

Childsmile

National Headline Data

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Executive summary

This report presents longitudinal headline data for the integrated *Childsmile* programme at a national level. Where appropriate, data are presented by NHS Board and the Scottish Index of Multiple Deprivation (SIMD).

Childsmile Core - Nursery and School Supervised Toothbrushing

Participating establishments

• In the 2021/22 academic year, 1,541 pre-school establishments and 565 primary schools were participating in the *Childsmile* Core toothbrushing programme in Scotland. This increased to 2,270 pre-school establishments and 1,001 primary schools during the 2022/23 academic year, according to data provided by the *Childsmile*@HIC system (Figs 1 & 2, p.3 and Tab 1 p.4).

Childsmile Nursery & School - Fluoride varnish application

Participating establishments

697 pre-school establishments and 761 primary schools were participating in the Childsmile
Nursery and School fluoride varnish application (FVA) programme in Scotland during the 2022/23
academic year (Fig 3, p.5 and Tab 2, p.6). This is an increase in comparison with 2021/22 figures
(440 pre-school establishments and 566 primary schools).

Consent rates

- During the 2022/23 academic year, the average consent rate for Scotland, as a percentage of targeted children, was 82% among nursery children (an increase of 5% in comparison with the 2021/22 figure) and 83% for school children (an increase of 7% in comparison with the 2021/22 figure) (Figs 4 & 5, p.7-8).
- In the 2022/23 academic year consent rates varied between boards. The range was from 76% to 97% for nurseries and from 68% to 93% for primary schools (Tabs 3 & 4, p.9-10).

Fluoride varnish application rates

- Sixty five percent of targeted nursery children received at least one fluoride varnish application in the 2022/23 academic year, which is 7% higher than in 2021/22 (Fig 4, p.7). In addition, 76% of targeted school children received at least one fluoride varnish application in the 2022/23 academic year which is 11% higher than in 2021/22 (Fig 5, p.8).
- Variation in fluoride varnish application rates was evident across boards, the percentage of targeted children receiving *at least one* fluoride varnish application within 2022/23 academic year ranged from 58% to 81% in nurseries and from 62% to 90% in schools (Tabs 3 & 4, p.9-10).
- Thirty five percent of targeted nursery children received two or more fluoride varnish applications in the 2022/23 academic year (an 18% increase in comparison with the 2021/22 proportion) (Fig 4, p. 7). In addition, 57% of targeted school children received two or more fluoride varnish applications in the 2022/23 academic year (a 25% increase in comparison with the 2021/22 proportion) (Fig 5, p. 8).
- The percentage of children receiving *two or more* fluoride varnish applications ranged from 25% to 47% for nurseries, and from 23% to 76% for primary schools across NHS Boards (as a percentage of targeted children, 2022/23 academic year) (Tabs 3 & 4, p.9-10).

SIMD distribution of the proportion of nursery, and primary school, children who received a fluoride varnish application – as a percentage of all nursery and primary school, children who received fluoride varnish (described for here for SIMD 1 only):

- Thirty seven percent of nursery children and 41% of school children in SIMD 1 received *at least one* fluoride varnish application within 2022/23 academic year (health board [local] SIMD 2020v2) (Figs 6 & 7, p.12-13).
- Similarly, 36% of nursery children and 40% of school children in SIMD 1 received *two or more* fluoride varnish applications (health board (local) SIMD 2020v2) (Figs 6 & 7, p.12-13).

SIMD distribution of the proportion of nursery aged children, and P1-P4 school children, who received fluoride varnish – as a percentage of all nursery aged children, and all P1-P4 school, children residing in the SIMD 1 category.

- Twenty eight percent of the whole population of three to four-year-old nursery school children residing in SIMD 1 quintile received *at least one* fluoride varnish application in the 2022/23 academic year. Also, 15% received *two or more* fluoride varnish applications (health board (local) SIMD 2020v2) (Figs 8 & 9, p.14-15 and Tab 6, p.18).
- Forty nine percent of the whole population of P1-P4 aged children residing in SIMD 1 quintile received *at least one* fluoride varnish application in the 2022/23 academic year. In addition, 36% received *two or more* fluoride varnish applications (health board (local) SIMD 2020v2) (Fig 10 & 11, p.16-17 and Tab 6, p. 18).

Childsmile Practice

Child referral and Dental Health Support Worker contact

- A total of 11,550 children in Scotland were recorded on the Childsmile@HIC system as being referred to a Dental Health Support Worker in the 2022/23 financial year – a 39% increase in comparison with the number in 2021/22 (8,307 children) (Fig 14, p.22).
- A total of 12,630 children were successfully contacted by a Dental Health Support Worker in the 2022/23 financial year an increase of 39% in comparison with 2021/22 (9,086 children) (Fig 14, p.22).
- In the 2022/23 financial year the majority of children were referred to Dental Health Support Workers by a Health Visitor (9,805 children); 2,140 children were via an 'Other' source; 426 children from a dentist; 136 children via Clinic; 305 children by NHS-24; 163 children were self-referrals; and for 360 children the type of referral was not specified (Fig 15, p.24).
- There were 14,408 children with at least one kept DHSW appointment in the 2022/23 financial year; 173 families who refused *Childsmile*; 155 families that could not be contacted; and for 935 families the end result was an 'FTA / Not at home' (Fig 16, p.25).
- Of the 14,408 children with at least one kept appointment; 4,512 had their first kept appointment within the financial year; while 734 children had their second kept appointment and 912 children had their third (or greater) kept DHSW appointment within 2022/23 (Fig 17, p.26).

Dental Practice engagement

• Eighty nine percent (n=950) of independent contractor General Dental Service practices were delivering *Childsmile* interventions in the 2022/23 financial year (the proportion in the previous financial year was 86% of 900 establishments) (Tab 10, p.27).

Delivery in dental practice

- Eighty nine percent of zero to two-year-olds who were registered with an NHS dentist in Scotland (n=48,957) received toothbrushing and dietary advice in practice in the 2022/23 financial year (NHS Board range: 48%-100%) and 55% of three to five-year-olds registered with an NHS dentist (n=116,259) receiving toothbrushing and dietary advice in practice in the same year (NHS Board range: 23%-65%) (Tabs 11 & 12, p. 28-29).
- Forty one percent of six to 12-year-olds registered with an NHS dentist in Scotland (n=397,958) received toothbrushing and dietary advice in practice in the 2022/23 financial year (NHS Board range: 11%-51%) and 23% of 13-17-year-olds registered with an NHS dentist (n=309,642) received toothbrushing and dietary advice in practice in the same year (NHS Board range: 4%-29%) (Tabs 13 & 14, p. 30-31).
- In the 2022/23 financial year, 50% of two to five-year-old children who were registered with an NHS dentist (NHS Board range: 12%-56%) received at least one fluoride varnish application in practice. Also, 39% of children in this age group, registered with an NHS dentist, received one fluoride varnish application (NHS Board range: 10%-43%) and 11% received two or more fluoride varnish applications (children who had received at least one fluoride varnish application within the reporting period and who had also received another fluoride varnish application in the 12 months prior to that application), NHS Board range: 1%-14% (Tab 15, p.35).

- The proportion of two to five-year-old children who were registered with an NHS dentist who
 received at least one fluoride varnish application in practice in the 2022/23 financial year
 increased by 31% in comparison with the 2021/22 proportion, while the percentage of those who
 received two or more fluoride varnish applications increased by 8% (Fig 20, p.34).
- The proportion of two to five-year-old children registered with an NHS dentist (n=142,034) who received at least one fluoride varnish application in practice increased across the SIMD categories (from 45% in the most deprived quintile to 57% in the least deprived quintile) and for those receiving one only FVA (from 37% of the most deprived to 42% of the least deprived children) The proportion of two to five-year-old children who were registered with an NHS dentist who received two or more fluoride varnish applications also rose across the SIMD categories (from 8% in the most deprived quintile to 15% in the least deprived quintile) (Fig 21, p.36).

Total number of fluoride varnish applications in nursery, school and practice settings

• In 2022/23, 33,188 fluoride varnish applications were delivered in nursery settings, 127,507 in school settings and 83,186 in dental practice settings (Tab 16, p.37). These numbers represent an increase of 119% in the numbers of fluoride varnish applications delivered in nursery schools; a 92% rise in the number of fluoride varnish applications in school settings; and a 181% increase in the numbers of fluoride varnish applications delivered in dental practice settings when compared with applications in the same settings in 2021/2022.

Childsmile Workforce

• Seven *Childsmile* training courses were provided during the 2022/23 financial year and these taught a total of 52 Dental Health Support Workers and 42 Extended Duty Dental Nurses (Fig 23, p.39). For comparison, in the 2021/22 financial year two courses ran with five Dental Health Support Workers and 15 Extended Duty Dental Nurses trained.

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Abbreviations

List of abbreviations of NHS Board names

AA Ayrshire & Arran

B Borders

DG Dumfries & Galloway

F Fife

FV Forth ValleyG Grampian

GGC Greater Glasgow & Clyde

H Highland
La Lanarkshire
Lo Lothian
O Orkney
S Shetland
T Tayside

WI Western Isles

Sco Scotland

Other abbreviations

ASN Additional Support Needs

CHSP-PS Child Health Surveillance Programme Pre-School system

DHSW
Dental Health Support Worker
EDDN
Extended Duty Dental Nurse
FVA
Fluoride Varnish Application
GDS
General Dental Services
HIC
Health Informatics Centre
ISD
Information Services Division
NES
NHS Education for Scotland

P Primary school year groups (e.g., P4 – Primary 4)

PCDS Primary Care Dental Services

PDS Public Dental Service
PHS Public Health Scotland

SDR Statement of Dental Remuneration
SIMD Scottish Index of Multiple Deprivation

Introduction

This report presents headline data for the integrated *Childsmile* programme at a national level. Where appropriate, data are presented by NHS Board and Scottish Index of Multiple Deprivation (SIMD). A key aim of the report is to show progress over time for all components of the programme.

Childsmile National Headline Data reports are usually produced and circulated once a year. However, the report for 2019-2020 was compiled but not distributed, and similarly the 2020-2021 activity data were collected but not reported in 2021. In both cases this was because of the effects of the COVID-19 pandemic on the activities of the *Childsmile* programme and the evaluation of this programme. The Report for 2021-2022 was compiled and published in January 2023.

Data for the *Childsmile* Core (Nursery and School Supervised Toothbrushing), Nursery and School sections of this report correspond to the academic year (for the purposes of this report an academic year is from 1 July to 30 June). Data for *Childsmile* Practice are given by financial year (1 April to 31 March).

This report covers the following periods:

- Childsmile Core and Childsmile Nursery & School: 2018/19 to 2022/23 academic year (data from the Health Informatics Centre [HIC], University of Dundee)
- Childsmile Practice DHSW data: 2018/19 to 2022/23 financial year (data from HIC)
- Childsmile Practice PCDS data: 2018/19 to 2022/23 financial year (data from Public Health Scotland [PHS])
- Childsmile Workforce training figures: 2018/19 to 2022/23 financial year (data from NHS Education for Scotland [NES])

Data availability

The data covering the most recent five-year period are presented in each report. For earlier data, please refer to previously published reports (available at: http://www.child-smile.org.uk/professionals/research-and-evaluation/monitoring reports.aspx) or contact the *Childsmile* evaluation team.

Negative toothbrushing consent

In August 2016 positive consent (opt-in) to the toothbrushing segment of the *Childsmile* programme was replaced with negative consent (opt-out). Namely, all children attending a toothbrushing establishment are considered to have consented to toothbrushing unless the parent indicates that they do not wish their child to take part. Consequently, currently there is no individual level toothbrushing data being recorded on the *Childsmile*@HIC system.

Delivery of fluoride varnish in NHS Orkney, NHS Shetland and NHS Western Isles

There are different arrangements for delivery of fluoride varnish in nurseries and schools in NHS Orkney, NHS Shetland, and NHS Western Isles. From January 2011 **all** children in nurseries and schools up to P2 (inclusive) are targeted to receive fluoride varnish through *Childsmile* Nursery/School components of the programme, whereas children in school years P3 to P7 are followed up through *Childsmile* Practice. The monitoring of these P3 to P7 children started in January 2011 in NHS Orkney, April 2011 in NHS Shetland, and August 2011 in NHS Western Isles.

Since the incorporation of *Childsmile* Practice interventions into the SDR on 1 October 2011, data from GP17 forms that were recording the delivery of fluoride varnish to P3-P7 children through *Childsmile* Practice (i.e., in NHS Orkney, NHS Shetland and NHS Western Isles) have been unavailable.

Measure of deprivation

The measure of deprivation used throughout this report is the Scottish Index of Multiple Deprivation (SIMD) population-weighted quintile (a quintile describes a fifth of the population), with SIMD 1 being the most deprived quintile and SIMD 5 the least deprived quintile.

SIMD2020v2 was used when reporting the 2022/23 data, SIMD2016 was used for the reports from 2015/16-2021/2022, while SIMD2012 was used for 2014/15. "NHS Board (local) SIMD" is used for *Childsmile* Nursery and School and "National (Scotland) SIMD" for *Childsmile* Practice (to be consistent with the SDR payment arrangements with General Dental Services [GDS] practices).

Child allocation to NHS Board

For *Childsmile* Nursery and School: Children are linked to a nursery/school and the nursery/school is assigned to an NHS Board. However, the child's home postcode is used to assign the child to a SIMD quintile (e.g., this means if a child goes to school in NHS Grampian but lives in NHS Highland, they will be included in the NHS Grampian data, but their SIMD quintile will be for NHS Highland).

