



Childsmile

National Headline Data

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Contents

Executive summary	iii
List of tables	vi
List of figures	vi
Abbreviations	viii
Introduction	1
Childsmile Core	3
Participating establishments	3
Childsmile Nursery & School	5
Participating establishments	5
Consent and fluoride varnish application rates	7
Childsmile Practice	22
Child referral and dental health support worker contact	22
Practice engagement	26
Delivery in dental practice	27
Number of fluoride varnish applications in nursery, school and practice settings	34
Childsmile workforce	36
Appendix 1: Definitions	37

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 Scottish Index of Multiple Deprivation (SIMD).

Childsmile Core

Participating establishments

- According to the data recorded on the Childsmile@HIC system, 2,579 pre-school establishments and 1,329 primary schools were participating in the Childsmile Core toothbrushing programme in Scotland during the 2018/19 academic year (Figs 1 & 2, p.3 and Tab 1 p.4). For comparison, in the 2017/18, 2,597 pre-school establishments and 1,315 primary schools were recorded as participating.

Childsmile Nursery & School

Participating establishments

- 997 pre-school establishments and 1,024 primary schools were participating in the Childsmile Nursery and School programme in Scotland during the 2018/19 academic year (Fig 3, p.5 and Tab 2, p.6). This is an increase in comparison with 2017/18 figures: 975 pre-school establishments and 961 primary schools.

Consent rates

- During the 2018/19 academic year, the average consent rate for Scotland, as a percentage of targeted children, was 87% among both nursery children (down by 1% in comparison with the 2017/18 figure) and school children (similar to the 2017/18 figure) (Figs 4 & 5, p.7-8).
- In the 2018/19 academic year consent rates varied between boards. For nurseries the range was from 81% to 96%, and for schools 83% to 94%, of targeted children (Tabs 3 & 4, p.9-10).

Fluoride varnish application rates

- 69% of targeted nursery children received at least one fluoride varnish application in the 2018/19 academic year, which is 2% lower than in 2017/18 (Fig 4, p.7). 82% of targeted school children received at least one fluoride varnish application in the 2018/19 academic year – same proportion as in 2017/18 (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 2018/19 academic year ranged from 62% to 82% in nurseries and from 78% to 92% in schools (Tabs 3 & 4, p. 9-10).
- 40% of targeted nursery children received *two or more* fluoride varnish applications in the 2018/19 academic year (1% decrease in comparison with the 2017/18 proportion) (Fig 4, p.7). 69% of targeted school children received *two or more* fluoride varnish applications in the 2017/18 academic year (1% increase in comparison with the 2017/18 proportion) (Fig 5, p.8).
- The percentage of children receiving *two or more* fluoride varnish applications ranged from 32% to 57% for nurseries, and from 63% to 84% for primary schools across NHS Boards (as a percentage of targeted children, 2018/19 academic year) (Tabs 3 & 4, p. 9-10).

SIMD quintile distribution of children receiving a fluoride varnish application:

- 36% of nursery children and 41% of school children who received *at least one* fluoride varnish application within 2018/19 academic year were in SIMD 1 quintile (health board (local) SIMD 2016) (Figs 6 & 7, p.12-13).
- Similarly, 35% of nursery children and 41% of school children who received *two or more* fluoride varnish applications were in SIMD 1 quintile (health board (local) SIMD 2016) (Figs 6 & 7, p.12-13).

Proportion of SIMD1 population receiving a fluoride varnish application:

- 47% of the population of nursery aged children residing in SIMD 1 quintile received *at least one* fluoride varnish application in the 2018/19 academic year. 26% received *two or more* fluoride varnish applications (health board (local) SIMD 2016) (Figs 8 & 9, p.14-15).
- 67% of the population of P1-P4 aged children residing in SIMD 1 quintile received *at least one* fluoride varnish application in the 2018/19 academic year. 56% received *two or more* fluoride varnish applications (health board (local) SIMD 2016) (Fig 10 & 11, p.16-17).

Childsmile Practice

Child referral and Dental Health Support Worker contact

- 13,107 children in Scotland were recorded on the Childsmile@HIC system as referred to a Dental Health Support Worker in the 2017/18 financial year – a 4% decrease in comparison with the 2017/18 figure (13,617 children) (Fig 14, p.22).
- 13,984 children were successfully contacted by a Dental Health Support Worker in the 2017/18 financial year – a decrease of 2% in comparison with 2017/18 (14,264 children) (Fig 14, p.22).
- In the 2018/19 financial year the majority of children were referred to Dental Health Support Workers by a Health Visitor – 9,605; 1,856 via ‘Other’ source; 662 from a dentist; 403 via Clinic; 227 were referred by NHS 24; 87 were self-referrals and for 267 children the type of referral was not specified (Fig 15, p.23).
- There were 13,753 children with at least one kept DHSW appointment; 255 families who refused Childsmile; 148 families that could not be contacted; and for 1,917 families the end result was an ‘FTA / Not at home’ (Fig 16, p.24).
- Within the 2018/19 financial year, 13,753 children had at least one kept DHSW appointment. Of these children, 12,116 had their first kept appointment within the reporting period. 2,086 children had their second kept appointment and 792 had their third (or greater) kept DHSW appointment within 2018/19 (for these children, their prior kept appointment may have occurred in an earlier reporting period) (Fig 17, p.25).

Practice engagement

- 88% (912) of independent contractor General Dental Service practices were delivering Childsmile interventions in the 2018/19 financial year (same proportion as in the previous 2017/18 financial year – 88% (909)) (Tab 10, p.26).

Delivery in dental practice

- The proportions of 0-2-year-old registered with an NHS dentist receiving toothbrushing / dietary advice in the 2018/19 financial year were slightly lower than in the previous, 2017/18 year. The proportions of the registered 0-2-year-olds receiving toothbrushing instruction decreased by 1%, while of those receiving dietary advice decreased by 2% (Fig 18, p.27).
- The proportions of 3-5-year-old registered with an NHS dentist receiving toothbrushing / dietary advice in the 2018/19 financial year were 2% lower than in 2017/18 (Fig 19, p.27).
- During the 2018/19 financial year, 77% of 0-2 year old children registered with an NHS dentist in Scotland (NHS Board range: 65%-92%), and 46% of 3-5 year old children registered with an NHS dentist in Scotland received *toothbrushing instruction* (NHS Board range: 37%-59%) (Tabs 11 & 12, p.28-29).
- 74% of 0-2 year old children registered with an NHS dentist in Scotland (NHS Board range: 65%-92%), and 46% of 3-5 year old children registered with an NHS dentist in Scotland received *dietary advice* (NHS Board range: 37%-60%) (Tabs 11 & 12, p.28-29).
- The proportion of 2-5 year old children registered with an NHS dentist who received *at least one* fluoride varnish application in the 2018/19 financial year decreased by 2% in comparison with the 2017/18 proportion, while the proportion of those who received *two or more* fluoride varnish applications, on the contrary, increased by 3% (Fig 21, p.31).

- In the 2018/19 financial year, 41% of 2-5 year old children registered with an NHS dentist (NHS Board range: 30%-57%) received *at least one* fluoride varnish application and 20% 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: 10%-31% (Tab 13, p.32).
- Proportions of 2-5 year old children registered with an NHS dentist who received *at least one* fluoride varnish application increased gradually across the SIMD quintiles (from 36% in the most deprived quintile to 49% in the least deprived quintile). Similarly, proportions of 2-5 year old children registered with an NHS dentist who received *two or more* fluoride varnish applications rose gradually across the SIMD quintiles from 16% in the most deprived quintile to 26% in the least deprived quintile). However, there was no clearly defined trend in the proportions of those receiving one only FVA – 21% of the most deprived and 22% of the least deprived children received one FVA only (Fig 22, p.33).

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

- In 2018/19, 62,004 fluoride varnish applications were delivered in nursery settings, 192,369 in school settings and 99,664 in dental practice settings (Tab 14, p.34). The number of fluoride varnish applications in nursery settings was comparable with the 2017/18 figures (62,133). There was a 6% increase in the school settings and 3% increase in the numbers of fluoride varnish applications delivered in dental practice settings.

Childsmile Workforce

- In the 2018/19 financial year, 13 Childsmile training courses were run, 12 Dental Health Support Workers and 66 Extended Duty Dental Nurses were trained (Fig 24, p.36). For comparison, in the 2017/18 financial year 13 courses were run with 19 Dental Health Support Workers and 73 Extended Duty Dental Nurses trained.

List of tables

Table 1 Pre-school educational establishments and primary schools participating in Childsmile Core programme (as a % of total number of pre-school establishments / LA primary schools) by NHS Board – Scotland, 2018/2019 academic year	4
Table 2: Numbers of nurseries and primary schools participating in fluoride varnish programme – by NHS Board, 2014/15-2018/19 academic year	6
Table 3: Targeting, consent and FVA rates – Childsmile Nursery, by NHS Board, 2018/2019 academic year	9
Table 4: Consent and FVA rates – Childsmile School (as a % of the total number of targeted children in participating schools) – by NHS Board, 2018/2019 academic year.....	10
Table 5: P1-P4 and P1-P2 targeting, consent and FVA rates – Childsmile School, by NHS Board, 2018/2019 academic year	11
Table 6 Proportion of population of nursery and P1-P4 children receiving at least one FVA / one FVA only / two or more FVAs, by local SIMD – Scotland, 2018/2019 academic year.....	18
Table 7 Proportion of population of nursery and P1-P4 children receiving at least one FVA / one FVA only / two or more FVAs, by national SIMD – Scotland, 2018/2019 academic year	20
Table 8: Additional support needs children receiving FVA, by NHS Board, 2018/2019 academic year	21
Table 9: DHSW: Child referrals, contacts, practice appointments made and children registered with own dentist – by NHS Board, 2018/2019 financial year	22
Table 10: Independent contractor GDS practices delivering Childsmile interventions – Scotland, by NHS Board, 2018/2019 financial year.....	26
Table 11: Proportion of 0-2 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2018/2019 financial year	28
Table 12: Proportion of 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2018/2019 financial year.....	29
Table 13: Proportion of 2-5 year old children registered with an NHS dentist receiving one FVA only / two or more FVAs / at least one FVA – Scotland, by NHS Board, 2018/2019 financial year	32
Table 14: Number of FVAs in nursery, school and practice settings, 2014/15-2018/19	34

List of figures

Figure 1: Nurseries participating in toothbrushing programme in Scotland, 2014/15-2018/19 academic year	3
Figure 2: Primary schools participating in toothbrushing programme in Scotland, 2014/15-2018/19 academic year	3
Figure 3: Nurseries and primary schools participating in fluoride varnish programme in Scotland, 2014/15-2018/19 academic year	5
Figure 4: Nursery Consent and FVA rates (as a % of the total number of children in participating nurseries) – Scotland, 2014/15-2018/19 academic year	7
Figure 5: School Consent and FVA rates (as a % of the total number of targeted children in participating schools) – Scotland, 2014/15-2018/19 academic year	8

Figure 6: Nursery children receiving <i>at least one</i> and <i>two or more</i> FVAs by SIMD quintile - Scotland, 2014/15-2018/19 academic year	12
Figure 7: Primary school children receiving <i>at least one</i> and <i>two or more</i> FVAs by SIMD quintile - Scotland, 2014/15-2018/19 academic year	13
Figure 8: Proportion of population of nursery children in each SIMD (local) quintile who received at least one FVA – Scotland, 2014/15-2018/19 academic year.....	14
Figure 9: Proportion of population of nursery children in each SIMD (local) quintile who received two or more FVAs – Scotland, 2014/15-2018/19 academic year	15
Figure 10: Proportion of population of P1-P4 age children in each SIMD (local) quintile who received at least one FVA – Scotland, 2014/15-2018/19 academic year.....	16
Figure 11: Proportion of population of P1-P4 age children in each SIMD (local) quintile who received two or more FVAs – Scotland, 2014/15-2018/19 academic year	17
Figure 12: Proportion of population of nursery (3-4 year olds) and P1-P4 children receiving at least one FVA, by national SIMD – Scotland, 2018/2019 academic year	19
Figure 13: Proportion of population of nursery (3-4 year olds) and P1-P4 children receiving two or more FVAs, by national SIMD – Scotland, 2018/2019 academic year	19
Figure 14: DHSW: Child referrals, contacts, practice appointments made and children registered/will register with own dentist – Scotland, 2014/15-2018/19 financial year.....	22
Figure 15: Number of children referred to DHSW by national SIMD of child – Scotland, 201/2019 financial year	23
Figure 16: Children successfully contacted and not contacted by DHSW, and families who refused Childsmile, by national SIMD of child – Scotland, 2018/2019 financial year	24
Figure 17: Children with different numbers of kept DHSW appointments by national SIMD of child – Scotland, 2018/2019 financial year	25
Figure 18: Proportion of 0-2 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, 2014/15-2018/19 financial year.....	27
Figure 19: Proportion of 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, 2014/15-2018/19 financial year.....	27
Figure 20: Proportion of 0-2 and 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction / dietary advice – Scotland, by national SIMD, 2018/2019 financial year	30
Figure 21: Proportion of 2-5 year old children registered with an NHS dentist receiving at least one FVA or two or more FVAs – Scotland, 2014/15-2018/19 financial year	31
Figure 22: Proportion of 2-5 year old children registered with an NHS dentist receiving one FVA only / two or more FVAs / at least one FVA – Scotland, by national SIMD, 2018/2019 financial year	33
Figure 23: SIMD (national) distribution of FVAs in nursery, school and practice settings – Scotland, 2018/2019	35
Figure 24: NES Childsmile training courses and staff trained – Scotland, 2014/15-2018/19 financial year	36

Abbreviations

List of abbreviations of NHS Board names

AA	Ayrshire & Arran
B	Borders
DG	Dumfries & Galloway
F	Fife
FV	Forth Valley
G	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
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 produced and circulated once a year. Data for the Childsmile Core, 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).

Childsmile Core, Nursery & School and Childsmile Practice Dental Health Support Worker (DHSW) sections of the report are based on data available at 27th September 2019, and Childsmile Practice Primary Care Dental Services (PCDS) section – as of September 2019. Figures may be subject to further updating¹.

This report covers the following periods:

- Childsmile Core and Childsmile Nursery & School: 2014/15 to 2018/19 academic year (data from the Health Informatics Centre (HIC));
- Childsmile Practice – DHSW data: 2014/15 to 2018/19 financial year (data from HIC);
- Childsmile Practice – PCDS data: 2014/15 to 2018/19 financial year (data from the Information Services Division (ISD) Scotland);
- Childsmile Workforce – training figures: 2014/15 to 2018/19 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).

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 consented to toothbrushing, unless the parent indicates that they do not wish their child to take part. As a consequence, currently there is no individual level toothbrushing data being recorded on the Childsmile@HIC system.

6-8 week assessment Child Health Surveillance Programme Pre-School (CHSP-PS) data

The 6-8 week assessment CHSP-PS data are not presented in this report due to a change in the 6-8 week assessment form made in January 2016. Prior to this change there was a section on the assessment form designated specifically for Childsmile, whereas at present Childsmile falls under the category of 'Future action', along with thirteen other (non-Childsmile) future action categories. Moreover, the 'Future actions' field is not compulsory to fill in. This change has led to a very low completion rates for Childsmile referrals at the 6-8 weeks assessment: within the 2018/19 financial year this field was only completed for 6.5% of the total number of the conducted 6-8 week reviews.

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.

¹ This is due to time-lags from delivery to data entry and ongoing quality checks.

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 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.

SIMD 2016 was used when reporting 2015/16–2018/19 data, while SIMD 2012 was used for 2014/15 data.

“Health 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 ISD 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 data are reported using the 2014 NHS Board configuration except for the 2018/19 Childsmile Practice PCDS data.

Scottish NHS Boards boundary 2018

There was a further 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

Population baselines

The population baselines in this report are based on Small Area Population Estimates as at 30 June within each reporting year, e.g. the 2018/19 data is based on Small Area Population Estimates as at 30 June 2018. 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>.

