Swansea	44	135	3077	2854	92.8	2854
Aneurin Bevan	7	14	155	143	92.3	143
Blaenau Gwent	1	1	43	43	100.0	43
Caerphilly	3	10	95	83	87.4	83
Newport	2	2	11	11	100.0	11
Torfaen	1	1	6	6	100.0	6
Betsi Cadwaladr	69	244	3997	3742	93.6	3732
Anglesey	16	61	635	550	86.6	540
Conwy	2	8	321	265	82.6	265
Denbighshire	6	24	426	387	90.8	387
Flintshire	19	60	1303	1297	99.5	1297
Gwynedd	15	50	515	482	93.6	482
Wrexham	11	41	797	761	95.5	761
Cardiff & Vale	1	1	139	128	92.1	128
Cardiff	1	1	139	128	92.1	128
Cwm Taf	6	16	579	523	90.3	523
Merthyr	1	3	87	87	100.0	87
RCT	5	13	492	436	88.6	436
Hywel Dda	28	30	676	631	93.3	617
Carmarthenshire	9	9	164	164	100.0	164
Ceredigion	11	12	226	222	98.2	208
Pembrokeshire	8	9	286	245	85.7	245
Powys	2	19	186	184	98.9	184
WALES	183	539	10566	9806	92.8	9782
TOTAL (both year groups) *		3555	97280	91324	93.9	91290

Frequency of brushing

- Reported frequency of tooth brushing during the week, was as follows for the seven Health Board areas:

Table 10 Reported frequency of tooth brushing during the school week by LHB

LHB	Nursery - School Year 2	School Years 3 - 6	All
ABMU	4.8	4.6	4.8
Aneurin Bevan	4.7	5.0	4.7
Betsi Cadwaladr	4.7	4.8	4.7
Cardiff and Vale	4.8	5.0	4.8
Cwm Taf	4.9	5.0	4.9
Hywel Dda	4.8	4.8	4.8
Powys	4.4	4.5	4.4
WALES	4.8	4.7	4.8

Children receiving oral health education (OHE)

Children taking part in Designed to Smile receive oral health education sessions which include information on the wider determinants of health such as diet and nutrition. These sessions are given to children taking part in the supervised tooth brushing and the fluoride varnish/fissure sealant elements of the programme.

Table 11: Children receiving oral health education sessions

	Nursery - Year 2			School Years 3 - 6			Mixed school year ages groups		
AREA	Number of settings	No. of children eligible	Number of children taking part in oral health education	Number of settings	No. of children eligible	Number of children taking part in oral health education	Number of settings	No. of children eligible	Number of children taking part in oral health education
Aneurin Bevan	174	11591	11591	84	2734	2734	86	7486	7486
Blaenau Gwent	38	2145	2145	21	654	654	20	1764	1764
Caerphilly	54	2938	2938	30	765	765	25	1753	1753
Monmouth	11	600	600	4	122	122	5	547	547
Newport	33	2624	2624	17	669	669	15	1590	1590
Torfaen	38	3284	3284	12	524	524	21	1832	1832
ABMU	239	17900	17900	56	4256	4246	43	1774	1774
Bridgend	68	4684	4684	3	210	210	10	514	514
Neath Port Talbot	73	4501	4501	17	1304	1304	12	340	340
Swansea	98	8715	8715	36	2742	2732	21	920	920
Betsi Cadwaladr	394	17072	17072	69	4058	4058	7	266	266
Anglesey	55	1762	1762	15	611	611	2	81	81
Conwy	62	2841	2841	2	321	321	0	0	0
Denbighshire	50	2203	2203	6	426	426	0	0	0
Flintshire	62	3488	3488	20	1380	1380	0	0	0
Gwynedd	74	2475	2475	14	515	515	5	185	185
Wrexham	91	4303	4303	12	805	805	0	0	0
Cardiff & Vale	87	7756	7034	18	2475	2444	6	103	99
Cardiff	65	6327	5743	11	1649	1619	5	93	89
Vale Glamorgan	22	1429	1291	7	826	825	1	10	10
Cwm Taf	66	5277	5033	27	1711	1599	10	477	443
RCT	47	4207	3991	26	1691	1582	9	337	308
Merthyr	19	1070	1042	1	20	17	1	140	135
Hywel Dda	21	1349	1349	12	280	280	12	168	167
Carmarthenshire	10	492	492	4	24	24	5	53	53
Ceredigion	0	0	0	0	0	0	1	11	10
Pembrokeshire	11	857	857	8	256	256	6	104	104
Powys	32	1573	1466	1	17	12	26	998	948
WALES	Nursery - Yr2	62518	61445	Year 3- 6	15531	15373	Mixed ages	11272	11183

- 88,001 children across Wales received oral health education sessions which incorporated not merely OHP but also focussed on aspects such as nutrition and healthy food choices; 61,445 children from Pre-school – School Year 2, 15,373 from School Years 3-6 and 11,183 from mixed school year ages groups (Table 11).
- Up until this reporting year this activity has been increasing over time as the Designed to Smile programme has been developing. This year however, there has been a fall in activity which is likely to be linked to the fact that the programme is now well established and most children have already received their OHE sessions (Figures 4 & 5).

- In the Betsi Cadwaladr area a small percentage of children from special needs schools have not had “Wider Oral Health education” as it was not considered appropriate in terms of their complex medical and educational needs.
- However, in those cases, school support staff and parents usually receive inputs which are tailor-made to the child’s needs, in close liaison with wider health professionals, and as part of a general and oral health risk-assessed approach.

Figure 4: Children receiving oral health education sessions in 2014/15 compared with previous years

