



Childsmile

National Headline Data

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Executive summary

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

Childsmile Core

Participating establishments

- According to the data recorded on the Childsmile@HIC system, 2,597 pre-school establishments and 1,315 primary schools were participating in the Childsmile Core toothbrushing programme in Scotland during the 2017/18 academic year (Figs 1 & 2, p.3 and Tab 1 p.4). This is a small decrease in comparison with the 2016/17 figures (2,644 and 1,346, respectively).

Childsmile Nursery & School

Participating establishments

- 975 pre-school establishments and 961 primary schools were participating in the Childsmile Nursery and School programme in Scotland during the 2017/18 academic year (Fig 3, p.5 and Tab 2, p.6). This is an increase in comparison with 2016/17 figures: 964 pre-school establishments and 919 primary schools.

NOTE: A new age filter has been applied when reporting Childsmile Nursery & School 2016/17 and 2017/18 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 and 2017/18 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the pre-2016/17 data.

Consent rates

- During the 2017/18 academic year, the average consent rate for Scotland, as a percentage of targeted children, was 88% among nursery children (up by 1% in comparison with the 2016/17 figure) and 87% among school children (1% down from the 2016/17 figure) (Figs 4 & 5, p.7-8).
- In the 2017/18 academic year consent rates varied between boards. For nurseries the range was from 81% to 97%, and for schools 82% to 95%, of targeted children (Tabs 3 & 4, p.9-10).

Fluoride varnish application rates

- 71% of targeted nursery children received at least one fluoride varnish application in the 2017/18 academic year – same proportion as in 2016/17 (Fig 4, p.7). 82% of targeted school children received at least one fluoride varnish application in the 2017/18 academic year, which is 1% lower than in 2016/17 (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 2017/18 academic year ranged from 66% to 82% in nurseries and from 78% to 91% in schools (Tabs 3 & 4, p. 9-10).
- 41% of targeted nursery children received *two or more* fluoride varnish applications in the 2017/18 academic year (1% decrease in comparison with the 2016/17 proportion) (Fig 4, p.7). 68% of targeted school children received *two or more* fluoride varnish applications in the 2017/18 academic year – same proportion as in 2016/17 (Fig 5, p.8).
- The percentage of children receiving *two or more* fluoride varnish applications ranged from 32% to 57% for nurseries, and from 61% to 83% for primary schools across NHS Boards (as a percentage of targeted children, 2017/18 academic year) (Tabs 3 & 4, p. 9-10).

SIMD quintile distribution of children receiving a fluoride varnish application:

- 36% of nursery children and 42% of school children who received *at least one* fluoride varnish application within 2017/18 academic year were in SIMD 1 quintile (health board (local) SIMD 2016) (Figs 6 & 7, p.12-13).

- Similarly, 36% of nursery children and 42% 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:

- 46% of the population of nursery aged children residing in SIMD 1 quintile received *at least one* fluoride varnish application in the 2017/18 academic year. 27% received *two or more* fluoride varnish applications (health board (local) SIMD 2016) (Figs 8 & 9, p.14-15).
- 66% of the population of P1-P4 aged children residing in SIMD 1 quintile received *at least one* fluoride varnish application in the 2017/18 academic year. 55% 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

- 13,617 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 2016/17 figure (14,132 children) (Fig 14, p.20).
- 14,264 children were successfully contacted by a Dental Health Support Worker in the 2017/18 financial year – a decrease of 2% in comparison with 2016/17 (14,501 children) (Fig 14, p.20).
- In the 2017/18 financial year the majority of children were referred to Dental Health Support Workers by a Health Visitor – 10,254; 1,971 via ‘Other’ source; 489 from a dentist; 286 via Clinic; 184 were referred by NHS 24; 172 were self-referrals and for 261 children the type of referral was not specified (Fig 15, p.21).
- There were 13,974 children with at least one kept DHSW appointment; 332 families who refused Childsmile; 201 families that could not be contacted; and for 1,955 families the end result was an ‘FTA / Not at home’ (Fig 16, p.22).
- Within the 2017/18 financial year, 13,947 children had at least one kept DHSW appointment. Of these children, 12,353 had their first kept appointment within the reporting period. 1,997 children had their second kept appointment and 744 had their third (or greater) kept DHSW appointment within 2017/2018 (for these children, their prior kept appointment may have occurred in an earlier reporting period) (Fig 17, p.23).

Practice engagement

- 88% (909) of independent contractor General Dental Service practices were delivering Childsmile interventions in the 2017/18 financial year. For comparison, 86% (876) were delivering Childsmile in the 2016/17 financial year (Tab 8, p.24).

