



Designed to Smile

Activity Data: April 2015 – March 2016

Monitoring Report

December 2016

**Maria Z. Morgan
Welsh Oral Health Information Unit
Cardiff University School of Dentistry**

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)	14
Home packs	17
Wider engagement	19
Parents	19
Setting personnel	20
Primary care personnel	21
Integration with wider public health personnel and initiatives	22
Cardiff & Vale and Cwm Taf	22
Aneurin Bevan	22
Quality Assessment	24
Fissure Sealant Activity	25
Fluoride varnish	27
Staff and resources	29
Additional issues	31
Abertawe Bro Morgannwg	31
Aneurin Bevan	31
Betsi Cadwaladr	31
Additional activity in Cwm Taf	31
Hywel Dda	31
Powys	31
Conclusions	32
References	33
Acknowledgements	34

Executive Summary

This report details the Designed to Smile activity which took place between April 2015 and March 2016.

Settings: By the end of March 2016 the total number of schools and nurseries involved in Designed to Smile was 1,542. This includes 1,474 settings agreeing to take part in the tooth brushing element of the programme; 268 of these settings also took part in either the fissure sealant or the fluoride varnish elements of D2S; and another 180 settings took part in supervised tooth-brushing and the fluoride varnish and fissure sealant elements of D2S. A further 68 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 94,789 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 95%.

Population coverage: 63.5% 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 5.7% of children in School Years 3-6 are taking part (assuming a population denominator of children aged 7-10).

Home packs: 172,401 home packs were distributed across Wales. On average 2.8 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 2,468 and 684 parents attended either group oral health education or one to one sessions respectively.

Overall, 7,995 and 8,292 members of school/nursery staff received training in the implementation of supervised tooth brushing and wider oral health education respectively between April 2015 and March 2016. 60,182 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 9,650 quality assessments (QAs) were carried out across Wales between April 2015 and March 2016. These involved 509 instances of remedial measures being undertaken with 14 settings having to be temporarily suspended.

Fissure Sealant Programme activity: 8,198 children were assessed during April 2015-March 2016; 286 fewer children when compared with the previous year. The total number of teeth sealed during April 2015-March 2016 was 17,591 – 1,828 more than in April 2014- March 2015.

Fluoride varnish activity: During 2015/16 there has been considerable growth in the Fluoride Varnish element of the programme. Across Wales there were 21,190 having two applications with an additional 16,070 children receiving one application of fluoride varnish during the period.

Staff and costs: During this reporting period an additional 26 individuals were recruited to work on Designed to Smile. Since the scheme was introduced a total of 168 new staff have been recruited to work in the Wales' CDS. A total of £3,699,163 was spent on the Designed to Smile programme during 2015/16; 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.

Table 1 Number of settings taking part in D2S (TB or FV) in April 2015 -2016 compared with previous years, by reporting LHB

	2009-10*	2010-11*	2011-12**	2012-13**		2013-14**		2014-15**		2015-16**	
Abertawe Bro Morgannwg	54	127	139	212		245		270		273	
Aneurin Bevan	21	100	157	208		211		211		224	
Betsi Cadwaladr	166	270	326	394		413		419		419	
Cardiff and Vale	232	341	413	384	186 C&V 198 CT	375	188 C&V	383	189 C&V	394	200 C&V 194 CT
Hywel Dda	42	84	147	162		174		186		193	
Powys	0	22	29	34		34		40		39	
WALES	515	944	1211	1394		1452		1509		1542	

**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

- The total number of schools and nurseries agreeing to take part in Designed to Smile was 1,542 by the end of March 2016. This includes 1,474 settings agreeing to take part in the tooth brushing element of the programme; 268 of these settings also took part in either the fissure sealant or the fluoride varnish elements of D2S; and another 180 settings took part in supervised tooth-brushing and the fluoride varnish and fissure sealant elements of D2S.
- A further 68 settings were taking part in the fluoride varnish and/or the fissure sealant elements of D2S but were not tooth brushing.

- Setting type is presented in Table 2. 24 special educational needs schools as defined by Welsh Government and an additional 21 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
Abertawe Bro Morgannwg	140	0	3	2	120	8	0	273
Aneurin Bevan	91	1	0	0	125	7	0	224
Betsi Cadwaladr	230	0	11	9	157	0	12	419
Cardiff and Vale	87	2	0	0	105	6	0	200
Cwm Taf	110	3	6	3	66	4	2	194
Hywel Dda	64	26	15	2	74	7	5	193
Powys	9	1	6	0	21	0	2	39
WALES	591	33	38	14	548	24	21	1542

- 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 53.3% (1542/2892) of these settings.

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

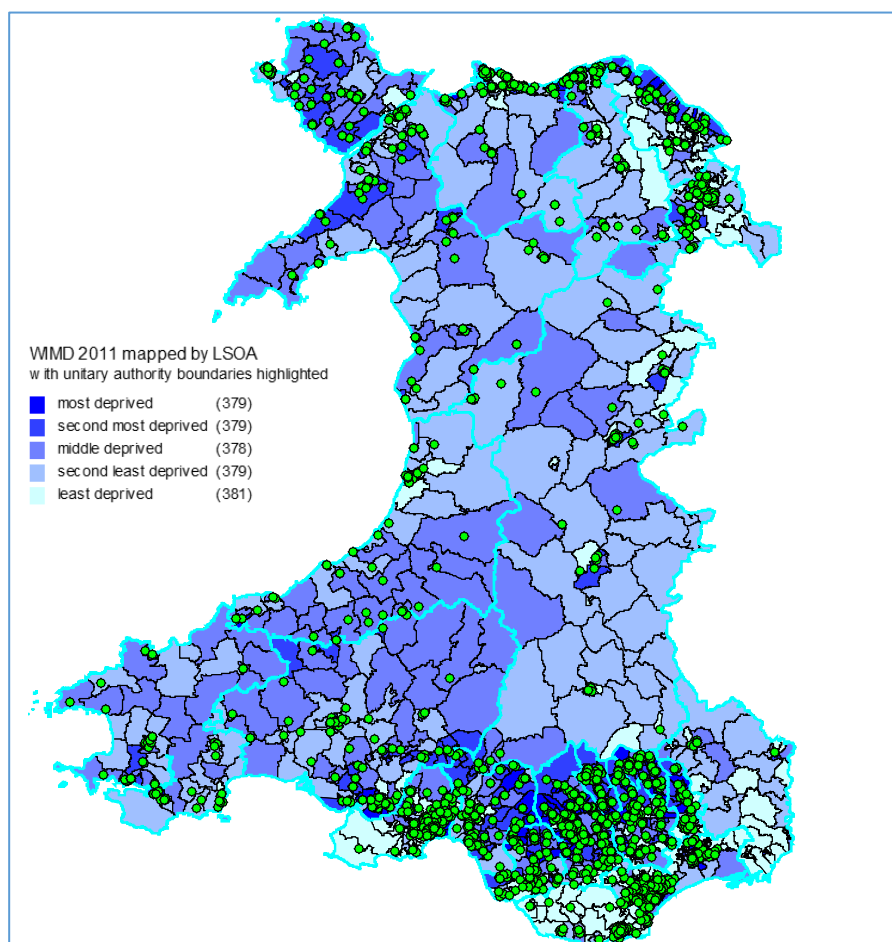
Local Health Board	Total number of settings in LHB	Number of settings taking part in D2S	% of all settings taking part
Abertawe Bro Morgannwg	372	273	73.4
Anuerin Bevan	464	224	48.3
Betsi Cadwaladr	873	419	48.0
Cwm Taf	245	200	81.6
Cardiff and Vale	334	194	58.1
Hywel Dda	428	193	45.1
Powys	176	39	22.2
WALES	2892	1542	53.3

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

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).