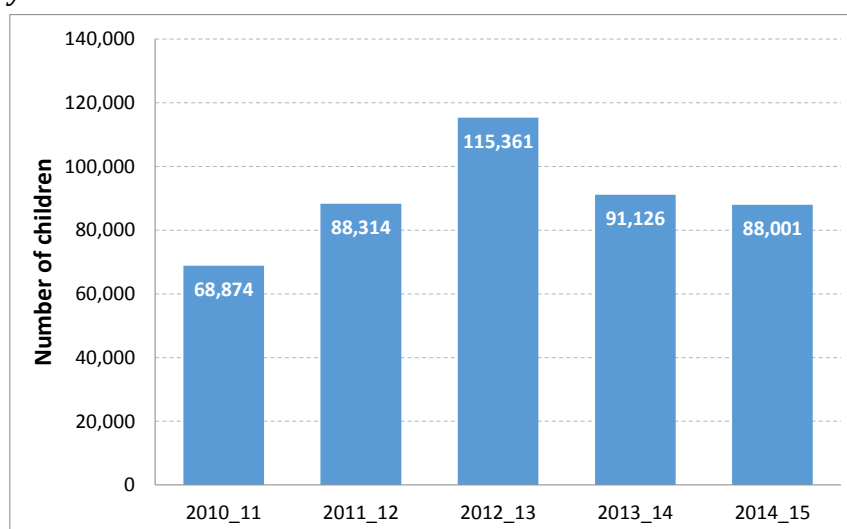
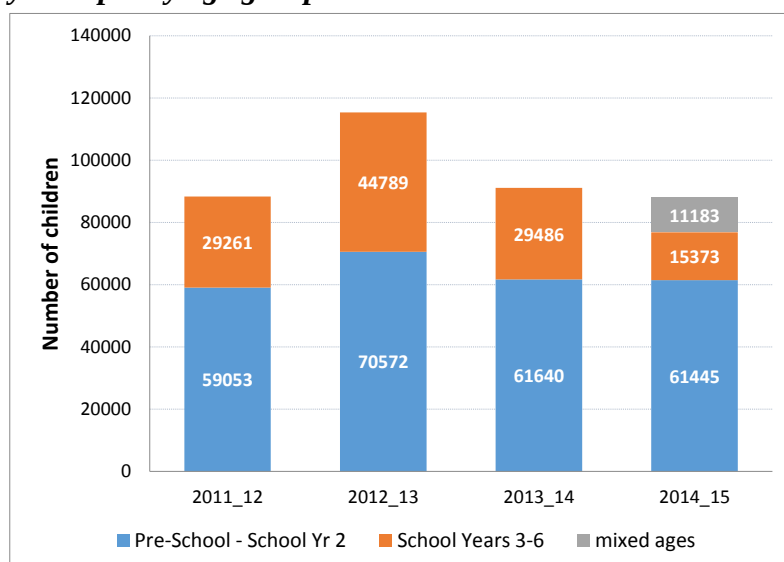


Figure 5: Children receiving oral health education sessions in 2014/15 compared with previous years split by age group



- Numbers of children eligible to receive the wider OHE referred to in Table 11 do not tally with the numbers taking part in the supervised tooth brushing (Table 8 and 9). The denominator for this characteristic is likely to include all children taking part in Designed to Smile: tooth brushing, fluoride varnish and fissure sealant programmes. It is beyond the scope of the current monitoring system to check whether these children are mutually exclusive.

Home packs

- In each classroom where tooth brushing is taking place, the CDS aim to provide each child with at least two ‘home packs’ per school/nursery year. The home packs contain a toothbrush and fluoride toothpaste, in order to facilitate and encourage children to continue brushing in their home environment.

Table 12: Home packs sent out – for settings taking part in the TB element of D2S

AREA	Pre-school - School Year 2					School Years 3- 6				
	No. of settings	Number of classes	Number of children brushing	Number of packs distributed	Number of packs per child =packs /children	No. of settings	Number of classes	Number of children brushing	Number of packs distributed	Number of packs per child =packs /children
ABMU	255	599	17863	47929	2.7	70	215	4455	14469	3.2
Bridgend	74	145	4823	12149	2.5	4	8	226	762	3.4
Neath Port Talbot	76	177	4229	11545	2.7	22	72	1375	4494	3.3
Swansea	105	277	8811	24235	2.8	44	135	2854	9213	3.2
Aneurin Bevan	189	447	12297	26904	2.2	7	14	143	304	2.1
Blaenau Gwent	39	84	2117	5445	2.6	1	1	43	86	2.0
Caerphilly	60	150	3642	7926	2.2	3	10	83	190	2.3
Monmouth	11	26	619	1528	2.5					
Newport	36	68	2342	4935	2.1	2	2	11	22	2.0
Torfaen	43	119	3577	7070	2.0	1	1	6	6	1.0
Betsi Cadwaladr	398	754	16471	51420	3.1	69	244	3732	11960	3.2
Anglesey	55	108	1600	5266	3.3	16	61	540	1878	3.5
Conwy	62	106	2654	8520	3.2	2	8	265	963	3.6
Denbighshire	50	85	2143	6552	3.1	6	24	387	1278	3.3
Flintshire	62	137	3511	10355	2.9	19	60	1297	3908	3.0
Gwynedd	79	158	2415	7847	3.2	15	50	482	1545	3.2
Wrexham	90	160	4148	12880	3.1	11	41	761	2388	3.1
Cardiff and Vale	160	364	12073	25985	2.2	1	1	128	302	2.4
Cardiff	113	261	8870	19312	2.2	1	1	128	302	2.4
Vale Glamorgan	47	103	3203	6673	2.1					
Cwm Taf	188	385	11053	22284	2.0	6	16	523	1061	2.0
Merthyr	50	100	2870	6019	2.1	1	3	87	170	2.0
RCT	138	285	8183	16265	2.0	5	13	436	891	2.0
Hywel Dda	182	345	9180	12985	1.4	28	30	617	1220	2.0
Carmarthenshire	85	170	4211	5224	1.2	9	9	164	328	2.0
Ceredigion	44	80	1887	3196	1.7	11	12	208	393	1.9
Pembrokeshire	53	95	3082	4565	1.5	8	9	245	499	2.0
Powys	39	122	2571	5024	2.0	2	19	184	370	2.0
WALES	1411	3016	81508	192531	2.4	183	539	9782	29686	3.0

- Table 12 shows the number of home packs sent out by each health board and their constituent unitary authorities during the twelve month period for the supervised tooth brushing element of Designed to Smile.
- 222,217 packs were distributed between April 2014 and March 2015; 192,531 to Pre-school – Year 2 children and 29,686 to children in school years 3-6. This represents an increase of 8,527 packs compared with the previous year when 230,744 home packs were distributed.
- Across Wales an average of 2.4 packs were distributed to Preschool – Year 2 children; ranging from 1.2 packs per child in Carmarthenshire to 3.3 packs in Anglesey. Whereas, an average of 3.0 packs were distributed to children from Years 3-6; this ranged from 1.0 pack in Torfaen to 3.6 in Conwy (Table 12).

Table 13: Home packs related to the Fissure Sealant and Fluoride Varnish elements of D2S and “other” activity

	Fissure Sealant and Fluoride Varnish		Fissure Sealant		Fluoride Varnish		Home packs related to other activity		Total number of children who received home packs in this setting	
AREA	No. of packs delivered to settings	children who received packs	packs delivered to settings	children who received packs	packs delivered to settings	children who received packs	packs delivered to settings	children who received packs	packs delivered to settings	children who received packs
Aneurin Bevan	2494	1247	6379	3243	462	231			9335	4721
Blaenau Gwent	360	180	1911	991					2271	1171
Caerphilly	274	137	1916	976	462	231			2652	1344
Monmouth			244	122					244	122
Newport	1860	930	1216	608					3076	1538
Torfaen			1092	546					1092	546
Betsi Cadwaladr	1086	362	9948	3316			3410	3410	14444	7088
Anglesey			279	93			660	660	939	753
Conwy			1632	544			500	500	2132	1044
Denbighshire	165	55	4485	1495			550	550	5200	2100
Flintshire	921	307	939	313			600	600	2460	1220
Gwynedd			2187	729			500	500	2687	1229
Wrexham			426	142			600	600	1026	742
Cardiff and Vale	4661	4661			6518	6518	1572	1572	12751	12751
Cardiff	4174	4174			4628	4628	883	883	9685	9685
Vale Glamorgan	487	487			1890	1890	689	689	3066	3066
Cwm Taf	2024	2024			2849	2849	364	364	5237	5237
Merthyr	985	985			1666	1666			2651	2651
RCT	1039	1039			1183	1183	364	364	2586	2586
Hywel Dda							9450	8205	9450	8205
Carmarthenshire							2730	2500	2730	2500
Ceredigion							2916	1901	2916	1901
Pembrokeshire							3804	3804	3804	3804
WALES	10265	8294	16327	6559	9829	9598	14796	13551	51217	38002