Delivery in dental practice

- The proportions of 0-2-year-old registered with an NHS dentist receiving toothbrushing / dietary advice in the 2017/18 financial year were 8% higher than in the previous, 2016/17 year (Fig 18, p.25).
- The proportions of 3-5-year-old registered with an NHS dentist receiving toothbrushing / dietary advice in the 2017/18 financial year were 5% higher than in 2016/17 (Fig 19, p.25).
- During the 2017/18 financial year, 78% of 0-2 year old children registered with an NHS dentist in Scotland (NHS Board range: 64%-91%), and 48% of 3-5 year old children registered with an NHS dentist in Scotland received *toothbrushing instruction* (NHS Board range: 33%-64%) (Tabs 9 & 10, p.26-27).
- 76% of 0-2 year old children registered with an NHS dentist in Scotland (NHS Board range: 62%-93%), and 48% of 3-5 year old children registered with an NHS dentist in Scotland received *dietary advice* (NHS Board range: 33%-64%) (Tabs 9 & 10, p.26-27).
- The proportion of 2-5 year old children registered with an NHS dentist who received *at least one* fluoride varnish application in the 2017/18 financial year increased by 4% in comparison with the

2016/17 proportion, while the proportion of those who received *two or more* fluoride varnish applications, on the contrary, decreased by 1% (Fig 21, p.29).

- In the 2017/18 financial year, 43% of 2-5 year old children registered with an NHS dentist (NHS Board range: 28%-59%) received *at least one* fluoride varnish application and 17% 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: 8%-25% (Tab 11, p.30).
- 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 37% 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 13% in the most deprived quintile to 22% in the least deprived quintile) (Fig 22, p.31).

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

- In 2017/18, 62,133 fluoride varnish applications were delivered in nursery settings, 192,369 in school settings and 99,664 in dental practice settings (Tab 12, p.32). There was a decrease in fluoride varnish applications in nursery settings (8% decrease) in comparison with the 2016/17 figures. On the contrary, there was a 1% increase in the school settings and 2% increase in the numbers of fluoride varnish applications delivered in dental practice settings.

Childsmile Workforce

- In the 2017/18 financial year, 13 Childsmile training courses were run, 19 Dental Health Support Workers and 73 Extended Duty Dental Nurses were trained (Fig 24, p.34). For comparison, in the 2016/17 financial year 13 courses were run with 17 Dental Health Support Workers and 60 Extended Duty Dental Nurses trained.

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Abbreviations

List of abbreviations of NHS Board names

| | |
|------------|-------------------------|
| AA | Ayrshire & Arran |
| B | Borders |
| DG | Dumfries & Galloway |
| F | Fife |
| FV | Forth 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 3rd September 2018, and Childsmile Practice Primary Care Dental Services (PCDS) section – as of September 2018. Figures may be subject to further updating¹.

This report covers the following periods:

- Childsmile Core and Childsmile Nursery & School: 2013/14 to 2017/18 academic year (data from the Health Informatics Centre (HIC));
- Childsmile Practice – DHSW data: 2013/14 to 2017/18 financial year (data from HIC);
- Childsmile Practice – PCDS data: 2013/14 to 2017/18 financial year (data from the Information Services Division (ISD) Scotland);
- Childsmile Workforce – training figures: 2013/14 to 2017/18 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/documents/5225.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 2017/18 financial year this field was only completed for 5.2% of the total number of the conducted 6-8 week reviews.

Public Dental Service

The new contract of employment designed to modernise the terms and conditions of community and salaried dentists was introduced in Scotland in September 2013. The community dental service and the salaried general dental services in Scotland are now part of the Public Dental Service (PDS).

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.

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

The monitoring of these P3 to P7 children started in January 2011 in NHS Orkney, April 2011 in NHS Shetland and August 2011 in NHS Western Isles.

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

Measure of deprivation

The measure of deprivation used throughout this report is 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 2015/16–2017/18 data, while SIMD 2012 was used for 2013/14 and 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 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 changes 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.

As a result of this change, the data for the 2014/15-2017/18 academic/financial years are reported using this new NHS Board configuration, whereas the data for previous years are reported using the 2006 NHS Board configuration.

Population baselines

The population baselines in this report are based on Small Area Population Estimates (based on the 2001 Census). The baselines for 2013/14 and 2014/15 in this report are based on Small Area Population Estimates at 30 June 2013, for 2015/16 – on Small Area Population Estimates at 30 June 2015, for 2016/17 – on Small Area Population Estimates at 30 June 2016, and the 2017/18 data is based on Small Area Population Estimates at 30 June 2017. The population estimates were 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, 2,597 pre-school establishments and 1,315 primary schools were participating in the Childsmile Core toothbrushing programme in Scotland during the 2017/2018 academic year.