Definitions

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

Childsmile Core

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 recorded on the Childsmile@HIC system, 2,579 pre-school establishments and 1,329 primary schools were participating in the Childsmile Core toothbrushing programme in Scotland during the 2018/2019 academic year.

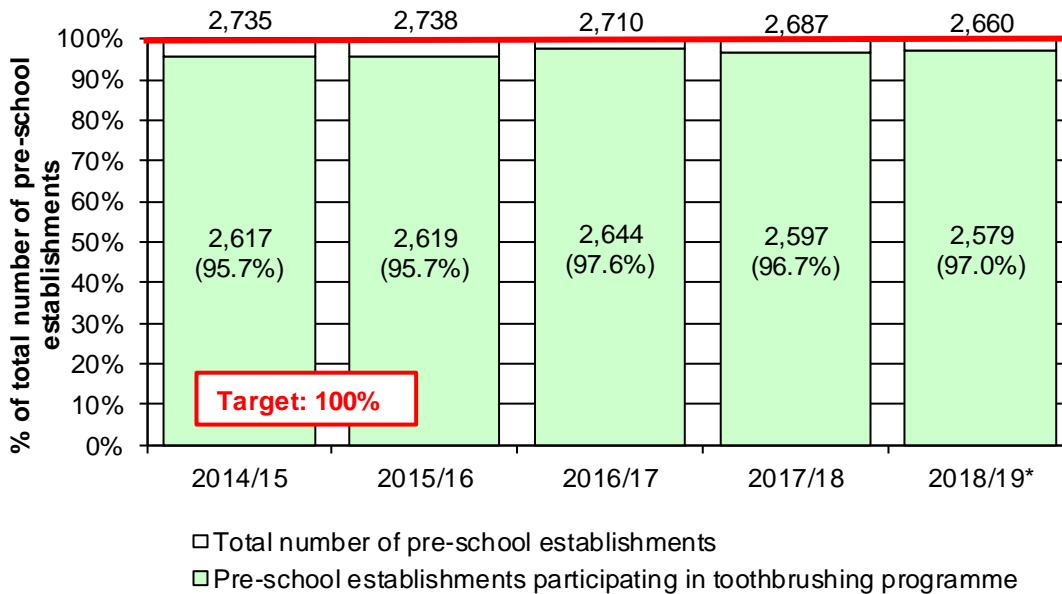


Figure 1: Nurseries participating in toothbrushing programme in Scotland, 2014/15-2018/19 academic year

NOTES: *Data quality issues with the recording of toothbrushing monitoring contacts on the Childsmile@HIC system were discovered when analysing the data for the 2018/19 academic year. The figures were partially amended based on several NHS Boards' locally kept information, however, underreporting may still be present in other NHS Boards' figures. Additional data quality checks will be incorporated in the future report production process to improve data recording practices.

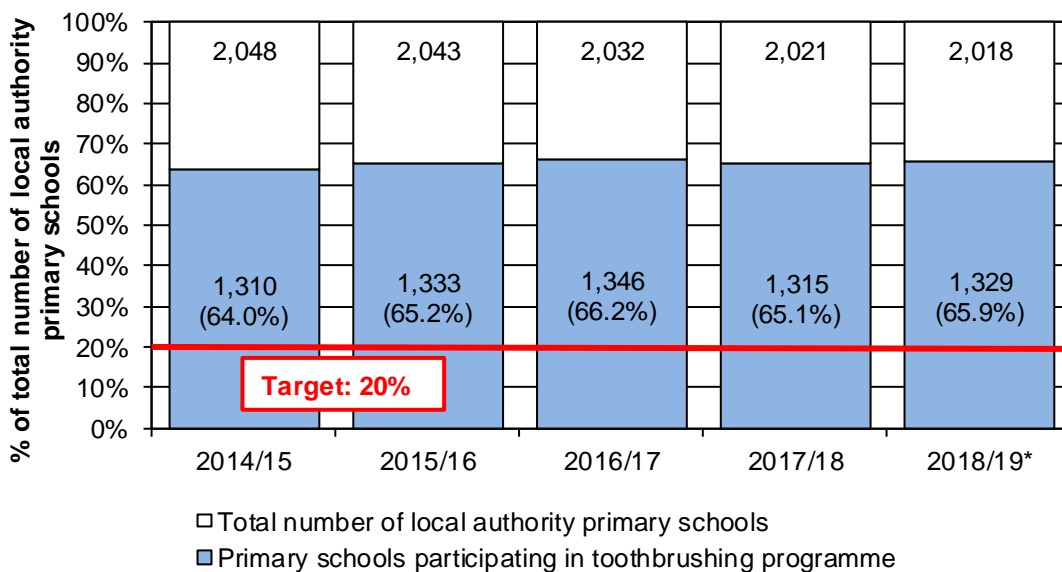


Figure 2: Primary schools participating in toothbrushing programme in Scotland, 2014/15-2018/19 academic year

NOTES: See notes under Figure 1.

Table 1 Pre-school educational establishments and primary schools participating in Childsmile Core programme (as a % of total number of pre-school establishments / LA primary schools) by NHS Board – Scotland, 2018/2019 academic year

NHS Board	Total number of pre-school establishments	Pre-school establishments participating in toothbrushing programme *		Total number of LA primary schools	Primary schools participating in toothbrushing programme *	
		n	% of total		n	% of total
AA	154	154	100.0%	131	111	84.7%
B	73	73	100.0%	61	61	100.0%
DG	87	71	81.6%	98	75	76.5%
F	163	159	97.5%	135	57	42.2%
FV	135	135	100.0%	106	87	82.1%
G	327	290	88.7%	244	96	39.3%
GGC	462	456	98.7%	297	268	90.2%
H	268	255	95.1%	253	147	58.1%
La	278	278	100.0%	245	186	75.9%
Lo	425	425	100.0%	222	111	50.0%
O	21	17	81.0%	19	16	84.2%
S	25	24	96.0%	28	28	100.0%
T	219	219	100.0%	156	63	40.4%
WI	23	23	100.0%	23	23	100.0%
Scotland	2,660	2,579	97.0%	2,018	1,329	65.9%

LA – local authority

NOTES:

- 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 2018 to June 2019.
- 2) The total numbers of pre-school establishments as at July 2019 were provided by the Childsmile teams in NHS Boards.
- 3) Total numbers of local authority primary schools as at September 2018 are from *Openings and Closings Exercise*, June 2018, by the Scottish Government (<https://www2.gov.scot/Topics/Statistics/Browse/School-Education/Datasets/contactdetails>)
- 4) The target is to offer toothbrushing programme to all nurseries (100%) and at least 20% of P1 and P2 classes of schools, those situated in areas with the highest level of need of NHS Boards.
- 5) 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.
- 6) *Data quality issues with the recording of toothbrushing monitoring contacts on the Childsmile@HIC system were discovered when analysing the data for the 2018/19 academic year. These were partially amended based on several NHS Boards' locally kept information (namely for NHS Ayrshire & Arran, NHS Borders, NHS Greater Glasgow & Clyde, NHS Orkney and NHS Shetland). Underreporting may still be present in other NHS Boards' figures. Additional data quality checks will be incorporated in the future report production process to improve data recording practices.

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 Health Boards, but not all, offer fluoride varnish to a small number of two-year-old children attending targeted nurseries. To ensure population rates are comparable across all Health Boards, 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 2016/17-2018/19 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.

Historically, within 2015/16 in NHS Lothian twelve establishments participating in the fluoride varnish programme have been closed due to structural faults. This had an impact on a normal routine varnishing service within the Health Board in Session 2 (January to June 2016).

Participating establishments

In the 2018/2019 academic year, 997 nurseries and 1,024 primary schools were participating in the fluoride varnish programme.

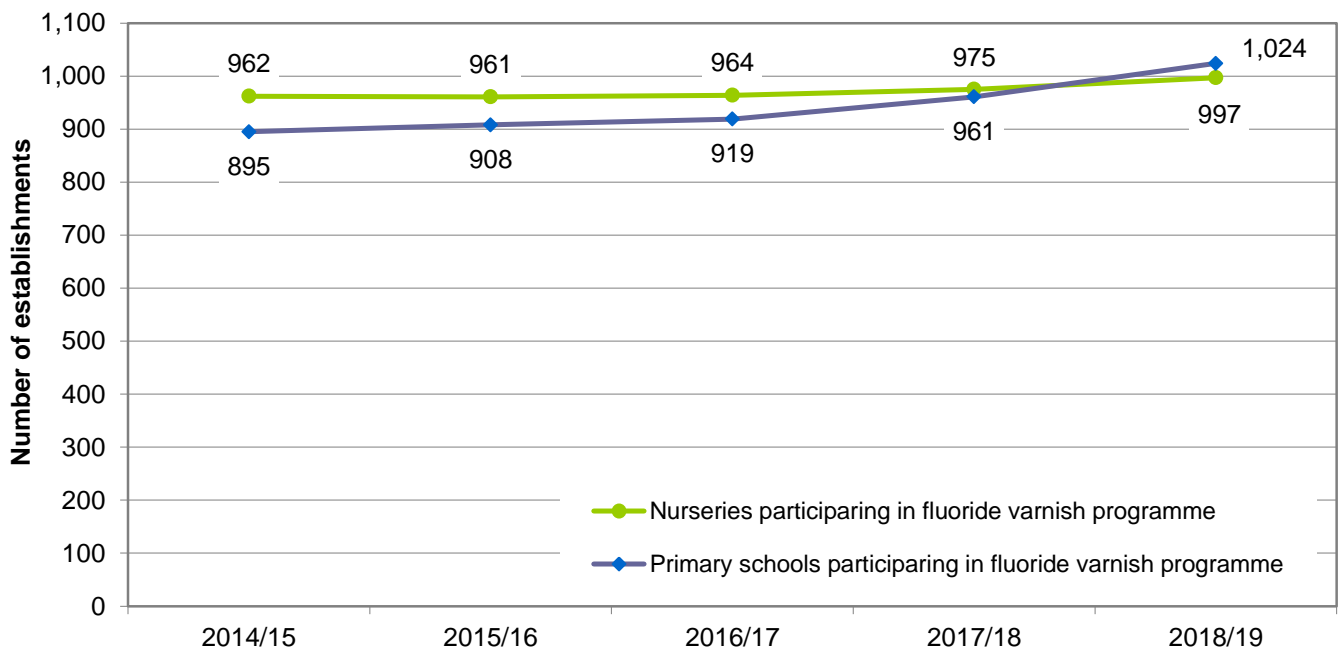


Figure 3: Nurseries and primary schools participating in fluoride varnish programme in Scotland, 2014/15-2018/19 academic year

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, 2014/15-2018/19 academic year

NHS Board	Number of participating nurseries					Number of participating primary schools				
	14/15	15/16	16/17	17/18	18/19	14/15	15/16	16/17	17/18	18/19
AA	38	37	38	38	57	39	44	48	50	75
B	18	18	19	21	22	17	17	19	25	24
DG	10	10	10	11	10	10	10	10	11	10
F	41	40	39	39	39	43	41	44	46	46
FV	30	39	39	39	39	31	34	34	36	36
G	155	148	149	148	121	81	84	81	82	112
GGC	122	123	123	120	149	139	140	140	146	154
H	93	93	88	96	95	77	78	75	84	85
La	262	263	264	268	271	253	253	254	255	256
Lo	80	77	77	78	78	87	89	90	106	106
O	21	21	21	21	21	19	19	19	19	19
S	23	23	22	22	23	27	27	27	27	27
T	45	44	51	50	49	47	47	55	51	51
WI	24	25	24	24	23	25	25	23	23	23
Scotland	962	961	964	975	997	895	908	919	961	1,024

NOTES:

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

Consent and fluoride varnish application rates

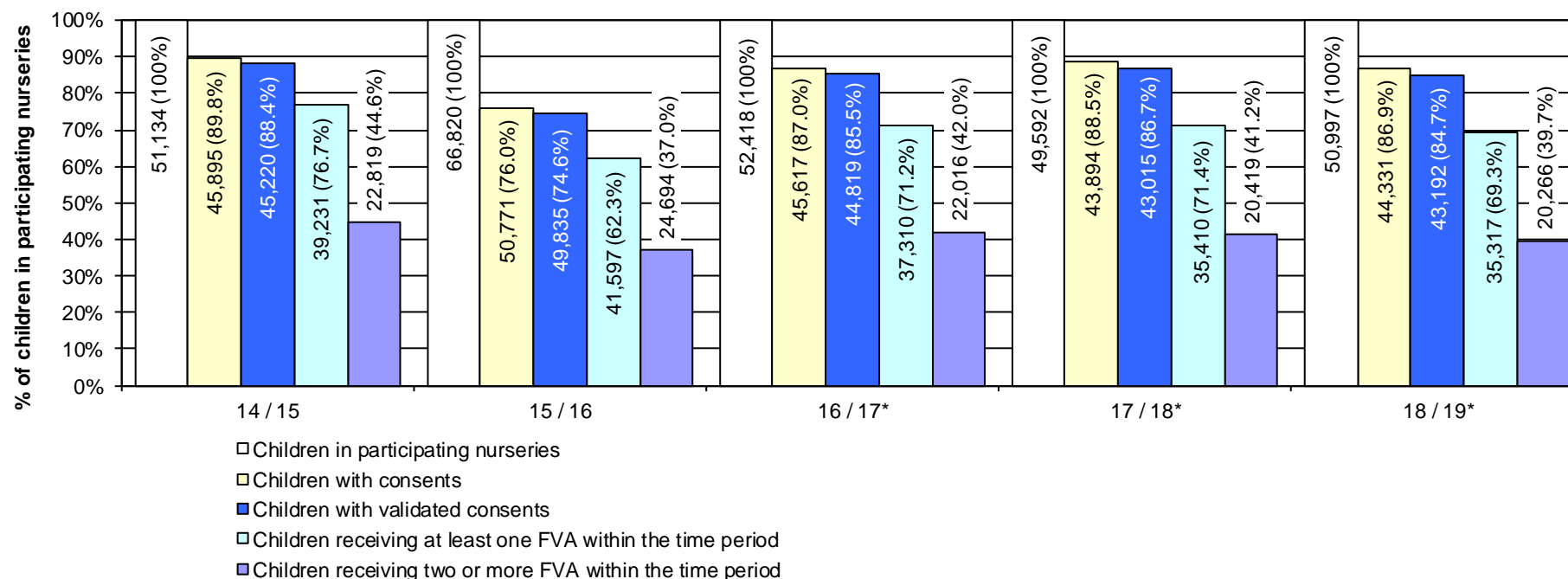


Figure 4: Nursery Consent and FVA rates (as a % of the total number of children in participating nurseries) – Scotland, 2014/15-2018/19 academic year

FVA – fluoride varnish application.

NOTES:

- 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 2018/2019 academic year the number of 3-4 year old targeted children in participating nurseries equals 50,997 (100%), of those 44,331 (86.9%) children were consented for FVA, 43,192 (84.7%) had validated consents, 35,317 (69.3%) received at least one FVA and 20,266 (39.7%) children received two or more FVAs.
- 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.
- * A new age filter has been applied when reporting Childsmile Nursery & School 2016/17-2018/19 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 2016/17–2017/18 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- The way the number of targeted children in participating nurseries/schools is calculated has been changed for the 2015/16–2018/19 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 2015/16–2018/19 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 2015/16–2018/19 proportions of children with consents, with validated consents and those receiving fluoride varnish is not directly comparable with the previous years' proportions.