For *Childsmile* Practice: Child's home postcode is used to determine NHS Board. This procedure is in line with PHS reporting of dental statistics. Please note the child may reside in the NHS Board but have attended a dental practice anywhere in Scotland.

Scottish NHS Boards boundary 2014

On 1st April 2014, NHS Board boundaries were changed to align with those of local authorities. The purpose of the change is to help NHS Boards and local authorities work closer together in the provision of care in the local community.

The 2014/15-2016/17 *Childsmile* Practice PCDS data are reported using the 2014 NHS Board configuration.

Scottish NHS Boards boundary 2018

There was a slight change of the NHS Board boundaries in February 2018. Namely, the boundaries for NHS Fife and NHS Tayside changed following The Fife Council Area and Perth and Kinross Council Area Boundaries Amendment Order 2017.

The 2018/19 Childsmile Practice PCDS data are reported using the 2018 NHS Board configuration.

Scottish NHS Boards boundary 2019

There was further minor change to the NHS Board boundaries in April 2019. Namely, the boundaries for NHS Greater Glasgow & Clyde NHS Lanarkshire changed following The Glasgow City Council Area and North Lanarkshire Council Area Boundaries Amendment Order 2018.

The 2019/20-2022/23 *Childsmile* Practice PCDS/PHS data are reported using the 2019 NHS Board configuration.

Population baselines

The population baselines in this report are based on Small Area Population Estimates as at 30 June within each reporting year. For example, the 2022/23 data should be based on Small Area Population Estimates as at 30 June 2022. However, delays in processing the Scottish Census, which was moved from 2021 to 2022 due to the COVID-19 pandemic, have delayed the estimates for June 2022 and *these will now be published in February 2024*. For this report, we will use these estimates for June 2021. The population estimates are provided by the National Records of Scotland (NRS; https://www.nrscotland.gov.uk). Population estimates can be found online at: https://www.opendata.nhs.scot/dataset/population-estimates.

Changes to the Statement of Dental Renumeration (SDR) from February 2022

The PCDS data provided by PHS are given by financial year (1st April to 31st March) and are based on treatments *undertaken and paid* during that period. Changes to payment codes in the SDR took effect on 01 February 2022 (with no overlap with the previous codes) and these changes altered the data available to PHS. However, PHS were able to provide information for the full financial year 2021-2022 that matched the data used in previous Headline Reports. This year, PHS were again able to let us have information that matched previous reports, and provided information for two additional age-groups, but data for toothbrushing instruction and dietary advice is now coded as one item and is included as such in this report.

Definitions

Please refer to Appendix 1 which shows definitions for terms used throughout this report.

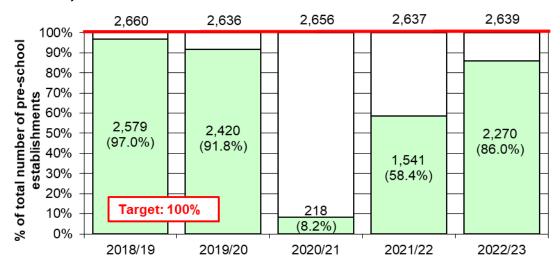
Childsmile Core - Nursery and School Supervised Toothbrushing

Please refer to Appendix 1 for definitions of terms used throughout this report.

Childsmile Core data are presented by academic year.

Participating establishments

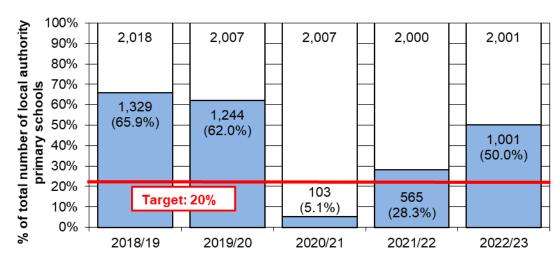
According to the data that is recorded on the *Childsmile*@HIC system, 2,270 pre-school establishments and 1,001 primary schools were participating in the *Childsmile* Core toothbrushing programme in Scotland during the 2022/23 academic year.



■Total number of pre-school establishments

□ Pre-school establishments participating in toothbrushing programme

Figure 1: Nurseries participating in toothbrushing programme in Scotland academic year, 2018/19-2022/23.



□Total number of local authority primary schools

■Primary schools participating in toothbrushing programme

Figure 2: Primary schools participating in toothbrushing programme in Scotland academic year, 2018/19-2022/23.

Table 1 Pre-school educational establishments and primary schools participating in *Childsmile* Core programme (as a percentage of the total number of pre-school establishments / LA primary schools) by NHS Board – Scotland, 2022/23 academic year.

Health Board	Total number of pre-school establishments	particip	stablishments pating in g programme	Total number of LA primary schools	Primary schools participating in toothbrushing programme		
	establishments	n	% of total	Schools	n	% of total	
AA	155	139	89.7%	130	98	75.4%	
В	71	70	98.6%	59	22	37.3%	
DG	82	56	68.3%	97	68	70.1%	
F	159	155	97.5%	133	44	33.1%	
FV	131	131	100.0%	104	77	74.0%	
G	326	272	83.4%	239	69	28.9%	
GGC	464	269	58.0%	303	180	59.4%	
Н	259	222	85.7%	245	107	43.7%	
La	296	290	98.0%	244	153	62.7%	
Lo	401	405	101.0%	224	85	37.9%	
0	21	21	100.0%	21	20	95.2%	
S	20	21	105.0%	27	25	92.6%	
Т	233	199	85.4%	154	32	20.8%	
WI	21	20	95.2%	21	21	100.0%	
Total	2,639	2,270	86.0%	2,001	1,001	50.0%	

LA - Local Authority

- 1) Pre-school establishments / primary schools participating in the toothbrushing programme (*Childsmile* Core) are those pre-school establishments that had at least one toothbrushing monitoring contact recorded on the *Childsmile*@HIC system within the period July 2022 to June 2023.
- 2) The total numbers of pre-school establishments were provided by the *Childsmile* teams in NHS Boards up 30th July 2023 (where data was unavailable figs from the previous year were used).
- 3) Percentages that exceed 100 are due to a mismatch between figures provided by *Childsmile* teams and those recorded on the HIC system, i.e. *Childsmile* teams have underestimated the number of establishments providing toothbrushing in their area.
- 4) Total numbers of local authority primary schools as at April 2023: were obtained here: https://www.gov.scot/publications/school-contact-details/.
- 5) The target is to offer toothbrushing programme to all nurseries (100%) and at least 20% of P1 and P2 classes in those schools situated in areas with the highest level of need.
- 6) Data for NHS Boards will be partial, if not all of the monitoring contacts with the establishments participating in the toothbrushing programme were entered onto the *Childsmile*@HIC system. Percentages that exceed 100% in column four are most likely due to underreporting in the baseline figures returned NHS Boards

Childsmile Nursery & School

Please refer to Appendix 1 for definitions of terms used throughout this report.

Childsmile Nursery & School data are presented by academic year.

Reporting unique children from a record-based system: As HIC uses a system based on linked records (i.e., consent constitutes one record and all activity linked with that consent is recorded) a child may have more than one record for any reporting period. For example, a child may be listed on more than one class list or have completed more than one consent form. This affects the data completeness/consistency, e.g., the Scotland total, which reports each unique child, may not be the sum of the NHS Board data. It has not been possible to estimate and report the extent to which this affects the data in this report.

Children under three years of age: The Childsmile Nursery programme includes children of three years and upwards in all targeted nurseries. Some NHS Boards, but not all, offer fluoride varnish to a small number of two-year-old children attending targeted nurseries. To ensure that population rates are comparable across all NHS Boards, the data for two-year-old children, namely records of children who were under three years old at the end of February of each reporting year, are excluded from the *Childsmile* Nursery & School section.

Age filter for Childsmile Nursery & School data: A new age filter has been applied when reporting Childsmile Nursery & School since 2016/17. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the Childsmile@HIC system, as it was the case before. Consequently, the 2016/17-2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.

The effect of the SARS-Cov-2 COVID-19 pandemic on the FV activities of the *Childsmile* programme, and its recovery, can clearly be seen in the graph below.

Participating establishments

In the 2022/2023 academic year, 697 nurseries and 761 primary schools were participating in the fluoride varnish programme.

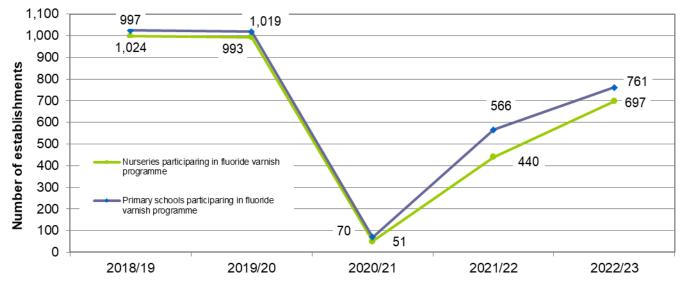


Figure 3: Nurseries and primary schools participating in fluoride varnish programme in Scotland, 2018/19-2022/23 academic year.

The breakdown by NHS Board is shown in the table below:

Table 2: Numbers of nurseries and primary schools participating in fluoride varnish programme – by NHS Board, 2018/19-2022/23 academic year.

NHS	Number	of partic	ipating n	urseries		Nun	nber of pa	rticipating	primary	schools
Board	18/19	19/20	20/21	21/22	22/23	18/19	19/20	20/21	21/22	22/23
AA	57	57	0	24	56	75	72	0	30	66
В	22	22	1	4	8	24	23	1	5	9
DG	10	10	0	0	1	10	11	0	0	1
F	39	39	0	0	0	46	46	0	0	46
FV	39	38	0	17	17	36	41	0	27	27
G	121	120	0	35	51	112	117	1	46	44
GGC	149	150	49	124	158	154	154	64	144	160
Н	95	95	1	36	57	85	83	2	42	63
La	271	271	0	130	190	256	255	1	134	178
Lo	78	76	0	3	76	106	99	1	65	81
0	21	21	0	20	20	19	19	0	19	19
S	23	22	0	23	21	27	26	0	28	25
Т	49	49	0	24	20	51	51	0	25	23
WI	23	23	0	0	22	23	22	0	1	19
Scotland	997	993	51	440	697	1,024	1,019	70	566	761

NOTES:

1) NHS Boards based on the boundaries as at 1st April 2019.

Consent and fluoride varnish application rates

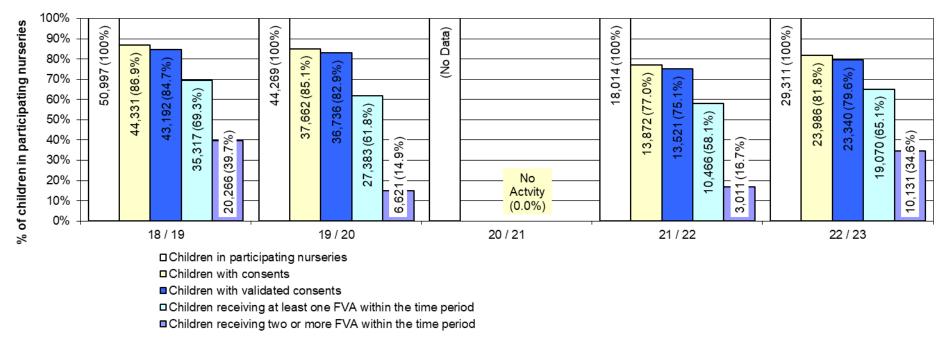


Figure 4: Nursery Consent and fluoride varnish application rates (as a % of the total number of children in participating nurseries) – Scotland, 2018/19-2022/23 academic year

- 1. Figure 4 presents children with consents, children with validated consents, children receiving at least one FVA and children receiving two or more FVAs as a % of the **total number** of children aged 3 years and over in participating nurseries.
 - For example, for 2021/2022 academic year the number of 3–4-year-old targeted children in participating nurseries equals 18,014 (100%), of those 13,872 (77.0%) children were consented for FVA, 13,521 (75.1%) had validated consents, 10,466 (58.1%) received at least one FVA and 3,011 (16.7%) children received two or more FVAs.
- 2. The total number of children in participating nurseries is derived from *Childsmile*@HIC system class lists using an additional date of birth-based age filter. There may be some underreporting of the number of children in participating nurseries due to inability to obtain all class lists in full, and over-reporting if children attend more than one targeted nursery.
- 3. A new age filter has been applied when reporting *Childsmile* Nursery & School 2016/17-2022/23 data. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the *Childsmile*@HIC system, as it was the case before. Consequently, the 2016/17–2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 4. The way the number of targeted children in participating nurseries/schools is calculated has been changed for the 2015/16–2022/23 data. Previously it had been based on an actual date of adding and a date for removing the child to/from a class list, which for 2015/16–2022/23 data was replaced with a session year and number (where Session 1 is the period July to December and Session 2 is January to June each year) of adding and removing the child to/from a class list. Due to this, the 2015/16–2022/23 proportions of children with consents, with validated consents and those receiving fluoride varnish is not directly comparable with the previous years' proportions.