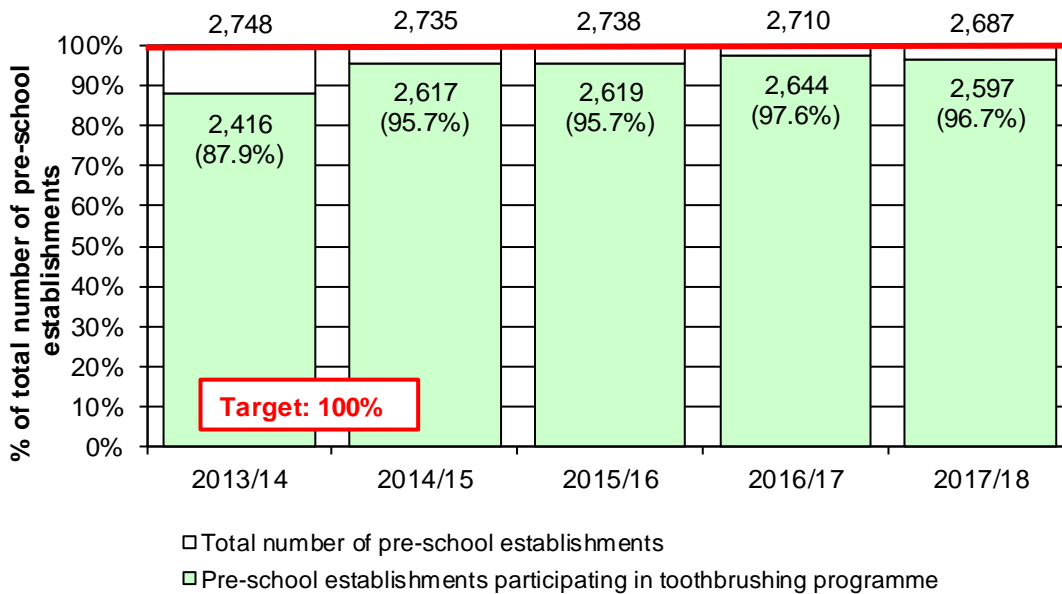


Figure 1: Nurseries participating in toothbrushing programme in Scotland, 2013/14-2017/18 academic year

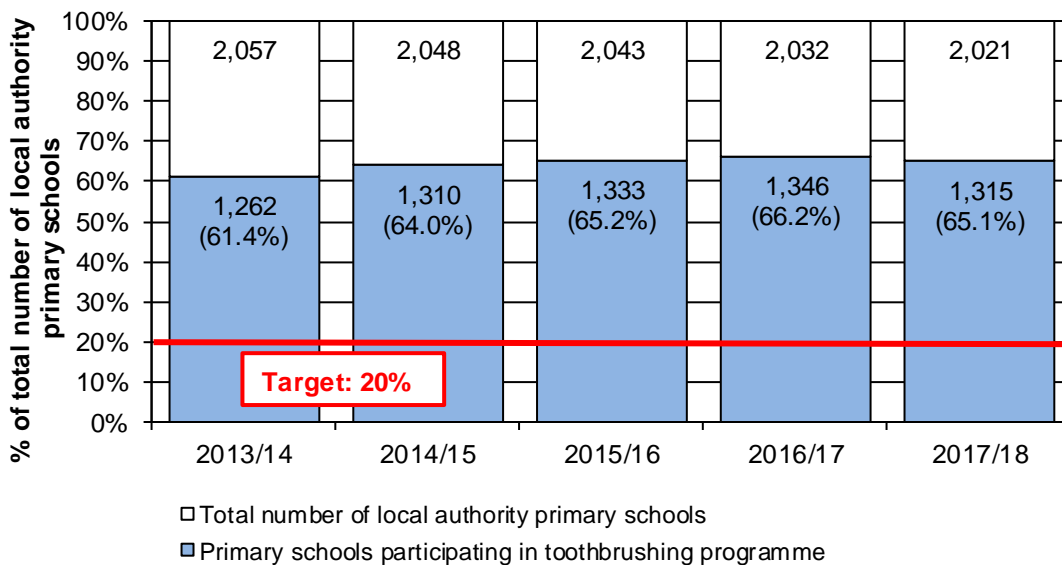


Figure 2: Primary schools participating in toothbrushing programme in Scotland, 2013/14-2017/18 academic year