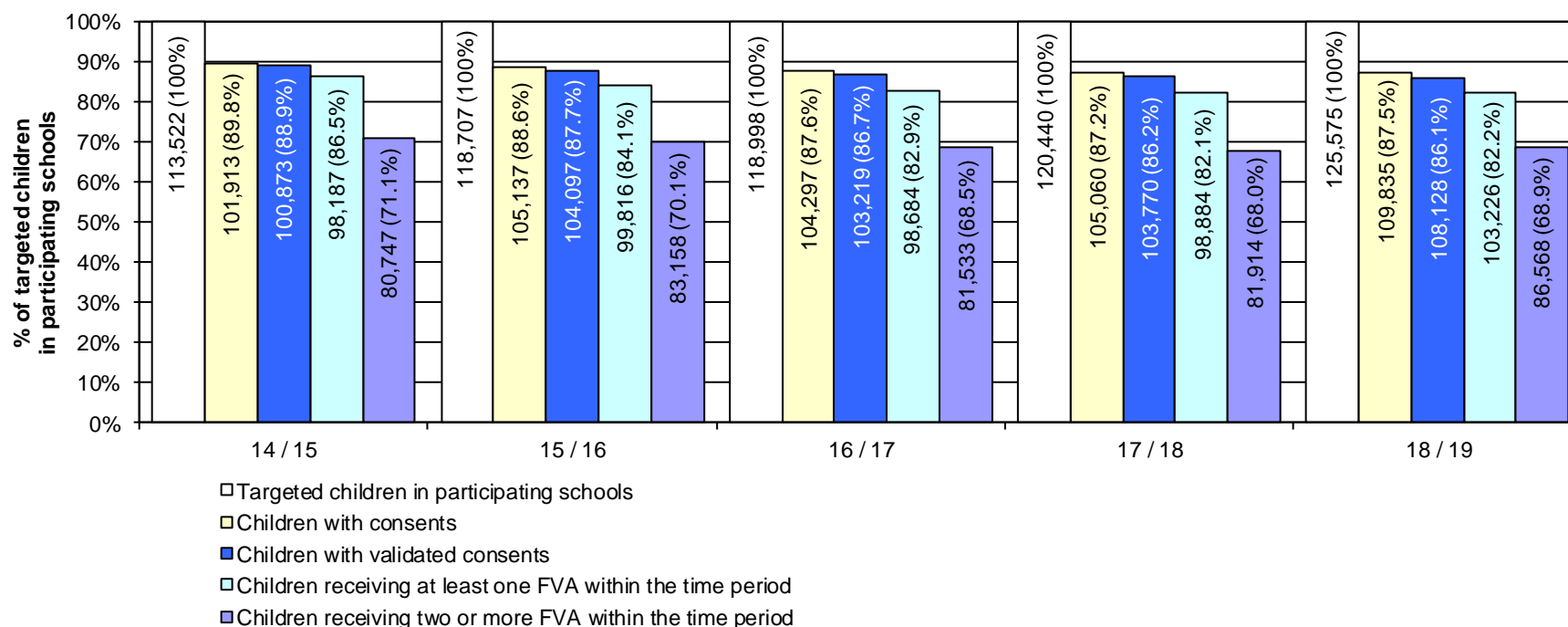


Figure 5: School Consent and FVA rates (as a % of the total number of targeted children in participating schools) – Scotland, 2014/15-2018/19 academic year

FVA – fluoride varnish application.

NOTES:

- 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 2018/2019 academic year the number of targeted children in participating primary schools equals 125,575 (100%), of those 109,835 (87.5%) children were consented for FVA, 108,128 (86.1%) had validated consents, 103,226 (82.2%) received at least one FVA and 86,568 (68.9%) children received two or more FVAs.
- 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.
- The way the number of targeted children in participating nurseries/schools is calculated has been changed for the 2015/16–2018/19 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 2015/16–2018/19 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 2015/16–2018/19 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 FVA rates – Childsmile Nursery, by NHS Board, 2018/2019 academic year

NHS board	Population of 3-4 year old children in NHS board (baseline)	Number of targeted nursery children in participating schools		Nursery children with consents		Nursery children with validated consents		Nursery children receiving at least one FVA			Nursery children receiving one only FVA			Nursery children receiving two or more FVAs		
		P	T	% of P	C	% of T	n	% of T	n	% of T	% of C	n	% of T	% of C	n	% of T
AA	7,461	3,624	48.6%	3,205	88.4%	3,124	86.2%	2,601	71.8%	81.2%	1,093	30.2%	34.1%	1,508	41.6%	47.1%
B	2,327	810	34.8%	763	94.2%	758	93.6%	658	81.2%	86.2%	195	24.1%	25.6%	463	57.2%	60.7%
DG	2,679	511	19.1%	469	91.8%	458	89.6%	419	82.0%	89.3%	152	29.7%	32.4%	267	52.3%	56.9%
F	8,027	2,509	31.3%	2,166	86.3%	2,130	84.9%	1,700	67.8%	78.5%	753	30.0%	34.8%	947	37.7%	43.7%
FV	6,295	2,192	34.8%	2,098	95.7%	2,083	95.0%	1,799	82.1%	85.7%	784	35.8%	37.4%	1,015	46.3%	48.4%
G	12,546	5,429	43.3%	4,567	84.1%	4,533	83.5%	3,712	68.4%	81.3%	1,775	32.7%	38.9%	1,937	35.7%	42.4%
GGC	25,346	9,958	39.3%	8,145	81.8%	7,718	77.5%	6,186	62.1%	75.9%	3,042	30.5%	37.3%	3,144	31.6%	38.6%
H	6,238	3,208	51.4%	2,765	86.2%	2,732	85.2%	2,283	71.2%	82.6%	837	26.1%	30.3%	1,446	45.1%	52.3%
La	14,464	14,283	98.7%	12,609	88.3%	12,411	86.9%	10,020	70.2%	79.5%	3,928	27.5%	31.2%	6,092	42.7%	48.3%
Lo	19,490	4,255	21.8%	3,978	93.5%	3,720	87.4%	2,960	69.6%	74.4%	1,306	30.7%	32.8%	1,654	38.9%	41.6%
O	401	399	99.5%	364	91.2%	361	90.5%	296	74.2%	81.3%	113	28.3%	31.0%	183	45.9%	50.3%
S *	475*	497*	100%	479	96.4%	464	93.4%	395	79.5%	82.5%	156	31.4%	32.6%	239	48.1%	49.9%
T	8,375	2,842	33.9%	2,301	81.0%	2,283	80.3%	1,913	67.3%	83.1%	814	28.6%	35.4%	1,099	38.7%	47.8%
WI	492	480	97.6%	422	87.9%	417	86.9%	375	78.1%	88.9%	103	21.5%	24.4%	272	56.7%	64.5%
Sco	114,616	50,997	44.5%	44,331	86.9%	43,192	84.7%	35,317	69.3%	79.7%	15,051	29.5%	34.0%	20,266	39.7%	45.7%

NOTES:

- 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 2016/17-2018/19 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 2016/17-2018/19 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the data presented in previous reports.
- 3) The population baselines for 2018/2019 in this report are based on Small Area Population Estimates at 30 June 2018, provided by the National Records of Scotland (NRS) by Health Board by single year of age. These population estimates are based on the 2011 Census.
- 4) NHS Boards based on the boundaries as at 1st April 2014.
- 5) * For NHS Shetland the mid-2018 NRS population estimates were lower than the number of targeted children according to the data recorded on the Childsmile@HIC system. This might be explained by the differences in the estimation methodologies used, as well as by the fact that there might be duplicate children recorded on the Childsmile@HIC system (e.g. when the same child attends more than one nursery and hence has more than one record on the system).

Table 4: Consent and FVA rates – Childsmile School (as a % of the total number of targeted children in participating schools) – by NHS Board, 2018/2019 academic year

NHS board	Population baseline (up to whatever primary year reached in each HB)	Targeted children in participating schools		Primary school children with consents		Primary school children with validated consents		Children receiving at least one FVA			Children receiving one only FVA			Children receiving two or more FVAs		
		P	T	% of P	C	% of T	n	% of T	n	% of T	% of C	n	% of T	% of C	n	% of T
AA	28,115	8,656	30.8%	7,505	86.7%	7,358	85.0%	7,050	81.4%	93.9%	1,411	16.3%	18.8%	5,639	65.1%	75.1%
B	8,693	3,823	44.0%	3,453	90.3%	3,431	89.7%	3,309	86.6%	95.8%	328	8.6%	9.5%	2,981	78.0%	86.3%
DG	5,995	1,504	25.1%	1,342	89.2%	1,309	87.0%	1,276	84.8%	95.1%	141	9.4%	10.5%	1,135	75.5%	84.6%
F	29,734	9,651	32.5%	8,678	89.9%	8,641	89.5%	8,081	83.7%	93.1%	1,348	14.0%	15.5%	6,733	69.8%	77.6%
FV	17,110	3,787	22.1%	3,471	91.7%	3,459	91.3%	3,360	88.7%	96.8%	482	12.7%	13.9%	2,878	76.0%	82.9%
G	45,854	13,838	30.2%	11,866	85.7%	11,800	85.3%	11,202	81.0%	94.4%	2,545	18.4%	21.4%	8,657	62.6%	73.0%
GGC	89,221	25,052	28.1%	21,302	85.0%	20,572	82.1%	19,447	77.6%	91.3%	2,630	10.5%	12.3%	16,817	67.1%	78.9%
H	23,898	11,260	47.1%	10,062	89.4%	9,988	88.7%	9,660	85.8%	96.0%	1,234	11.0%	12.3%	8,426	74.8%	83.7%
La	53,668	21,933	40.9%	18,830	85.9%	18,710	85.3%	17,807	81.2%	94.6%	3,043	13.9%	16.2%	14,764	67.3%	78.4%
Lo	69,363	12,796	18.4%	11,908	93.1%	11,523	90.1%	11,041	86.3%	92.7%	1,781	13.9%	15.0%	9,260	72.4%	77.8%
O	1,659	1,635	98.6%	1,493	91.3%	1,476	90.3%	1,445	88.4%	96.8%	167	10.2%	11.2%	1,278	78.2%	85.6%
S	1,929	1,017	52.7%	930	91.4%	911	89.6%	883	86.8%	94.9%	108	10.6%	11.6%	775	76.2%	83.3%
T	30,881	8,857	28.7%	7,341	82.9%	7,308	82.5%	7,037	79.5%	95.9%	1,304	14.7%	17.8%	5,733	64.7%	78.1%
WI	1,960	1,767	90.2%	1,654	93.6%	1,642	92.9%	1,628	92.1%	98.4%	136	7.7%	8.2%	1,492	84.4%	90.2%
Sco	408,080	125,575	30.8%	109,835	87.5%	108,128	86.1%	103,226	82.2%	94.0%	16,658	13.3%	15.2%	86,568	68.9%	78.8%

NOTES:

- 1) "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.
- 2) The population baselines for 2018/2019 in this report are based on Small Area Population Estimates at 30 June 2018, provided by the National Records of Scotland (NRS) by Health Board by single year of age. These population estimates are based on the 2011 Census.
- 3) NHS Boards based on the boundaries as at 1st April 2014.

Table 5: P1-P4 and P1-P2 targeting, consent and FVA rates – Childsmile School, by NHS Board, 2018/2019 academic year

NHS board	P1-P4 aged population in NHS board (baseline)	Targeted P1-P4 children in participating schools		P1-P4 children with consents		P1-P4 children with validated consents		P1-P4 children receiving at least one FVA			P1-P4 children receiving one only FVA			P1-P4 children receiving two or more FVAs		
		P	T	% of P	C	% of T	n	% of T	n	% of T	% of C	n	% of T	% of C	n	% of T
AA	15,906	8,036	50.5%	7,109	88.5%	6,969	86.7%	6,694	83.3%	94.2%	1,339	16.7%	18.8%	5,355	66.6%	75.3%
B	4,943	2,098	42.4%	1,962	93.5%	1,947	92.8%	1,886	89.9%	96.1%	181	8.6%	9.2%	1,705	81.3%	86.9%
DG	5,995	1,448	24.2%	1,311	90.5%	1,278	88.3%	1,247	86.1%	95.1%	132	9.1%	10.1%	1,115	77.0%	85.0%
F	17,025	5,829	34.2%	5,296	90.9%	5,271	90.4%	4,932	84.6%	93.1%	816	14.0%	15.4%	4,116	70.6%	77.7%
FV	13,598	3,554	26.1%	3,380	95.1%	3,368	94.8%	3,278	92.2%	97.0%	468	13.2%	13.8%	2,810	79.1%	83.1%
G	26,291	10,646	40.5%	9,514	89.4%	9,459	88.9%	9,010	84.6%	94.7%	2,011	18.9%	21.1%	6,999	65.7%	73.6%
GGC	52,179	24,026	46.0%	20,866	86.8%	20,155	83.9%	19,101	79.5%	91.5%	2,537	10.6%	12.2%	16,564	68.9%	79.4%
H	13,289	6,716	50.5%	6,156	91.7%	6,103	90.9%	5,926	88.2%	96.3%	680	10.1%	11.0%	5,246	78.1%	85.2%
La	30,332	19,359	63.8%	17,324	89.5%	17,217	88.9%	16,506	85.3%	95.3%	2,715	14.0%	15.7%	13,791	71.2%	79.6%
Lo	39,963	12,259	30.7%	11,508	93.9%	11,152	91.0%	10,715	87.4%	93.1%	1,703	13.9%	14.8%	9,012	73.5%	78.3%
T	17,645	7,938	45.0%	6,998	88.2%	6,968	87.8%	6,732	84.8%	96.2%	1,256	15.8%	17.9%	5,476	69.0%	78.3%
Mainland - total	237,166	101,908	43.0%	91,424	89.7%	89,887	88.2%	86,027	84.4%	94.1%	13,838	13.6%	15.1%	72,189	70.8%	79.0%
NHS board	P1-P2 aged population in NHS board (baseline)	Targeted P1-P2 children in participating schools		P1-P2 children with consents		P1-P2 children with validated consents		P1-P2 children receiving at least one FVA			P1-P2 children receiving one only FVA			P1-P2 children receiving two or more FVAs		
		P	T	% of P	C	% of T	n	% of T	n	% of T	% of C	n	% of T	% of C	n	% of T
O	912	405	44.4%	374	92.3%	370	91.4%	361	89.1%	96.5%	40	9.9%	10.7%	321	79.3%	85.8%
S	1,123	477	42.5%	457	95.8%	446	93.5%	435	91.2%	95.2%	68	14.3%	14.9%	367	76.9%	80.3%
WI	1,064	512	48.1%	476	93.0%	471	92.0%	466	91.0%	97.9%	33	6.4%	6.9%	433	84.6%	91.0%
Islands - total	3,099	1394	45.0%	1307	93.8%	1287	92.3%	1262	90.5%	96.6%	141	10.1%	10.8%	1121	80.4%	85.8%

NOTES:

- 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) The population baselines for 2018/2019 in this report are based on Small Area Population Estimates at 30 June 2018, provided by the National Records of Scotland (NRS) by Health Board by single year of age. These population estimates are based on the 2011 Census.
- 3) 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 2014.

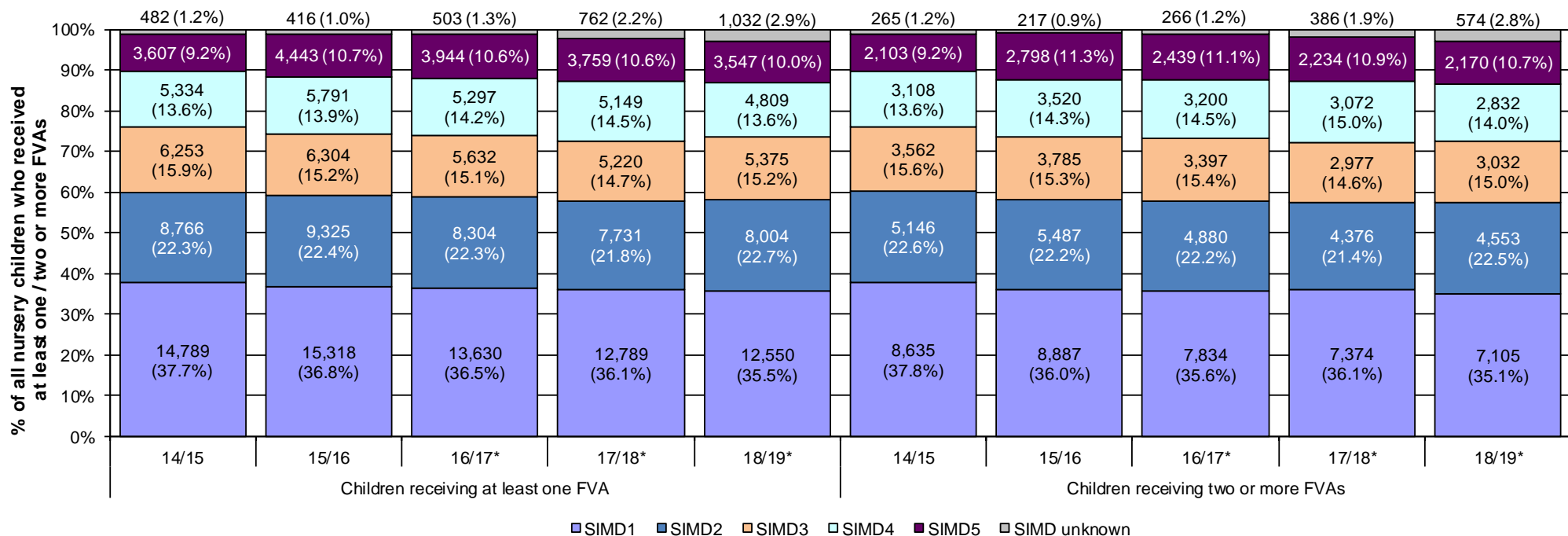


Figure 6: Nursery children receiving at least one and two or more FVAs by SIMD quintile - Scotland, 2014/15-2018/19 academic year

FVA – fluoride varnish application, SIMD – Scottish Index of Multiple Deprivation (local).