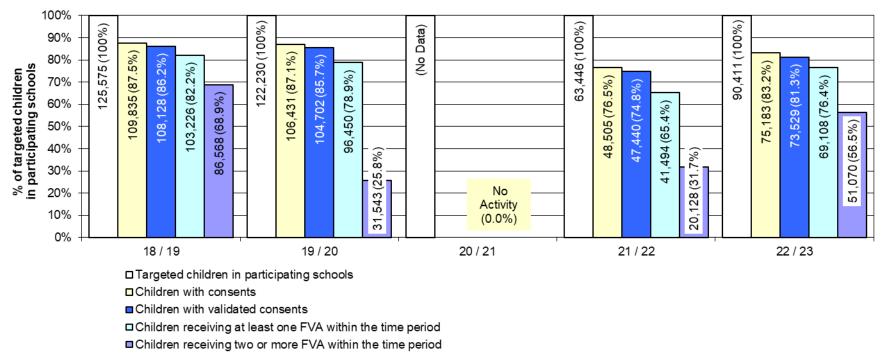


Figure 5: School Consent and fluoride varnish application rates (as a % of the total number of targeted children in participating schools) – Scotland, 2018/19-2022/23 academic year

- 1) Figure 5 presents children with consents, children with validated consents, children receiving at least one FVA and children receiving two or more FVAs as a % of the total number of **targeted** children in participating primary schools. "Targeted children" relates to the children in the primary years' groups reached by *Childsmile* teams in schools, e.g. *Childsmile* teams may have reached up to P5 classes and children in P1, P2, P3, P4 and P5 will be included.
 - For example, for 2021/2022 academic year the number of targeted children in participating primary schools equals 63,446 (100%), of those 48,505 (76.5%) children were consented for FVA, 47,440 (74.8%) had validated consents, 41,494 (65.4%) received at least one FVA and 20,128 (31.7%) children received two or more FVAs.
- 2) The number of targeted children in participating schools is derived from *Childsmile*@HIC system class lists. There may be some underreporting of the number of targeted children in participating schools due to inability to obtain all class lists in full.
- 3) The way the number of targeted children in participating nurseries/schools is calculated has been changed for the 2015/16–2022/23 data. Previously it had been based on an actual date of adding and a date for removing the child to/from a class list, which for 2015/16–2022/23 data was replaced with a session year and number (where Session 1 is the period July to December and Session 2 is January to June each year) of adding and removing the child to/from a class list. Due to this, the 2015/16–2022/23 proportions of children with consents, with validated consents and those receiving fluoride varnish is not directly comparable with the previous years' proportions.

Table 3: Targeting, consent and fluoride varnish application rates - Childsmile Nursery, by NHS Board, 2022/2023 academic year

NHS Board	Population of 3–4- year-old children in NHS board (baseline)	Number of t nursery chi participating	ldren in	Nursery with co		Nursery with va cons	lidated		children r least one F		_	r children i	-	,	children r or more F	-
	Р	T	% of P	C	% of T	n	% of T	n	% of T	% of C	n	% of T	% of C	n	% of T	% of C
AA	6,895	2,525	36.6%	1,913	75.8%	1,871	74.1%	1493	59.1%	78.0%	682	27.0%	35.7%	811	32.1%	42.4%
В	2,173	292	13.4%	268	91.8%	261	89.4%	224	76.7%	83.6%	151	51.7%	56.3%	73	25.0%	27.2%
DG	2,635	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
F	7,364	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
FV	5,949	796	13.4%	751	94.3%	736	92.5%	646	81.2%	86.0%	271	34.0%	36.1%	375	47.1%	49.9%
G	12,111	1,926	15.9%	1,491	77.4%	1,460	75.8%	1113	57.8%	74.6%	589	30.6%	39.5%	524	27.2%	35.1%
GGC	23,869	8,230	34.5%	6,666	81.0%	6,432	78.2%	5316	64.6%	79.7%	2,426	29.5%	36.4%	2,890	35.1%	43.4%
Н	5,718	1,583	27.7%	1,263	79.8%	1,219	77.0%	980	61.9%	77.6%	478	30.2%	37.8%	502	31.7%	39.7%
La	14,006	9,053	64.6%	7,185	79.4%	7,061	78.0%	5707	63.0%	79.4%	2,735	30.2%	38.1%	2,972	32.8%	41.4%
Lo	18,267	2,730	14.9%	2,596	95.1%	2,478	90.8%	2067	75.7%	79.6%	884	32.4%	34.1%	1,183	43.3%	45.6%
0	417	399	95.7%	362	90.7%	358	89.7%	288	72.2%	79.6%	135	33.8%	37.3%	153	38.3%	42.3%
S	471	394	83.7%	382	97.0%	371	94.2%	306	77.7%	80.1%	152	38.6%	39.8%	154	39.1%	40.3%
Т	7,807	991	12.7%	768	77.5%	761	76.8%	634	64.0%	82.6%	275	27.7%	35.8%	359	36.2%	46.7%
WI	478	392	82.0%	341	87.0%	332	84.7%	296	75.5%	86.8%	161	41.1%	47.2%	135	34.4%	39.6%
Sco	108,160	29,311	27.1%	23,986	81.8%	23,340	79.6%	19,070	65.1%	79.5%	8,939	30.5%	37.3%	10,131	34.6%	42.2%

- 1) Table 3 presents number of 3-4-year-old children in population, and the numbers of 3-4-year-old nursery children targeted, consented and receiving FVA.
- 2) A new age filter has been applied when reporting *Childsmile* Nursery & School 2016/17-2022/23 data. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the *Childsmile*@HIC system, as it was the case before. Consequently, the 2016/17–2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the data presented in previous reports.
- 3) The population baselines in these reports are based on Small Area Population Estimates produced by National Records of Scotland (NRS) as at 30 June within each reporting year. Delays associated with the 2021 National Census in Scotland have meant that the estimates due for publication on 30th June 2022 will now be published in February 2024. Consequently, the population baselines in this report are based on Small Area Population Estimates at 30th June 2021.
- 4) NHS Boards based on the boundaries as at April 2019.

Table 4: Consent and fluoride varnish application rates – *Childsmile* School (as a % of the total number of targeted children in participating schools) – by NHS Board, 2022/2023 academic year

NHS Board	Population baseline (up to whatever primary year reached in each HB)	Targ childi partici sche	ren in pating	childre	school en with eents	childre	school en with lated ents		Iren rece east one	_		Children receiving one only FVA			Children receiving two or more FVAs		
	Р	Т	% of P	С	% of T	n	% of T	n	% of T	% of C	n	% of T	% of C	n	% of T	% of C	
AA	27,405	8,110	29.6%	6,909	85.2%	6,750	83.2%	6,306	77.8%	91.3%	1,645	20.3%	23.8%	4,661	57.5%	67.5%	
В	8,704	1,091	12.5%	747	68.5%	730	66.9%	677	62.1%	90.6%	338	31.0%	45.2%	339	31.1%	45.4%	
DG	10,288	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	
F	29,350	5,464	18.6%	3,962	72.5%	3,919	71.7%	3,492	63.9%	88.1%	2,209	40.4%	55.8%	1,283	23.5%	32.4%	
FV	23,375	1,849	7.9%	1,519	82.2%	1,513	81.8%	1,464	79.2%	96.4%	234	12.7%	15.4%	1,230	66.5%	81.0%	
G	46,035	6,133	13.3%	5,175	84.4%	5,138	83.8%	4,834	78.8%	93.4%	1,367	22.3%	26.4%	3,467	56.5%	67.0%	
GGC	90,180	24,337	27.0%	19,716	81.0%	19,008	78.1%	17,964	73.8%	91.1%	3,529	14.5%	17.9%	14,435	59.3%	73.2%	
Н	22,897	7,184	31.4%	6,071	84.5%	5,975	83.2%	5,604	78.0%	92.3%	1,528	21.3%	25.2%	4,076	56.7%	67.1%	
La	52,730	18,689	35.4%	15,556	83.2%	15,482	82.8%	14,493	77.5%	93.2%	3,372	18.0%	21.7%	11,121	59.5%	71.5%	
Lo	69,688	10,663	15.3%	9,721	91.2%	9,276	87.0%	8,826	82.8%	90.8%	2,392	22.4%	24.6%	6,434	60.3%	66.2%	
0	1,564	1,566	100.1%	1,464	93.5%	1,453	92.8%	1,406	89.8%	96.0%	215	13.7%	14.7%	1,191	76.1%	81.4%	
S	1,905	828	43.5%	768	92.8%	742	89.6%	718	86.7%	93.5%	138	16.7%	18.0%	580	70.0%	75.5%	
T	30,604	3,652	11.9%	2,915	79.8%	2,899	79.4%	2,721	74.5%	93.3%	729	20.0%	25.0%	1,992	54.5%	68.3%	
WI	1,820	845	46.4%	660	78.1%	644	76.2%	603	71.4%	91.4%	342	40.5%	51.8%	261	30.9%	39.5%	
Sco	416,545	90,411	21.7%	75,183	83.2%	73,529	81.3%	69,108	76.4%	91.9%	18,038	20.0%	24.0%	51,070	56.5%	67.9%	

- 1) "Targeted children" relates primarily to the children in classes P1-P4. Childsmile teams may varnish in classes above P4 but this activity is at the discretion of the NHS Board.
- 2) For information on the population estimates used in this table please see the notes for Table 3 above.
- 3) NHS Boards based on the boundaries as at 1st April 2019.

Table 5: P1-P4 and P1-P2 targeting, consent and fluoride varnish application rates - Childsmile School, by NHS Board, 2022/2023 academic year

NHS board	P1-P4 aged population in NHS board (baseline)	child partic	ed P1-P4 Iren in ipating lools		children onsents	with va	children alidated sents		children red east one F	•		children re one only F	-		children re o <i>or mor</i> e F	-
	Р	Т	% of P	С	% of T	n	% of T	n	% of T	% of C	n	% of T	% of C	n	% of T	% of C
AA	15,110	7,371	48.8%	6,440	87.4%	6,292	85.4%	5,920	80.3%	91.9%	1,513	20.5%	23.5%	4,407	59.8%	68.4%
В	4,922	895	18.2%	707	79.0%	691	77.2%	645	72.1%	91.2%	321	35.9%	45.4%	324	36.2%	45.8%
DG	5,570	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
F	16,265	5,215	32.1%	3,844	73.7%	3,801	72.9%	3,413	65.4%	88.8%	2,149	41.2%	55.9%	1,264	24.2%	32.9%
FV	12,849	1,632	12.7%	1,466	89.8%	1,460	89.5%	1,416	86.8%	96.6%	211	12.9%	14.4%	1,205	73.8%	82.2%
G	25,779	5,750	22.3%	4,940	85.9%	4,903	85.3%	4,634	80.6%	93.8%	1,303	22.7%	26.4%	3,331	57.9%	67.4%
GGC	50,901	22,996	45.2%	19,235	83.6%	18,548	80.7%	17,616	76.6%	91.6%	3,461	15.1%	18.0%	14,155	61.6%	73.6%
Н	12,654	4,404	34.8%	3,876	88.0%	3,814	86.6%	3,598	81.7%	92.8%	908	20.6%	23.4%	2,690	61.1%	69.4%
La	29,539	16,276	55.1%	14,013	86.1%	13,950	85.7%	13,240	81.3%	94.5%	2,980	18.3%	21.3%	10,260	63.0%	73.2%
Lo	39,262	10,245	26.1%	9,451	92.2%	9,018	88.0%	8,593	83.9%	90.9%	2,329	22.7%	24.6%	6,264	61.1%	66.3%
T	17,044	3,404	20.0%	2,770	81.4%	2,754	80.9%	2,591	76.1%	93.5%	694	20.4%	25.1%	1,897	55.7%	68.5%
Mainland - total	229,895	78,188	34.0%	66,742	85.4%	65,231	83.4%	61,666	78.9%	92.4%	15,869	20.3%	23.8%	45,797	58.6%	68.6%
NHS board	P1-P2 aged population in NHS board (baseline)	child partic	ed P1-P2 Iren in ipating lools		children onsents	with va	children alidated sents		children red east one F			children re one only F	-		children re o or more F	_
	Р	Т	% of P	С	% of T	n	% of T	n	% of T	% of C	n	% of T	% of C	n	% of T	% of C
0	416	359	86.3%	344	95.8%	341	95.0%	328	91.4%	95.3%	52	14.5%	15.1%	276	76.9%	80.2%
S	508	424	83.5%	408	96.2%	396	93.4%	384	90.6%	94.1%	80	18.9%	19.6%	304	71.7%	74.5%
WI	470	424	90.2%	383	90.3%	374	88.2%	351	82.8%	91.6%	146	34.4%	38.1%	205	48.3%	53.5%
Islands - total	1,394	1,207	86.6%	1,135	94.0%	1,111	92.0%	1,063	88.1%	93.7%	278	23.0%	24.5%	785	65.0%	69.2%

- 1) Table 5 presents number of children in P1-P4 or P1-P2 population, and the numbers of P1-P4 or P1-P2 children targeted, consented and receiving FVA.
- 2) For information on the population estimates used in this table please see the notes for Table 3 above.
- There are different arrangements for delivery of fluoride varnish in nurseries and schools in NHS Orkney, NHS Shetland and NHS Western Isles. From January 2011 **all** children in nurseries and schools up to P2 (inclusive) are targeted to receive fluoride varnish through *Childsmile* Nursery/School components of the programme, whereas children in school years P3 to P7 are followed up through *Childsmile* Practice.
- 4) NHS Boards based on the boundaries as at 1st April 2019.