- A total of 36,421 packs were distributed to 24,451 children in settings taking part in the fissure sealant and/or the fluoride varnish elements of the programme – these children received an average of 1.5 packs during the reporting period (Table 13).
- In ABMU all children taking part in the Fluoride varnish element of the scheme are also taking part in the supervised tooth brushing, their home pack data is presented in Table 12.
- In addition 14,796 home packs were distributed to children not taking part in the core elements of Designed to Smile, i.e. those involved in the wider oral health promotion aspects (Table 13).

	Number of packs	Cost of packs
Tooth brushing	222,217	156,263.0
Fluoride varnish/Fissure Sealant	36,421	25,611.2
Other	14,796	10,404.5
TOTAL		192,278.8

**a box of 25 home packs costs £17.58*

- The total costs of the home packs have been calculated as £192,278 based on the fact that a box of 25 home packs costs £17.58 including VAT.

Wider engagement

- A key element of the Designed to Smile Programme involves CDS personnel providing broader oral health advice, education and promotion to parents, school and primary care personnel linked to the programme.

Parents

- The CDS teams invite all parents or guardians of children taking part in the scheme to a talk at their child's school/nursery, prior to the tooth brushing scheme commencing. CDS personnel answer questions about the programme, and also provide general advice on good oral health and nutrition.

Table 14: Parents attending Oral Health Promotion (OHP) talks

AREA	No. of parents taking part in group oral health education sessions	No. of parents taking part in one to one sessions
Aneurin Bevan	128	77
Blaenau Gwent	0	0
Caerphilly	0	0
Monmouth	9	2
Newport	0	0
Torfaen	119	75
AMBU	1473	808
Bridgend	666	113
Neath Port Talbot	81	212
Swansea	726	483
Betsi Cadwaladr	1259	602
Anglesey	40	40
Conwy	119	119
Denbighshire	128	128
Flintshire	879	222
Gwynedd	23	23
Wrexham	70	70
Cardiff and Vale	450	31
Cardiff	270	21
Vale Glamorgan	180	10
Cwm Taf	414	1
Merthyr	64	0
RCT	350	1
Hywel Dda	7	7
Carmarthenshire	7	7
Ceredigion	0	0
Pembrokeshire	0	0
POWYS	17	6
WALES	3748	1532

- There has been a reduction in oral health education activity associated parents of children taking part in Designed to Smile between 2014/15 and the previous reporting period. In 2014/15 3,748 and 1,532 parents took part in oral health education group and one to one sessions compared with 5,831 and 4,288 in 2013/14 (Table 14).
- This reduction is likely to be associated with the fact that the programme is well established and contacts now only need to be made with parents of recent recruits. But also the guidance from the “How to Guide”, emphasising the importance of delivering only evidence based health promotion.
- The dental health messages in all Powys DHE talks and displays are based on the Department of Health, Delivering Better Oral Health guidance which is evidence based.

The CDS D2S teams have been engaged in a wide range of activities to engage parents and carers in Designed to Smile – some examples are presented below:

- In Aneurin Bevan Health Board area, accessing parents via schools continues to be difficult. Some are accessed via Flying Start groups, induction days and school fetes.
- The D2S programme is offered to the Travelling Community at Shepherds Hill and Upper Race in Torfaen. Twenty two children have received Fluoride Varnish applications and a dental home pack as part of this programme. These children are targeted at the primary schools they attend, but consent is not always returned.
- In May 2014, the ABHB introduced a new referral care pathway for dental care for children requiring sedation or general anaesthesia. Each family has an oral health session with a D2S Oral Health Educator at the assessment appointment. This has proved an effective way of accessing parents and other family members. 221 sessions of D2S health educator time have been dedicated to these interventions seeing over 900 children and their parents.
- ABMU teams have attended local libraries that have regular parent group activities, as well as sessions in Family Centres and Flying Start drop in sessions. Linking in with events held by Communities First and ‘Looked after Children’ teams have proved successful. D2S presence in summer fetes and organised ‘fun days’ by local communities during school holidays have provided further contact with parents.
- The Designed to Smile team from Betsi Cadwaladr have attended a range of family centred events to engage with both children and their parents/carers. All DHE activity conforms with D0H guidance in Delivering Better Oral Health.
 - In May 2014 they attended the Urdd National Eisteddfod in Bala. This was a great opportunity to meet the public and work alongside maternity services, school nurses, and the smoking cessation and Child and Adolescent Mental Health teams.
 - During June 2014 the team was present at the Anglesey Young Children and Families Festival.
 - The D2S team had a presence at several Health Fairs across North Wales, where a total of 1290 parents and children were seen. Links were followed up with parenting groups and other health professionals asking for more information on D2S.

- The D2S team in Betsi Cadwaladr also distributed 1500 home packs (incorporating drinking cups) to health visitors and 1410 were given out at 1:1 sessions with parents in clinics.
- For Cardiff and Vale and Cwm Taf health board areas the number of parents attending events facilitated by health visitors, Flying Start is tabled below. Also, packs and cups distributed to parents.

Health Board	Parents attending	Packs	Cups
Cardiff & Vale	813		
Cwm Taf	165		
Cardiff & Vale		604	409
Cwm Taf	241	77	81

- During this year Hywel Dda UHB D2S Teams delivered Oral Health education to the following groups; Non D2S schools (to meet the national quality awards for WG Healthy Schools), Newly Employed Dietitians (PHW), Mother and Baby Groups, Flying Start Activity Days, Dental Component to OCN Students, Child Care Providers, Child Care Students and QCF Assessors (local colleges), Language and Play Settings, Social Services (including Corporate Parenting Teams and Foster Carers) and School Nursing Teams.
- Home packs were distributed, where appropriate to these groups in addition to D2S participating settings. Home packs and doidy cups were provided to all LAC children in Hywel Dda, delivered at the annual health check with the local LAC nurse. D2S had a presence at the Eisteddford, promoting Oral Health to those attending the event.
- In Powys LHB area dental health education has been delivered to parent and toddler groups and support groups such as, parents of disabled children. The D2S team had a stand at the 2015 Royal Welsh Show with activities to engage children and parents in the importance of oral care and wider health promotion messages.