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, 2017/2018 academic year

| Health 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 | 155 | 147 | 94.8% | 132 | 97 | 73.5% |
| B | 75 | 72 | 96.0% | 61 | 63 | 103.3% |
| DG | 89 | 86 | 96.6% | 99 | 86 | 86.9% |
| F | 166 | 163 | 98.2% | 135 | 58 | 43.0% |
| FV | 140 | 140 | 100.0% | 107 | 89 | 83.2% |
| G | 338 | 288 | 85.2% | 244 | 77 | 31.6% |
| GGC | 460 | 459 | 99.8% | 299 | 267 | 89.3% |
| H | 267 | 252 | 94.4% | 252 | 147 | 58.3% |
| La | 277 | 275 | 99.3% | 245 | 184 | 75.1% |
| Lo | 428 | 428 | 100.0% | 222 | 113 | 50.9% |
| O | 21 | 21 | 100.0% | 19 | 19 | 100.0% |
| S | 25 | 23 | 92.0% | 28 | 26 | 92.9% |
| T | 220 | 220 | 100.0% | 156 | 66 | 42.3% |
| WI | 26 | 23 | 88.5% | 22 | 23 | 104.5% |
| Scotland | 2,687 | 2,597 | 96.7% | 2,021 | 1,315 | 65.1% |

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 2017 to June 2018.
- 2) The total numbers of pre-school establishments as at July 2018 were provided by the Childsmile teams in NHS Boards.
- 3) Total numbers of local authority primary schools as at September 2017 are from *Openings and Closings Exercise*, June 2017, by the Scottish Government (<http://www.scotland.gov.uk/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.

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 3 years of age: The Childsmile Nursery programme includes children of 3 years and upwards in all targeted nurseries. Some Health Boards, but not all, offer fluoride varnish to a small number of 2 year old children attending targeted nurseries. To ensure population rates are comparable across all Health Boards, data for 2 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.

New age filter for Childsmile Nursery & School data: A new age filter has been applied when reporting Childsmile Nursery & School 2016/17 and 2017/18 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 and 2017/18 data for Nursery, P1-P2 and P1-P4 are not directly comparable with the previous years' data.

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 2017/2018 academic year, 975 nurseries and 961 primary schools were participating in the fluoride varnish programme.

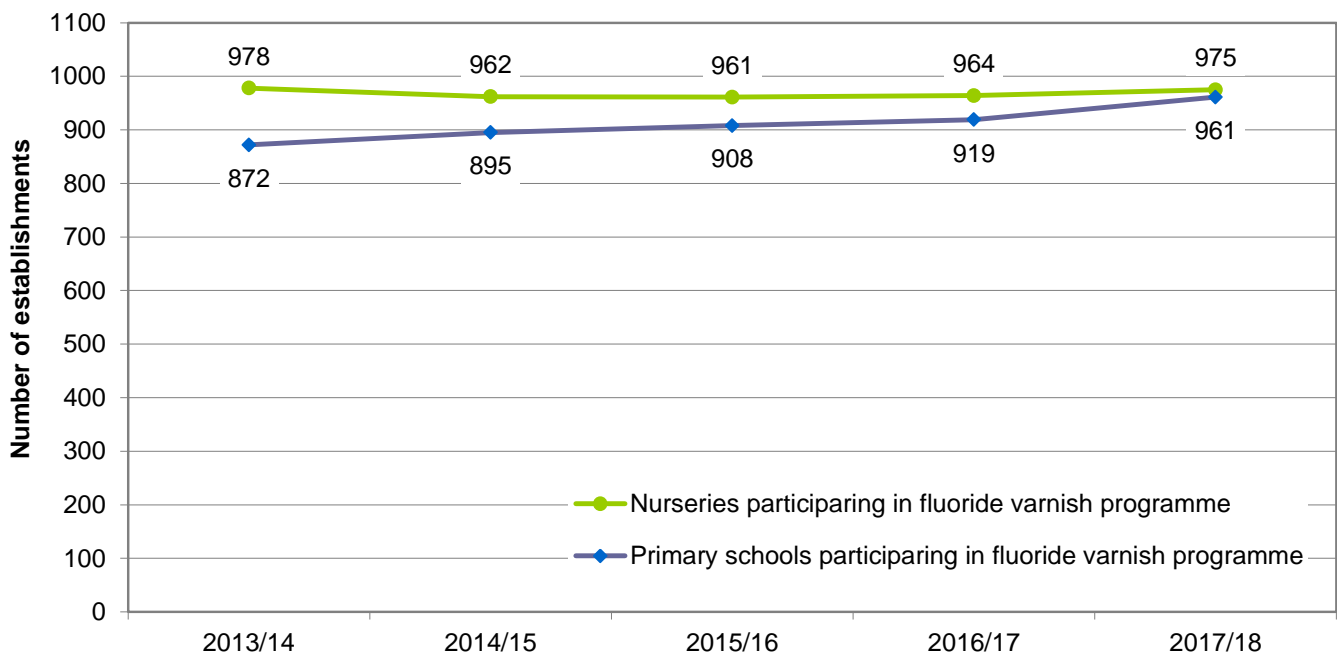


Figure 3: Nurseries and primary schools participating in fluoride varnish programme in Scotland, 2013/14-2017/18 academic year