NOTES:

- 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 2018/2019 academic year, 7,105 children who received two or more FVAs belonged to SIMD1 quintile (35.1% of the total number of children who received two or more FVAs); 4,553 (22.5%) children belonged to SIMD2; 3,032 (15.0%) to SIMD3; 2,832 (14.0%) to SIMD4; 2,170 (10.7%) to SIMD5 quintile; and there were 574 (2.8%) children with unknown SIMD (due to insufficient postcode information). All six categories combined add up to 100%.
- SIMD 2016 (local, NHS Board-level) was used.
- * A new age filter has been applied when reporting Childsmile Nursery & School 2016/17-2018/19 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 2016/17–2018/19 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.

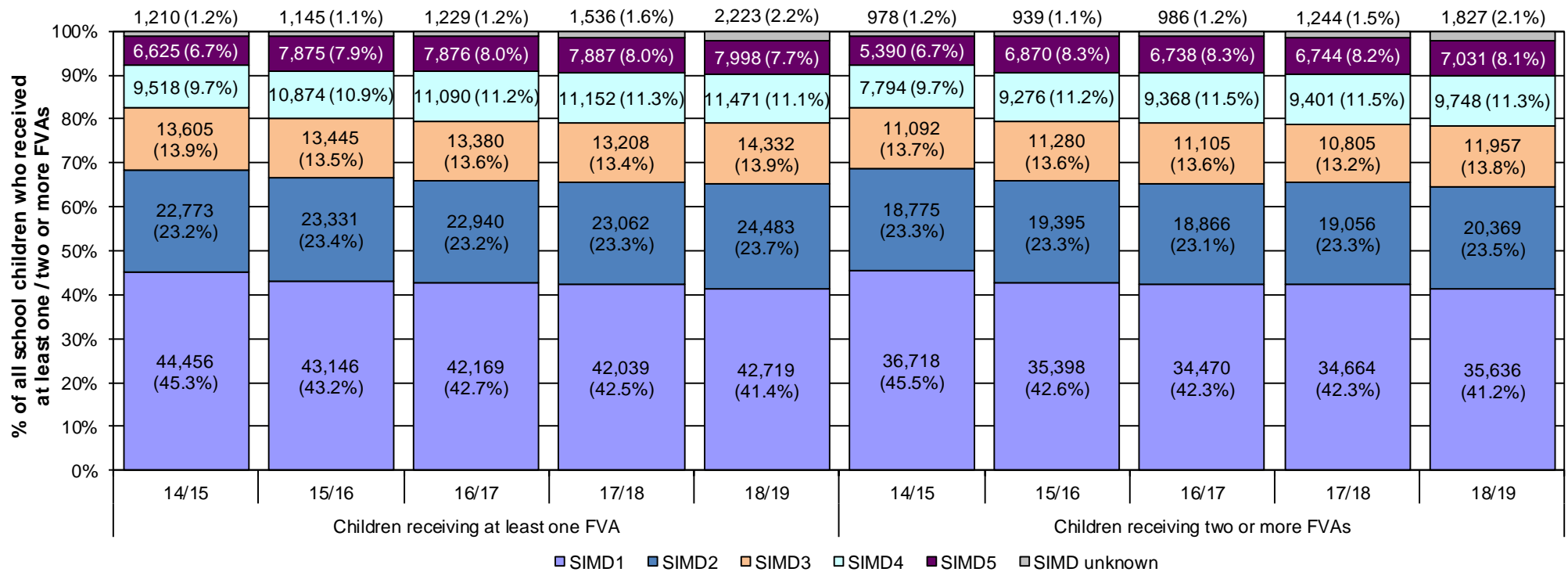


Figure 7: Primary school children receiving *at least one* and *two or more* FVAs by SIMD quintile - Scotland, 2014/15-2018/19 academic year

FVA – fluoride varnish application, SIMD – Scottish Index of Multiple Deprivation (local).

NOTES:

- 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. Also see notes for Figure 6.
- 2) SIMD 2016 (local, NHS Board-level) was used.

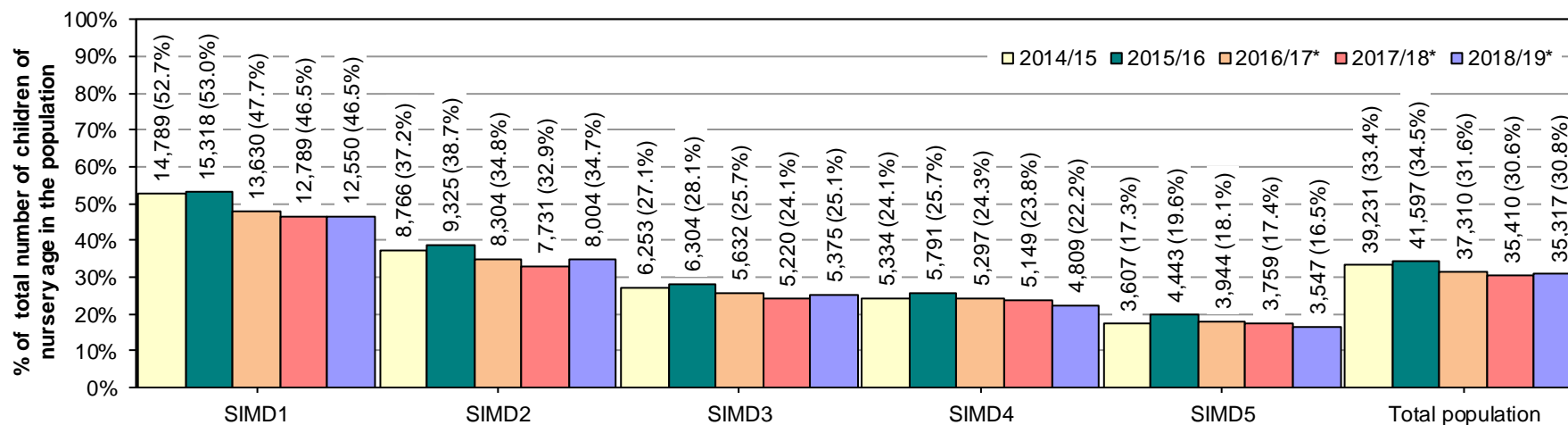


Figure 8: Proportion of population of nursery children in each SIMD (local) quintile who received at least one FVA – Scotland, 2014/15-2018/19 academic year

FVA – fluoride varnish application, SIMD – Scottish Index of Multiple Deprivation (local).

NOTES:

- 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 2016/17–2018/19 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 2016/17–2018/19 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:
 - The population baselines for 2018/2019 in this report were calculated using Small Area Population Estimates at 30 June 2018 provided by the NRS. These population estimates are based on the 2011 Census. Population estimates can be found online at: <https://www.opendata.nhs.scot/dataset/population-estimates>.
 - The population baselines for 2017/2018 were calculated using Small Area Population Estimates at 30 June 2017.
 - The population baselines for 2016/2017 were calculated using Small Area Population Estimates at 30 June 2016.
 - The population baselines for 2015/2016 were calculated using Small Area Population Estimates at 30 June 2015.
 - The population baselines for 2014/2015 were calculated using Small Area Population Estimates at 30 June 2013.
- 4) “Total population” numbers do not equal the sum of the numbers in the five SIMD quintiles, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect child postcode).
- 5) SIMD 2016 (local, NHS Board-level) was used.

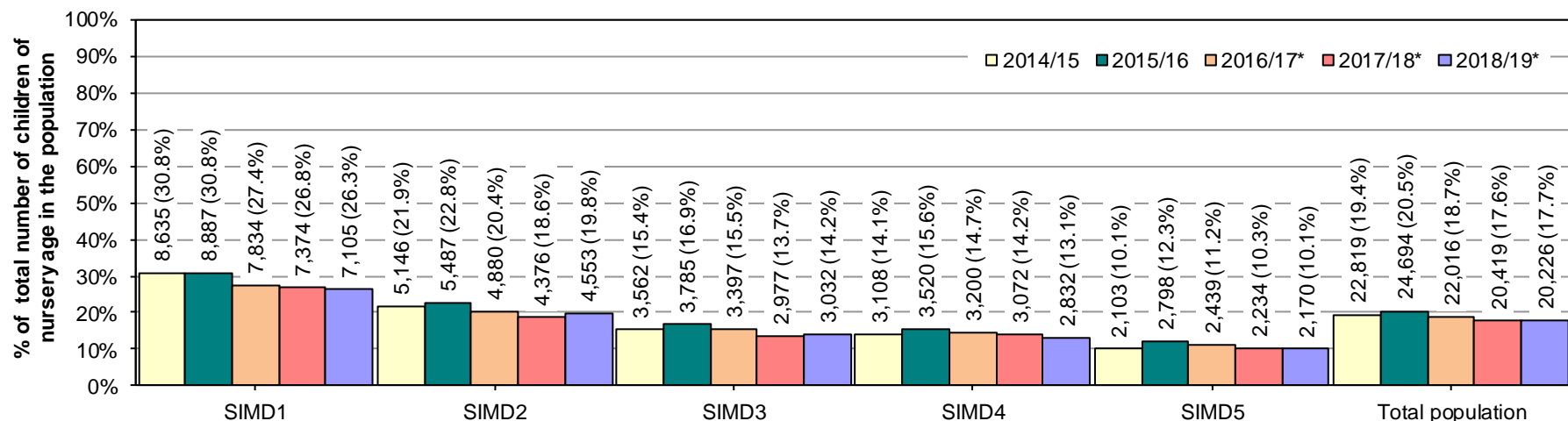


Figure 9: Proportion of population of nursery children in each SIMD (local) quintile who received two or more FVAs – Scotland, 2014/15-2018/19 academic year

FVA – fluoride varnish application, SIMD – 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 2016/17–2018/19 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 2016/17–2018/19 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:
 - The population baselines for 2018/2019 in this report were calculated using Small Area Population Estimates at 30 June 2018 provided by the NRS. These population estimates are based on the 2011 Census. Population estimates can be found online at: <https://www.opendata.nhs.scot/dataset/population-estimates>.
 - The population baselines for 2017/2018 were calculated using Small Area Population Estimates at 30 June 2017.
 - The population baselines for 2016/2017 were calculated using Small Area Population Estimates at 30 June 2016.
 - The population baselines for 2015/2016 were calculated using Small Area Population Estimates at 30 June 2015.
 - The population baselines for 2014/2015 were calculated using Small Area Population Estimates at 30 June 2013.
- 4) "Total population" numbers do not equal the sum of the numbers in the five SIMD quintiles, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect child postcode).
- 5) SIMD 2016 (local, NHS Board-level) was used.

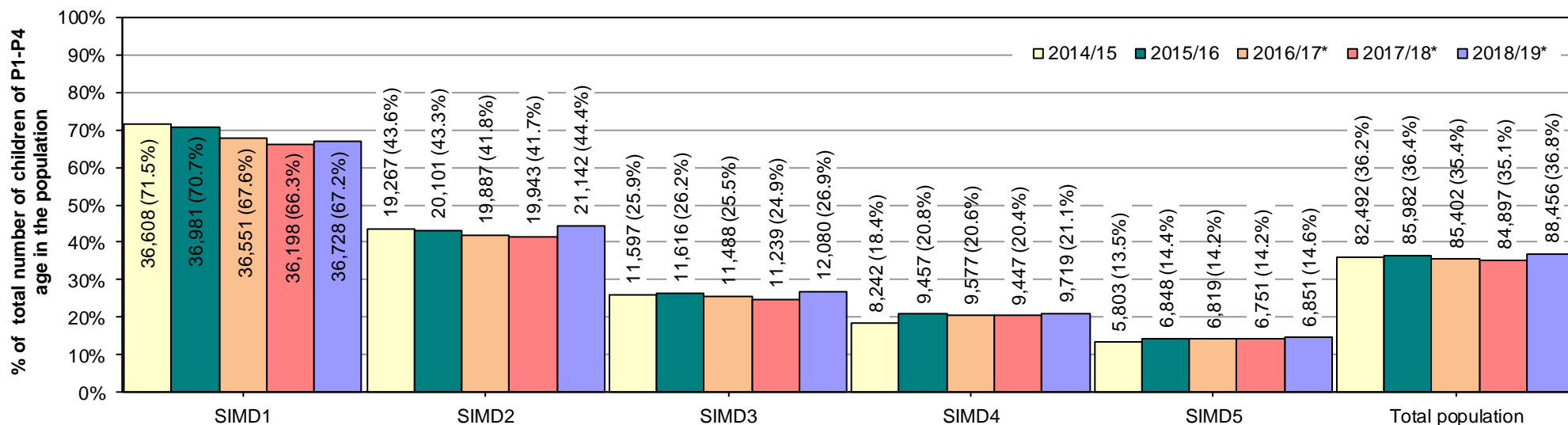


Figure 10: Proportion of population of P1-P4 age children in each SIMD (local) quintile who received at least one FVA – Scotland, 2014/15-2018/19 academic year

FVA – fluoride varnish application, SIMD – Scottish Index of Multiple Deprivation (local).

NOTES:

- 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 2016/17–2018/19 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 2016/17–2018/19 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 3) The denominator is the population of P1-P4 age children (5 to 8 years old) in each SIMD quintile.
 - The population baselines for 2018/2019 in this report were calculated using Small Area Population Estimates at 30 June 2018 provided by the NRS. These population estimates are based on the 2011 Census. Population estimates can be found online at: <https://www.opendata.nhs.scot/dataset/population-estimates>.
 - The population baselines for 2017/2018 were calculated using Small Area Population Estimates at 30 June 2017.
 - The population baselines for 2016/2017 were calculated using Small Area Population Estimates at 30 June 2016.
 - The population baselines for 2015/2016 were calculated using Small Area Population Estimates at 30 June 2015.
 - The population baselines for 2014/2015 were calculated using Small Area Population Estimates at 30 June 2013.
- 4) “Total population” numbers do not equal the sum of the numbers in the five SIMD quintiles, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect child postcode).
- 5) SIMD 2016 (local, NHS Board-level) was used.