- 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 57% of the 1542 settings taking part in Designed to Smile come from the second most and the most deprived categories Table 4a.

Figure 1 Settings agreeing to take part in Designed to Smile mapped by 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.
- 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 77.6% of settings come from the two most deprived groups because the deprivation is more concentrated within the unitary authority.

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

- 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 16.3% 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		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
ABMU	Bridgend	81	17.3	12.3	7.4	22.2	40.7
ABMU	Neath Port Talbot	76	7.9	17.1	11.8	28.9	34.2
ABMU	Swansea	116	20.7	7.8	18.1	19.8	33.6
ABMU		273	16.1	11.7	13.2	23.1	35.9
Aneurin Bevan	Blaenau Gwent	49	0.0	4.1	18.4	28.6	49.0
Aneurin Bevan	Caerphilly	72	2.8	1.4	23.6	31.9	40.3
Aneurin Bevan	Monmouth	11	9.1	18.2	0.0	63.6	9.1
Aneurin Bevan	Newport	47	0.0	0.0	6.4	23.4	70.2
Aneurin Bevan	Torfaen	45	0.0	20.0	20.0	44.4	15.6
Aneurin Bevan		224	1.3	6.3	17.0	33.5	42.0
Betsi Cadwaladr	Anglesey	61	3.3	0.0	39.3	32.8	24.6
Betsi Cadwaladr	Conwy	69	10.1	17.4	18.8	33.3	20.3
Betsi Cadwaladr	Denbighshire	55	14.5	20.0	41.8	3.6	20.0
Betsi Cadwaladr	Flintshire	62	8.1	14.5	8.1	38.7	30.6
Betsi Cadwaladr	Gwynedd	83	2.4	18.1	38.6	36.1	4.8
Betsi Cadwaladr	Wrexham	89	10.1	13.5	27.0	29.2	20.2
Betsi Cadwaladr		419	7.9	14.1	28.9	29.8	19.3
Cardiff & Vale	Cardiff	149	14.1	13.4	13.4	16.1	43.0
Cardiff & Vale	Vale of Glamorgan	51	31.4	7.8	27.5	15.7	17.6
Cardiff & Vale		200	18.5	12.0	17.0	16.0	36.5
Cwm Taf	Merthyr	54	3.7	0.0	13.0	35.2	48.1
Cwm Taf	RCT	140	6.4	7.1	12.9	33.6	40.0
Cwm Taf		194	5.7	5.2	12.9	34.0	42.3
Hywel Dda	Carmarthenshire	93	1.1	19.4	28.0	36.6	15.1
Hywel Dda	Ceredigion	43	18.6	14.0	51.2	11.6	4.7
Hywel Dda	Pembrokeshire	57	0.0	31.6	33.3	24.6	10.5
Hywel Dda		193	4.7	21.8	34.7	27.5	11.4
Powys	Powys	39	17.9	25.6	20.5	35.9	0.0
WALES	WALES	1542	9.3	12.4	21.3	27.8	29.2

Settings offered D2S and participation in constituent elements

- Between April 2015 and March 2016, a total of 1,668 settings were offered Designed to Smile across Wales. 1,542 settings took part culminating in a Principality wide participation rate of 92.4%. (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 76.5% (39/51) in Powys Health Board area to 100% (224/224) in Aneurin Bevan Health Board (Table 5).

Table 4b Targeting by quintile of deprivation

	All settings offered D2S in period	Settings taking part in at least one element of Designed to Smile							Settings not taking part in Designed to Smile						
		TB only	TB & 1 other element	All D2S	No to TB but participating in at least one other element	Not offered TB, another element is ongoing	Withdrawn from TB, another element continues	TB suspended, another element continues	Not yet targeted	Refused all elements of D2S	No to TB and not offered another element	No to TB and not participating in other D2S	TB suspended, no other activity	Withdrawn from D2S	Closed
Aneurin Bevan	224	101	39	62	16		6		6		5				2
Least deprived	3	2		1							3				
Second least deprived	14	8	3	2	1										
Middle deprived	38	14	11	9	2		2		2		1				
Second most deprived	75	30	16	21	5		3								1
Most deprived	94	47	9	29	8		1		4		1				1
ABMU	291	183	65	22	3				1	4			2	11	
Least deprived	47	37	4	3									1	2	
Second least deprived	38	22	9	1						1			1	4	
Middle deprived	40	25	7	4						1				3	
Second most deprived	65	36	22	4	1					2					
Most deprived	101	63	23	10	2				1					2	
Betsi Cadwaladr	465	344	35	27	2	6	5				6			21	19
Least deprived	38	28	3	2										2	3
Second least deprived	66	50	7	2							1			3	3
Middle deprived	135	105	7	3		2	4				4			8	2
Second most deprived	137	103	14	6	1	1								6	6
Most deprived	89	58	4	14	1	3	1				1			2	5
Cardiff & Vale	217	103	52	25	19		1				7	7			3
Least deprived	40	25	6	3	3						2	1			
Second least deprived	26	13	5	2	4							1			1
Middle deprived	37	15	11	4	3		1				1				2
Second most deprived	37	13	12	3	4						2	3			
Most deprived	77	37	18	13	5						2	2			
Cwm Taf	218	119	31	36	2		5	1			5	1	5	2	11
Least deprived	12	10		1									1		
Second least deprived	12	10									1			1	
Middle deprived	27	15	6	4							1				1
Second most deprived	73	41	13	10			2				1	1	1		4
Most deprived	94	43	12	21	2		3	1			2		3	1	6
Hywel Dda	202	163	21	8			1		2		1		2	2	2
Least deprived	10	9							1						
Second least deprived	44	41	1						1					1	
Middle deprived	68	61	4	2										1	
Second most deprived	57	40	8	5									2		2
Most deprived	23	12	8	1			1				1				
Powys	51	13	25				1				8	1		3	
Least deprived	10	3	3				1				1	1		1	
Second least deprived	13	3	7								2			1	
Middle deprived	10	1	7								2				
Second most deprived	18	6	8								3			1	
WALES	1668	1026	268	180	42	6	19	1	9	4	32	9	9	39	37