Setting personnel

- In each school/nursery involved in the Designed to Smile scheme, CDS teams talk to multiple members of staff to help them deliver the programme effectively and safely, but also to emphasise the importance of promoting good oral health and nutrition to the school/nursery children.
- Between April 2014 and March 2015 the CDS provided some training to 75% (1,087) of the 1,439 settings taking part in the supervised tooth brushing element of D2S (Table 15).
- Overall, 7,486 and 7,508 members of school/nursery staff received training in the implementation of supervised tooth brushing and wider oral health education respectively.

Table 15: Setting (school or nursery) personnel receiving Designed to Smile training

AREA	Number of settings with associated activity	No. of setting personnel eligible to take part in implementation of toothbrushing programme education sessions (if available)	Setting personnel taking part in implementation of toothbrushing		No. of setting personnel taking part in wider oral health education
			Number	Number trained per setting	
Aneurin Bevan	191	1723	1507	7.9	1521
Blaenau Gwent	37	419	346	9.4	352
Caerphilly	62	497	448	7.2	456
Monmouth	11	109	85	7.7	86
Newport	36	293	280	7.8	282
Torfaen	45	405	348	7.7	345
AMBU	261	2672	2672	10.2	2672
Bridgend	74	779	779	10.5	779
Neath Port Talbot	78	590	590	7.6	590
Swansea	109	1303	1303	12.0	1303
Betsi Cadwaladr	404	2221	2221	5.5	2220
Anglesey	58	252	252	4.3	252
Conwy	64	346	346	5.4	346
Denbighshire	49	336	336	6.9	336
Flintshire	62	438	438	7.1	437
Gwynedd	80	348	348	4.4	348
Wrexham	91	501	501	5.5	501
Cardiff and Vale	72	227	227	3.2	227
Cardiff	50	164	164	3.3	164
Vale Glamorgan	22	63	63	2.9	63
Cwm Taf	41	271	271	6.6	271
Merthyr	16	125	125	7.8	125
RCT	25	146	146	5.8	146
Hwyel Dda	78	363	354	4.5	353
Carmarthenshire	36	156	156	4.3	145
Ceredigion	17	87	87	5.1	87
Pembrokeshire	25	120	111	4.4	121
POWYS	40	278	234	5.9	244
0 WALES	1087	7755	7486	6.9	7508

- Across Wales 6.9 members of staff were trained per setting, where training was delivered, to deliver the supervised tooth brushing element of Designed to Smile during 2014/15. The numbers of setting personnel trained per by unitary authority and health board are presented in Table 15.
- The range in the numbers trained may be explained by a different approach to counting staff who receive training. Cardiff and Vale for example, provide initial training for all but only new staff members are trained each year. Monitoring of compliance with quality standards is then routinely carried out. Whereas in Betsi Cadwaladr update training is provided each year to every member of staff involved in D2S to reinforce the standards and engage with those delivering the tooth-brushing element of the programme.
- The numbers of staff trained per setting by unitary authority ranged from 2.9 in the Vale of Glamorgan to 12.0 in Swansea. The difference in numbers of personnel trained is likely to reflect the difference in the number of classes and class size across unitary authority areas.

Primary care personnel

- A key element of the D2S programme is that CDS personnel work closely with key stakeholders to promote consistent and up to date oral and wider health messages.
- During 2014-15 CDS D2S teams had contacts with Primary Care Students, 434 health visitors, 248 individuals working in the Healthy Schools initiative. Specific details of the activities involved together with local health board breakdowns are presented in Table 16.

Table 16: Primary care personnel and community initiatives receiving training from the D2S team

Area	Primary care students	Health visitor	Healthy Schools	Mother and baby groups	Childcare courses	Early years	School nurses	Flying Start	Parenting groups	Dietitians	Midwives	Other	TOTAL
Aneurin Bevan	15	159	15	8	4	3	43	19	11	16	3	168	464
Blaenau Gwent	2	47	3	3	4	3		5	4		2	34	107
Caerphilly	3	34	2	2				4	4		1	55	105
Monmouth	4	19	4					4				27	58
Newport	4	32	4	3				3	3			26	75
Torfaen	2	27	2					3				12	46
Pan Gwent							43			16		14	73
ABMU	550	7									2	2	561
Bridgend	123	5									2		130
Neath Port Talbot	244	2										2	248
Swansea	183												183
Betsi Cadwaladr	187	168	15				2			11		5	388
Anglesey		10					2			1			13
Conwy		41	2							2			45
Denbighshire	28		6							4			38
Flintshire	27	40	7							2			76
Gwynedd		28								1			29
Wrexham	132	49								1		5	187
Cardiff & Vale	19	14	120					12	5	3		68	241
Cardiff	19		60							3		51	133
Vale		14	60					12	5			17	108
Cwm Taf		23	68		80	111		12	11	1		45	351
Merthyr		1			27					1			29
RCT		22	68		53	111		12	11			45	322
Hywel Dda	158	54	30	151	70		33	27	27	5		456	1011
Cardemarthenshire	158	22	30	34	17		15					309	585
Ceredigion		18		60									78
Pembrokeshire		14		57	53		18	27	27	5		147	348
POWYS		9					2			3		8	22
Grand Total	929	434	248	159	154	114	80	70	54	39	5	752	3038

D2S teams also delivered a range of activities working with 752 “other” professionals in the community, including Language and Play Settings and Social Services (Table 16).

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Integration with wider public health personnel and initiatives

Aneurin Bevan: An Oral Health Promotion Steering Group has become well established within ABUHB and has been proactive in both giving guidance to the D2S programme and facilitating partnership working. It is a forum for contact between Healthy Schools, Flying Start, Sure Start, and Public Health, amongst others, and all aspects of the D2S programme.

- The Healthy Schools Coordinators who are within a structured Healthy Pre-School Scheme in each borough work closely with D2S, along with the Early Years Development Team. ABUHB has a Health Promotion Lead to ensure working with external agencies within the borough.
- Members of D2S team participate in events hosted by outside agencies in order to promote the programme and good oral health in general such as local authority fun-days, multidisciplinary meetings and educational days.

Betsi Cadwaladr: Links continue with HSPSS and Healthy Schools co-ordinators. The phase 6 NQA award has elevated the importance of the D2S programme, showing it to be an essential aspect of the healthy schools package. However there are still a small number of schools reluctant to fully embrace the programme.

Work continues within Flying Start and Community First areas involving a full spread of primary care personnel, including family liaison officers, key workers and Health Visitors. We have been proactive with parenting groups, some high-need baby clinics and mother and toddler groups within Sure Start/Flying Start and Barnado's areas.

Local Further Education Colleges and Glyndwr University continue to receive support from the Designed to Smile team who have input on a range of child care, teacher training and student Health Visitor courses.

The Designed to Smile strategic planning group has been re-formatted and the membership streamlined to allow for more regular meetings.