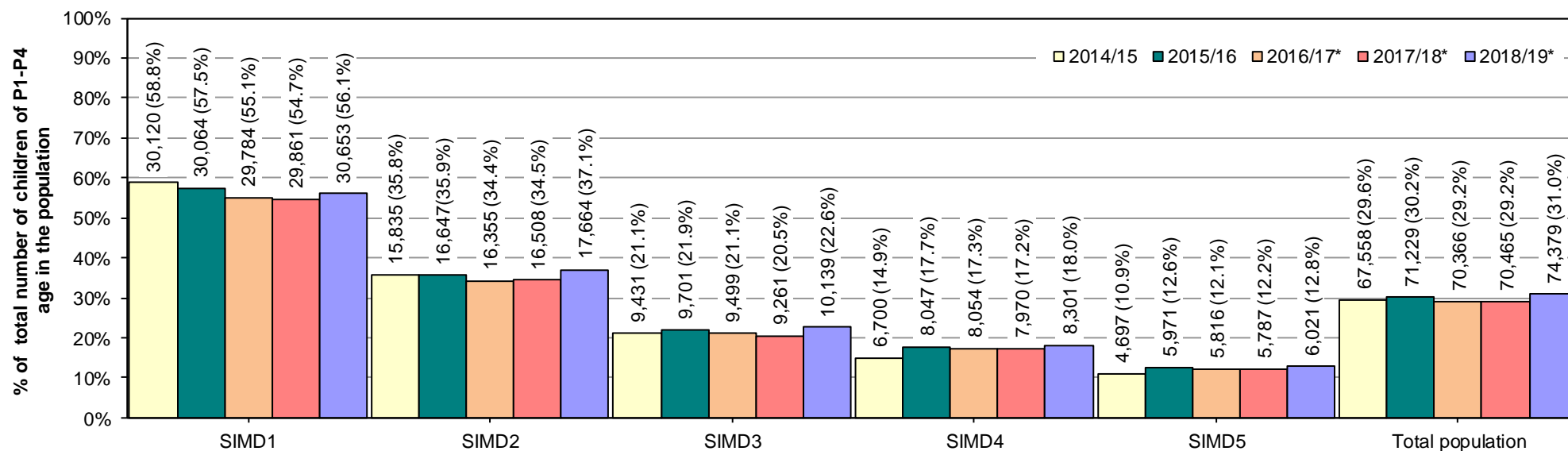


Figure 11: Proportion of population of P1-P4 age children in each SIMD (local) quintile who received two or more FVAs – Scotland, 2014/15-2018/19 academic year

FVA – fluoride varnish application, SIMD – Scottish Index of Multiple Deprivation (local).

NOTES:

- 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 2016/17–2018/19 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 2016/17–2018/19 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 3) The denominator is the population of P1-P4 age children (5 to 8 years old) in each SIMD quintile.
 - The population baselines for 2018/2019 in this report were calculated using Small Area Population Estimates at 30 June 2018 provided by the NRS. These population estimates are based on the 2011 Census. Population estimates can be found online at: <https://www.opendata.nhs.scot/dataset/population-estimates>.
 - The population baselines for 2017/2018 were calculated using Small Area Population Estimates at 30 June 2017.
 - The population baselines for 2016/2017 were calculated using Small Area Population Estimates at 30 June 2016.
 - The population baselines for 2015/2016 were calculated using Small Area Population Estimates at 30 June 2015.
 - The population baselines for 2014/2015 were calculated using Small Area Population Estimates at 30 June 2013.
- 4) "Total population" numbers do not equal the sum of the numbers in the five SIMD quintiles, as total numbers include children who could not be assigned to a SIMD quintile (due to missing or incorrect child postcode).
- 5) SIMD 2016 (local, NHS Board-level) was used.

Table 6 Proportion of population of nursery and P1-P4 children receiving at least one FVA / one FVA only / two or more FVAs, by local SIMD – Scotland, 2018/2019 academic year

	SIMD (local, NHS Board-level)	Nursery population baseline (3-4 years of age)	Children receiving at least one FVA		Children receiving one only FVA		Children receiving two or more FVAs	
		N	n	% of N	n	% of N	n	% of N
Nursery	1	26,995	12,550	46.5%	5,445	20.2%	7,105	26.3%
	2	23,044	8,004	34.7%	3,451	15.0%	4,553	19.8%
	3	21,395	5,375	25.1%	2,343	11.0%	3,032	14.2%
	4	21,651	4,809	22.2%	1,977	9.1%	2,832	13.1%
	5	21,531	3,547	16.5%	1,377	6.4%	2,170	10.1%
	Unknown		1,032		458		574	
	Total		114,616	35,317	30.8%	15,051	13.1%	20,266
P1-P4	SIMD (local, NHS Board-level)	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	
		N	n	% of N	n	% of N	n	% of N
	1	54,688	36,728	67.2%	6,075	11.1%	30,653	56.1%
	2	47,624	21,142	44.4%	3,478	7.3%	17,664	37.1%
	3	44,914	12,080	26.9%	1,941	4.3%	10,139	22.6%
	4	46,097	9,719	21.1%	1,418	3.1%	8,301	18.0%
	5	46,942	6,851	14.6%	830	1.8%	6,021	12.8%
	Unknown		1,936		335		1,601	
Total		240,265	88,456	36.8%	14,077	5.9%	74,379	31.0%

NOTES:

- 1) The population baselines for 2018/2019 in this report were calculated using Small Area Population Estimates at 30 June 2018 provided by the NRS. These population estimates are based on the 2011 Census. Population estimates can be found online at: <https://www.opendata.nhs.scot/dataset/population-estimates>.
- 2) SIMD 2016 (local, NHS Board-level) was used.

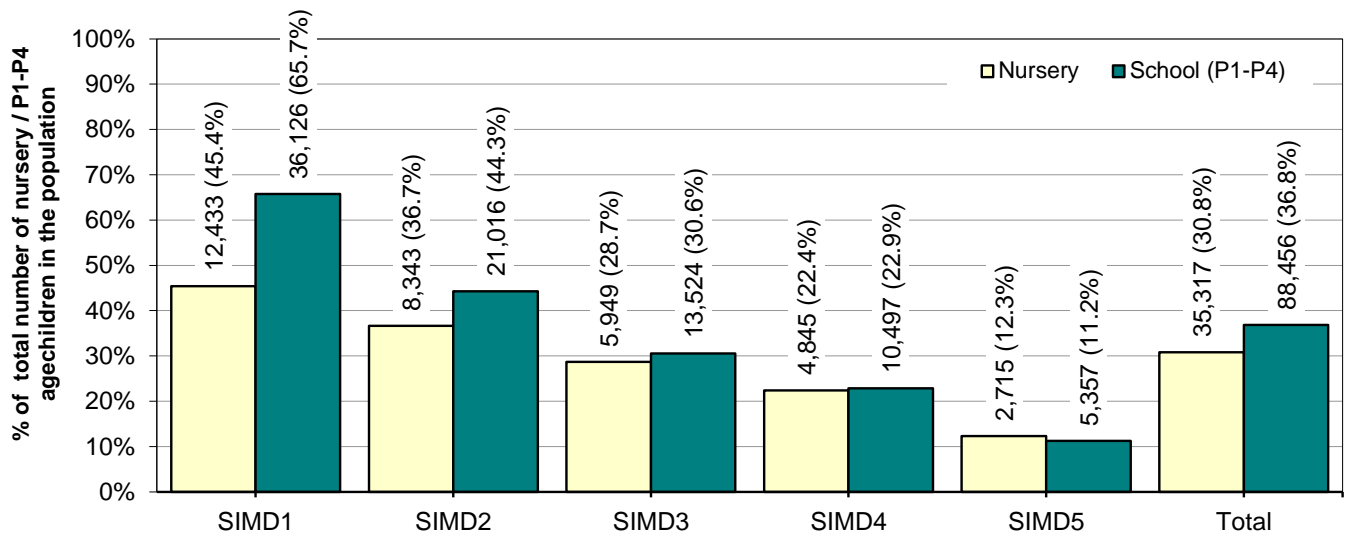


Figure 12: Proportion of population of nursery (3-4 year olds) and P1-P4 children receiving at least one FVA, by national SIMD – Scotland, 2018/2019 academic year

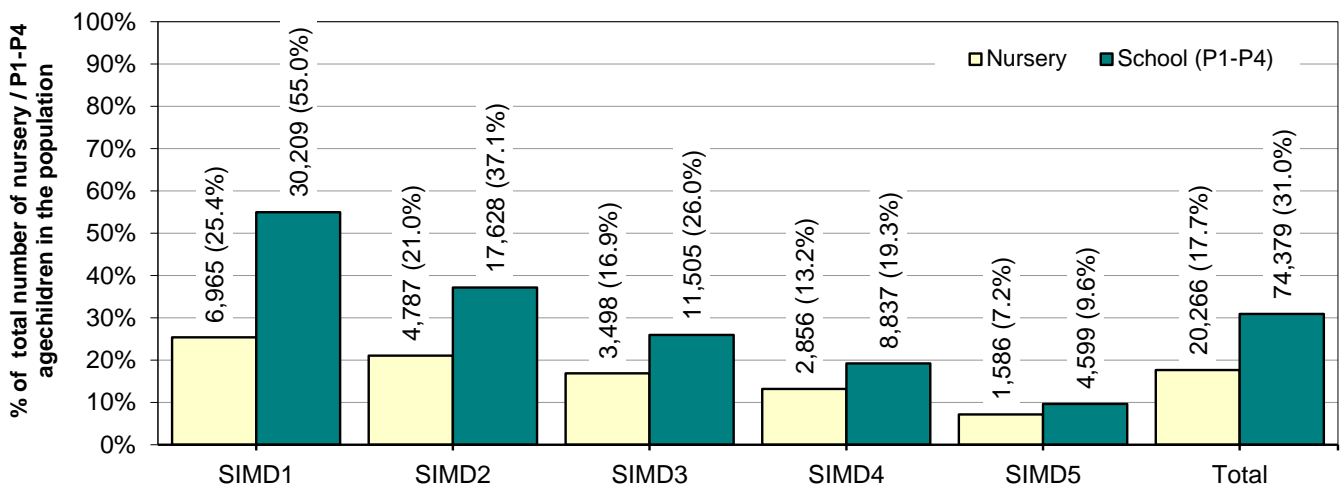


Figure 13: Proportion of population of nursery (3-4 year olds) and P1-P4 children receiving two or more FVAs, by national SIMD – Scotland, 2018/2019 academic year

NOTES:

- 1) Figure 12 presents the proportion of nursery / P1-P4 age children in each SIMD (national) quintile who received *at least one* FVA in 2016/17 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 2018/19 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 2016/17–2018/19 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 2016/17–2017/18 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.
- 4) The denominator is all children (nursery / P1-P4 age in the population) in each SIMD quintile. The population baselines for 2018/2019 in this report were calculated using Small Area Population Estimates at 30 June 2018 provided by the NRS. These population estimates are based on the 2011 Census.
- 5) "Total population" numbers do not equal the sum of the numbers in the five SIMD quintiles, 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 2016 (national, Scotland-level) was used.

Table 7 Proportion of population of nursery and P1-P4 children receiving at least one FVA / one FVA only / two or more FVAs, by national SIMD – Scotland, 2018/2019 academic year

	SIMD (national, Scotland- level)	Nursery population baseline (3-4 years of age)	Children receiving <i>at least one FVA</i>		Children receiving <i>one only FVA</i>		Children receiving <i>two or more FVAs</i>	
		N	n	% of N	n	% of N	n	% of N
Nursery	1	27,394	12,433	45.4%	5,468	20.0%	6,965	25.4%
	2	22,750	8,343	36.7%	3,556	15.6%	4,787	21.0%
	3	20,747	5,949	28.7%	2,451	11.8%	3,498	16.9%
	4	21,617	4,845	22.4%	1,989	9.2%	2,856	13.2%
	5	22,108	2,715	12.3%	1,129	5.1%	1,586	7.2%
	Unknown		1,032		458		574	
	Total	114,616	35,317	30.8%	15,051	13.1%	20,266	17.7%
	P1-P4		P1-P4 population baseline (5-8 years of age)	Children receiving <i>at least one FVA</i>		Children receiving <i>one only FVA</i>		Children receiving <i>two or more FVAs</i>
		N	n	% of N	n	% of N	n	% of N
1		54,969	36,126	65.7%	5,917	10.8%	30,209	55.0%
2		47,454	21,016	44.3%	3,388	7.1%	17,628	37.1%
3		44,265	13,524	30.6%	2,019	4.6%	11,505	26.0%
4		45,891	10,497	22.9%	1,660	3.6%	8,837	19.3%
5		47,686	5,357	11.2%	758	1.6%	4,599	9.6%
Unknown			1,936		335		1,601	
Total	240,265	88,456	36.8%	14,077	5.9%	74,379	31.0%	

NOTES:

- 1) The population baselines for 2018/2019 in this report were calculated using Small Area Population Estimates at 30 June 2018 provided by the NRS. These population estimates are based on the 2011 Census. Population estimates can be found online at: <https://www.opendata.nhs.scot/dataset/population-estimates>.
- 2) SIMD 2016 (national, Scotland-level) was used.

Table 8: Additional support needs children receiving FVA, by NHS Board, 2018/2019 academic year

Health Board	Number of ASN children in fluoride varnishing establishments	ASN children receiving at least one FVA		ASN children receiving one only FVA		ASN children receiving two or more FVAs	
	N	n	% of N	n	% of N	n	% of N
AA	654	447	68.3%	128	19.6%	319	48.8%
B	53	34	64.2%	7	13.2%	27	50.9%
DG	9	0	0.0%	0	0.0%	0	0.0%
F	286	172	60.1%	52	18.2%	120	42.0%
FV	198	75	37.9%	24	12.1%	51	25.8%
G	442	141	31.9%	49	11.1%	92	20.8%
GGC	275	134	48.7%	130	47.3%	4	1.5%
H	212	107	50.5%	47	22.2%	60	28.3%
La	1,971	1,245	63.2%	434	22.0%	811	41.1%
Lo	1,176	508	43.2%	205	17.4%	303	25.8%
O	1	0	0.0%	0	0.0%	0	0.0%
S	11	7	63.6%	0	0.0%	7	63.6%
T	410	271	66.1%	116	28.3%	155	37.8%
WI	2	2	100.0%	0	0.0%	2	100.0%
Scotland	5,700	3,143	55.1%	1,192	20.9%	1,951	34.2%

ASN – Additional support needs, FVA – fluoride varnish application

NOTES:

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.

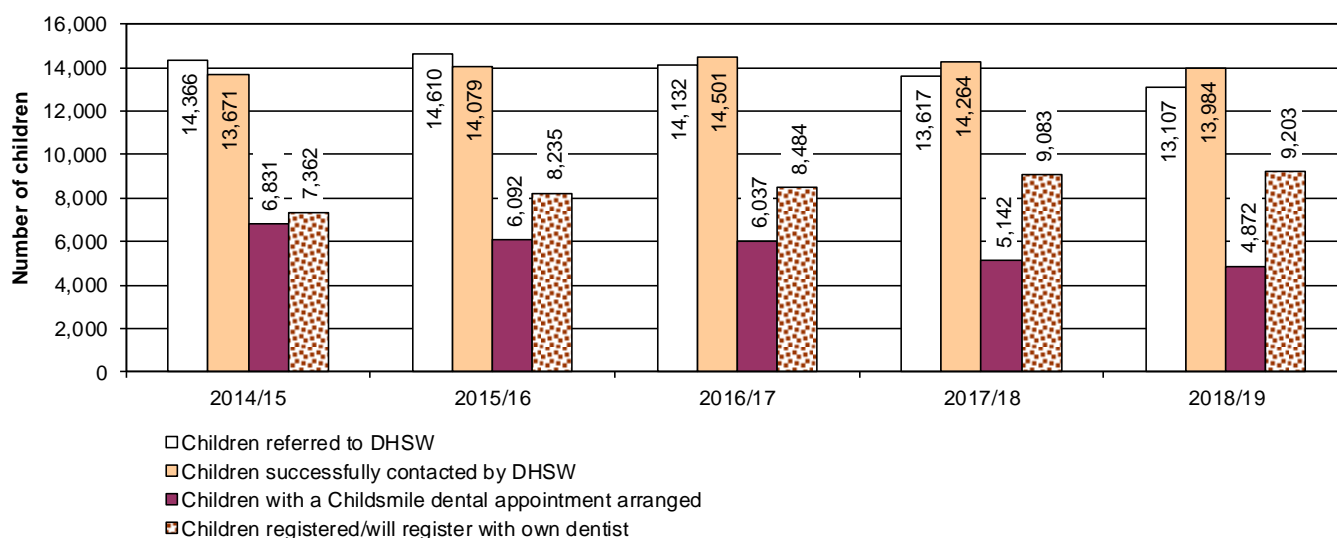


Figure 14: DHSW: Child referrals, contacts, practice appointments made and children registered/will register with own dentist – Scotland, 2014/15-2018/19 financial year

DHSW – Dental Health Support Worker.