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 at least one other element	Not offered TB, another element is ongoing	Withdrawn from TB, another element continues	TB suspended, another element continues	Not yet targeted	No to TB and not offered another element	No to TB & not participating in other D2S	Refused all elements of D2S	Withdrawn from D2S	TB suspended, no other activity	Closed
Aneurin Bevan	224	224	62	101	39	16		6		6	5					2
Blaenau Gwent	49	49	12	26	3	4		4		1	1					
Caerphilly	72	72	21	26	17	6		2		5	4					
Monmouth	11	11	4	5	2											
Newport	47	47	12	23	6	6										
Torfaen	45	45	13	21	11											2
ABMU	291	273	22	183	65	3				1			4	11		2
Bridgend	85	81		61	20										3	1
Neath Port Talbot	87	76	3	53	18	2				1			4	6		
Swansea	119	116	19	69	27	1								2	1	
Betsi Cadwaladr	465	419	27	344	35	2	6	5			6			21		19
Anglesey	67	61	4	57	0						2					4
Conwy	80	69	5	54	5	1	4							7		4
Denbighshire	61	55	5	36	8	1	1	4						2		4
Flintshire	68	62	8	41	11		1	1			1			1		4
Gwynedd	83	83	1	72	10											
Wrexham	106	89	4	84	1						3			11		3
C&V	217	200	25	103	52	19		1			7	7				3
Cardiff	157	149	21	77	36	15					2	3				3
Vale	60	51	4	26	16	4		1			5	4				
Cwm Taf	218	194	36	119	31	2		5	1		5	1		2	5	11
Merthyr	61	54	9	31	11	1		3				1			4	2
RCT	157	140	27	88	20	2		2	1		5			2	1	9
Hywel Dda	202	193	8	163	21			1		2	1			2	2	2
Cardiganshire	98	93	3	75	14			1			1					2
Ceredigion	46	43	5	38	0					2				1		
Pembrokeshire	58	57		50	7									1		
Powys	51	39		13	25			1			8	1		3		
WALES	1668	1542	180	1026	268	42	6	19	1	9	32	9	4	39	9	37

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

- The supervised tooth brushing participation rate for Wales was 88% (180 + 1026 + 268/1668 or 1474/1668). An additional 35 settings were classified as taking part in the supervised tooth brushing element of the programme during this reporting period when compared with April 2014-March 2015, where a total of 1439 settings were taking part.
- Unitary authority level participation rates in any element of D2S ranged from 76.5% in Powys to 100% in the unitary authorities within Aneurin Bevan Health Board and Gwynedd in Betsi Cadwaladr (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.
- 4 settings declined to take part in the scheme between April 2015 – March 2016, which compares favourably with 2014-15 when 19 settings refused to take part. Reasons for refusal have included staffing issues, wanting to observe other settings before taking part and concentrating on other performance related issues.
- It should be noted that those not yet targeted were not necessarily scheduled to be targeted during 2015/16 but will be during the next reporting period.

Supervised tooth brushing

Total settings in D2S **1,542**

Total settings brushing **1,474**

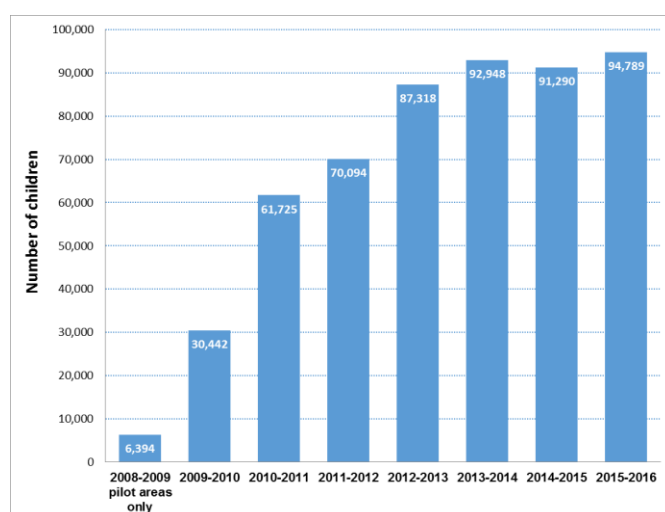
Total children brushing **94,789**

Total money spent **£3,699,163**

AREA	TB only	TB & 1 element	All D2S - ie TB, FV & FS	ALL SETTINGS BRUSHING	CHILDREN BRUSHING
Blaenau Gwent	26	3	12	41	2,466
Caerphilly	26	17	21	64	4,219
Monmouth	5	2	4	11	669
Newport	23	6	12	41	2,784
Torfaen	21	11	13	45	3,999
Aneurin Bevan	101	39	62	202	14,137
Bridgend	61	20	0	81	5,475
Neath Port Talbot	53	18	3	74	5,314
Swansea	69	27	19	115	11,198
ABMU	183	65	22	270	21,987
Anglesey	57	0	4	61	2,237
Conwy	54	5	5	64	3,396
Denbighshire	36	8	5	49	2,639
Flintshire	41	11	8	60	4,859
Gwynedd	72	10	1	83	3,145
Wrexham	84	1	4	89	4,916
Betsi Cadwaladr	344	35	27	406	21,192
Cardiff	77	36	21	134	10,470
Vale	26	16	4	46	3,558
Cardiff & Vale	103	52	25	180	14,028
Merthyr	31	11	9	51	2,654
RCT	88	20	27	136	8,404
Cwm Taf	119	31	36	187	11,058
Carmarthenshire	75	14	3	92	4,549
Ceredigion	38	0	5	43	1,818
Pembrokeshire	50	7	0	57	3,379
Hywel Dda	163	21	8	192	9,746
Powys	13	25	0	38	2,641
WALES	1,026	268	180	1,474	94,789

- 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 2014-15 and the current reporting period the total number of children brushing has increased by 3,499, from 91,290 to 94,749. Now that the programme has targeted most eligible settings the numbers taking part have plateaued (Figure 2).

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, 50.4% 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 41.5% in Aneurin Bevan to 65.4% in ABMU (Table 7). This may be a reflection of relative deprivation across Wales.
- Whereas 5.7% 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	87,431	137684*	63.5
Pre-school - Year 2	87,431	173342**	50.4
Pre-school - Year 1	65,548	104196***	62.9
School Year 3-6	7,358	129473****	5.7

*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 of children brushing nursery - Yr 2	Denominator children aged 2-6	Coverage	Number of children brushing Year 3-6	Denominator children aged 7-10	Coverage
WALES	87431	173342	50.4	7358	129473	5.7
ABMU	18485	28251	65.4	3502	21781	16.1
Aneurin Bevan	14137	34034	41.5		25695	0.0
Betsi Cadwaladr	17448	38869	44.9	3744	28609	13.1
Cardiff and Vale	14028	27921	50.2		19627	0.0
Cwm Taf	10946	17501	62.5	112	12662	0.9
Hywel Dda	9746	20101	48.5		15653	0.0
Powys	2641	6665	39.6		5446	0.0

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 100,426; with parents/guardians providing consent for 94,857 children (94.5%); and 94,789 (94.4%) actually brushing during the period.
- Consent rates again were very high for the scheme. The overall consent rate for Wales was 94.5% (94.6% and 93.1% 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 87.9% in Newport to 100% in Powys (Table 8).
- Reporting LHB consent rates are presented in Figure 3.