Cardiff and Vale and Cwm Taf: Table 16 highlights the range of wider engagement activities that both CDS's are involved in. The emphasis is on forging relationships with those working with young children; healthy schools, primary care, health visitors etc.

Hywel Dda: Dda: During the year the Steering group was re-launched with a wider Oral Health Focus. All D2S Co-Ordinators attend and provide OH input to all Health Schools and Healthy Pre Schools steering groups. Following the expansion of Flying Start settings in the Llanelli area, a SLA was implemented with Menter Cwm Gwendraeth which provided additional OH support, training and resources to all preschool settings in Llanelli. Delivery of OH training for Health Visitors, enabling key messages to be delivered to new parents, this includes the provision home packs and doidy cups. A rolling programme is in place with local colleges and education providers to delivery OH training to relevant courses.

Powys: The D2S team dental health educators continue to work with Health Visitors providing advice to bumps and babies groups. They also continue to work alongside the Dietitians, to deliver a session for those attending the OCN Nutrition course. The OCN Nutrition course is attended by early years and playgroup leaders as well as Health Visitors and School Nurses.

Quality Assessment

- Before any school or nursery can begin the tooth brushing programme, CDS teams carry out a full risk assessment of the classroom environment to ensure that the required standards can be met.
- CDS teams provide training and guidelines to school/nursery staff on cleaning protocols and the importance of working to avoid cross-infection. To ensure that these standards are maintained over time, CDS staff must visit each setting once every half term (around once per six weeks) and fill out a Quality Assurance (QA) assessment form while observing the tooth brushing scheme in action³. Notes are recorded of any interventions required or, in the case of repeated interventions, cases where the programme has been suspended in a school/nursery.

Table 17: Quality assessments carried out by UAs within reporting LHBs

Health Board	Number of settings	Number of classes	Number of QA assessments undertaken	Number of times where remedial measures were necessary	How many times was it suspended
ABMU	259	817	350	0	0
Aneurin Bevan	189	458	1059	68	1
Betsi Cadwaladr	406	1010	3808	90	0
Cardiff and Vale	160	363	874	29	0
Cwm Taf	188	395	1621	46	0
Hywel Dda	186	372	1132	22	8
Powys	38	141	327	17	1
WALES	1426	3556	9171	272	10

Table 17 shows the number of QAs carried out in each LHB during the reporting period. 9,171 QAs were carried out across Wales between April 2014 and March 2015. This represents a reduction of 1,243 QAs (there were 10,414 QAs in 2013/2014) when compared with the previous reporting period. The number of times remedial measures were necessary (272) and numbers of suspensions (10) were similar to those in 2013/14 (in 2013/14 they were 248 and 10 respectively).

In the Betsi Cadwaladr and Aneurin Bevan area all remedial measures for QAs were minor and have been resolved. These fall under the headings of: splayed bristles, too much /too little paste, wear and tear/slightly grubby appearance of racks/buses.

³ In settings where CDS teams feel that staff require extra support, or where previous interventions have been necessary, they may decide to carry out QA assessments more regularly than once per half-term.

Fissure Sealant Activity

Table 18: Wales Fissure Sealant Programme Activity April 2014 – March 2015, compared with previous years

	Total April 2014-March 2015	Total April 2013-March 2014	Total April 2012-March 2013	Total April 2011-March 2012	Total April 2010-March 2011	Total April 2009-	Totals January to December		
							2008	2007	2006
Total number of settings visited	187	180	196	191	456	229	229	248	281
Total number of children having one or more Fissure Sealant applied	5,376								
Total number of children assessed	8,484	8,485	8,395	9,044	16,570	7,748	8,250	8,026	7,564
Total number of children receiving oral hygiene advice/instruction	13,858	12,403	11,972	12,763	16,058	9,023	7,746	16,665	9,340
Total number of children receiving fluoride toothpaste and brushes	see Table 13 above	12,403	11,496	12,725	16,331	9,495	7,746	19,700	18,220
Total number of teeth sealed	15,763	15,615	11,728	11,428	14,075	12,015	10,397	10,291	9,797

- Across Wales between April 2014 and March 2015 187 schools took part, which is similar to the number of settings visited during the previous two reporting periods, but a significant reduction when compared with activity for 2010/11 (Table 18).
- Since the commencement of Designed to Smile local health boards have been refocusing their oral health promotion activity and this has had implications for FSP activity.
- 8,484 children were assessed during April 2014-March 2015.
- The total number of teeth sealed during April 2014-March 2015 was 15,763.
- Area breakdowns for activity associated with the Fissure Sealant element of Designed to Smile are presented in Table 19.
- ABMU targeted schools have fully engaged in the TAF and fissure sealant programmes. There seems to be increased awareness of the programme, this has resulted in additional requests from those schools not in the target areas. These schools are directed to the D2S website and offered the use of teaching resources on loan.
- In Aneurin Bevan the Fissure Sealant Programme is ongoing and is a well-established element of D2S programme. This year the D2S team has piloted and been successful in implementing 'Direct Access' school dental screening using D2S dental therapists. They have carried out dental screening and treatment planning for fissure sealants. In 2015/16 ABUHB will manage the fissure sealing programme without input from dentists. This will improve the efficiency of the programme and fits with prudent healthcare agenda.
- Cardiff & Vale and Cwm Taf are unable to contribute any data as the sealant / varnish trial continues.

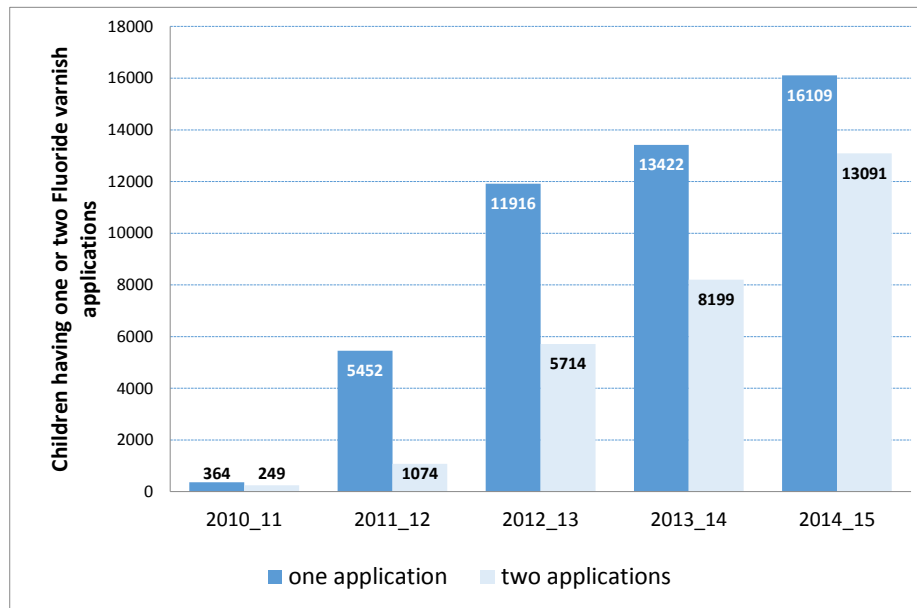
Table 19: Fissure Sealant Programme Activity by Health Board April 2014 – March 2015