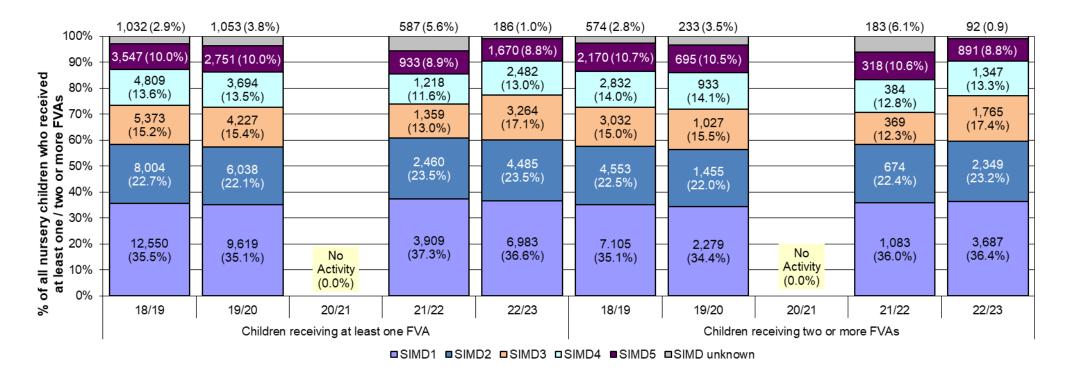


Figure 6: Nursery children receiving *at least one* and *two or more* fluoride varnish applications by SIMD quintile - Scotland, 2018/19-2022/23 academic year SIMD – Scotlish Index of Multiple Deprivation (local).

- 1) Figure 6 presents the proportion of children in each SIMD quintile who received *at least one* and *two or more* FVAs. The numbers in the sections of the bars represent the numbers (and percentages) of children who received *at least one / two or more* FVA(s) belonging to each SIMD quintile. For example, in 2022/2023 academic year, 3,687 children who received *two or more* FVAs belonged to SIMD1 quintile (36.4%) of the total number of children who received *two or more* FVAs); 2,349 (23.2%) children belonged to SIMD2; 1,765 (17.4%) to SIMD3; 1,347 (13.3%) to SIMD4; 891 (8.8%) to SIMD5 quintile; and there were 92 (0.9%) children with unknown SIMD (due to insufficient postcode information). All six categories combined add up to 100%.
- 2) SIMD 2020v2 (local, NHS Board-level) was used.
- 3) *A new age filter has been applied when reporting *Childsmile* Nursery & School 2016/17-2022/23 data. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the *Childsmile*@HIC system, as it was the case before. Consequently, the 2016/17–2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.

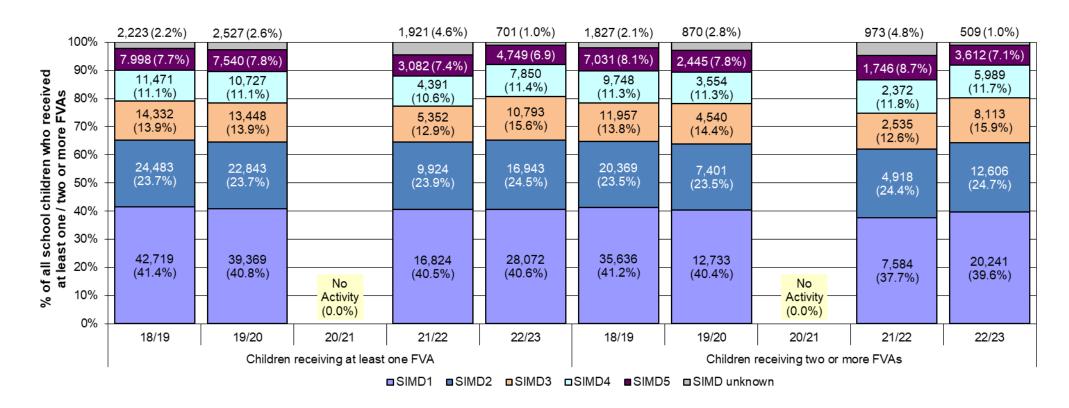


Figure 7: Primary school children receiving at least one and two or more fluoride varnish applications by SIMD quintile - Scotland, 2018/19-2022/23 academic year

SIMD - Scottish Index of Multiple Deprivation (local).

- 1) Primary school children here include all children in P1 to P7 classes receiving fluoride varnish, depending on how high up the primary years *Childsmile* teams have reached in participating schools.
- 2) One percent of children had unknown SIMD (due to insufficient postcode information).
- 3) SIMD 2020v2 (local, NHS Board-level) was used.

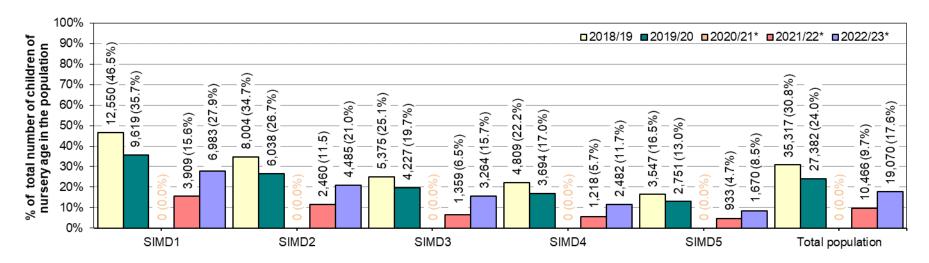


Figure 8: Proportion of population of nursery aged (3-4-years-old) children in each SIMD (local) quintile who received at least one fluoride varnish applications – Scotland, 2018/19-2022/23 academic year

SIMD – Scottish Index of Multiple Deprivation (local).

- 1) Figure 8 presents the proportion of nursery age children in each SIMD (local) quintile who received at least one FVA within an academic year (as a proportion of total number of children of nursery age in the population).
- 2) A new age filter has been applied when reporting *Childsmile* Nursery & School 2016/17–2022/23 data. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the *Childsmile*@HIC system, as it was the case before. Consequently, the 2016/17–2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 3) The denominator is the population of 3-4-year-olds in each SIMD quintile:
- 4) The population baselines in these reports are based on Small Area Population Estimates produced by National Records of Scotland (NRS) as at 30 June within each reporting year. Delays associated with the 2021 National Census in Scotland have meant that the estimates due for publication on 30th June 2022 will now be published in February 2024. Consequently, the population baselines in this report are based on Small Area Population Estimates at 30th June 2021.Population estimates can be found online at: https://www.opendata.nhs.scot/dataset/population-estimates.
 - -The population baselines for 2021/2022 were calculated using Small Area Population Estimates at 30 June 2021.
 - -The population baselines for 2020/2021 were calculated using Small Area Population Estimates at 30 June 2020.
 - -The population baselines for 2019/2020 were calculated using Small Area Population Estimates at 30 June 2019.
 - -The population baselines for 2018/2019 were calculated using Small Area Population Estimates at 30 June 2018.
- 5) "Total population" numbers do not equal the sum of the numbers in the five SIMD categories, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect child postcode).
- 6) SIMD 2020v2 (local, NHS Board-level) was used.

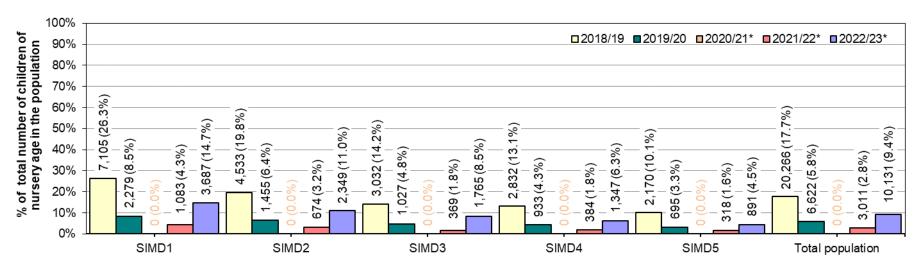


Figure 9: Proportion of population of nursery children (3-4-years-old) in each SIMD (local) quintile who received two or more fluoride varnish applications – Scotland, 2018/19-2022/23 academic year

SIMD – The Scottish Index of Multiple Deprivation (local).

NOTES:

- 1) Figure 9 presents the proportion of nursery age children in each SIMD (local) quintile who received *two or more* FVAs within an academic year (as a proportion of total number of children of nursery age in the population).
- 2) A new age filter has been applied when reporting *Childsmile* Nursery & School 2016/17–2022/23 data. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the *Childsmile*@HIC system, as it was the case before. Consequently, the 2016/17–2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 3) The denominator is the population of 3-4-year-olds in each SIMD quintile:

For information on the population estimates used in this figure please see the notes for Figure 8 above. Population estimates can be found online at: https://www.opendata.nhs.scot/dataset/population-estimates.

- -The population baselines for 2021/2022 were calculated using Small Area Population Estimates at 30 June 2021.
- -The population baselines for 2020/2021 were calculated using Small Area Population Estimates at 30 June 2020.
- -The population baselines for 2019/2020 were calculated using Small Area Population Estimates at 30 June 2019.
- -The population baselines for 2018/2019 were calculated using Small Area Population Estimates at 30 June 2018.
- 4) "Total population" numbers do not equal the sum of the numbers in the five SIMD categories, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect child postcode).
- 5) SIMD 2020v2 (local, NHS Board-level) was used.

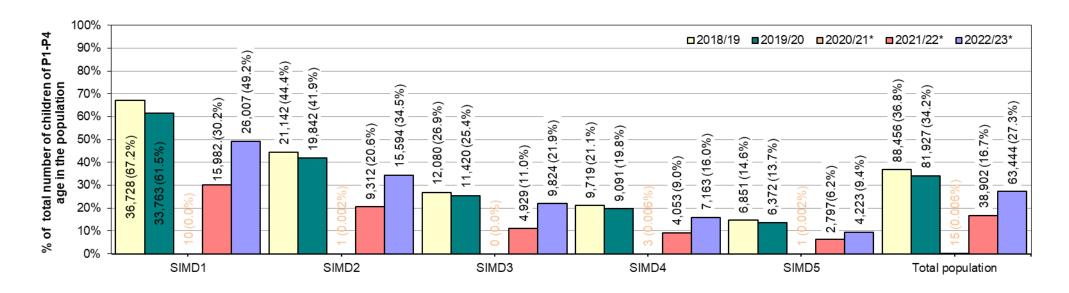


Figure 10: Proportion of the whole population of P1-P4 age children in each SIMD (local) quintile who received at least one fluoride varnish application – Scotland, 2018/19-2022/23 academic year

SIMD - The Scottish Index of Multiple Deprivation (local).

- 1) Figure 10 presents the proportion of P1-P4 age children in each SIMD (local) quintile who received at least one FVA within an academic year (as a proportion of total number of children of P1-P4 age in the population).
- 2) A new age filter has been applied when reporting *Childsmile* Nursery & School 2016/17–2022/23 data. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the *Childsmile*@HIC system, as it was the case before. Consequently, the 2016/17–2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 3) The denominator is the population of 3-4-year-olds in each SIMD quintile:
 - For information on the population estimates used in this figure please see the notes for Figure 8 above. Population estimates can be found online at: https://www.opendata.nhs.scot/dataset/population-estimates.
 - -The population baselines for 2021/2022 were calculated using Small Area Population Estimates at 30 June 2021.
 - -The population baselines for 2020/2021 were calculated using Small Area Population Estimates at 30 June 2020.
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- 4) "Total population" numbers do not equal the sum of the numbers in the five SIMD categories, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect child postcode).
- 5) SIMD 2020v2 (local, NHS Board-level) was used.

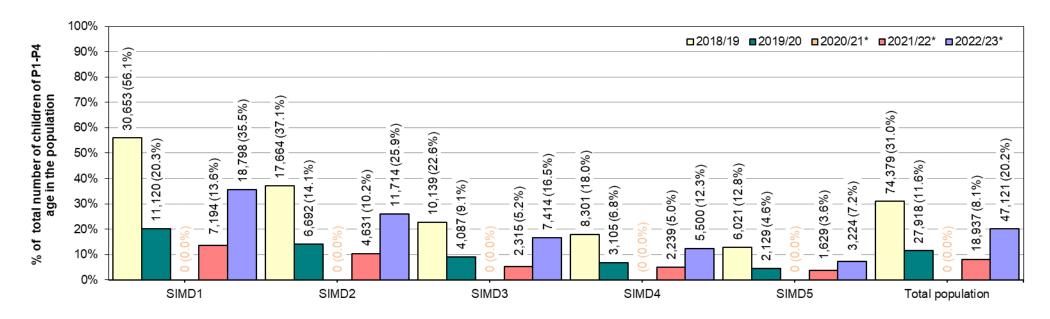


Figure 11: Proportion of the whole population of P1-P4 age children in each SIMD (local) quintile who received two or more fluoride varnish applications – Scotland, 2018/19-2022/23 academic year

SIMD – The Scottish Index of Multiple Deprivation (local).

- 1) Figure 11 presents the proportion of P1-P4 age children in each SIMD (local) quintile who received *two or more* FVAs within an academic year (as a proportion of total number of children of P1-P4 age in the population).
- 2) A new age filter has been applied when reporting *Childsmile* Nursery & School 2016/17–2022/23 data. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the *Childsmile*@HIC system, as it was the case before. Consequently, the 2016/17–2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 3) The denominator is the population of 3-4-year-olds in each SIMD quintile:
 - For information on the population estimates used in this figure please see the notes for Figure 8 above. Population estimates can be found online at: https://www.opendata.nhs.scot/dataset/population-estimates.
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- 4) "Total population" numbers do not equal the sum of the numbers in the five SIMD categories, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect child postcode).
- 5) SIMD 2020v2 (local, NHS Board-level) was used.