NOTES: 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 2014/15-2018/19.

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.

NHS Boards based on the boundaries as at 1 April 2014

Table 9: DHSW: Child referrals, contacts, practice appointments made and children registered with own dentist – by NHS Board, 2018/2019 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	314	365	137	219
B	444	545	295	180
DG	186	266	215	57
F	999	1,117	604	557
FV	398	422	113	315
G	215	200	49	160
GGC	6,825	7,068	2,294	4,848
H	686	780	411	352
La	1,424	1,366	573	855
Lo	794	1,005	42	949
O	140	140	0	141
S	0	0	0	0
T	126	125	1	124
WI	0	0	0	0
Unknown NHS Board	556	585	138	446
Scotland	13,107	13,984	4,872	9,203

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

In total, according to the Childsmile@HIC system data, in the 2018/2019 financial year: 9,605 children were referred to Childsmile from a Health Visitor; 1,856 via 'Other' source; 662 from a dentist; 403 via Clinic; 227 were referred by NHS 24; 87 were self-referrals and for 267 children the type of referral was not specified.

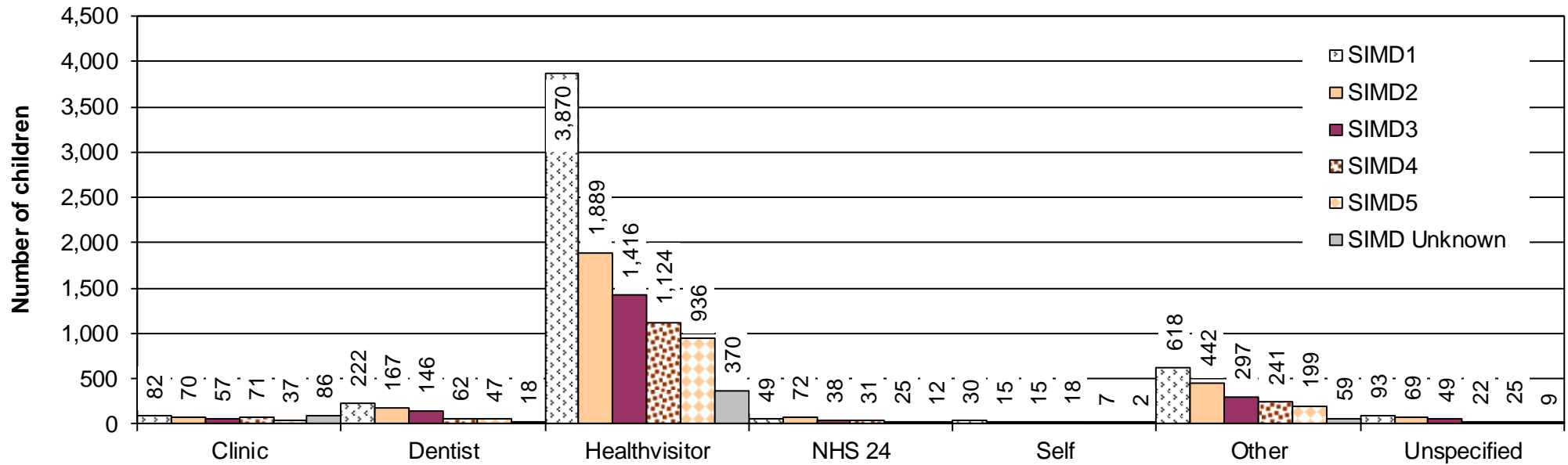


Figure 15: Number of children referred to DHSW by national SIMD of child – Scotland, 201/2019 financial year

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

NOTES:

- 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 2016 (national) was used.

In total in the 2018/2019 financial year there were: 13,753 children with at least one kept DHSW appointment; 255 families who refused Childsmile; 148 families that could not be contacted; and for 1,917 families the end result was an 'FTA / Not at home'.

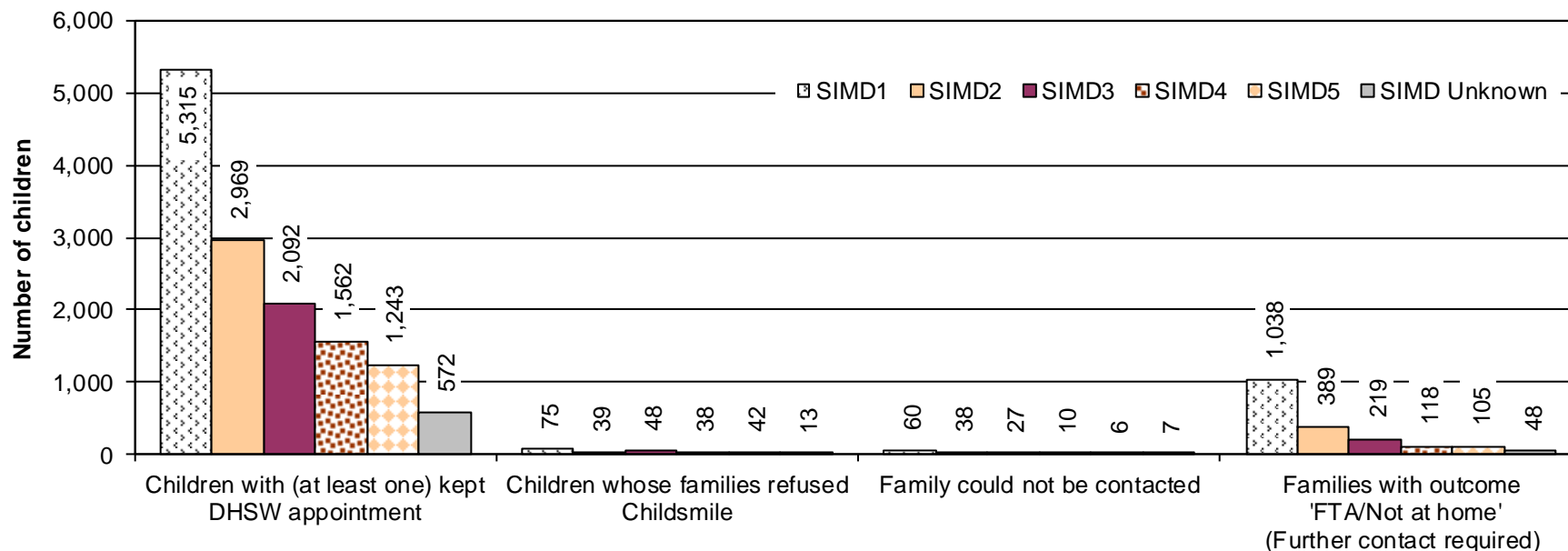


Figure 16: Children successfully contacted and not contacted by DHSW, and families who refused Childsmile, by national SIMD of child – Scotland, 2018/2019 financial year

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

NOTES:

- 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 2016 (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 2015/16–2018/19 data are comparable, however these are not comparable with the numbers in earlier reports.

Within the 2018/2019 financial year 13,753 children had at least one kept DHSW appointment. Of these children, 12,116 had their first kept appointment within the reporting period. 2,086 children had their second kept appointment and 792 had their third (or greater) kept DHSW appointment within 2018/2019. For these children, their prior kept appointment may have occurred in an earlier reporting period.

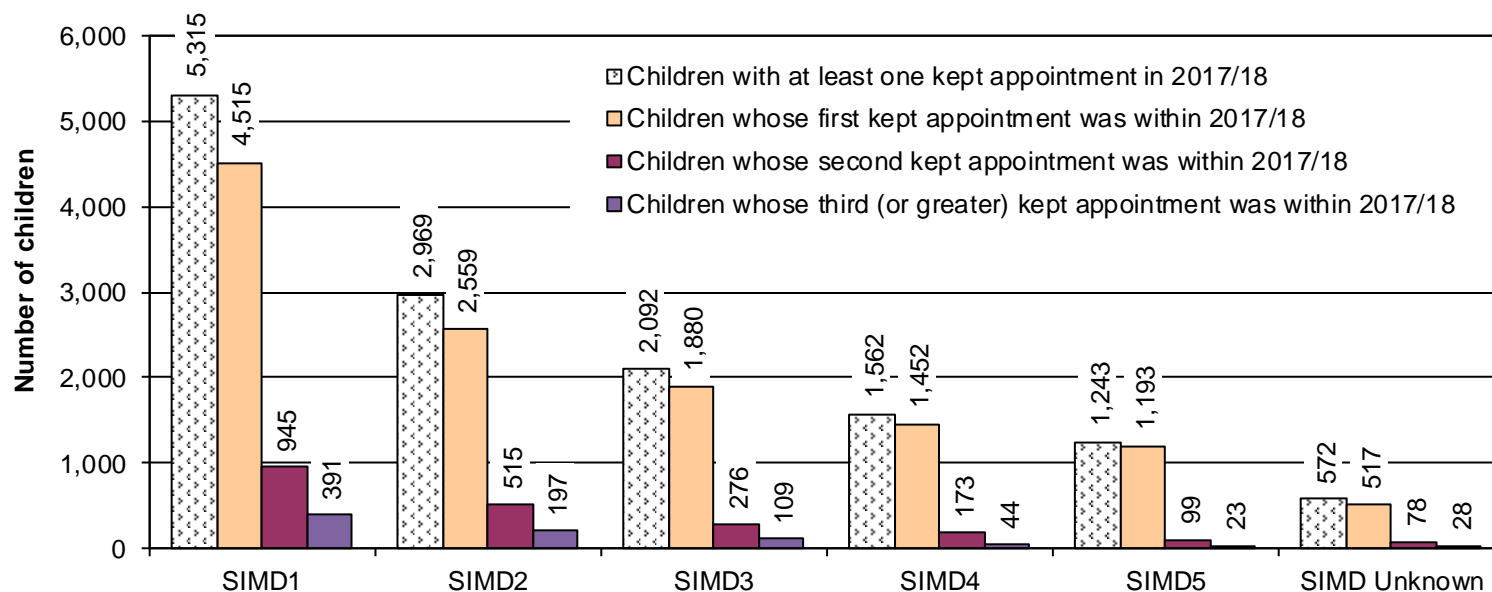


Figure 17: Children with different numbers of kept DHSW appointments by national SIMD of child – Scotland, 2018/2019 financial year

SIMD – Scottish Index of Multiple Deprivation (national).

NOTES:

- 1) Figure 17 presents the number of children with at least one kept DHSW appointment within the 2018/2019 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 2018/19 and those whose 3rd (or greater) appointment was within 2018/19 are not mutually exclusive, as some children might have had several appointments within the same 2018/19 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 2016 (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.

ISD 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, 912 independent contractor GDS practices were delivering Childsmile interventions during 2018/2019 financial year in Scotland, which is a 0.3% increase in comparison with 909 independent contractor GDS practices that were delivering Childsmile interventions in 2017/2018.

Table 10: Independent contractor GDS practices delivering Childsmile interventions – Scotland, by NHS Board, 2018/2019 financial year

NHS Board	Total GDS Dental Practices	GDS Dental Practices Delivering Childsmile	
	N	n	% of N
AA	68	61	89.7%
B	16	15	93.8%
DG	36	34	94.4%
F	66	59	89.4%
FV	46	43	93.5%
G	95	85	89.5%
GGC	275	241	87.6%
H	58	49	84.5%
La	121	109	90.1%
Lo	171	146	85.4%
O	4	2	50.0%
S	2	1	50.0%
T	78	66	84.6%
WI	1	1	100.0%
Scotland	1,037	912	87.9%

Independent contractor GDS – independent contractor General Dental Services (non-salaried GDS), ISD – Information Services Division.

NOTES:

- 1) 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 31 March 2019, calculated from the total list of dental practices supplied by ISD).
- 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 February 2018.

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 0 to 2 years, and from 3 to 5 years (inclusive).
- For FVA there is only one age group, from 2 to 5 years (inclusive).

Children with *two or more* FVAs (made by a dentist or dental care professional) are those 2-5 years old children (inclusive) who had received an FVA within the reporting period (2018/2019 financial year) and who had also received another FVA in the 12 months prior to that application.

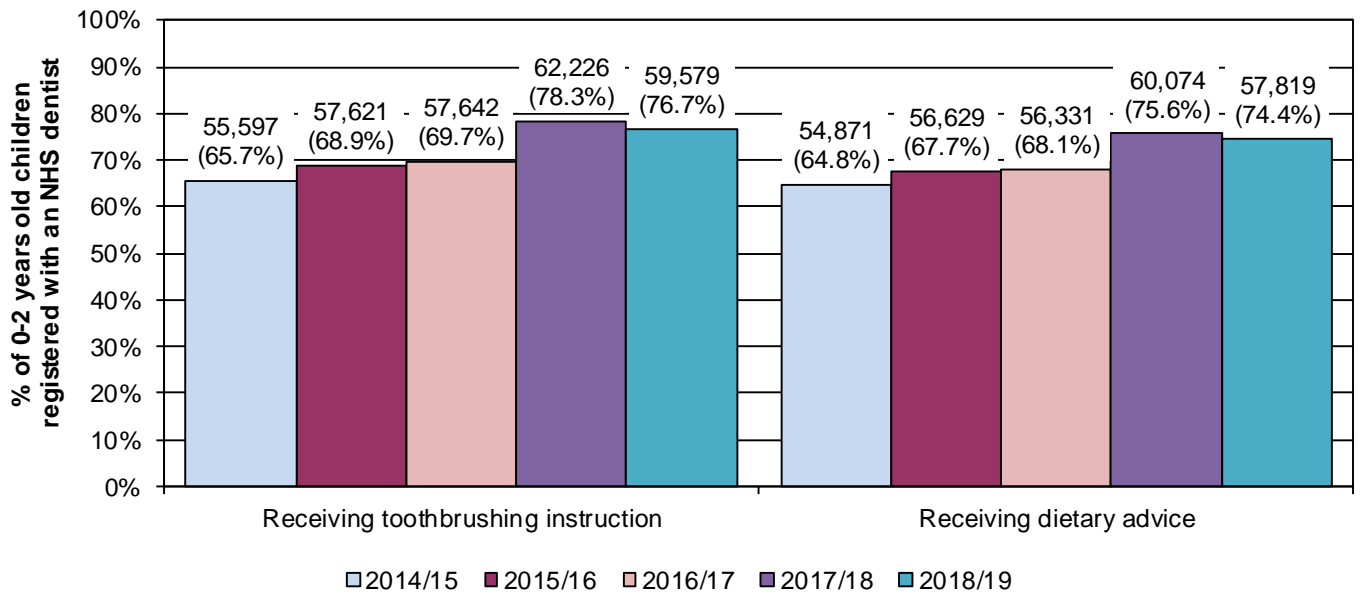


Figure 18: Proportion of 0-2 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, 2014/15-2018/19 financial year

NOTES: Numbers of children registered with an NHS dentist, as at 31st March 2019, were provided by ISD