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, 2013/14-2017/18 academic year

| NHS Board | Number of participating nurseries | | | | | Number of participating primary schools | | | | |
|-----------------|-----------------------------------|------------|------------|------------|------------|---|------------|------------|------------|------------|
| | 13/14 | 14/15 | 15/16 | 16/17 | 17/18 | 13/14 | 14/15 | 15/16 | 16/17 | 17/18 |
| AA | 34 | 38 | 37 | 38 | 38 | 37 | 39 | 44 | 48 | 50 |
| B | 18 | 18 | 18 | 19 | 21 | 17 | 17 | 17 | 19 | 25 |
| DG | 10 | 10 | 10 | 10 | 11 | 10 | 10 | 10 | 10 | 11 |
| F | 40 | 41 | 40 | 39 | 39 | 41 | 43 | 41 | 44 | 46 |
| FV | 30 | 30 | 39 | 39 | 39 | 30 | 31 | 34 | 34 | 36 |
| G | 157 | 155 | 148 | 149 | 148 | 85 | 81 | 84 | 81 | 82 |
| GGC | 126 | 122 | 123 | 123 | 120 | 139 | 139 | 140 | 140 | 146 |
| H | 95 | 93 | 93 | 88 | 96 | 77 | 77 | 78 | 75 | 84 |
| La | 269 | 262 | 263 | 264 | 268 | 228 | 253 | 253 | 254 | 255 |
| Lo | 87 | 80 | 77 | 77 | 78 | 88 | 87 | 89 | 90 | 106 |
| O | 19 | 21 | 21 | 21 | 21 | 20 | 19 | 19 | 19 | 19 |
| S | 24 | 23 | 23 | 22 | 22 | 29 | 27 | 27 | 27 | 27 |
| T | 44 | 45 | 44 | 51 | 50 | 46 | 47 | 47 | 55 | 51 |
| WI | 25 | 24 | 25 | 24 | 24 | 25 | 25 | 25 | 23 | 23 |
| Scotland | 978 | 962 | 961 | 964 | 975 | 872 | 895 | 908 | 919 | 961 |

NOTES:

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

Consent and fluoride varnish application rates

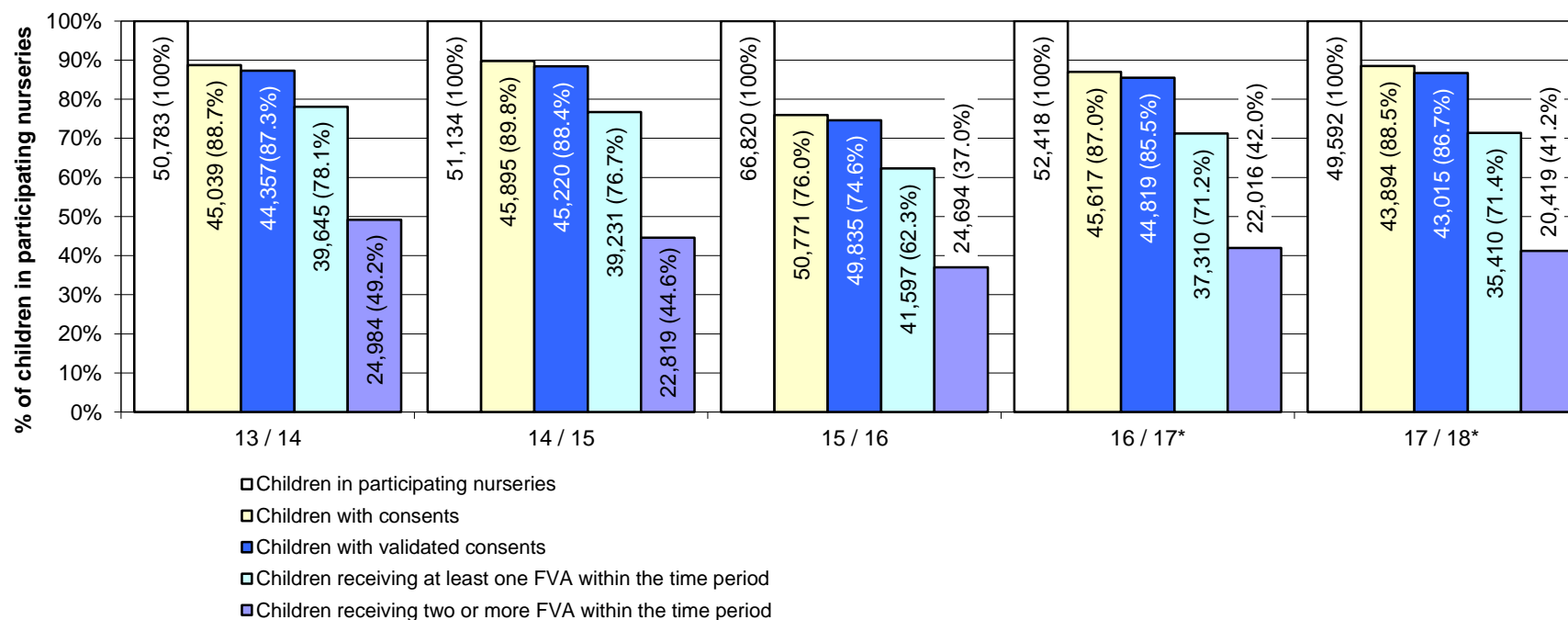


Figure 4: Nursery Consent and FVA rates (as a % of the total number of children in participating nurseries) – Scotland, 2013/14-2017/18 academic year

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 2017/2018 academic year the number of 3-4 year old targeted children in participating nurseries equals 49,592 (100%), of those 43,894 (88.5%) children were consented for FVA, 43,015 (86.7%) had validated consents, 35,410 (71.4%) received at least one FVA and 20,419 (41.2%) 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 and 2017/18 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 2015/16–2017/18 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 2015/16–2017/18 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 2015/16–2017/18 proportions of children with consents, with validated consents and those receiving fluoride varnish is not directly comparable with the previous years' proportions.

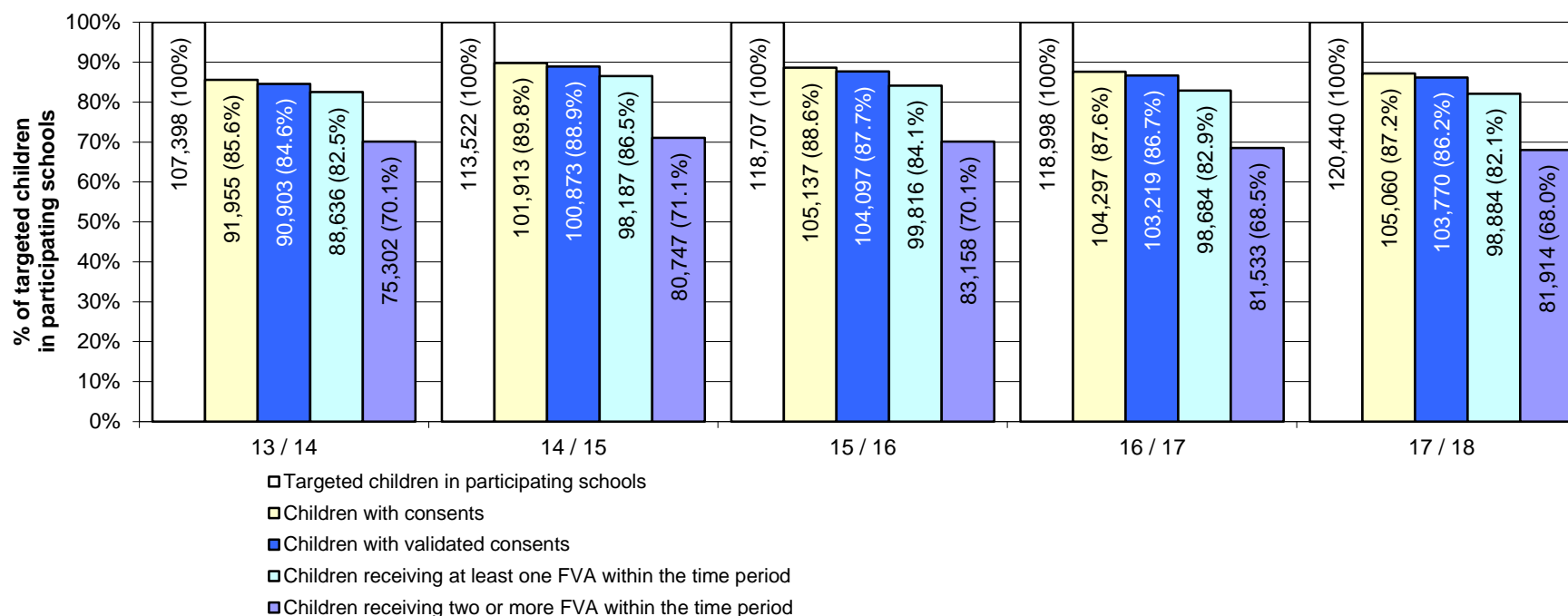


Figure 5: School Consent and FVA rates (as a % of the total number of targeted children in participating schools) – Scotland, 2013/14-2017/18 academic year