Figure 3: Percentage children with consent by reporting LHB for pre-school-School year 2

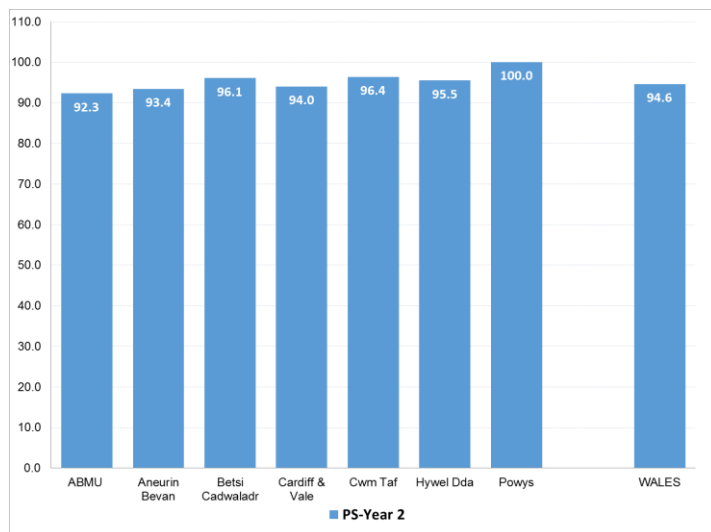


Table 8 Children brushing across Wales: Preschool-Year 2

AREA	Number of settings	Number of classes	Children eligible for inclusion	Number whose parents consent	% children with consent	Total number of children brushing
ABMU	268	636	20024	18485	92.3	18485
Bridgend	81	169	5708	5371	94.1	5371
Neath Port Talbot	74	180	4735	4362	92.1	4362
Swansea	113	287	9581	8752	91.3	8752
Aneurin Bevan	202	488	15128	14137	93.4	14137
Blaenau Gwent	41	77	2646	2466	93.2	2466
Caerphilly	64	168	4396	4219	96.0	4219
Monmouth	11	25	724	669	92.4	669
Newport	41	88	3167	2784	87.9	2784
Torfaen	45	130	4195	3999	95.3	3999
Betsi Cadwaladr	402	753	18216	17503	96.1	17448
Anglesey	61	118	1988	1787	89.9	1787
Conwy	61	104	3263	3143	96.3	3143
Denbighshire	49	84	2278	2226	97.7	2226
Flintshire	60	133	3508	3499	99.7	3445
Gwynedd	82	159	2816	2650	94.1	2649
Wrexham	89	155	4363	4198	96.2	4198
Cardiff & Vale	180	444	14929	14028	94.0	14028
Cardiff	133	323	11046	10470	94.8	10470
Vale of Glamorgan	47	121	3883	3558	91.6	3558
Cwm Taf	186	375	11372	10959	96.4	10946
Merthyr	51	98	2806	2657	94.7	2654
RCT	135	277	8566	8302	96.9	8292
Hywel Dda	193	396	10210	9746	95.5	9746
Carmarthenshire	93	219	4773	4549	95.3	4549
Ceredigion	43	79	1914	1818	95.0	1818
Pembrokeshire	57	98	3523	3379	95.9	3379
Powys	38	133	2641	2641	100.0	2641
WALES	1469	3225	92520	87499	94.6	87431

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	47	173	3832	3502	91.4	3502
Bridgend	1	4	115	104	90.4	104
Neath Port Talbot	13	52	1044	952	91.2	952
Swansea	33	117	2673	2446	91.5	2446
Betsi Cadwaladr	63	235	3959	3744	94.6	3744
Anglesey	13	52	517	450	87.0	450
Conwy	3	11	290	253	87.2	253
Denbighshire	6	24	432	413	95.6	413
Flintshire	17	62	1425	1414	99.2	1414
Gwynedd	16	56	553	496	89.7	496
Wrexham	8	30	742	718	96.8	718
Cwm Taf	1	4	115	112	97.4	112
RCT	1	4	115	112	97.4	112
WALES	111	412	7906	7358	93.1	7358
TOTAL (both year groups) *			100426	94857	94.5	94789

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	4.6	4.3	4.5
Aneurin Bevan	4.9		4.9
Betsi Cadwaladr	4.6	4.8	4.6
Cardiff and Vale	4.6		4.6
Cwm Taf	4.8	3.5	4.8
Hywel Dda	4.8		4.8
Powys	4.5		4.5
WALES	4.7	4.6	4.7

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.

- 60,182 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; 50,720 children from Pre-school – School Year 2, 13,377 from School Years 3-6 and 407 from mixed school year ages groups (Table 11).
- Since the 2012-13 reporting year this activity has been falling which is likely to be linked to the fact that the programme is well established and most children have already received their OHE sessions (Figures 4 & 5). This will also be a reflection of recent guidance in the How to Guide.
- In Aneurin Bevan UHB the vast majority of children involved receive brief informal reinforcements of the oral health messages from the D2S team when Quality Assurance assessments are taking place or during preparation for fluoride varnish applications or fissure sealant screening. These quick educational contacts help build the children's compliance within the programme and allow familiarity between the children and the D2S team. Only those children starting out on the tooth brushing programme receive a more formal oral health promotion lesson. In 2015/16, 2310 children received these planned lessons in ABUHB.

Table 11: Children receiving oral health education sessions

AREA	Nursery - Year 2			School Years 3 - 6			Mixed school year ages groups		
	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
Aneurin Bevan	502	16751	15998	84	2690	2627	7	443	407
Blaenau Gwent	81	2896	2780	21	643	624	1	99	95
Caerphilly	172	4913	4697	30	822	807	1	89	83
Monmouth	26	785	758	4	114	113			
Newport	91	3935	3716	17	692	673	3	159	142
Torfaen	132	4222	4047	12	419	410	2	96	87
ABMU	110	12659	12347	51	3638	3023			
Bridgend	32	3258	3212	4	289	289			
Neath Port Talbot	28	2401	2401	11	644	644			
Swansea	50	7000	6734	36	2705	2090			
Betsi Cadwaladr	402	18220	8091	63	3850	951			
Anglesey	61	1999	804	13	517	138			
Conwy	62	3360	1288	2	159	15			
Denbighshire	49	2278	1062	6	432	317			
Flintshire	59	3495	1587	17	1426	22			
Gwynedd	82	2819	1494	17	574	263			
Wrexham	89	4269	1856	8	742	196			
Cardiff & Vale	39	3898	3701	8	414	414			
Cardiff	2	233	233	7	388	388			
Vale Glamorgan	37	3665	3468	1	26	26			
Cwm Taf	103	8633	8086	8	324	307			
RCT	76	6901	6504	1	17	17			
Merthyr	27	1732	1582	7	307	290			
Hywel Dda	13	591	591	51	2461	1733			
Carmarthenshire	12	567	567	22	1242	691			
Ceredigion				13	515	338			
Pembrokeshire	1	24	24	16	704	704			
Powys	38	2645	1906	0	0	0			
Nursery - Yr 2	1207	63397	50720	Year 3 - 6	13377	9055	Mixed ages	443	407

Figure 4: Children receiving oral health education sessions in 2015/16 compared with previous years