Table 6 Proportion of population of nursery and P1-P4 children receiving at least one fluoride varnish application / one fluoride varnish application only / two or more fluoride varnish applications, by local SIMD – Scotland, 2022/2023 academic year

	SIMD (local, NHS Board- level)	Nursery population baseline (3-4 years of age)	rece	dren iving one FVA		receiving aly FVA	Children receiving two or more FVAs		
	ievei)	N	n	% of N	n	% of N	n	% of N	
	1	25,058	6,983	(27.9%)	3,296	31.2%	3,687	14.7%	
Nursery	2	21,361	4,485	(21.0%)	2,136	10.0%	2,349	11.0%	
	3	20,787	3,264	(15.7%)	1,499	7.2%	1,765	8.5%	
	4	21,284	2,482	(11.7%)	1,135	5.3%	1,347	6.3%	
	5	19,670	1,670	(8.5%)	779	4.0%	891	4.5%	
	Unknown	0	186	0.0%	94	0.0%	92	0.0%	
	Total	108,160	19,070	17.6%	8,939	8.3%	10,131	9.4%	
	SIMD (local, NHS Board-	P1-P4 population baseline (5-8 years of age)	Children receiving at least one FVA		Children receiving one only FVA		Children receiving two or more FVAs		
	level)	N	n	% of N	n	% of N	n	% of N	
	1	52,900	26,007	49.2%	7,209	13.6%	18,798	35.5%	
P1-P4	_	4= 00=	45 504	04.50/	0.000	0.00/	11,714	25.9%	
	2	45,237	15,594	34.5%	3,880	8.6%	11,714	23.370	
	3	45,237 44,882	15,594 9,824	21.9%	2,410	5.4%	7,414	16.5%	
			,		,		,		
	3	44,882	9,824	21.9%	2,410	5.4%	7,414	16.5%	
	3 4	44,882 44,822	9,824 7,163	21.9% 16.0%	2,410 1,663	5.4% 3.7%	7,414 5,500	16.5% 12.3%	

¹⁾ For information on the population estimates used in this table please see the notes for Table 3 above. Population estimates can be found online at: https://www.opendata.nhs.scot/dataset/population-estimates.

²⁾ SIMD 2020v2 (local, NHS Board-level) was used.

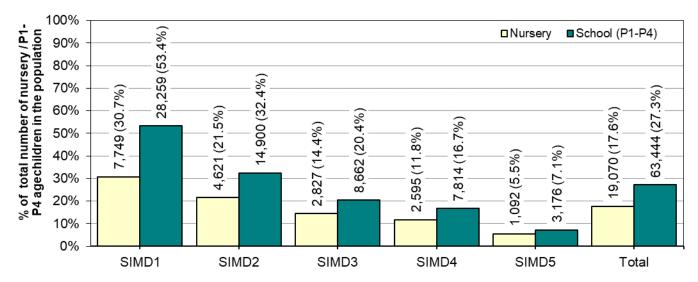


Figure 12: Proportion of population of nursery (3–4-year-olds) and P1-P4 children receiving at least one fluoride varnish application, by national SIMD – Scotland, 2022/2023 academic year

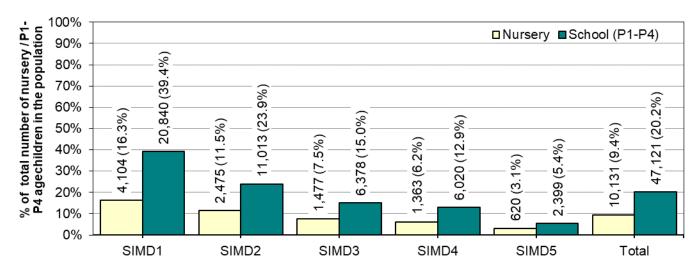


Figure 13: Proportion of population of nursery (3–4-year-olds) and P1-P4 children receiving two or more fluoride varnish applications, by national SIMD – Scotland, 2022/2023 academic year

- 1) Figure 12 presents the proportion of nursery / P1-P4 age children in each SIMD (national) quintile who received *at least one* FVA in 2022/23 academic year (as a proportion of total number of children of nursery / P1-P4 age in the population). Figure 13 presents the proportion of nursery / P1-P4 age children in each SIMD (national) quintile who received *two or more* FVAs in 2022/23 academic year (as a proportion of total number of children of nursery / P1-P4 age in the population).
- 2) The numerator is children of nursery / P1-P4 age who received at least one / two or more FVAs.
- 3) A new age filter has been applied when reporting *Childsmile* Nursery & School 2016/17–2022/23 data. The new age filter for reporting Nursery (3-4 years old), P1-P2 (5-6 years old) and P1-P4 (5-8 years old) data is based on the individual child's date of birth, rather than on class lists uploaded onto the *Childsmile*@HIC system, as it was the case before. Consequently, the 2016/17–2022/23 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 4) For information on the population estimates used in these figures please see the notes for Figure 8 above.
- 5) Total population" numbers do not equal the sum of the numbers in the five SIMD categories, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect postcode of the child).
- 6) SIMD 2020v2 (national, Scotland-level) was used.

Table 7 Proportion of population of nursery and P1-P4 children receiving at least one fluoride varnish application / one fluoride varnish application only / two or more fluoride varnish applications, by *National SIMD – Scotland, 2022/2023 academic year

	SIMD (national, Scotland- level)	Nursery population baseline (3-4 years of age)	rece	dren iving one FVA		receiving oly FVA	Children receiving two or more FVAs		
	Í	N	n	% of N	n	% of N	n	% of N	
	1	25,208	7,749	(30.7%)	3645	14.5%	4,104	(16.3%)	
Nursery	2	21,526	4,621	(21.5%)	2146	10.0%	2,475	(11.5%)	
	3	19,601	2,827	(14.4%)	1350	6.9%	1,477	(7.5%)	
	4	22,069	2,595	(11.8%)	1232	5.6%	1,363	(6.2%)	
	5	19,756	1,092	(5.5%)	472	2.4%	620	(3.1%)	
	Unknown	0	186	(0.0%)	94	0.0%	92	(0.0%)	
	Total	108,160	19,070	(17.6%)	8,939	8.3%	10,131	(9.4%)	
		•		, ,				. ,	
	SIMD (national, Scotland- level)	P1-P4 population baseline (5-8 years of age)	rece	dren iving one FVA		receiving oly FVA	Children	receiving ore FVAs	
	(national, Scotland-	P1-P4 population baseline (5-8 years	rece	iving		_	Children	receiving	
	(national, Scotland-	P1-P4 population baseline (5-8 years of age)	rece at least	iving one FVA	one or	nly FVA	Children two or m	receiving ore FVAs	
P1-P4	(national, Scotland- level)	P1-P4 population baseline (5-8 years of age) N	rece at least	iving one FVA % of N	one or	% of N	Children two or m	receiving ore FVAs % of N	
P1-P4	(national, Scotland- level)	P1-P4 population baseline (5-8 years of age) N 52,928	rece at least n 28,259	work of N (53.4%)	one on n 7419	% of N 14.0%	Children two or m	receiving ore FVAs % of N (39.4%)	
P1-P4	(national, Scotland- level)	P1-P4 population baseline (5-8 years of age) N 52,928 46,055	rece at least n 28,259 14,900	% of N (53.4%) (32.4%)	n 7419 3887	% of N 14.0% 8.4%	Children two or m n 20,840 11,013	receiving ore FVAs % of N (39.4%) (23.9%)	
P1-P4	(national, Scotland- level) 1 2 3	P1-P4 population baseline (5-8 years of age) N 52,928 46,055 42,430	rece at least n 28,259 14,900 8,662	% of N (53.4%) (32.4%) (20.4%)	n 7419 3887 2284	% of N 14.0% 8.4% 5.4%	Children two or m n 20,840 11,013 6,378	receiving ore FVAs % of N (39.4%) (23.9%) (15.0%)	
P1-P4	(national, Scotland- level) 1 2 3 4	P1-P4 population baseline (5-8 years of age) N 52,928 46,055 42,430 46,820	rece at least n 28,259 14,900 8,662 7,814	% of N (53.4%) (32.4%) (20.4%) (16.7%)	n 7419 3887 2284 1794	% of N 14.0% 8.4% 5.4% 3.8%	Children two or m n 20,840 11,013 6,378 6,020	receiving ore FVAs % of N (39.4%) (23.9%) (15.0%) (12.9%)	

^{*}Numbers in SIMD categories differ from those in Table 6 (local SIMD) while the column totals remain the same.

- 1) For information on the population estimates used in this figure please see the notes for Table 3 above. Population estimates can be found online at: https://www.opendata.nhs.scot/dataset/population-estimates.
- 2) SIMD 2020v2 (national, Scotland-level) was used.

Table 8: Additional support needs children receiving fluoride varnish application, by NHS Board, 2019/2020 academic year

Health Board	Number of ASN children in fluoride varnishing establishments	ASN children receiving at least one FVA		rece	hildren iving nly FVA	ASN children receiving two or more FVAs		
	N	n	% of N	n	% of N	n	% of N	
AA	804	533	66.3%	208	25.9%	325	40.4%	
В	82	35	42.7%	27	32.9%	8	9.8%	
DG	7	0	0.0%	0	0.0%	0	0.0%	
F	232	35	15.1%	35	15.1%	0	0.0%	
FV	327	227	69.4%	48	14.7%	179	54.7%	
G	269	145	53.9%	61	22.7%	84	31.2%	
GGC	274	95	34.7%	70	25.5%	25	9.1%	
Н	297	116	39.1%	59	19.9%	57	19.2%	
La	2,069	1,273	61.5%	483	23.3%	790	38.2%	
Lo	58	0	0.0%	0	0.0%	0	0.0%	
0	1	0	0.0%	0	0.0%	0	0.0%	
S	18	0	0.0%	0	0.0%	0	0.0%	
T	277	164	59.2%	62	22.4%	102	36.8%	
WI	3	0	0.0%	0	0.0%	0	0.0%	
Scotland	4,718	2,623	55.6%	1,053	22.3%	1,570	33.3%	

ASN - Additional support needs

¹⁾ The table includes children recorded on the *Childsmile*@HIC system under class type "SpEd" (special education); children in these classes may be of different ages.

²⁾ NHS Boards based on the boundaries as at 1st April 2014.

Childsmile Practice

Please refer to Appendix 1 for definitions of terms used throughout this report.

Child referral and dental health support worker contact

DHSW Practice data are presented by financial year.

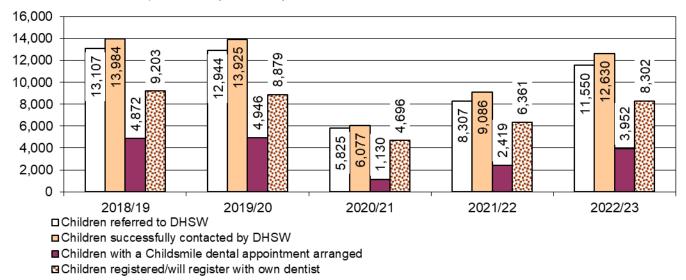


Figure 14: DHSW: Child referrals, contacts, practice appointments made and children registered/will register with own dentist – Scotland, 2018/19-2022/23 financial year

DHSW - Dental Health Support Worker.

- 1) Figure 14 presents the number of children referred to a DHSW (as entered into the *Childsmile* HIC system by DHSWs), the number of children / families contacted by a DHSW, the number of children who had a *Childsmile* dental appointment arranged by a DHSW, and children whose parents/carers indicated that their child was registered / would register with their own dentist, by financial year for the period 2018/19-2022/23.
- 2) Children referred to a DHSW in one reporting period may not be contacted by a DHSW or have a dental appointment arranged within the same reporting period.
- 3) NHS Boards based on the boundaries as at 1 April 2019

Table 9: DHSW: Child referrals, contacts, practice appointments made and children registered with own dentist – by NHS Board, 2019/2020 financial year

NHS Board	Children referred to DHSW	Children successfully contacted by DHSW	Children with a Childsmile dental appointment arranged	Children registered/ will register with own dentist (self-reported)
AA	98	92	24	69
В	504	677	31	524
DG	326	362	24	305
F	456	500	305	194
FV	418	449	226	208
G	466	458	96	343
GGC	5,119	5,453	1,994	3,468
Н	759	879	447	261
La	1,529	1,738	537	1,214
Lo	868	950	22	926
0	111	111	0	111
S	0	0	0	0
T	61	58	7	50
WI	0	0	0	0
Unknown NHS Board	835	903	239	629
Scotland	11,550	12,630	3,952	8,302

DHSW – Dental Health Support Worker. Please see notes for Figure 14.

In total, according to the *Childsmile*@HIC system data, in the 2022/2023 financial year: 9,805 children were referred to *Childsmile* from a Health Visitor; 2,140 via 'Other' source; 426 from a dentist; 136 via Clinic; 305 were referred by NHS 24; 163 were self-referrals and for 360 children the type of referral was not specified.