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 2017/2018 academic year the number of targeted children in participating primary schools equals 120,440 (100%), of those 105,060 (87.2%) children were consented for FVA, 103,770 (86.2%) had validated consents, 98,884 (82.1%) received at least one FVA and 81,914 (68.0%) 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 2015/16–2017/18 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 2015/16–2017/18 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 2015/16–2017/18 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, 2017/2018 academic year

| NHS board | Population of 3-4 year old children in NHS board (baseline) | Number of targeted 3-4 year old nursery children in participating establishments | | Nursery children with consents | | Nursery children with validated consents | | Nursery children receiving at least one 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 |
| AA | 7,413 | 2,620 | 35.3% | 2,386 | 91.1% | 2,335 | 89.1% | 1,917 | 73.2% | 80.3% | 1,140 | 43.5% | 47.8% |
| B | 2,480 | 789 | 31.8% | 738 | 93.5% | 730 | 92.5% | 619 | 78.5% | 83.9% | 364 | 46.1% | 49.3% |
| DG | 2,763 | 523 | 18.9% | 481 | 92.0% | 466 | 89.1% | 431 | 82.4% | 89.6% | 292 | 55.8% | 60.7% |
| F | 8,023 | 2,704 | 33.7% | 2,324 | 85.9% | 2,288 | 84.6% | 1,782 | 65.9% | 76.7% | 877 | 32.4% | 37.7% |
| FV | 6,442 | 2,248 | 34.9% | 2,132 | 94.8% | 2,114 | 94.0% | 1,839 | 81.8% | 86.3% | 1,030 | 45.8% | 48.3% |
| G | 12,713 | 6,622 | 52.1% | 5,835 | 88.1% | 5,779 | 87.3% | 4,841 | 73.1% | 83.0% | 2,691 | 40.6% | 46.1% |
| GGC | 25,741 | 7,626 | 29.6% | 6,519 | 85.5% | 6,276 | 82.3% | 5,187 | 68.0% | 79.6% | 2,957 | 38.8% | 45.4% |
| H | 6,188 | 3,215 | 52.0% | 2,769 | 86.1% | 2,730 | 84.9% | 2,300 | 71.5% | 83.1% | 1,332 | 41.4% | 48.1% |
| La* | 14,535* | 14,594* | 100.4%* | 13,009 | 89.1% | 12,770 | 87.5% | 10,160 | 69.6% | 78.1% | 5,844 | 40.0% | 44.9% |
| Lo | 19,605 | 4,349 | 22.2% | 4,069 | 93.6% | 3,938 | 90.5% | 3,292 | 75.7% | 80.9% | 2,109 | 48.5% | 51.8% |
| O | 400 | 388 | 97.0% | 358 | 92.3% | 355 | 91.5% | 297 | 76.5% | 83.0% | 187 | 48.2% | 52.2% |
| S | 533 | 503 | 94.4% | 486 | 96.6% | 468 | 93.0% | 385 | 76.5% | 79.2% | 220 | 43.7% | 45.3% |
| T | 8,504 | 2,896 | 34.1% | 2,346 | 81.0% | 2,328 | 80.4% | 1,957 | 67.6% | 83.4% | 1,084 | 37.4% | 46.2% |
| WI | 531 | 516 | 97.2% | 443 | 85.9% | 439 | 85.1% | 403 | 78.1% | 91.0% | 292 | 56.6% | 65.9% |
| Sco | 115,871 | 49,592 | 42.8% | 43,894 | 88.5% | 43,015 | 86.7% | 35,410 | 71.4% | 80.7% | 20,419 | 41.2% | 46.5% |

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 and 2017/18 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 data presented in previous reports.
- 3) The population baselines for 2017/2018 in this report are based on Small Area Population Estimates at 30 June 2017, 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) The way the number of targeted children in participating nurseries/schools is calculated has been changed for the 2015/16–2017/18 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 2015/16–2017/18 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 2015/16–2017/18 proportions of children with consents, with validated consents and those receiving fluoride varnish is not directly comparable with the previous years' proportions.
- 6) * For NHS Lanarkshire the mid-2017 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, 2017/2018 academic year