Area	Number of settings	Number of classes	Number on roll by establishment	Number consenting to FS assessment by establishment	Number being assessed	Number of children having one or more Fissure Sealant applied	Number of teeth sealed
ABMU	13	46	1173	478	445	421	1390
Neath Port Talbot	3	10	256	118	103	97	320
Swansea	10	36	917	360	342	324	1070
Aneurin Bevan	87	170	5473	3511	3287	2197	6610
Blaenau Gwent	21	42	1281	785	720	510	1475
Caerphilly	31	60	1535	1040	982	630	1920
Monmouth	4	8	228	176	173	95	289
Newport	18	34	1387	832	766	506	1542
Torfaen	13	26	1042	678	646	456	1384
Betsi Cadwaladr	74	198	6248	4426	4165	2379	6695
Anglesey	4	12	283	175	164	114	393
Conwy	15	30	901	518	487	222	724
Denbighshire	19	54	1947	1420	1348	755	2136
Flintshire	21	60	1729	1383	1311	836	2181
Gwynedd	10	27	889	576	534	271	817
Wrexham	5	15	499	354	321	181	444
Hywel Dda	13	37	964	587	587	379	1068
Carmarthenshire	7	21	474	309	309	194	541
Ceredigion	2	6	130	71	71	50	161
Pembrokeshire	4	10	360	207	207	135	366
WALES	187	451	13858	9002	8484	5376	15763

Fluoride varnish

- The Designed to Smile oral health promotion initiative aims to get fluoride into contact with children's teeth. Supervised tooth brushing has been the focus of Designed to Smile in the early years and application of fissure sealants was ongoing, as it was inherited from Designed to Smile's predecessor, the Fissure Sealant Programme. As Designed to Smile progresses some areas have introduced the Fluoride Varnish element of the programme.

Figure 6 Children receiving Fluoride Varnish Applications across Wales since 2010/11



- The Fluoride Varnish element of the D2S programme has continued to grow; Figure 6 highlights its uptake in Wales since 2010/11.
- It is important to note that for the 2014-15 reporting year we have decided to collect Fluoride Varnish data to coincide with the school year (so data reflects September 2014 – July 2015) as opposed to the financial year. This change was introduced because of the logistical difficulties involved in collating data as children change classes during a financial year.
- This means that the data between April 2014 and July 2014 has not been reported in the figures/tables in this chapter. Refer to Appendix for details.
- In 2014/15, a total 16,109 children received one application with an additional 13,091 having two applications of fluoride varnish across Wales. LHB and UA breakdowns are presented in Table 20.
- The Fluoride Varnish Programme in Aneurin Bevan Health Board has expanded in 2014/15 with more children having multiple applications of fluoride varnish. This has resulted in D2S OHIPs being more creative with their working patterns to address the increased workload.
- The CDS in the ABMU health board area have reported that settings are fully engaged in the fluoride varnish element of D2S.

- The North Wales Community Dental Service has this year delivered 2 fluoride varnish “extended duties” courses. These were open to dental nurses from all branches of dentistry across the North Wales and Powys areas and will create a larger base for fluoride varnish applications within the school, community or practice settings.
- During this reporting period Powys CDS has increased the number of settings taking part in the fluoride varnish element of Designed to Smile.

Table 20: Fluoride Varnish applications

AREA	Number of settings	Number of children eligible during reporting period	Number of children with consent	Number excluded due to medical reasons	Number of children receiving 1 six monthly application	Number of children receiving two six monthly applications
Aneurin Bevan	101	13927	10331	468	4148	5096
Blaenau Gwent	16	2223	1631	49	635	858
Caerphilly	36	3904	3076	167	1224	1494
Monmouth	6	747	566	16	196	320
Newport	21	4055	2674	129	1403	976
Torfaen	22	2998	2384	107	690	1448
ABMU	60	8913	7393	495	2432	3506
Bridgend	7	746	604	56	477	0
Neath Port Talbot	18	2446	1995	100	652	947
Swansea	35	5721	4794	339	1303	2559
Betsi Cadwaladr	14	1980	1528	157	314	1023
Anglesey	2	380	237	22	73	108
Denbighshire	2	195	159	23	45	98
Flintshire	9	1198	982	101	174	720
Wrexham	1	207	150	11	22	97
Cardiff & Vale	93	8160	5689	214	3719	528
Cardiff	70	6506	4491	157	2949	528
Vale Glamorgan	23	1654	1198	57	770	0
Cwm Taf	76	8943	6810	378	3306	1827
Merthyr	24	3238	2527	130	1101	730
RCT	52	5705	4283	248	2205	1097
Hywel Dda	21	3293	2291	143	1456	560
Carmarthenshire	10	1317	996	59	512	350
Ceredigion	4	560	355	26	298	17
Pembrokeshire	7	1416	940	58	646	193
POWYS	21	1828	1385	24	734	551
WALES	386	47044	35427	1879	16109	13091

- The Seal or Varnish clinical trial is taking place in the Cardiff and Vale and Cwm Taf health board areas. The first cohort of the trial has been completed, the second cohort is currently on the 30 month treatment stage and final examinations will take place between September and December 2015.
- In Hywel Dda, 3 new members of the team have attended the FV course.

Staff and resources

- Currently there are a total of 149 new and existing CDS personnel contributing to Designed to Smile across Wales. A considerable number of these work part-time to reflect school/nursery term times and consequently the number of whole time equivalents (wte's) are fewer; presently there are 82.2 wte's working in Designed to Smile (Table 21).

Table 21: Staff involved in Designed to Smile

Area	Total number of personnel working for D2S	Number of whole time equivalents	Personnel recruited during the period
Aneurin Bevan	34	21.2	0
Blaenau Gwent	0	0.0	0
Caerphilly	4	2.6	0
Newport	5	2.3	0
Pan Gwent	23	14.8	0
Torfaen	2	1.5	0
ABMU	16	11.4	5
Pan Health Board	16	11.4	5
Betsi Cadwaladr	41	17.3	3
Anglesey	4	1.1	0
Conwy	5	2.2	0
Denbighshire	4	1.9	0
Flintshire	10	3.8	0
Gwynedd	9	3.9	2
Wrexham	9	4.4	1
Cardiff & Vale	19	10.1	4
Cardiff	14	7.6	4
Vale Glamorgan	5	2.5	0
Cwm Taf	17	8.2	0
Merthyr	6	2.9	0
RCT	11	5.4	0
Hywel Dda	15	10.2	0
Carmarthenshire	10	7.5	0
Ceredigion	2	0.9	0
Pembrokeshire	3	1.8	0
Powys	7	3.8	1
WALES	149	82.2	13

NB. Health boards with more than one constituent unitary authority (UA), staff tend to work across multiple UA areas, therefore UA breakdown constitute an approximation

- During this reporting period an additional 13 individuals were recruited to work on Designed to Smile (Table 21). Since the scheme was introduced a total of 142 new staff have been recruited to work in the Wales' CDS (24 recruited in 2008-09; 19 recruited in 2009-10, 34 recruited in 2010/11, 26 in 2011/12, 22 in 2012/13, 4 in 2013/14; for details consult previous annual monitoring reports).