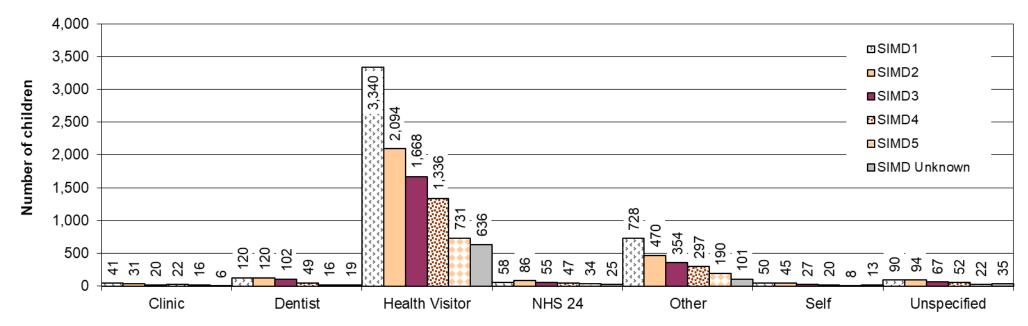


Figure 15: Number of children referred to DHSW by source, location, service etc. – Scotland, 2022/2023 financial year Number of children referred to DHSW by national SIMD of child – Scotland, 2022/2023 financial year

DHSW - Dental Health Support Worker, SIMD - The Scottish Index of Multiple Deprivation (national).

- 1) Figure 15 presents the number of children referred to a DHSW (by Health Visitor, Dentist, via Clinic, Self-referral or 'Other' route) by SIMD of child's home postcode.
- 2) SIMD 2020v2 (national) was used.

In total in the 2022/2023 financial year there were: 14,408 children with at least one kept DHSW appointment; 173 families who refused *Childsmile*; 155 families that could not be contacted; and for 935 families the end result was an 'FTA / Not at home'.

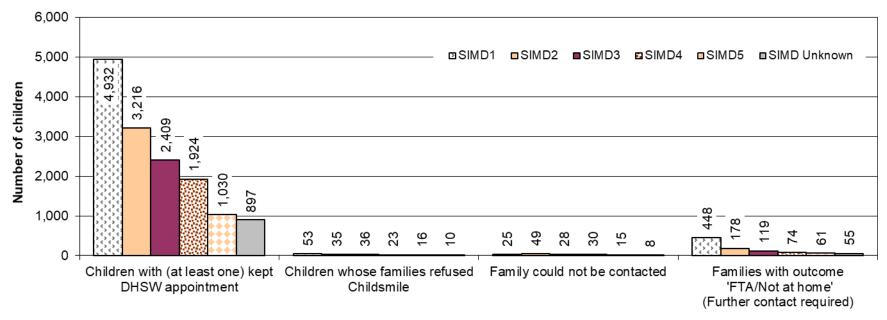


Figure 16: Children successfully contacted and not contacted by DHSW, and families who refused *Childsmile*, by national SIMD of child – Scotland, 2022/2023 financial year.

DHSW - Dental Health Support Worker, SIMD - The Scottish Index of Multiple Deprivation (national), FTA - failed to attend.

- 1) Figure 16 presents the number of children with kept DHSW appointments, children whose families refused *Childsmile*, number of families that could not be contacted and families with the outcome 'FTA / Not at home' by SIMD of child's home postcode.
- 2) SIMD 2020v2 (national) was used.

The method of presenting the data on children with different numbers of kept DHSW appointments was changed in the 2015/2016 report, therefore 2015/16–2022/23 data are comparable; however, these are not comparable with the numbers in earlier reports.

Within the 2022/2023 financial year 14,408 children had at least one kept DHSW appointment. Of these children, 4,512 had their first kept appointment within the reporting period. 734 children had their second kept appointment and 912 had their third (or greater) kept DHSW appointment within 2022/2023.

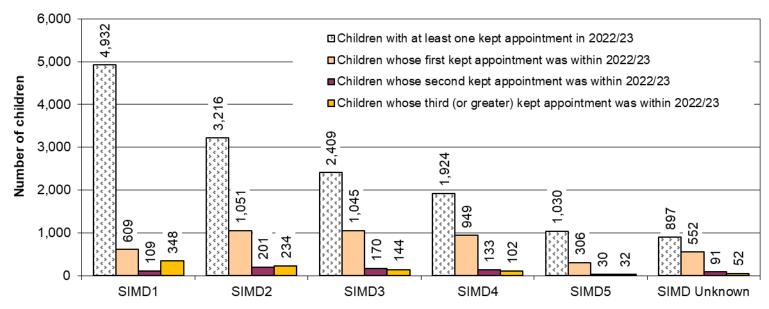


Figure 17: Children with different numbers of kept DHSW appointments by national SIMD of child - Scotland, 2022/2023 financial year

SIMD – Scottish Index of Multiple Deprivation (national).

- 1) Figure 17 presents the number of children with at least one kept DHSW appointment within the 2022/2023 financial year and how many of those had their: first, second, or third (or greater) kept appointment within the reporting period by SIMD of the child's home postcode.
- 2) For those children who had their second, or their third (or greater) kept appointment, their prior kept appointment may have occurred in an earlier reporting period.
- 3) The numbers in the last three bars (children with 1st kept appointment, those whose 2nd appointment was within 2022/23 and those whose 3rd (or greater) appointment was within 2022/23 are not mutually exclusive, as some children might have had several appointments within the same 2022/23 financial year, i.e., their 1st, 2nd and 3rd (or greater).
- 4) Data for this figure are only available for appointments from January 2010 onwards. Kept appointments prior to this were not collected by the *Childsmile*@HIC system and therefore are not available for inclusion in this figure.
- 5) SIMD 2020v2 (national) was used.

Practice engagement

Primary Care Dental Services (PCDS) activity data are presented by financial year.

Incorporation of Childsmile Practice into Statement of Dental Remuneration

Childsmile Practice interventions were incorporated into the SDR by the Scottish Government on 1 October 2011, and therefore the data reported in the Practice Engagement and Delivery in Dental Practice sections of this report are directly comparable with the data published in the September 2012 *Childsmile* National Headline Data report and onwards.

The PCDS data provided by PHS are given by financial year (1st April to 31st March) and are based on treatments *undertaken and paid* during that period. Changes to payment codes in the SDR took effect on 01 February 2022 (with no overlap with the previous codes) and these changes altered the data available to PHS. However, PHS were still able to provide data for the full financial year as configured in previous reports and these groupings are used in this document.

PHS are unable to report robust Public Dental Service (PDS) data therefore the total number of PDS practices and those delivering Childsmile interventions cannot be reported.

In total, 950 independent contractor GDS practices were delivering *Childsmile* interventions during 2022/2023 financial year in Scotland (see table 10 below), which is a 5% increase in comparison with 900 independent contractor GDS practices that were delivering *Childsmile* interventions in 2021/2022.

Table 10: Independent contractor GDS practices delivering *Childsmile* interventions – Scotland, by NHS Board, 2022/2023 financial year

NHS Board	Total GDS Dental Practices	GDS Dental Practices Delivering Childsmile	
	N	n	% of N
AA	66	61	92.4%
В	21	19	90.5%
DG	34	32	94.1%
F	68	58	85.3%
FV	52	44	84.6%
G	93	82	88.2%
GGC	278	252	90.6%
Н	59	51	86.4%
La	122	115	94.3%
Lo	179	155	86.6%
0	5	4	80.0%
S	3	2	66.7%
Т	75	70	93.3%
WI	6	5	83.3%
Scotland	1,061	950	89.5%

Independent contractor GDS – independent contractor General Dental Services (non-salaried GDS), PHS – Public Health Scotland.

- Table 10 presents the number of independent-contractor GDS practices delivering *Childsmile* interventions in each NHS Board, as a percentage of total number of independent contractor GDS practices (total numbers as at 04 November 2022, calculated from the total list of dental practices supplied by PHS).
- 2) "Dental practices delivering *Childsmile*" are those practices that have delivered any of the *Childsmile* interventions (toothbrushing instruction, dietary advice or fluoride varnish application) within the reporting period.
- 3) Total numbers of independent contractor GDS practices include practices with orthodontists only.
- 4) NHS Boards based on the boundaries as at April 2019.

Delivery in dental practice

The data on the delivery of *Childsmile* interventions in dental practice settings are collected for the following age groups:

- For toothbrushing instruction and dietary advice there are two age groups from zero to two-years, three to five-years (inclusive).
- For FVA there is one age group from two to five- years (inclusive).

Children with *two or more FVAs* (made by a dentist or dental care professional) are those two to five- years-old children (inclusive) who had received an FVA within the reporting period (2022/2023 financial year) and who had also received another FVA in the 12 months prior to that application.

Table 11: Proportion of zero to two-year-old children registered with an NHS dentist receiving both toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2022/2023 financial year

NHS Board	zero to two-year-olds registered with an NHS dentist	zero to two-year-olds receiving both toothbrushing instruction & dietary advice	
	N	N	% of N
Ayrshire & Arran	2,911	2,713	93.2%
Borders	921	827	89.8%
Dumfries & Galloway	993	666	67.1%
Fife	3,006	2,622	87.2%
Forth Valley	2,757	2,755	99.9%
Grampian	5,011	3,993	79.7%
Greater Glasgow & Clyde	12,859	11,968	93.1%
Highland	2,509	1,906	76.0%
Lanarkshire	6,520	6,031	92.5%
Lothian	7,774	6,958	89.5%
Orkney	155	75	48.4%
Shetland	411	353	85.9%
Tayside	2,989	2,450	82.0%
Western Isles	141	84	59.6%
Scotland	49,036	43,410	88.6%

- 1) Numbers of children registered with an NHS dentist, as at 3rd November 2023, were provided by PHS.
- 2) Scotland totals include children who could not be allocated to an NHS Board (due to a missing/incorrect postcode).
- 3) NHS Boards based on the boundaries as at April 2019.

Table 12: Proportion of three to five-year-old children registered with an NHS dentist receiving both toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2022/2023 financial year

NHS Board	three to five-year-olds registered with an NHS dentist	three to five-year-olds receiving both toothbrushing instruction & dietary advice			
	N	N	% of N		
Ayrshire & Arran	7,181	4,241	59.1%		
Borders	2,386	1,254	52.6%		
Dumfries & Galloway	2,510	1,016	40.5%		
Fife	7,931	4,136	52.1%		
Forth Valley	6,356	4,158	65.4%		
Grampian	13,177	6,764	51.3%		
Greater Glasgow & Clyde	26,985	15,538	57.6%		
Highland	6,268	2,816	44.9%		
Lanarkshire	14,890	8,320	55.9%		
Lothian	19,105	11,188	58.6%		
Orkney	460	107	23.3%		
Shetland	614	274	44.6%		
Tayside	7,948	4,137	52.1%		
Western Isles	448	113	25.2%		
Scotland	116,514	64,074	54.9%		

Please see notes for table 11

Table 13: Proportion of six to 12-year-old children registered with an NHS dentist receiving both toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2022/2023 financial year

NHS Board	six to 12-year-olds registered with an NHS dentist	six to 12-year-olds receiving both toothbrushing instruction & dietary advice			
	N	N	% of N		
Ayrshire & Arran	26,011	11,383	43.8%		
Borders	7,917	3,294	41.6%		
Dumfries & Galloway	9,173	2,642	28.8%		
Fife	27,514	10,870	39.5%		
Forth Valley	22,043	11,190	50.8%		
Grampian	44,034	16,576	37.6%		
Greater Glasgow & Clyde	88,845	38,492	43.3%		
Highland	22,327	7,480	33.5%		
Lanarkshire	50,268	21,321	42.4%		
Lothian	66,180	29,992	45.3%		
Orkney	1473	169	11.5%		
Shetland	1844	334	18.1%		
Tayside	28,773	10,992	38.2%		
Western Isles	1556	298	19.2%		
Scotland	399,891	165,053	41.3%		

Please see notes for table 11

Table 14: Proportion of 13-17-year-old children registered with an NHS dentist receiving both toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2022/2023 financial year

NHS Board	13-17-year-olds registered with an NHS dentist	13-17-year-olds receiving both toothbrushing instruction & dietary advice			
	N	N	% of N		
Ayrshire & Arran	20,723	4,747	22.9%		
Borders	6,379	1,553	24.3%		
Dumfries & Galloway	7,867	1,439	18.3%		
Fife	21,488	4,766	22.2%		
Forth Valley	18,213	5,258	28.9%		
Grampian	33,281	7,118	21.4%		
Greater Glasgow & Clyde	67,547	16,614	24.6%		
Highland	17,874	3,340	18.7%		
Lanarkshire	39,756	9,564	24.1%		
Lothian	49,732	13,151	26.4%		
Orkney	1198	77	6.4%		
Shetland	1402	56	4.0%		
Tayside	22,912	4,727	20.6%		
Western Isles	1270	102	8.0%		
Scotland	315,757	72,517	23.0%		

Please see notes for table 11

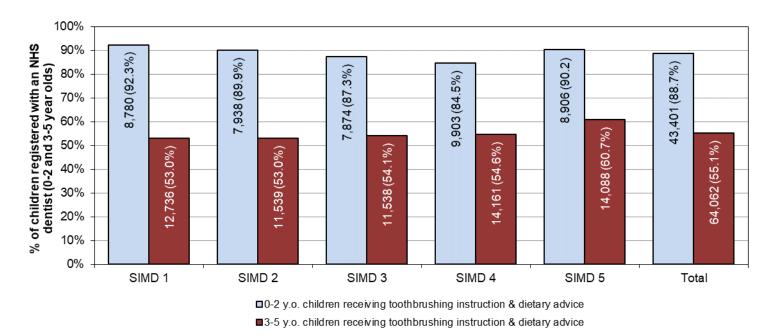


Figure 18: Proportion of zero to two- and three to five-year-old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, by national SIMD, 2022/2023 financial year.