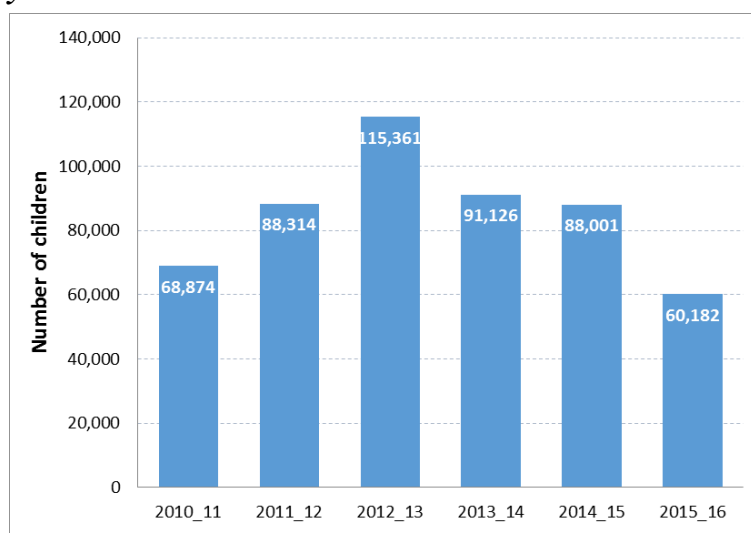
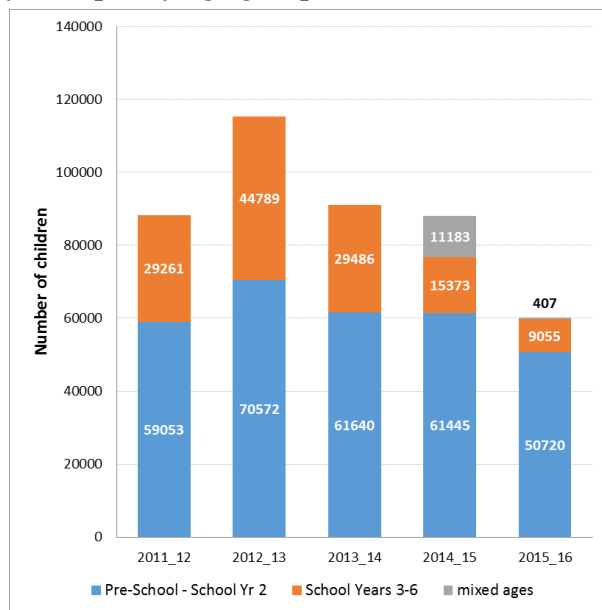


Figure 5: Children receiving oral health education sessions in 2015/16 compared with previous years split by age group



- 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	All ages				
	No. of settings	Children eligible to take part in Tooth brushing during the reporting period	Children who received Home Packs in this setting during the reporting period.	Number of packs distributed	No. of packs per child (calc from column e/d)
ABMU	269	23784	23784	60481	2.5
Bridgend	80	5787	5787	14093	2.4
Neath Port Talbot	74	5824	5824	14472	2.5
Swansea	115	12173	12173	31916	2.6
Aneurin Bevan	202	15128	15128	44184	2.9
Blaenau Gwent	41	2646	2646	7708	2.9
Caerphilly	64	4396	4396	13169	3.0
Monmouth	11	724	724	2172	3.0
Newport	41	3167	3167	8882	2.8
Torfaen	45	4195	4195	12253	2.9
Betsi Cadwaladr	407	22031	22031	65554	3.0
Anglesey	61	2473	2473	7046	2.8
Conwy	64	3430	3430	10270	3.0
Denbighshire	49	2738	2738	8214	3.0
Flintshire	60	4879	4879	14609	3.0
Gwynedd	84	3512	3512	10454	3.0
Wrexham	89	4999	4999	14961	3.0
Cardiff and Vale	180	14929		16086	1.1
Cardiff	133	11046		12262	1.1
Vale Glamorgan	47	3883		3824	1.0
Cwm Taf	185	11481	11478	22503	2.0
Merthyr	50	2805	2806	5500	2.0
RCT	135	8676	8672	17003	2.0
Hywel Dda	193	10353	10353	18833	1.8
Carmarthenshire	93	4778	4778	9148	1.9
Ceredigion	43	1909	1909	2370	1.2
Pembrokeshire	57	3666	3666	7315	2.0
Powys	39	2761	2822	5241	1.9
WALES	1206	76683	61812	172401	2.8

- 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.
- 172,401 packs were distributed between April 2015 and March 2016. This represents a fall of 49,816 packs compared with the previous year when 222,217 home packs were distributed.
- Across Wales an average of 2.8 packs were distributed; ranging from 1.0 pack per child in the Vale of Glamorgan to 3.0 packs in Caerphilly, Monmouth and most of the unitary authorities in Betsi Cadwaladr (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			Other		
	Home Packs distributed	Children who received Home Packs	Average times a year	Home Packs distributed	Children who received Home Packs	Average times a year	Home Packs distributed	Children who received Home Packs	Average times a year	Home Packs distributed	Children who received Home Packs	Average times a year
Aneurin Bevan	13401	4467	3	1953	651	3	1920	640	3	4349	4349	1
Blaenau Gwent	3645	1215	3	702	234	3				1705	1705	1
Caerphilly	3036	1012	3	756	252	3	705	235	3	1010	1010	1
Monmouth	612	204	3							500	500	1
Newport	3720	1240	3	450	150	3	1215	405	3	24	24	1
Torfaen	2388	796	3	45	15	3				1110	1110	1
Betsi Cadwaladr	939	313	3	8142	2714	3				5864	5864	1
Angelesey	285	95	3							500	500	1
Conwy				1632	544	3				748	748	1
Denbighshire	483	161	3	4563	1521	3				753	753	1
Flintshire				201	67	3				763	763	1
Gwynedd	171	57	3	1746	582	3				1200	1200	1
Wrexham										1900	1900	1
Cardiff & Vale							100	100	1	552	552	1.1
Cardiff							100	100	1	552	552	1.1
Hwyel Dda										1067	1067	1.4
Carmarthenshire										547	547	1.3
Ceredigion										520	520	1.5
WALES	14340	4780	3	10095	3365	3	2020	740	2.75	11832	11832	1.1

- A total of 26,455 packs were distributed 8,885 to children in settings taking part in the fissure sealant and/or the fluoride varnish elements of the programme – these children received an average of 2.98 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 11,832 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	172,401	84,476.5
Fluoride varnish/Fissure Sealant	14,939	7,320.1
Other activities	11,832	5,797.7
TOTAL	199,172	97,594.3

**a box of 50 home packs costs £24.50*

- The total costs of the home packs have been calculated as £97,594.30 based on the fact that a box of 50 home packs costs £24.50 including VAT.
- In Aneurin Bevan UHB all children participating in any element of the D2S programme receive a home pack at least twice a year. The health board continues to has difficulties with the ordering and delivery of these packs.