Table 22: Resources spent on Designed to Smile between April 2014 – March 2015

	Staff spend £	Staff spend as a % of total spend	Non-staff spend £	Total £
Abertawe Bro Morgannwg	279,498	47	310,221	589,719
Aneurin Bevan	562,993	77	171,900	734,893
Betsi Cadwaladr	463,916	56	358,111	822,027
Cardiff and Vale	385,900	76	120,323	506,223
Cwm Taf	303,207	65	160,512	463,719
Hywel Dda	336,251	79	90,415	426,666
Powys	123,934	84	24,086	148,020
WALES	2,455,699	67	1,235,568	3,691,267

- A total of £3,691,267 was spent on the Designed to Smile programme during 2014/15; representing 99% of the £3,717,000, allocated (Tables 22 & 23).
- A LHB breakdown of staff and non-staff spend are presented in Table 22. During this period £2,455,699 was spent on staff costs across Wales, equating to 67% of the total spend. This characteristic ranged from 47% in ABMU to 84% in Powys.

Table 23: 2014/15 Allocations versus monies spent by reporting LHB

	Allocation £	Spend £	Difference £
Abertawe Bro Morgannwg	619,000	589,719	29,281
Aneurin Bevan	732,000	734,893	-2,893
Betsi Cadwaladr	822,000	822,027	-27
Cardiff and Vale*	970,000	969,942	58
Hywel Dda	427,000	426,666	334
Powys	147,000	148,020	-1,020
WALES	3,717,000	3,691,267	25,733

**incorporates Cwm Taf allocation and spend*

- A further £1,235,568 was spent on non-staff costs (Table 22); some of this was spent on programme resources and materials such as information leaflets and administrative documentation, toothbrushes, pastes, home packs, while other money was spent on travel and

training costs. In some areas the monies associated with accommodation for the D2S team are also included in the non-staff spend. Recruitment costs for those new staff referred to above also featured in the costs of the programme.

Additional issues

Abertawe Bro Morgannwg

Successes

- Targeted schools have fully engaged in the TAF and fissure sealant programmes. There seems to be increased awareness of the programme, this has resulted in additional requests from those schools not in the target areas. These schools are directed to the website and offered the use of teaching resources on loan.

Barriers

- There have been staff related pressures because of long term sickness and maternity leave; these should be alleviated within the next few months.
- Due to the increase in activity with the TAF and fissure sealant programme, oral health education sessions have decreased. Attendance at community events has also decreased; team members have attended 29 events mainly during the school holidays.
- Whilst the team continues to monitor the tooth brushing programme (i.e. delivering stock, checking cleanliness and collecting monthly tick sheets); there have been problems in arranging formal Quality Assessments associated with reduced capacity.

Aneurin Bevan

Successes

- There is a perception amongst some settings that the FV and FS elements of D2S do not require as much participation by teaching staff as the tooth brushing, and therefore are more prepared to accept these aspects of the programme. Settings with established tooth brushing have agreed to advise and support those schools experiencing difficulties.
- Four special care needs schools in ABUHB continue to participate in the tooth brushing programme, and special units in relevant schools are also targeted.
- The problems associated with recording D2S data across the financial year period rather than academic year continues to cause problems with data collation.
- All children participating in any element of the D2S programme receive a home pack at least twice a year (three times if possible).
- ABUHB no longer delivers teaching sessions to children in years 4, 5 and 6 to concentrate on more evidence based activities within the D2S programmes so these children no longer receive home packs. As this element was part of the programme for a portion of the school year 4964 children in these year groups participated in Oral Health Education sessions (Pan Gwent) last year. Each of these children received a home pack.
- Partnership working in Flying Start settings has seen an additional 3950 home packs given out across Gwent.
- All D2S staff in ABUHB take part in regular training for continued professional development. They also participate in a peer review and audit programme within the CDS.

- All programmes are subject to continual monitoring. Clinical protocols are in place and all teaching sessions are evaluated. Team meetings are held regularly. Stock control and financial monitoring are undertaken monthly in close liaison with ABUHB finance and CDS directors. The website is maintained centrally.

Barriers

Tooth brushing Programme

- Issues surrounding compliance persist; several schools have pulled out of D2S as they are under increasing pressure from the national curriculum and other aspects of school life. Supervised tooth brushing is increasingly being viewed as a time consuming commitment encroaching on 'valuable' teaching time. A number of teachers make comments about 'parental responsibility' and cross infection.
- Where small schools have merged into larger schools, there have been problems re-introducing the tooth brushing programme due to the disruption associated with the new changes.
- Quality Assurance assessments have reduced slightly this term due to other commitments of staff and long term sick leave. The schools are also reluctant to have more disruption than absolutely necessary during the school day. There have been more recorded remedial actions this year and a number of these involve providing training for new staff.
- There have been difficulties with ordering and delivery of these home packs, including long-term sick leave, which has led to home packs being delivered twice this year to the majority of schools rather than three times in 2013/14. These packs help reinforce the OHE teaching and enable the child to maintain continuity with tooth brushing at home, which may be no longer being carried out within schools due to the age of the child.
- Access to parents via schools continues to be difficult. Some parents are accessed via Flying Start groups, induction days, school fetes, Dental GA/sedation triage etc.
- The Oral Health Promotion Steering Group continues to meet although regular attendance by non-dental group members is often limited. Despite ABUHB concerted efforts to engage with Local authority Education leads this has proved to be difficult. Oral health care training is offered on an annual basis to generic health visitors and school nurses. On occasion, dieticians and midwives are also involved.
- Some staff employed with D2S work term-time only. Staff maternity leave and long-term sickness have had a detrimental effect on service delivery in 2014/15.

Betsi Cadwaladr

North Wales CDS delivers an accredited Oral Health Education Certificate Course that enables students to sit the National Examining Board for Dental Nurses Oral Health Education Certificate examination. The current cohort of students has just taken their exam in March 2015. We will have the results in May. This course has provided a steady base for recruitment of new Dental Health educators, and has helped with succession-planning,

The sickness absence and eventual tragic death of a management colleague who played a key role in the development, implementation and staff training aspects of the D2S programme was felt on a personal level by all, whilst long term sickness resulted in another member of staff opting for early retirement. Both sad events had the potential for impacting on the operational aspects of the

programme. However, the whole team have been exemplary in the support of both of these colleagues during their long illnesses, and have stepped up to the mark to provide any necessary cover of their duties.