SIMD – The Scottish Index of Multiple Deprivation 2020v2 (national).

- 1) Figure 20: Proportion of zero to two- and 3–5-year-old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice Scotland by national SIMD for the 2022/2023 financial year. This figure presents the number of zero to two- or 3–5-year-old children receiving toothbrushing instruction and dietary advice, shown as a proportion of the total number of zero to two- or 3–5-year-old children registered with an NHS dentist.
- 2) The numbers of children registered with an NHS dentist as at 3rd November 2023 were as follows (data supplied by PHS):
 - -0-2-year-olds: SIMD 1 9,514 children; SIMD 2 8,825; SIMD 3 9,017; SIMD 4 11,725; SIMD 5 9,876; and in total 49,036 children (including 79 SIMD Unknown).
 - -3-5-year-olds: SIMD 1 24,021 children; SIMD 2 21,756; SIMD 3 21,346; SIMD 4 25,922; SIMD 5 23,214; and in total 116,514 children (including 255 SIMD Unknown).

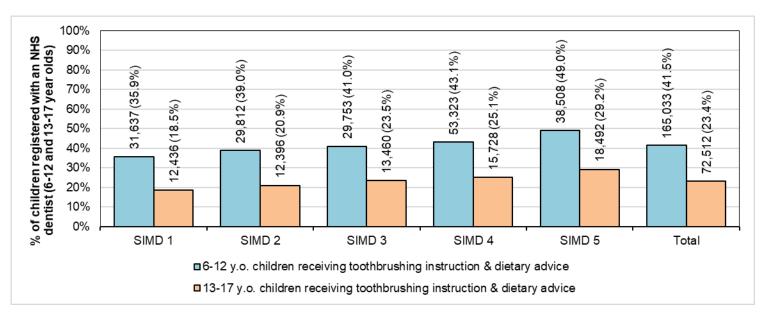


Figure 19: Proportion of six to 12- and 13–17-year-old children registered with an NHS dentist receiving toothbrushing instruction / dietary advice – Scotland, by national SIMD, 2022/2023 financial year.

SIMD – The Scottish Index of Multiple Deprivation 2020v2 (national).

- 1) Figure 20: Proportion of six to 12- and 13–17-year-old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice Scotland by national SIMD for the 2022/2023 financial year. This figure presents the number of zero to two- or 3–5-year-old children receiving toothbrushing instruction or dietary advice shown as a proportion of the total number of zero to two- or 3–5-year-old children registered with an NHS dentist.
- 2) The numbers of children registered with an NHS dentist as at 4th November 2022 were as follows (data supplied by PHS):
 - -six to 12-year-olds: SIMD 1 88,247 children; SIMD 2 76,509; SIMD 3 72,643; SIMD 4 81,961; SIMD 5 78,598; and in total 399,891 children (including 1,933 SIMD Unknown).
 - -13-17-year-olds: SIMD 1 67,162 children; SIMD 2 59,179; SIMD 3 57,227; SIMD 4 62,709; SIMD 5 63,365; and in total 315,757 children (including 6,115 SIMD Unknown).

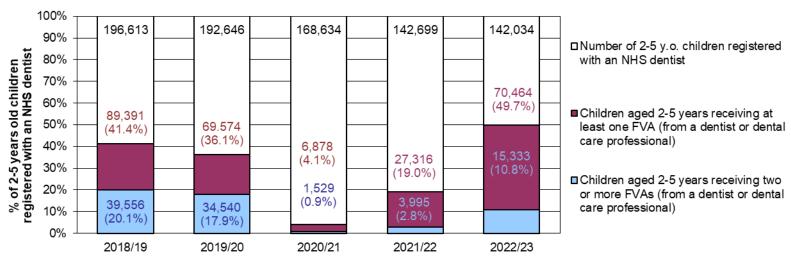


Figure 20: Proportion of two to five-year-old children registered with an NHS dentist receiving at least one fluoride varnish applications – Scotland, 2018/19-2022/23 financial year

1) Numbers at the top of each column represent the total number of 2–5-year-old children registered with an NHS dentist (as at 3rd November 2023). Numbers and percentages inside the columns represent the numbers/percentages of such children who received FVA at least once within 2022/2023 financial year, and numbers/percentages of such children who received an FVA within the reporting period and who had also received another FVA in the 12 months prior to that application (labelled "two or more FVAs").

For example, in the 2021/22 financial year 19.0% (27,316) of children registered with an NHS dentist (n=142,034) received at least one FVA, and 2.8% (3,995) children received an FVA within 2019/20 and had also received another FVA in the 12 months prior to that application.

Table 15: Proportion of two to five-year-old children registered with an NHS dentist receiving one fluoride varnish application only / two or more fluoride varnish applications / at least one fluoride varnish application – Scotland, by NHS Board, 2022/2023 financial year

НВ	2-5-year- olds registered with an NHS dentist	2-5-year-olds receiving one FVA only		receivin	ar-olds g two or FVAs	2-5-year-olds receiving at least one FVA		
	N	n	% of N	n % of N		n	% of N	
AA	8,685	3,615	41.6%	901	10.4%	4,516	52.0%	
В	2,873	1,027	35.7%	400	13.9%	1,427	49.7%	
DG	3,057	899	29.4%	165	5.4%	1,064	34.8%	
F	9,566	3,502	36.6%	884	9.2%	4,386	45.8%	
FV	7,767	3,347	43.1%	806	10.4%	4,153	53.5%	
G	15,922	6,428	40.4%	2,219	13.9%	8,647	54.3%	
GGC	33,107	13,428	40.6%	3,558	10.7%	16,986	51.3%	
Н	7,634	2,052	26.9%	547	7.2%	2,599	34.0%	
La	18,203	7,040	38.7%	1,714	9.4%	8,754	48.1%	
Lo	23,438	9,996	42.6%	3,251	13.9%	13,247	56.5%	
0	557	155	27.8%	32	5.7%	187	33.6%	
S	780	190	24.4%	11	1.4%	201	25.8%	
T	9,641	3,364	34.9%	830	8.6%	4,194	43.5%	
WI	506	53	10.5%	7	0.0%	60	11.9%	
Scotland	142,034	55,131	38.8%	15,333	10.8%	70,464	49.6%	

- 1) Numbers of children registered with an NHS dentist, as at 3rd November 2022, were provided by ISD.
- 2) Scotland totals include children who could not be allocated to an NHS Board (due to a missing/incorrect postcode).
- 3) NHS Boards based on the boundaries as at April 2019.

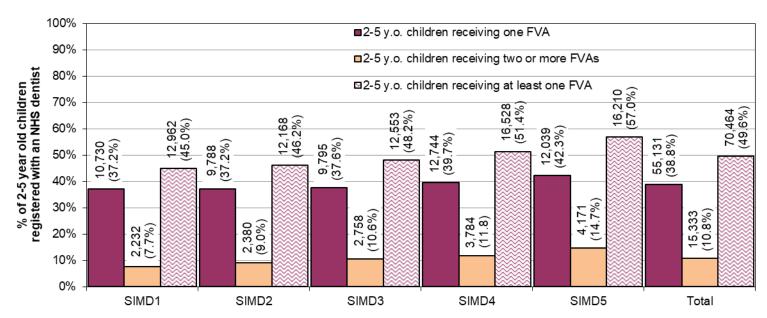


Figure 21: Proportion of two to five-year-old children registered with an NHS dentist receiving one fluoride varnish application only / two or more fluoride varnish applications / at least one fluoride varnish application – Scotland, by national SIMD, 2022/2023 financial year

SIMD – The Scottish Index of Multiple Deprivation (national).

NOTES:

- 1) : Proportion of two to five-year-old children registered with an NHS dentist receiving one fluoride varnish application only / two or more fluoride varnish applications / at least one fluoride varnish application Scotland, by national SIMD, 2022/2023 financial year presents the number of 2-5-year-old children receiving at least one or two or more FVAs shown as a proportion of the total number of 2-5-year-old children registered with an NHS dentist and belonging to one of the SIMD categories. The number of children receiving at least one FVA is the sum of the number of children receiving one FVA only and the number of those receiving two or more FVAs.
- 2) The numbers of 2-5-year-old children registered with an NHS dentist as at 3rd November 2023 were as follows (data supplied by ISD): SIMD 1 28,807 children; SIMD 2 26,330; SIMD 3 26,030; SIMD 4 32,132; SIMD 5 28,437; and in total there were 142,034 (including 298 SIMD Unknown).
- 3) Totals include children with SIMD unknown (due to a missing/incorrect postcode).
- 4) SIMD 2020v2 (national) was used.

For example, in the 2022/2023 financial year, 37.2% of 2-5 year old children residing in SIMD 1 and registered with an NHS dentist received only one FVA (10,730) and did not have another FVA in the 12 months prior to that application (labelled "one FVA"), 7.7% (2,232) received an FVA within the 2022/2023 financial year and had also received another FVA in the 12 months prior to that application (labelled "two or more FVAs") and 45.0% of 2-5 year old children (12,962 children) residing in SIMD 1 and registered with an NHS dentist received at least one FVA (labelled "at least one FVA").

Number of fluoride varnish applications in nursery, school and practice settings

243,881 FVAs were applied across all three arms of the programme (Nursery, School and Practice) in 2022/2023.

Table 16: Number of fluoride varnish applications in nursery, school and practice settings, 2018/19-2022/23

Health		2018/2019)		2019/2020)		2020/2021			2021/2022			2022/2023	
Board	Nursery	School	Practice*	Nursery	School	Practice*	Nursery	School	Practice*	Nursery	School	Practice*	Nursery	School	Practice*
AA	4,373	13,322	6,981	2,899	9,718	5,696	No Activity	0	184	960	4,546	1,452	2,528	11,524	5,275
В	1,299	7,051	2,737	595	3495	2,310	1	0	271	205	711	953	316	1,028	1,747
DG	774	2,412	2,336	492	1,362	1,663		0	110	0	0	439	0	0	1,186
F	2,870	14,854	6,204	1,556	10,770	5,025	-	0	446	0	0	1,951	0	4,883	5,037
FV	2,931	6,251	5,321	1,604	3,543	4,183	-	0	229	1,086	2,359	1,372	1,157	2,896	4,854
G	6,344	21,531	13,591	3,432	12,850	10,833	-	0	1,198	1,153	5,281	4,416	1,987	9,098	10,407
GGC	10,514	42,903	21,764	6,712	24,988	17,943	-	0	1,428	3,021	21,816	6,529	9,083	35,202	20,108
Н	4,254	18,917	4,088	2,095	10,806	2,961		0	456	1,356	4,207	1,349	1,659	9,809	3,041
La	18,319	35,340	11,284	10,707	23,229	9,737	-	15	529	5,483	19,015	3,153	9,471	25,780	10,254
Lo	5,054	21,330	20,899	2,996	13,632	17,264	•	0	1,720	0	2,290	6,053	4,239	17,710	15,873
0	551	2,724	453	382	1,834	338	1	0	72	641	1,705	198	527	2,615	198
S	703	1,661	344	392	915	222	-	0	1	316	643	91	551	1,298	209
T	3,303	13,218	5,902	2,036	9,131	4,696	•	0	408	933	3,525	1,529	1,106	4,786	4,888
WI	715	3,127	502	447	2,071	339		0	1	0	4	63	564	878	60
Unknown NHS Board	_	_	49	-	-	28	1	0	3	0	0	6	-	-	49
Scotland	62,004	204,641	102,455	36,345	128,344	83,238	-	15	7,056	15,154	66,102	29,554	33,188	127,507	83,186

- 1) Table 16 presents the number of FVAs applied in different settings by academic year, apart from 2018/19-2022/23 Childsmile Practice data (*), which are reported by financial year.
- 2) If a child's postcode is missing or incorrect, the child cannot be assigned to an NHS Board and is reported under "Unknown NHS Board".
- 3) There are no data available on varnishes applied to P3-P7 children in NHS Orkney, NHS Shetland and NHS Western Isles in practice settings in 2018/19-2022/23.
- 4) NHS Boards based on the boundaries as at April 2019.

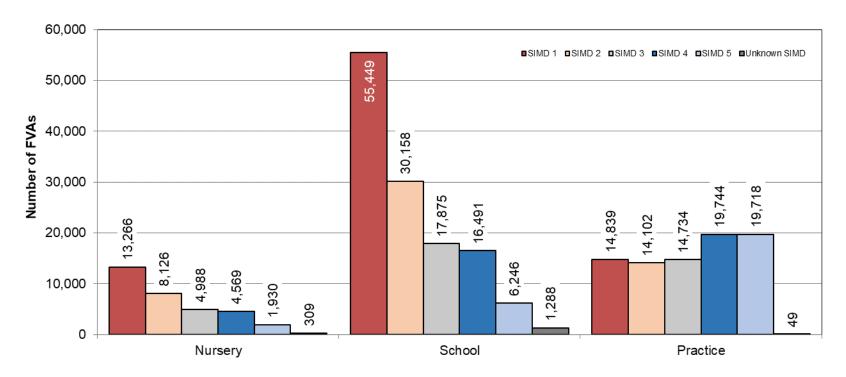


Figure 22: SIMD (national) distribution of fluoride varnish applications in nursery, school and practice settings – Scotland, 2022/2023

SIMD (national) - The Scottish Index of Multiple Deprivation (national).