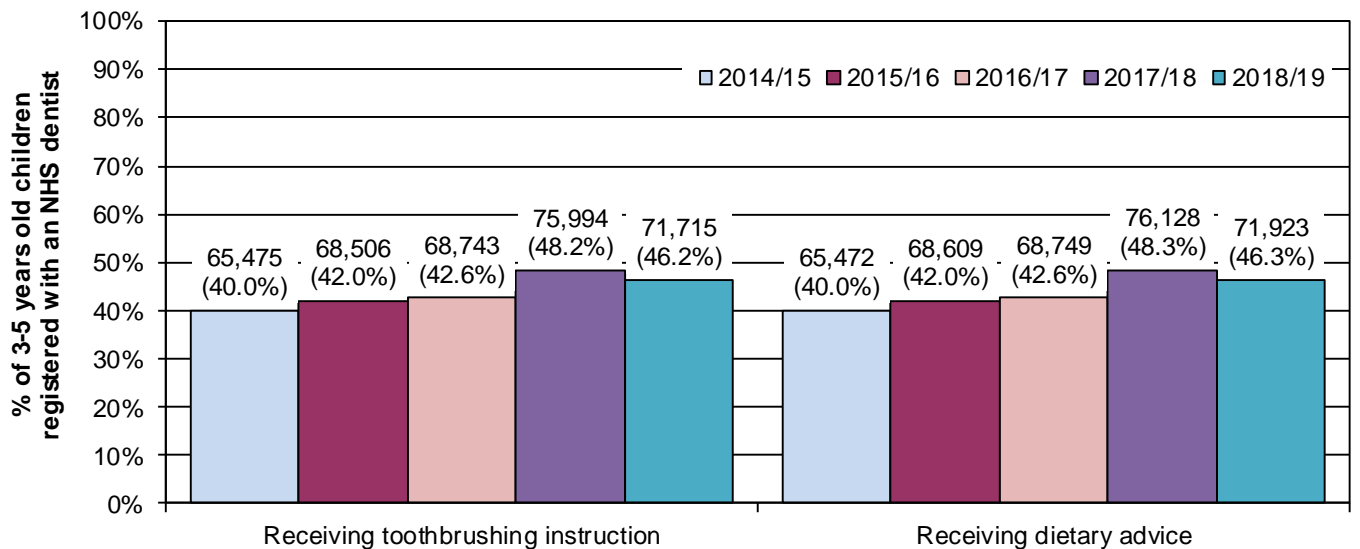


Figure 19: Proportion of 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, 2014/15-2018/19 financial year

Table 11: Proportion of 0-2 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2018/2019 financial year

NHS Board	0-2-year-olds registered with an NHS dentist	0-2-year-olds receiving toothbrushing instruction		0-2-year-olds receiving dietary advice	
	N	n	% of N	n	% of N
AA	5,039	4,019	79.8%	3,906	77.5%
B	1,474	1,195	81.1%	1,177	79.9%
DG	1,749	1,408	80.5%	1,383	79.1%
F	5,402	4,102	75.9%	3,893	72.1%
FV	4,056	3,151	77.7%	3,030	74.7%
G	8,337	5,609	67.3%	5,485	65.8%
GGC	18,776	14,586	77.7%	14,142	75.3%
H	3,935	2,568	65.3%	2,547	64.7%
La	10,094	8,437	83.6%	8,324	82.5%
Lo	11,838	9,897	83.6%	9,419	79.6%
O	323	227	70.3%	222	68.7%
S	508	411	80.9%	412	81.1%
T	4,937	3,571	72.3%	3,482	70.5%
WI	401	370	92.3%	369	92.0%
Scotland	77,718	59,579	76.7%	57,819	74.4%

NOTES:

- 1) Numbers of children registered with an NHS dentist, as at 31st March 2019, 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 February 2018.

Table 12: Proportion of 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2018/2019 financial year

NHS Board	3-5-year-olds registered with an NHS dentist	3-5-year-olds receiving toothbrushing instruction		3-5-year-olds receiving dietary advice	
	N	n	% of N	n	% of N
AA	10,020	4,814	48.0%	4,818	48.1%
B	2,994	1,723	57.5%	1,740	58.1%
DG	3,623	1,881	51.9%	1,885	52.0%
F	10,826	4,780	44.2%	4,806	44.4%
FV	8,424	4,180	49.6%	4,198	49.8%
G	16,854	7,221	42.8%	7,223	42.9%
GGC	34,460	15,962	46.3%	15,970	46.3%
H	8,430	3,085	36.6%	3,125	37.1%
La	19,414	9,036	46.5%	9,017	46.4%
Lo	25,469	13,245	52.0%	13,339	52.4%
O	593	269	45.4%	268	45.2%
S	738	296	40.1%	298	40.4%
T	10,881	4,790	44.0%	4,801	44.1%
WI	662	393	59.4%	396	59.8%
Scotland	155,299	71,715	46.2%	71,923	46.3%

NOTES:

- 1) Numbers of children registered with an NHS dentist, as at 31st March 2019, 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 February 2018.

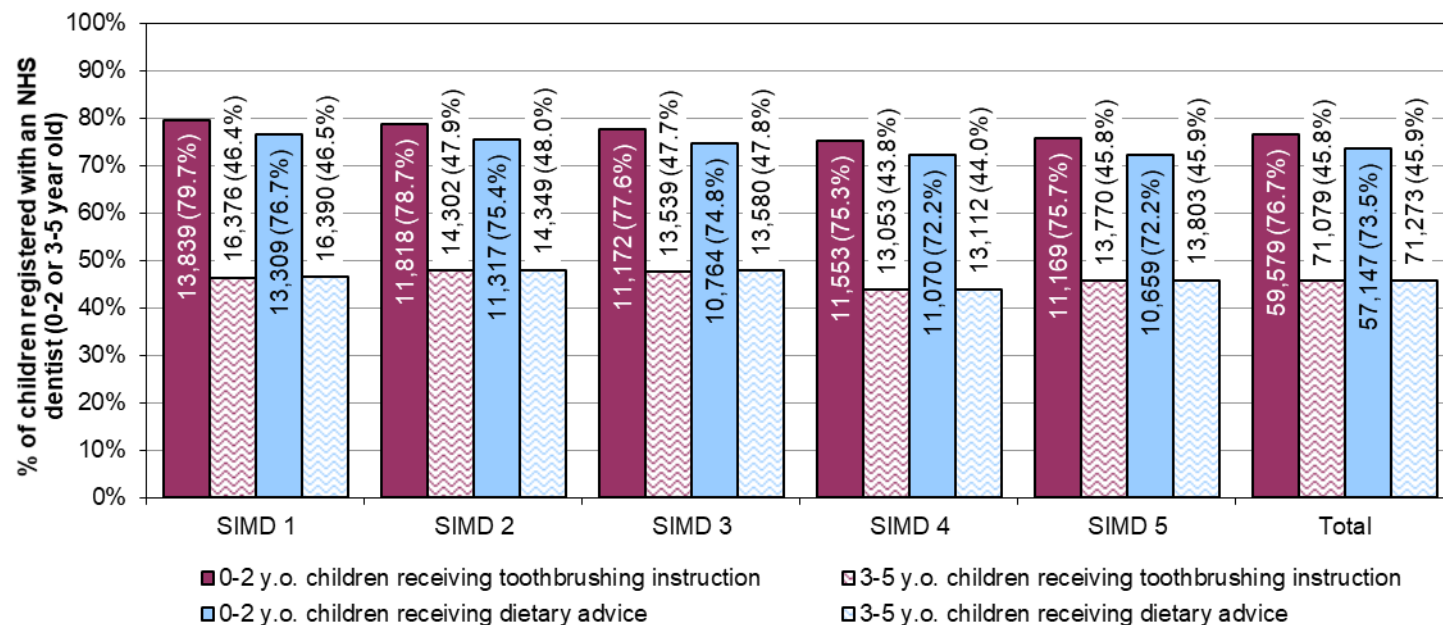


Figure 20: Proportion of 0-2 and 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction / dietary advice – Scotland, by national SIMD, 2018/2019 financial year

SIMD – Scottish Index of Multiple Deprivation (national).

NOTES:

- 1) Figure 20 presents the number of 0-2 or 3-5 year old children receiving toothbrushing instruction or dietary advice shown as a proportion of the total number of 0-2 or 3-5 year old children registered with an NHS dentist.
- 2) The numbers of children registered with an NHS dentist as of 31st March 2018 were as follows (data supplied by ISD):
 - 0-2 year olds: SIMD 1 – 17,357 children; SIMD 2 – 15,016; SIMD 3 – 14,392; SIMD 4 – 15,340; SIMD 5 – 14,764; and in total – 77,718 children (including SIMD Unknown).
 - 3-5 year olds: SIMD 1 – 35,272 children; SIMD 2 – 29,874; SIMD 3 – 28,382; SIMD 4 – 29,814; SIMD 5 – 30,046; and in total – 155,299 children (including SIMD Unknown).
- 3) Totals include children with SIMD unknown (due to a missing/incorrect postcode).
- 4) SIMD 2016 (national) was used.

For example, in the 2018/2019 financial year 79.7% of 0-2 year old children residing in SIMD 1 and registered with an NHS dentist received toothbrushing instruction at least once (13,839 children), and 76.7% of such children received dietary advice at least once (13,309 children).

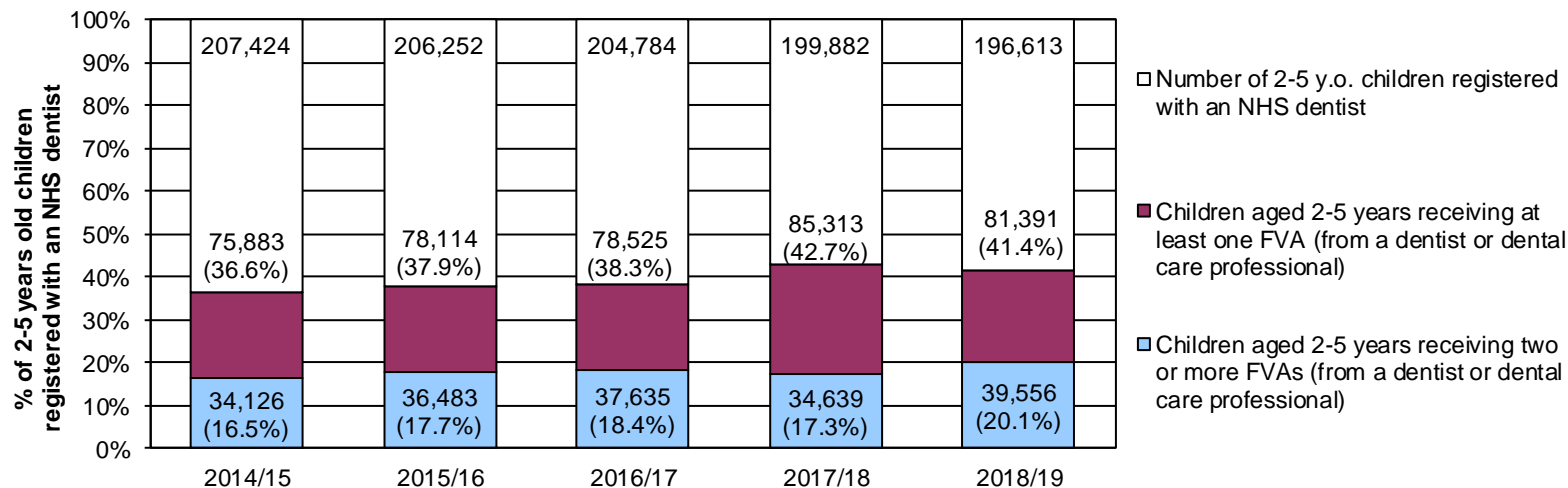


Figure 21: Proportion of 2-5 year old children registered with an NHS dentist receiving at least one FVA or two or more FVAs – Scotland, 2014/15-2018/19 financial year

FVA – fluoride varnish application.

NOTES: Numbers at the top of each column represent the total number of 2-5 year old children registered with an NHS dentist (as at 31st March 2019). Numbers and percentages inside the columns represent the numbers/percentages of such children who received FVA at least once within 2018/2019 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 2018/19 financial year 41.4% (81,391) of children registered with an NHS dentist received at least one FVA, and 20.1% (39,556) children received an FVA within 2018/19 and had also received another FVA in the 12 months prior to that application

Table 13: Proportion of 2-5 year old children registered with an NHS dentist receiving one FVA only / two or more FVAs / at least one FVA – Scotland, by NHS Board, 2018/2019 financial year

HB	2-5-year-olds registered with an NHS dentist	2-5-year-olds receiving one FVA only		2-5-year-olds receiving two or more FVAs		2-5-year-olds receiving at least one FVA	
	N	n	% of N	n	% of N	n	% of N
AA	13,065	2,861	22.5%	2,673	21.0%	5,534	43.5%
B	3,934	934	24.8%	1,160	30.9%	2,094	55.7%
DG	4,790	900	19.6%	949	20.7%	1,849	40.3%
F	14,117	2,798	20.3%	2,311	16.8%	5,109	37.1%
FV	10,951	2,295	21.7%	2,004	18.9%	4,299	40.6%
G	22,043	5,065	23.7%	5,504	25.7%	10,569	49.4%
GGC	44,972	9,150	20.9%	8,243	18.8%	17,393	39.7%
H	10,957	1,938	18.3%	1,374	13.0%	3,312	31.3%
La	25,189	4,993	20.2%	4,141	16.8%	9,134	37.0%
Lo	32,525	7,504	23.4%	8,645	27.0%	16,149	50.4%
O	788	205	26.7%	171	22.2%	376	48.9%
S	1,021	197	20.0%	97	9.8%	294	29.8%
T	13,868	2,653	19.4%	2,105	15.4%	4,758	34.8%
WI	872	333	39.5%	151	17.9%	484	57.3%
Scotland	199,882	41,835	21.3%	39,556	20.1%	81,391	41.4%

FVA – fluoride varnish application.

NOTES:

- 1) Numbers of children registered with an NHS dentist, as at 31st March 2019, 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 February 2018.

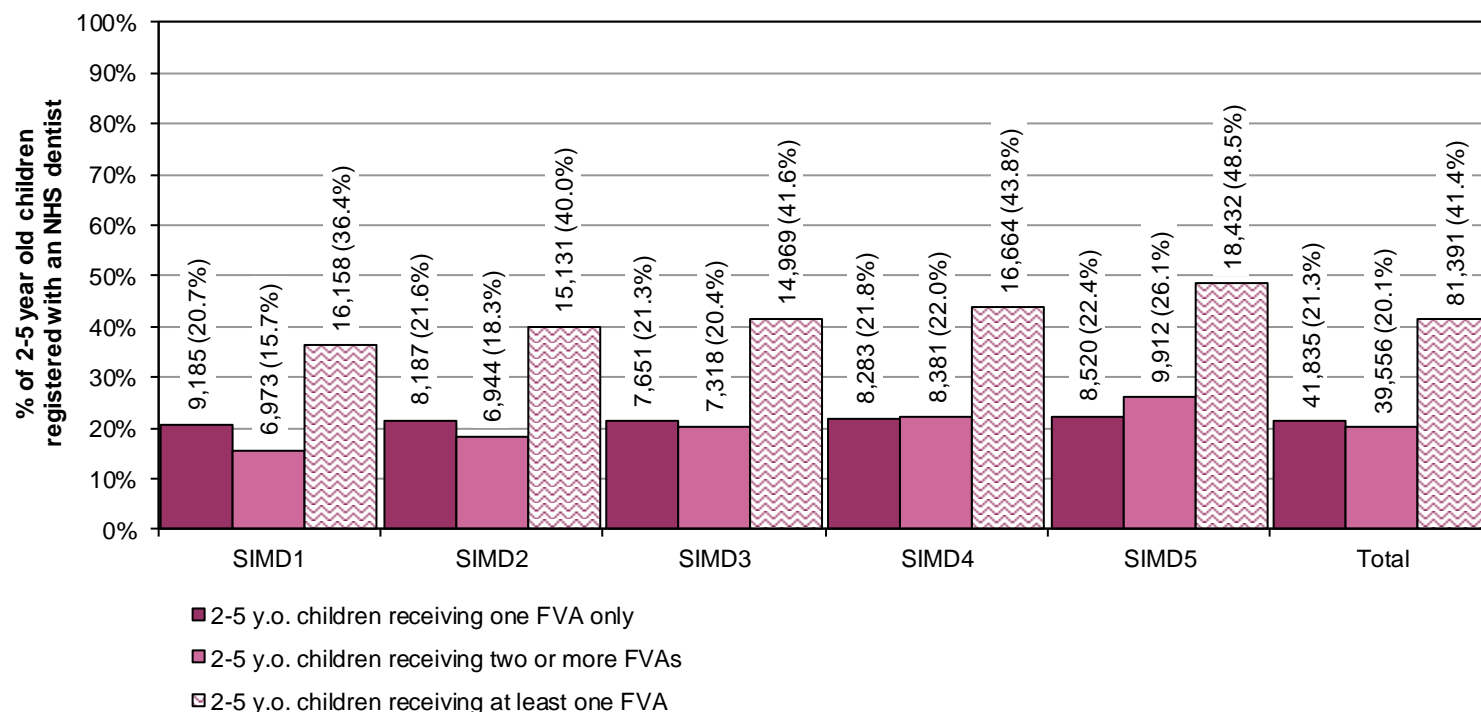


Figure 22: Proportion of 2-5 year old children registered with an NHS dentist receiving one FVA only / two or more FVAs / at least one FVA – Scotland, by national SIMD, 2018/2019 financial year

FVA – fluoride varnish application, SIMD – Scottish Index of Multiple Deprivation (national).