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

	Number of settings	Parents taking part in group oral health education sessions	Parents taking part in one to one sessions
ABMU	269	247	54
Bridgend	81	66	10
Neath Port Talbot	73	0	2
Swansea	115	181	42
Aneurin Bevan	204	815	352
Blaenau Gwent	41	35	7
Caerphilly	64	21	21
Monmouth	11	12	1
Newport	42	0	0
Torfaen	46	747	323
Betsi Cadwaladr	406	229	214
Anglesey	61	20	28
Conwy	64	0	25
Denbighshire	49	55	55
Flintshire	60	32	32
Gwynedd	83	20	14
Wrexham	89	102	60
Cardiff & Vale	82	687	63
Cardiff	61	463	45
Vale of Glamorgan	21	224	18
Cwm Taf	74	477	1
Merthyr	5	79	0
RCT	69	398	1
Hywel Dda	107	0	0
Cardiganshire	40	0	0
Ceredigion	34	0	0
Pembrokeshire	33	0	0
Powys	39	13	0
WALES	1181	2468	684

- There has been a reduction in oral health education activity associated with parents of children taking part in Designed to Smile in recent years. In 2015/16 the total numbers of parents taking part in group and one to one sessions were 2,468 and 684 respectively (Table 14). 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.
- 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.

- Although Powys has reported that delivering wider health promotion to parents/carers is an ongoing challenge and sessions are poorly attended.
- 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 Pembrokeshire within Hywel Dda, engagement with the gypsy traveller project in has meant that D2S has been able to provide key messages to children and their parents including access to dental services.
- In Wrexham within Betsi Cadwaladr, a new initiative has increased liaison with parents whose first language is not English (or Welsh), refugee groups, asylum seekers and other vulnerable groups, to improve uptake on the brushing programme and clinical preventive elements of D2S, and to facilitate greater access to dental services.

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.

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

AREA	Number of settings with associated activity	No. of setting personnel taking part in implementation of toothbrushing	Staff trained per setting to deliver toothbrushing	No. of setting personnel taking part in wider oral health education
Aneurin Bevan	204	1587	7.8	1653
Blaenau Gwent	41	319	7.8	329
Caerphilly	64	476	7.4	506
Monmouth	11	83	7.5	88
Newport	42	282	6.7	302
Torfaen	46	427	9.3	428
AMBU	269	3066	11.4	3066
Bridgend	81	817	10.1	817
Neath Port Talbot	73	639	8.8	639
Swansea	115	1610	14.0	1610
Betsi Cadwaladr	406	2319	5.7	2319
Anglesey	61	311	5.1	311
Conwy	64	310	4.8	310
Denbighshire	49	324	6.6	324
Flintshire	60	376	6.3	376
Gwynedd	83	364	4.4	364
Wrexham	89	634	7.1	634
Cardiff and Vale	82	207	2.5	207
Cardiff	61	175	2.9	175
Vale Glamorgan	21	32	1.5	32
Cwm Taf	74	59	0.8	59
Merthyr	5	0	0.0	0
RCT	69	59	0.9	59
Hywel Dda	107	737	6.9	817
Cardiganshire	40	437	10.9	437
Ceredigion	34	76	2.2	105
Pembrokeshire	33	224	6.8	275
POWYS	39	20	0.5	171
WALES	1181	7995	6.8	8292

- Between April 2015 and March 2016 the CDS provided some training to 80% (1,181) of the 1,474 settings taking part in the supervised tooth brushing element of D2S (Table 15).
- Overall, 7,995 and 78,292 members of school/nursery staff received training in the implementation of supervised tooth brushing and wider oral health education respectively.
- The numbers of staff trained per setting by unitary authority ranged from 0 in Merthyr Tydfil to 14 in Swansea.

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 (Table 16).

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

	Early Years	Community First	Flying Start	Barnardos	Healthy Schools	Health visitors	Midwives	School nurses	Dietitians	Health Board	Postgrad	Primary care students	Cardiff University	HMP	Other
Aneurin Bevan	380				63	245	3	105	14			10			52
ABMU						15	2	8	2			31			63
Betsi Cadwaladr					44	219	5	62	17			438			120
Cardiff and Vale			43	11					20	14			23	14	
Cwm Taf		168	81		60					79	8	1			260
Hywel Dda	86				153	37	4	102	2			86			30
Powys	8					21			3			1			
WALES	474	168	124	11	320	537	14	277	58	93	8	567	23	14	525

- During 2015-16 CDS D2S teams had contacts with 567, Primary Care Students, 537 health visitors, 320 individuals working in the Healthy Schools initiative.
- D2S teams also delivered a range of activities working with 752 “other” professionals in the community, including Language and Play Settings and Social Services.
- In Aneurin Bevan UHB the Oral Health Promotion Steering Group continues to meet and attendance is improving. Oral health training continues to be offered on an annual basis to generic health visitors and school nurses, dieticians and midwives are also offered training. The D2S team continues to work closely with health visitors and Flying Start and Sure Start teams in targeted areas to distribute home packs to pre-school children. All Flying Start personnel are trained in Oral Health annually.
- Whilst ABMU CDS has always worked collaboratively with other departments, these partnerships have strengthened this year. Consequently, combined efforts with health visiting teams, school nurses, dietetic department, speech and language, Healthy Schools and Pre-Schools has resulted in the wider spread of correct messages and increased parent contact.
- In Betsi Cadwaladr UHB links continue with key groups which include the Healthy Sustainable Pre School Scheme, Healthy Schools and Child Care Fora. The phase 6 National Quality Assessment Award continues to elevate the importance of the D2S

programme. However there still remain a small number of schools reluctant to embrace the programme.

- Work continues within Flying Start and Community First areas and a proactive approach is developed with all 0-3 parenting groups and baby clinics within targeted areas.
- Working across different agencies has been beneficial, e.g. Cwm Taf Flying Start, as in previous years, have placed an order from their under spend to supply dental home packs and cups to children in Cwm Taf for the next financial year.
- Due to the expansion of flying start, Hywel Dda has taken on 5 new nursery settings. In Carmarthenshire within Hywel Dda, the CDS has worked in partnership to train teachers at workshops setup by the Healthy Schools coordinators to deliver OHE to their class pupils. All DHE activity conforms to Delivering Better Oral Health. Feedback received from participants was excellent.
- In Powys, dental health educators continue to work with Health Visitors providing advice to bumps and babies groups and have recently been invited to join in with delivering sessions to weaning groups. The delivery of dental health and wider health promotion sessions has been a success this year, due to the fact we were able to meet with a larger number of Health Visitors over two sessions.
- Powys CDS work alongside the Dietitians, to deliver a session for those attending the OCN Nutrition course continues. The OCN Nutrition course is attended by early years and playgroup leaders as well as Health Visitors and School Nurses.

Integration with wider public health personnel and initiatives

Cardiff & Vale and Cwm Taf

Epidemiology programme –5 year old survey: We are working closely with CDS colleagues to provide a smooth delivery and service for all involved.

Seal or Varnish clinical trial: The trial has recently been completed, the results are due end of April 2016. We will not be reporting on the Fissure Sealant programme as many of the schools are part of the trial.

Alongside our colleagues at Cardiff University we have been successful in receiving a nomination for the NICE 2016 Shared Learning Awards, the awards take place in July 2016.