- 1) : SIMD (national) distribution of fluoride varnish applications in nursery, school and **practice settings Scotland**, 2022/2023 shows distribution of FVAs by setting (nursery, school or dental practice) and national SIMD applied in 2022/23 academic (*Childsmile* Nursery and School) or financial (*Childsmile* Practice) year.
 - Across the settings, 83,554 FVAs were applied to SIMD 1 children; 52,386 FVAs to SIMD 2 children; 37,597 to SIMD 3; 40,804 to SIMD 4; and 27,894 FVAs were applied to SIMD 5 children. In total, 243,881 FVAs were applied in Nursery, School and Practice settings combined (including FVAs to children with unknown SIMD).
- 2) SIMD 2020v2 (national) was used for Nursery and School and Practice.

Childsmile workforce

Please refer to Appendix 1 for definitions of terms used throughout this report.

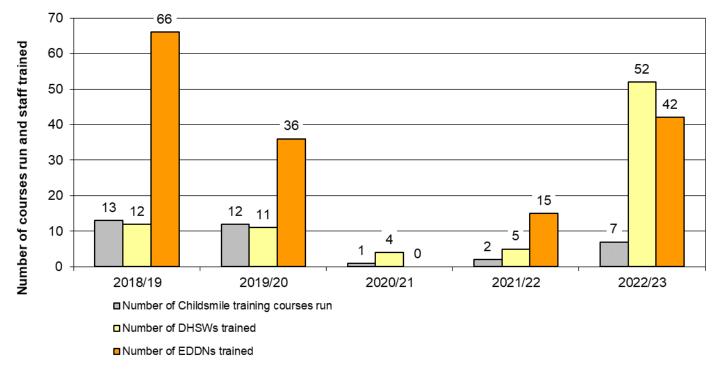


Figure 23: NES *Childsmile* training courses and staff trained – Scotland, 2018/19-2022/23 financial year DHSW – Dental Health Support Worker, EDDN – Extended Duty Dental Nurse.

- 1) NES: NES Childsmile training courses and staff trained Scotland, 2018/19-2022/23 financial year presents data on the number of *Childsmile* training courses run and staff trained. The data are provided by NHS Education for Scotland (NES).
- 2) From January 2021, NES Childsmile training courses are now being provided online.

Appendix 1: Definitions

The tables below give definitions for terms used throughout the *Childsmile* National Headline Data Report.

Childsmile Core

Term	Definition
Childsmile Core	Childsmile Core is a Scotland-wide initiative to help improve the health of children's teeth, through the distribution of free dental packs (containing a toothbrush, tube of 1450ppm fluoride toothpaste and an information leaflet) and supervised toothbrushing programmes in all nurseries, and Primary 1 and Primary 2 classes in priority schools. Over and above this, NHS Boards may deliver toothbrushing to older children in primary schools or include non-priority schools into their toothbrushing programmes.
Establishments participating in the toothbrushing programme (pre- school establishments or primary schools)	Establishments participating in the toothbrushing programme (<i>Childsmile</i> Core) are those establishments (pre-school establishments or primary schools) that had at least one toothbrushing monitoring contact recorded on the <i>Childsmile</i> @HIC system within the reporting period.
SIMD	The Scottish Index of Multiple Deprivation – The measure of deprivation used throughout this report is the population-weighted Scottish Index of Multiple Deprivation (SIMD). The Index considers 32 indicators to provide a relative measure of deprivation. The index is presented by SIMD quintile (a quintile describes a fifth of the population) with SIMD 1 being the most deprived quintile and SIMD 5 being the least deprived quintile. Health Board (local) SIMD is used for <i>Childsmile</i> Core as NHS Boards utilise the local
	SIMD index for targeting within this part of the programme.
Total number of pre- school educational establishments	The total numbers of pre-school educational establishments as at July 2023 were provided by the <i>Childsmile</i> teams in NHS Boards.
Total number of Local Authority primary schools	The list of schools as per ScoGov-t school census can be downloaded from the Scottish Government website: https://www.gov.scot/publications/school-contact-details/ (Populations as at 30 th April 2023)

Childsmile Nursery & School

Term	Definition
Childsmile Nursery & Childsmile School	Childsmile Nursery and Childsmile School provide clinical prevention programmes offering twice-yearly fluoride varnishing (in nursery / primary school settings), through community and primary care dental services, for children attending priority nurseries and primary schools.
Children with consents	Children with consents are all children whose parents / guardians have completed, signed and returned a positive consent form (i.e., children with validated consents, with invalid consents and with consents awaiting validation by a dentist).
Children with validated consents	Children with validated consents are children who have been consented by their parents / guardians and whose consents were validated for fluoride varnish application by a dentist (dentists may not validate consents of children who were hospitalised due to asthma or allergies – this is at the dentist's discretion).
Participating establishments (nurseries and schools)	Participating establishments (nurseries and schools) are those establishments with at least one Childsmile Nursery or School fluoride varnish application session during the reporting period.
SIMD	The Scottish Index of Multiple Deprivation – The measure of deprivation used is the 2020v2 population-weighted Scottish Index of Multiple Deprivation (SIMD). The Index considers 32 indicators to provide a relative measure of deprivation. The index is presented by SIMD quintile (a quintile describes a fifth of the population) with SIMD 1 being the most deprived quintile and SIMD 5 being the least deprived quintile. Health Board (local) SIMD is used for <i>Childsmile</i> Nursery and School as NHS Boards utilise the local SIMD index for targeting within this part of the programme.
Targeted children in participating nurseries / schools	The number of targeted children in participating nurseries and schools is derived from the <i>Childsmile</i> @HIC system class lists. The number of targeted children in schools relates to the children in the primary year classes reached by the <i>Childsmile</i> teams in participating schools, e.g. <i>Childsmile</i> teams may have reached up to Primary 5 classes and children in primaries 1, 2, 3, 4 and 5 will be included in the figures.
Total number of children (of nursery age, P1-P2 and P1-P4 age) in population	The population baselines in this report are based on Small Area Population Estimates as at 30 June within each reporting year, e.g. the 2021/22 data is based on Small Area Population Estimates as at 30 th June 2021. Delays associated with the 2021 National Census in Scotland have meant that the estimates due for publication on 30 th June 2022 will now be published in February 2024. Consequently, the population baselines in this report are based on Small Area Population Estimates at 30 th June 2021. The population estimates are provided by the National Records of Scotland (NRS; http://www.nrscotland.gov.uk). Population estimates can be found online at: https://www.opendata.nhs.scot/dataset/population-estimates . In this report the total nursery age (3- and 4-year-olds) and cumulative P1-P2 and P1-P4 age populations are used.
Unknown SIMD	If a postcode is missing from a child's record or is incorrect, the record cannot be assigned to a SIMD quintile, Children with incorrect/missing postcodes are reported under the "Unknown SIMD" sections of the relevant graphs.

Childsmile Practice

Term	Definition
Childsmile Practice	The <i>Childsmile</i> Practice programme is a universally accessible child-centred NHS dental service. As part of the <i>Childsmile</i> Practice pathway the programme is introduced to the family by the health visitor who will refer them straight to a dental practice or to a dental health support worker (DHSW). DHSWs will give additional oral health support to children and families most in need and make a first appointment for the child with a local <i>Childsmile</i> dental service, where a programme of <i>Childsmile</i> care, tailored to meet the needs of the individual child, will be provided by the dental team.
Children receiving dietary advice and toothbrushing instruction	Children receiving dietary advice and toothbrushing instruction are those children who received at least one dietary advice and toothbrushing instruction from a dentist or dental care professional within the reporting period. Numbers are reported separately for zero to two-years, three to five-years, six to 12-years, and 13-17-years age groups.
Children referred to DHSW (as recorded on HIC by DHSWs)	Children referred to DHSW by a health visitor, clinic (e.g., recruitment at a weaning fayre or mother & toddler group), dentist, by the NHS 24 service, via self-referral or other route (e.g. or a promotional event), as recorded by <i>Childsmile</i> staff on the HIC system.
Children registered with an NHS dentist	Data on total numbers of children registered with an NHS dentist are supplied by Public Health Scotland in November 2023.
Children registered / will register with own dentist	Children registered/will register with own dentist are children contacted by a DHSW whose parents/guardians advised that the child was registered/would register with own dentist (i.e., self-reported data). These children did not have a dental appointment arranged by a DHSW.
Children successfully contacted by DHSW	Children successfully contacted by DHSW are all children/families contacted by DHSW via a home visit, clinic, a telephone call or by other means (e.g., a promotional event), and for whom an "Appointment Kept" or "Declined on the day – Refused <i>Childsmile</i> " result was recorded.
Children with a Childsmile dental appointment arranged	Children with a <i>Childsmile</i> dental appointment arranged are those children whose families were contacted by a DHSW and who were assisted in booking an appointment at a dental practice delivering <i>Childsmile</i> .
Children with at least one fluoride varnish application (FVA)	Children with at least one FVA (made by a dentist or dental care professional) are those 2-5-years-old children (inclusive) who received an FVA from a dentist or dental care professional, within the reporting period.
Children with one FVA only	Children with one FVA only (made by a dentist or dental care professional) are those 2-5-years-old (inclusive) who had received one FVA within the reporting period and who had not received any more FVAs in the 12 months prior to that application.
Children with two or more FVAs	Children with two or more FVAs (made by a dentist or dental care professional) are those 2-5-years-old (inclusive) who had received at least one FVA within the reporting period and who had also received another FVA in the 12 months prior to that application.

Childsmile Practice (continued)

Term	Definition
Dietary advice	Dietary advice is giving families information on nutrition and drinks (to prevent decay) to foster good oral health behaviour. All contacts within the dental practice offer the opportunity for the whole dental team to inform families of the key oral health messages.
Fluoride varnish application (FVA)	Practices are expected to provide fluoride varnish application to the teeth of all children twice yearly, from the age of 2 (provided an appropriate medical history is available and deemed satisfactory). This is recommended by the Scottish Dental Clinical Effectiveness Programme (SDCEP) Prevention and Management of Dental Caries in Children guidance.
GDS (General Dental Services) dental practices delivering	Dental practices delivering <i>Childsmile</i> interventions are those independent contractor GDS practices that have delivered any of the <i>Childsmile</i> interventions (toothbrushing instruction, dietary advice or fluoride varnish application) within the reporting period.
Childsmile interventions	ISD are unable to report robust Public Dental Service (PDS) data therefore the total number of PDS practices delivering <i>Childsmile</i> interventions cannot be reported.
Independent contractor GDS (independent	Independent contractor General Dental Services are independent practices contracted to work on behalf of local NHS Boards.
contractor General Dental Services)	Independent contractor GDS were called non-salaried GDS in previous reports.
PDS (Public Dental Service)	From 1 January 2014, dentists employed by their local NHS Board provide dental care and treatment under what is known as the Public Dental Service (PDS). PDS includes all Scottish salaried dentists (formerly Community Dental Services and Salaried General Dental Services).
	PDS is a complementary service to general dental practice. In practice this means serving all priority groups, including children or adults who cannot obtain treatment from a general dental practice, people with special needs, patients requiring specialised services including surgical dentistry, paedodontics, and services for anxiety including sedation and general anaesthetics. They also assist with patients who are restricted to their homes or hospitalised.
SIMD	The Scottish Index of Multiple Deprivation – The measure of deprivation used throughout this report is the population-weighted Scottish Index of Multiple Deprivation (SIMD). The Index considers 32 indicators to provide a relative measure of deprivation. The index is presented by SIMD quintile (a quintile describes a fifth of the population) with SIMD 1 being the most deprived quintile and SIMD 5 being the least deprived quintile.
	SIMD 2012 was used for 2014/15, SIMD 2016 was used for 2015/16–2021/22 data and SIMD 202v2 was used for the 2022/23 data.
	National SIMD is used for <i>Childsmile</i> Practice as payments are processed for General Dental Practitioners using the national SIMD index.
Toothbrushing instruction	Toothbrushing instruction is giving families information on when to brush, types of brush and toothpaste to use, amount of toothpaste to use, methods and demonstrations of brushing, and parents brushing their child's teeth to demonstrate skill acquisition. All contacts within the dental practice offer the opportunity for the whole dental team to inform families of the key oral health messages.
Total number of independent-contractor GDS practices	The total numbers of independent contractor general dental practices as at 3 rd November 2022 were supplied by PHS Scotland, MIDAS.

Childsmile Practice (continued)

Term	Definition
Unknown NHS Board	If a postcode is missing from a child's record or is incorrect, the record cannot be assigned to a health board. All children with incorrect/missing postcodes are reported under "Unknown NHS Board" section of the relevant graphs.
Unknown SIMD	If a postcode is missing from a child's record or is incorrect, the record cannot be assigned to a SIMD quintile, Children with incorrect/missing postcodes are reported under the "Unknown SIMD" sections of the relevant graphs.

Childsmile Workforce

Term	Definition
Dental Health Support Workers (DHSW)	Dental Health Support Workers are employed by NHS Boards and are responsible for liaising with families, health visitor teams, nurseries, schools and dental practices with regards to <i>Childsmile</i> .
Extended Duty Dental Nurses (EDDN)	Extended Duty Dental Nurses may be employed by NHS Boards or independent contractors (family dentists) and provide preventive advice and regular Fluoride Varnish applications.

This report was prepared by the Central Evaluation and Research Team (University of Glasgow).

Data supplied by:

Health Informatics Centre, Dental Health Services & Research Unit (University of Dundee). Public Health Scotland, Dental & Ophthalmic Team. National Health Service Education for Scotland. *Childsmile* coordinators / *Childsmile* teams in NHS Boards.

December 2023



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