NOTES:

- 1) Figure 22 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 quintiles. 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 of 31st March 2019 were as follows (data supplied by ISD): SIMD 1 – 44,425 children; SIMD 2 – 37,847; SIMD 3 – 35,947; SIMD 4 – 38,020; SIMD 5 – 38,026; and in total there were 196,613 (including SIMD Unknown).
- 3) Totals include children with SIMD unknown (due to a missing/incorrect postcode).
- 4) SIMD 2016 (national) was used.

For example, in the 2018/2019 financial year, 20.7% of 2-5 year old children residing in SIMD 1 and registered with an NHS dentist received only one FVA (9,185) and did not have another FVA in the 12 months prior to that application (labelled “one FVA only”), 15.7% (6,973 children) received an FVA within the 2018/2019 financial year and had also received another FVA in the 12 months prior to that application (labelled “two or more FVAs”) and 36.4% of 2-5 year old children residing in SIMD 1 and registered with an NHS dentist received at least one FVA (16,158 children).

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

369,100 FVAs were applied across all three arms of the programme (Nursery, School and Practice) in 2018/2019.

Table 14: Number of FVAs in nursery, school and practice settings, 2014/15-2018/19

Health Board	2014/2015			2015/2016			2016/2017			2017/2018			2018/2019		
	Nursery	School	Practice	Nursery	School	Practice	Nursery	School	Practice*	Nursery	School	Practice*	Nursery	School	Practice*
AA	2,974	7,122	5,676	3,852	8,882	6,079	3,327	8,733	6,160	3,196	8,585	6,658	4,373	13,322	6,981
B	1,038	4,458	2,360	1,176	5,879	2,543	1,072	5,260	2,551	1,029	5,886	2,484	1,299	7,051	2,737
DG	878	2,384	2,594	977	2,449	2,720	893	2,493	2,604	868	2,923	2,520	774	2,412	2,336
F	3,457	12,995	7,117	3,311	14,453	7,530	3,319	14,923	7,052	2,801	15,083	6,671	2,870	14,854	6,204
FV	2,556	5,358	4,670	3,496	5,841	4,662	3,389	5,989	5,127	2,983	6,362	5,557	2,931	6,251	5,321
G	9,204	17,323	12,206	10,004	19,468	12,982	9,623	19,973	13,374	8,323	17,795	13,150	6,344	21,531	13,591
GGC	8,253	33,379	18,490	11,233	36,198	19,557	9,636	34,877	20,562	9,087	37,242	21,166	10,514	42,903	21,764
H	4,141	17,643	3,741	4,316	18,436	3,572	4,336	18,735	3,415	4,048	18,621	3,448	4,254	18,917	4,088
La	21,249	23,969	11,033	19,584	35,452	10,980	19,338	36,389	10,855	17,928	35,750	10,778	18,319	35,340	11,284
Lo	8,113	26,942	16,759	6,746	23,277	17,749	6,476	23,071	18,787	6,373	23,996	19,600	5,054	21,330	20,899
O	539	1,639	547	559	2,072	640	586	2,443	644	606	2,742	488	551	2,724	453
S	799	1,337	553	847	1,405	442	903	1,531	349	724	1,741	355	703	1,661	344
T	3,131	18,093	5,610	3,508	20,841	5,657	3,702	13,959	5,691	3,406	12,843	5,663	3,303	13,218	5,902
WI	640	1,448	633	717	2,073	698	734	2,499	546	761	2,800	538	715	3,127	502
Unknown NHS Board	-	-	1,661	-	-	1,213	-	-	153	-	-	588	-	-	49
Scotland	66,972	174,090	93,650	70,326	196,726	97,024	67,334	190,875	97,870	62,133	192,369	99,664	62,004	204,641	102,455

FVA – fluoride varnish application.

NOTES:

- 1) Table 14 presents number of FVAs applied in different settings by academic year, apart from 2016/17-2018/19 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 2014/15-2018/19.
- 4) NHS Boards based on the boundaries as at February 2018.

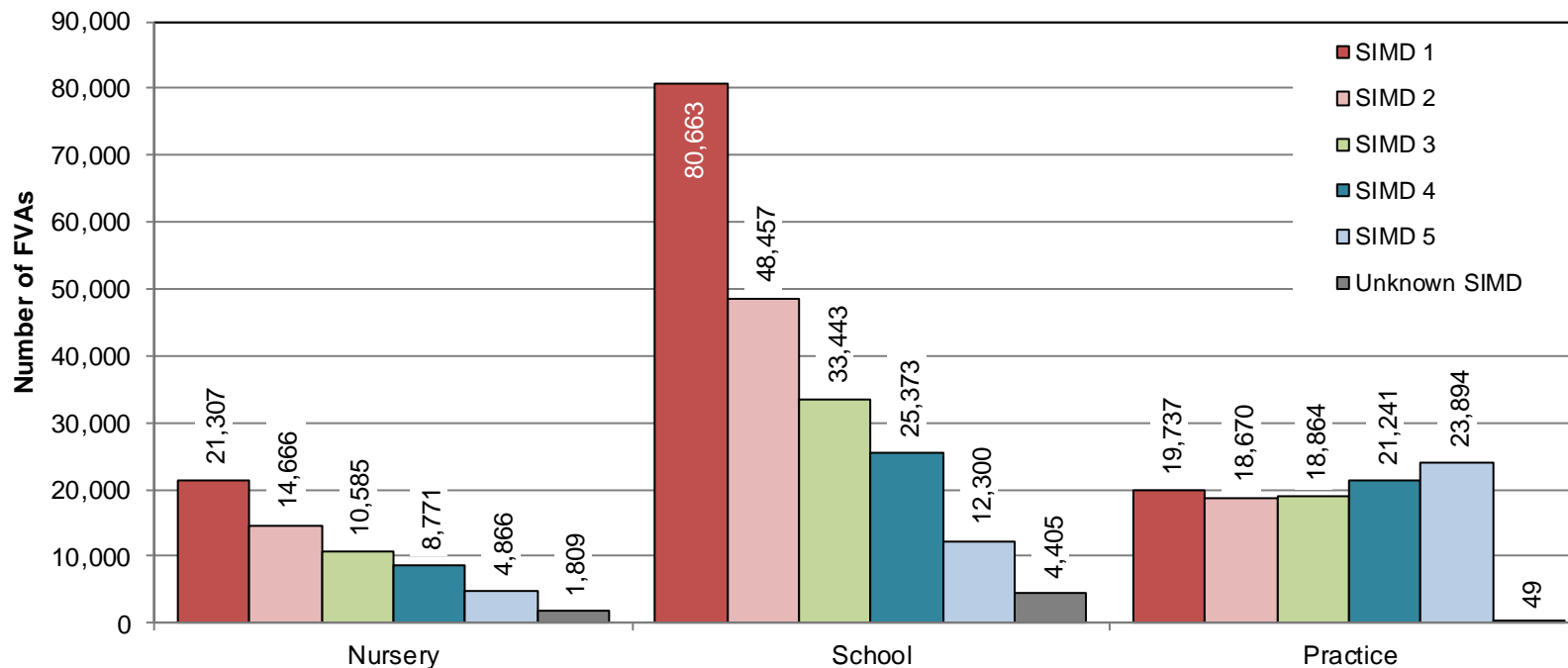


Figure 23: SIMD (national) distribution of FVAs in nursery, school and practice settings – Scotland, 2018/2019

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

NOTES:

- Figure 23 shows distribution of FVAs by setting (nursery, school or dental practice) and national SIMD applied in 2018/19 academic (Childsmile Nursery and School) or financial (Childsmile Practice) year.
 Across the settings, 121,707 FVAs were applied to SIMD 1 children; 81,793 FVAs to SIMD 2 children; 62,892 to SIMD 3; 55,385 to SIMD 4; and 41,060 FVAs were applied to SIMD 5 children. In total, 369,100 FVAs were applied in Nursery, School and Practice settings combined (including FVAs to children with unknown SIMD).
- SIMD 2016 (national) was used.

Childsmile workforce

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

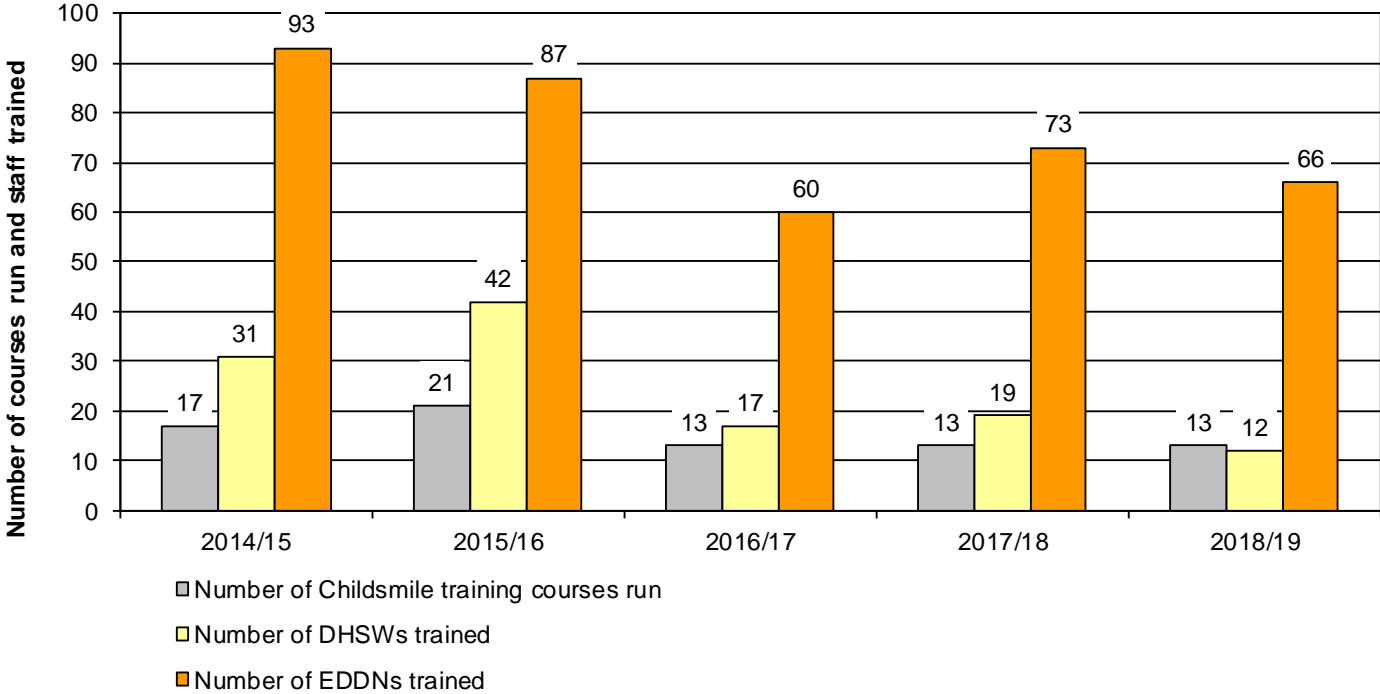


Figure 24: NES Childsmile training courses and staff trained – Scotland, 2014/15-2018/19 financial year

DHSW – Dental Health Support Worker, EDDN – Extended Duty Dental Nurse.

NOTE: Figure 24 presents data on the number of Childsmile training courses run and staff trained. The data are provided by NHS Education for Scotland (NES).

The information on whether an EDDN trained was from an independent contractor GDS practice or from a PDS practice, which was included into previous reports, is no longer collected by NES (from of 2017/18 onwards).

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 (Childsmile Core) are those establishments (pre-school establishments or primary schools) that had at least one toothbrushing monitoring contact recorded on the Childsmile@HIC system within the reporting period.
SIMD	<p>Scottish Index of Multiple Deprivation – The measure of deprivation used throughout this report is the 2016 population-weighted Scottish Index of Multiple Deprivation (SIMD). The Index considers 38 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.</p> <p>Health Board (local) SIMD is used for Childsmile Core as Health Boards utilise the local SIMD index for targeting within this part of the programme.</p>
Total number of pre-school educational establishments	The total numbers of pre-school educational establishments as at July 2019 were provided by the Childsmile teams in NHS Boards.
Total number of local authority primary schools	Total numbers of local authority primary schools as at September 2018 are from <i>Openings and Closings Exercise</i> , June 2018, by the Scottish Government (available online at: https://www2.gov.scot/Topics/Statistics/Browse/School-Education/Datasets/contactdetails)

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	<p>Scottish Index of Multiple Deprivation – The measure of deprivation used is the 2016 population-weighted Scottish Index of Multiple Deprivation (SIMD). The Index considers 38 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.</p> <p>Health Board (local) SIMD is used for Childsmile Nursery and School as Health Boards utilise the local SIMD index for targeting within this part of the programme.</p>
Targeted children in participating nurseries/schools	<p>The number of targeted children in participating nurseries and schools is derived from the Childsmile@HIC system class lists.</p> <p>The number of targeted children in schools relates to the children in the primary years groups reached by the Childsmile teams in participating schools, e.g. Childsmile 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.</p>
Total number of children (of nursery age, P1-P2 and P1-P4 age) in population	<p>The population baselines in this report are based on Small Area Population Estimates as at 30 June within each reporting year, e.g. the 2018/19 data is based on Small Area Population Estimates as at 30 June 2018. 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.</p> <p>In this report the total nursery age (3- and 4-year-olds) and cumulative P1-P2 and P1-P4 age populations are used.</p>
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 Childsmile Practice programme is a universally accessible child-centred NHS dental service. As part of the Childsmile 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 Childsmile dental service, where a programme of Childsmile care, tailored to meet the needs of the individual child, will be provided by the dental team.
Children receiving dietary advice	Children receiving dietary advice are those children who received at least one dietary advice from a dentist or dental care professional within the reporting period. Numbers are reported separately for 0-2 years old children and 3-5 years old children (inclusive).
Children receiving toothbrushing instruction	Children receiving toothbrushing instruction are those children who received toothbrushing instruction from a dentist or dental care professional at least once within the reporting period. Numbers are reported separately for 0-2 years old children and 3-5 years old children (inclusive).
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 Childsmile 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 the Information Services Division (ISD): https://www.isdscotland.org/Health-Topics/Dental-Care/General-Dental-Service/registration-and-participation.asp
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 Childsmile" result was recorded.
Children with a Childsmile dental appointment arranged	Children with a Childsmile 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 Childsmile.
Children with <i>at least one</i> 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 children (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 <i>two or more</i> FVAs	Children with two or more FVAs (made by a dentist or dental care professional) are those 2-5 years old children (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 Childsmile interventions	Dental practices delivering Childsmile interventions are those independent contractor GDS practices that have delivered any of the Childsmile interventions (toothbrushing instruction, dietary advice or fluoride varnish application) within the reporting period. ISD are unable to report robust Public Dental Service (PDS) data therefore the total number of PDS practices delivering Childsmile interventions cannot be reported.
Independent contractor GDS (independent contractor General Dental Services)	Independent contractor General Dental Services are independent practices contracted to work on behalf of local NHS Boards. 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	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 38 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 and SIMD 2016 was used for reporting 2015/16–2018/19 data. National SIMD is used for Childsmile 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 31st March 2019 were supplied by ISD 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 Childsmile.
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.

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Data supplied by:

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November 2019



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