Aneurin Bevan

Members of D2S continue to participate in events hosted by outside agencies in order to promote the programme and good oral health in general *these* include, local authority fun-days, multidisciplinary meetings and educational days.

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. Food and nutrition being the focus for 2015/16.

ABUBH has an Oral Health Promotion Steering Group that meets quarterly and is chaired by the executive board member for public health.

Quality Assessment

- Before any setting 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 QA assessments undertaken	Number of times where remedial measures were necessary	Number of suspensions
Aneurin Bevan	202	1411	38	13
ABMU	122	253	18	
Betsi Cadwaladr	408	3529	309	
Cardiff and Vale	180	1255	41	
Cwm Taf	187	1782	73	
Hywel Dda	192	1223	13	1
Powys	38	197	17	
WALES	1329	9650	509	14

Table 17 shows the number of QAs carried out in each LHB during the reporting period. 9,650 QAs were carried out across Wales between April 2015 and March 2016. This represents an increase of 479 QAs (there were 9,171 QAs in 2014/2015) when compared with the previous reporting period. The number of times remedial measures were necessary (509) and numbers of suspensions (14) have also increased when compared with those recorded for last year (in 2014/15 there were 272 and 10 respectively).

In ABMU, organising a formal QA every term has proven difficult. The team had previously established a monitoring system where they would visit schools once a month to check everything; sometimes on these occasions they would arrive at the same time as the brushing and would carry out a formal QA. However it is not possible to maintain these monthly visits and book appointments for attendance at the time of brushing. As a result, knowing that they are not going to be called upon every month some schools have become complacent with the tooth brushing. The team is looking at different ways of working to solve this problem.

Betsi Cadwaladr reported 309 remedial measures were needed during the period. This is more a reflection of more stringent interpretation of the How To Guide and not a reflection of poorer performing settings.

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 2015 – March 2016, compared with previous years

	Total April 2015 - March 2015-16	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- March 2010	Totals January to December		
								2008	2007	2006
Total number of settings visited	181	187	180	196	191	456	229	229	248	281
Total number of children assessed	8,198	8,484	8,485	8,395	9,044	16,570	7,748	8,250	8,026	7,564
Total number of children having one or more fissure sealant applied	5,952	5,376								
Total number of children receiving oral hygiene advice/instruction	12,406	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	6,559	12,403	11,496	12,725	16,331	9,495	7,746	19,700	18,220
Total number of teeth sealed	17,591	15,763	15,615	11,728	11,428	14,075	12,015	10,397	10,291	9,797

- Across Wales between April 2015 and March 2016 181 schools took part (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, which has reduced considerably since 2010.
- 8,198 children were assessed during April 2015-March 2016.
- The total number of teeth sealed during April 2015-March 2016 was 17,591.
- Area breakdowns for activity associated with the Fissure Sealant element of Designed to Smile are presented in Table 19.
- Cardiff & Vale and Cwm Taf are unable to contribute any data as the sealant / varnish trial continues.
- In Aneurin Bevan, the use of Direct Access dental therapists to provide the screening element of this programme has improved the delivery and flexibility the programme in line with Prudent healthcare.

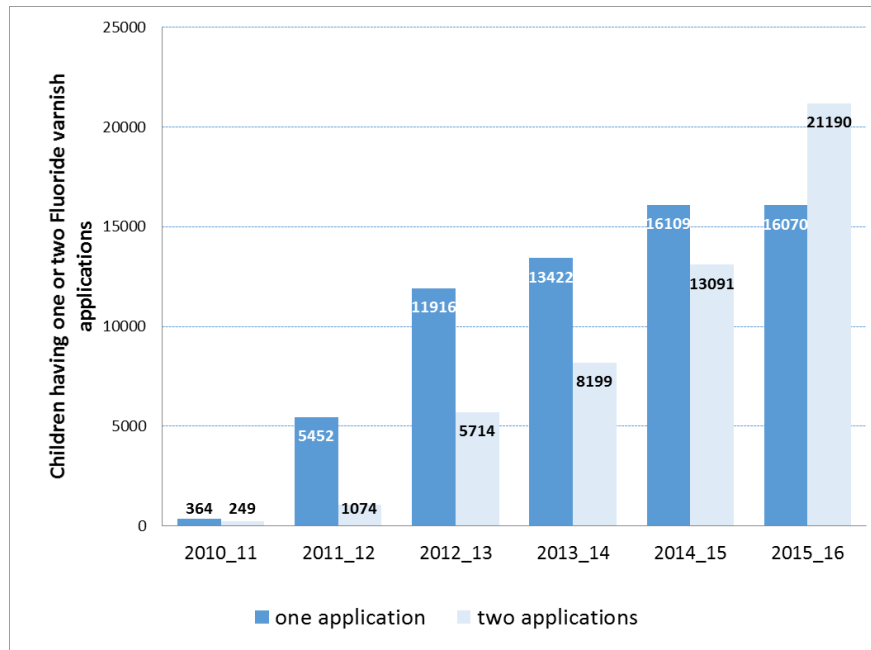
Table 19: Fissure Sealant Programme Activity by Health Board April 2015 – March 2016

	Number of settings	Number of children eligible in the setting	No. consenting to FS assessment	No. of children being assessed	Number of children having 1 or more FS applied	Number of teeth sealed	Children receiving oral hygiene advice/ instruction FSP
Aneurin Bevan	84	5490	3098	2849	2060	5981	5250
Blaenau Gwent	20	1215	714	689	480	1271	1020
Caerphilly	30	1546	911	848	606	1760	1546
Monmouth	4	224	179	173	129	388	193
Newport	17	1492	801	736	524	1554	1478
Torfaen	13	1013	493	403	321	1008	1013
ABMU	23	2399	1077	1008	985	3380	1015
Neath Portlbot	5	519	263	238	233	796	233
Swansea	18	1880	814	770	752	2584	782
Betsi Cadwaladr	74	6355	4686	4341	2907	8230	6141
Angelesey	4	290	165	157	120	389	285
Conwy	15	885	601	564	320	1164	863
Denbighshire	19	2032	1501	1384	967	2643	1957
Flintshire	21	1788	1435	1331	903	2303	1737
Gwynedd	10	841	639	581	374	1170	813
Wrexham	5	519	345	324	223	561	486
WALES	181	14244	8861	8198	5952	17591	12406

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



**from 2014-15 Fluoride varnish data has been reported for school year (i.e. September – July, as opposed to financial year).*

- The Fluoride Varnish element of the D2S programme has continued to grow; Figure 6 highlights its uptake in Wales since 2010/11.
- In the 2015/16 school year a total 21,190 children received two applications with an additional 16,070 having one application of fluoride varnish across Wales. LHB and UA breakdowns are presented in Table 20.
- In Aneurin Bevan, the numbers of children having fluoride applied has continues to increase. Maternity leave has presented challenges for the team, but these have been met with good co-ordination and 'team spirit'.
- In Betsi Cadwaladr UHB, the Fluoride Varnish scheme has been extended and will increase further in September when new members of staff are recruited.