A further 2 staff members have retired from the service this year, and the recruitment processes to re-establish a full team complement are under way. An additional dental nurse has been recruited to support the clinical prevention aspects of Designed to Smile within the Mobile Dental Units, and approval for recruiting three new Dental Health Support Workers has recently been gained. These new staff members will work closely with the epidemiology teams who are involved in dental survey work within schools.

It is also important to note that a large proportion of settings in the Betsi Cadwaladr area are located in rural areas and this impacts upon the delivery of D2S in terms of resources – in particular the time taken to travel to distant locations.

Successes: Betsi Cadwaladr CDS has delivered 2 fluoride varnish “extended duties” courses this year. These were open to dental nurses from all branches of dentistry across North Wales and Powys and will create a larger base for fluoride varnish applications within the school, community or practice settings. Successful delivery of tooth brushing and clinical prevention programme across North Wales, involving appropriate distribution of toothpaste to support the programme, and a robust and proactive quality assurance programme to maintain standards in all D2S settings.

Cardiff and Vale & Cwm Taf

Successes

- NICE Guidelines: A presentation to the UHB Clinical Boards was very successful. As a result we have been contacted by NICE to put our work forward for consideration as a good practice example for the implementation of NICE guidance on their website. We also plan to use the presentation across a number of target groups to raise awareness of the D2S programme and the level of need for prevention across the unitary authorities. The presentation was a collaboration between the D2S team and Cardiff University colleagues.
- Cwm Taf Flying Start have placed an order from their under spend to supply toothbrush and toothpaste packs and cups to all children in Cwm Taf for the next financial year 2015/16.
- We are working closely with our colleagues who contribute to the children’s epidemiology programme, to provide a smooth delivery and service for all involved.

Additional activity in Cwm Taf

Cwm Taf Health Board continues to fund an initiative in Rhondda Cynon Taf to deliver supervised tooth brushing to those nurseries and primary schools not taking part in D2S. The scheme is delivered to nursery, reception and school year 1.

Number of Non D2S schools	49
Number of schools participating	35
Number of children in participating schools	2,587
Number of children brushing	2,404
Number of home packs distributed (x2 where possible)	3,770
Number of parents/guardians attending talks	241

The intention was that each child received 2 home packs per year but one of our educators was off sick at the end of the school term so some of the children only had one pack).

Hywel Dda

Successes

Overall, the team has continued to deliver in spite of long term sickness for key D2S team members. They have maintained momentum ensuring that quality assurance checks were carried out termly. Relationships with the wider health professionals were strengthened via attendance at school nurse meetings and links with social services. Opportunities with local colleges to deliver oral health messages to child care students and their trainers were developed.

Extended OHE was offered to non D2S schools to support their NQA for healthy schools. The CDS consider that as the two programmes complement each other it is justified as a discretionary one off. Home pack deliveries have been consistent and there have been links with LAC teams to support home pack delivery. Mother and baby talks have led to direct contact with parents, enabling the team to deliver key messages very early on.

The SLA for Menter Cwm Gwendraeth was established to support the extension of flying start in the Llanelli area. *Through the medium of Welsh, to engage and encourage parents of these children to seek out resources related to health, this was an ideal opportunity to get involved and a good use of our resources. Training is provided by the D2S team to all professionals directly involved in this partnership. In return the CDS is included in all community days and have the use of translation services for additional resources.*

Flying start expansion in Llanelli was fully supported and all settings taken on.

Barriers

The CDS experienced significant long term sickness of key D2S personnel. This has meant that they have faced some challenges, particularly in relation to the fluoride varnish applications. There have also been some maintenance issues with the MDU, which has held up the FV delivery. Feedback from the schools remain positive, very well embedded. Where schools only manage to brush 4 out of 5 days, there is usually a good reason. Few schools were suspended this year, the team are understanding of issues relating to school inspections and their needs to prioritise. What is important is that the team goes back and offers support to re-establish the programme.

Powys

Successes

- One of our biggest successes is that we have increased the number of Schools taking part in the programme; this includes two setting that had previously refused to join us. We have also increased the Schools taking part in the fluoride varnish programme. These have both been successes when we consider the staff shortages we have faced.

Barriers

- There have been a number of barriers to the delivery of the Designed to Smile programme over the past twelve months. Staff shortages have unfortunately created a barrier. After successfully recruiting we again have long term staff absence, one of these being a maternity leave. Wider CDS personnel have been helpful in delivering the D2S programme working with the D2S team where capacity has allowed. Unfortunately some Schools have withdrawn from the programme during this past year, due to competing commitments.

Conclusions

Significant progress has been made in the development of the Designed to Smile during 2013/14. The supervised tooth brushing programme is now well established across the whole of Wales. In the super pilot areas in North and South East Wales the scheme has continued to develop. Whilst the areas newer to Designed to Smile (i.e. Aneurin Bevan, Powys, Hywel Dda, and Abertawe Bro Morgannwg health board areas) have reaped the rewards of the groundwork undertaken in the previous reporting period.

There have been substantial increases in the numbers of settings taking part in the supervised tooth brushing element of the programme, especially in the areas newer to Designed to Smile ensuring that children from deprived areas are getting fluoride in contact with teeth. This has culminated in 1,439 schools and nurseries taking part across the Principality with 91,290 children brushing with an appropriate strength fluoride-containing toothpaste.

During 2014/15 there has been considerable growth in the Fluoride Varnish element of the programme. A total of 386 settings were taking part. Across Wales there were 16,109 children receiving one application with an additional 13,091 having two applications of fluoride varnish.

In terms of resources a total of £3,691,267 was spent on the Designed to Smile programme during 2014/15; representing 99% of the monies £3,717,000, allocated by the Welsh Government.

During this reporting period an additional 13 individuals were recruited to work on Designed to Smile. Since the scheme was introduced a total of 142 new staff have been recruited to work in the Wales' CDS.

References

1. *Eradicating Child Poverty in Wales – Measuring Success*, Welsh Assembly Government, October 2006. Web address:

<http://gov.wales/statistics-and-research/eradicating-child-poverty-wales/?lang=en>

2. *Together for Health: A National Oral Health Plan for Wales 2013-18*, Welsh Assembly Government, March 2013. Web address:

<http://gov.wales/topics/health/cmo/professionals/dental/oral-plan/?lang=en>

Appendix

Fluoride Varnish applications by Health Board, April – July 2014

Health Board	Number of FV applications (either 1st or second)
ABMU	5,112
Aneurin Bevan	7,189
Betsi Cadwaladr	708
Cardiff and Vale	2,422
Cwm Taf	2,546
Hywel Dda	986
Powys	509
WALES	19,472

Acknowledgements

The work involved in monitoring Designed to Smile carries on throughout the year and is a considerable task. Thanks to the Wales Community Dental Service Designed to Smile Teams for collecting and cleaning the data. Thanks also to Mrs Jessica Brewster (WOHIU Administrator) for collating and central cleaning of the data.