Table 20: Fluoride Varnish applications

AREA	Number of settings	Number of children eligible to take part in setting	Number of children with consent	Number excluded due to medical reasons	Number of children receiving one six monthly application	Number of children receiving two six monthly applications
Aneurin Bevan	108	13605	10536	577	1942	7531
Blaenau Gwent	18	2220	1717	71	331	1225
Caerphilly	42	4389	3495	186	596	2513
Monmouth	6	757	562	21	103	393
Newport	21	3403	2459	189	501	1712
Torfaen	21	2836	2303	110	411	1688
ABMU	87	15299	12545	1119	6585	3845
Bridgend	19	3369	2649	216	1498	797
Neath Portlbot	21	3271	2681	164	1438	813
Swansea	47	8659	7215	739	3649	2235
Betsi Cadwaladr	29	4290	3165	271	1224	1248
Angelesey	4	608	442	35	165	167
Conwy	6	604	384	29	290	0
Denbighshire	5	918	705	51	388	184
Flintshire	9	1498	1190	98	263	692
Gwynedd	1	146	97	1	45	49
Wrexham	4	516	347	57	73	156
Cwm Taf	73	6080	5122	275	1401	2899
Merthyr	23	2100	1742	91	451	1001
RCT	50	3980	3380	184	950	1898
Cardiff & Vale	95	8321	6896	334	1979	3526
Cardiff	71	6369	5227	254	1447	2718
Vale Glamorgan	24	1952	1669	80	532	808
Hywel Dda	41	5826	4074	357	2169	1396
Cardmarthenshire	26	3271	2409	210	1304	811
Ceredigion	5	523	340	26	159	134
Pembrokeshire	10	2032	1325	121	706	451
Powys	27	2165	1686	50	770	745
WALES	460	55586	44024	2983	16070	21190

Staff and resources

- Currently there are a total of 146 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 (wtes) are fewer; presently there are 86.1 wtes working in Designed to Smile (Table 21).

Table 21: Staff involved in Designed to Smile

	Total number of personnel working for D2S	Sum of WTE	Personnel recruited during the period
Aneurin Bevan	29	19.5	3
Caerphilly	3	2.2	
Newport	4	2.8	
Pan Gwent	20	12.8	3
Torfaen	2	1.7	
ABMU	17	13.6	4
Bridgend	2	0.7	
Pan ABMU	15	12.9	4
Betsi Cadwaladr	42	18.6	1
Anglesey	4	1.6	
Conwy	3	1.0	
Denbighshire	4	1.9	
Flintshire	11	5.5	
Gwynedd	10	4.2	
Wrexham	10	4.4	1
Cardiff & Vale	19	10.5	2
Cardiff & Vale	19	10.5	2
Cwm Taf	18	8.1	3
Cwm Taff	18	8.1	3
Hywel Dda	14	11.8	
Carmarthenshire	10	8.2	
Ceredigion	1	1.0	
Pembrokeshire	3	2.6	
Powys	7	3.9	
WALES	146	86.1	26

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 26 individuals were recruited to work on Designed to Smile (Table 21). Since the scheme was introduced a total of 168 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, 13 in 2014/15: 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	332,971	56.1	260,780	593,751
Aneurin Bevan	568,472	78.2	158,904	727,376
Betsi Cadwaladr	551,880	67.1	270,127	822,007
Cardiff & Vale	386,115	71.1	157,018	543,133
Hywel Dda	350,000	79.8	88,617	438,617
Cwm Taf	303,376	71.1	123,371	426,747
Powys	120,628	81.8	26,904	147,532
WALES	2,280,471	70.6	824,941	3,699,163

- A total of £3,699,163 was spent on the Designed to Smile programme during 2015/16; 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 £2,280,471 was spent on staff costs across Wales, equating to 71% of the total spend. This characteristic ranged from 56% in ABMU to 82% in Powys.

Table 23: 2015/16 Allocations versus monies spent by reporting LHB

	Allocation £	Spend	Difference
Abertawe Bro Morgannwg	619,000	593,751	25,249
Aneurin Bevan	732,000	727,376	4,624
Betsi Cadwaladr	822,000	822,007	-7
Cardiff & Vale*	970,000	969,880	120
Hywel Dda	427,000	438,617	-11,617
Powys	147,000	147,532	-532
WALES	3,717,000	3,699,163	17,837

**incorporates Cwm Taf allocation and spend*

- A further £824,941 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: For ABMU HB this year, there has been success in re-engaging many of the schools in the high need areas that have previously withdrawn from the programme. Much of this has resulted through close links and support from the Healthy Schools Programme.

Aneurin Bevan

Successes: Although some schools targeted for the supervised tooth brushing continue to be reluctant to participate in the programme. D2S staff have reported that a number of settings appear to be more enthusiastic and motivated than in previous years, and have had to deal with fewer schools threatening to withdraw. There has been an increase in activity in our BME schools in Newport and involvement of some of these parents in tailored educational sessions.

Betsi Cadwaladr

Successes: The Designed to Smile strategic planning group has streamlined to allow for more regular meetings with subgroups as appropriate. North Wales Community Dental Service delivers an accredited Oral Health Education Certificate Course enabling student to sit the National Examining Board for Dental Nurses Oral Health Education Certificate examination.

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. There are approximately 50 settings with 2,500 children taking part.

Hywel Dda

Successes: A school which had previously withdrawn from the programme, have now, due to a new Head teacher, agreed to re-join the programme.

Barriers: There has been some reduced input into D2S locally due to covering extended periods of sick leave.

Powys

Barriers: Ongoing long term CDS staff absence created a problem to delivery of the programme earlier in the year. Furthermore some staff, notably from school setting, have put up more resistance to the tooth brushing element. Reasons for this are associated with time issues and competing curriculum developments.

Successes: On a more positive note, the majority of setting taking part are still very keen and enthusiastic. The CDS has engaged more with stakeholders, building good relationships and have valued their support. The CDS has worked closely with Wales PPA in Powys, who are very keen to support the D2S programme in the pre-School settings.

Conclusions

Significant progress has been made in the development of the Designed to Smile during 2015/16. The supervised tooth brushing programme is now well established across the whole of Wales.

There have been increases in the numbers of settings taking part in the supervised tooth brushing element of the programme, as well as continued participation of existing settings, ensuring that children from deprived areas are getting fluoride in contact with teeth. This has culminated in 1,474 schools and nurseries taking part across the Principality with 94,789 children brushing with an appropriate strength fluoride-containing toothpaste.

During 2015/16 there has been considerable growth in the Fluoride Varnish element of the programme. A total of 460 settings were taking part. Across Wales there were 16,070 children receiving one application with an additional 21,190 having two applications of fluoride varnish.

In terms of resources a total of £3,699,163 was spent on the Designed to Smile programme during 2015/16; 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 168 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://www.bristol.ac.uk/poverty/downloads/keyofficialdocuments/Eradicating%20Child%20Poverty%20Wales%20-%20Measuring%20Success.pdf>
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/nhswales/plans/oral-plan/?lang=en>
3. *Delivering Better Oral Health: an evidence-based toolkit for prevention*, published by Public Health England (Third edition)
http://www.designedtosmile.co.uk/delivering_better_oral_health.html

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.