| Health Board | Population baseline (up to whatever primary year reached in each HB) | Number of targeted children in participating schools | | Number of primary school children with consents | | Primary school children with validated consents | | Number of children receiving at least one fluoride varnish application | | | Number of children receiving two or more fluoride varnish applications | | |
|--------------|--|--|--------------|---|--------------|---|--------------|--|--------------|--------------|--|--------------|--------------|
| | P | T | % of P | C | % of T | n | % of T | n | % of T | % of C | n | % of T | % of C |
| AA | 28,180 | 5,590 | 19.8% | 4,930 | 88.2% | 4,856 | 86.9% | 4,629 | 82.8% | 93.9% | 3,756 | 67.2% | 76.2% |
| B | 8,575 | 3,744 | 43.7% | 3,308 | 88.4% | 3,281 | 87.6% | 3,164 | 84.5% | 95.6% | 2,668 | 71.3% | 80.7% |
| DG | 6,115 | 1,587 | 26.0% | 1,436 | 90.5% | 1,399 | 88.2% | 1,353 | 85.3% | 94.2% | 1,229 | 77.4% | 85.6% |
| F | 29,601 | 9,910 | 33.5% | 8,739 | 88.2% | 8,712 | 87.9% | 8,274 | 83.5% | 94.7% | 6,775 | 68.4% | 77.5% |
| FV | 24,136 | 4,263 | 17.7% | 3,509 | 82.3% | 3,488 | 81.8% | 3,404 | 79.8% | 97.0% | 2,902 | 68.1% | 82.7% |
| G | 45,585 | 11,831 | 26.0% | 10,413 | 88.0% | 10,369 | 87.6% | 9,880 | 83.5% | 94.9% | 7,249 | 61.3% | 69.6% |
| GGC | 76,026 | 23,903 | 31.4% | 20,565 | 86.0% | 20,078 | 84.0% | 18,579 | 77.7% | 90.3% | 15,674 | 65.6% | 76.2% |
| H | 24,122 | 11,319 | 46.9% | 9,946 | 87.9% | 9,877 | 87.3% | 9,596 | 84.8% | 96.5% | 8,416 | 74.4% | 84.6% |
| La | 53,588 | 22,064 | 41.2% | 19,012 | 86.2% | 18,855 | 85.5% | 17,968 | 81.4% | 94.5% | 14,802 | 67.1% | 77.9% |
| Lo | 68,441 | 13,065 | 19.1% | 11,954 | 91.5% | 11,696 | 89.5% | 11,197 | 85.7% | 93.7% | 9,510 | 72.8% | 79.6% |
| O | 1,668 | 1,638 | 98.2% | 1,492 | 91.1% | 1,470 | 89.7% | 1,453 | 88.7% | 97.4% | 1,286 | 78.5% | 86.2% |
| S | 1,930 | 995 | 51.6% | 946 | 95.1% | 926 | 93.1% | 890 | 89.4% | 94.1% | 763 | 76.7% | 80.7% |
| T | 30,424 | 8,932 | 29.4% | 7,317 | 81.9% | 7,279 | 81.5% | 7,035 | 78.8% | 96.1% | 5,551 | 62.1% | 75.9% |
| WI | 1,990 | 1,601 | 80.5% | 1,494 | 93.3% | 1,485 | 92.8% | 1,463 | 91.4% | 97.9% | 1,332 | 83.2% | 89.2% |
| Sco | 400,381 | 120,440 | 30.1% | 105,060 | 87.2% | 103,770 | 86.2% | 98,884 | 82.1% | 94.1% | 81,914 | 68.0% | 78.0% |

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 2017/2018 in this report are based on Small Area Population Estimates at 30 June 2017, 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.
- 4) The way the number of targeted children in participating nurseries/schools is calculated has been changed for the 2015/16–2017/18 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 2015/16–2017/18 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 2015/16–2017/18 proportions of children with consents, with validated consents and those receiving fluoride varnish is not directly comparable with the previous years' proportions.

Table 5: P1-P4 and P1-P2 targeting, consent and FVA rates – Childsmile School, by NHS Board, 2017/2018 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 two or more FVAs | | |
|-------------------------|---|--|---------------|------------------------------|---------------|--|---------------|---|--------------|---------------|---|--------------|---------------|
| | P | T | % of P | C | % of T | n | % of T | n | % of T | % of C | n | % of T | % of C |
| AA | 16,196 | 5,018 | 30.98% | 4,607 | 91.80% | 4,539 | 90.50% | 4,343 | 86.5% | 94.30% | 3,530 | 70.3% | 76.60% |
| B | 4,862 | 2,100 | 43.19% | 1,905 | 90.70% | 1,885 | 89.80% | 1,819 | 86.6% | 95.50% | 1,544 | 73.5% | 81.00% |
| DG | 6,115 | 1,518 | 24.82% | 1,394 | 91.80% | 1,357 | 89.40% | 1,318 | 86.8% | 94.50% | 1,200 | 79.1% | 86.10% |
| F | 17,176 | 6,066 | 35.32% | 5,417 | 89.30% | 5,397 | 89.00% | 5,177 | 85.3% | 95.60% | 4,244 | 70.0% | 78.30% |
| FV | 13,795 | 3,779 | 27.39% | 3,420 | 90.50% | 3,402 | 90.00% | 3,320 | 87.9% | 97.10% | 2,830 | 74.9% | 82.70% |
| G | 26,579 | 9,091 | 34.20% | 8,171 | 89.90% | 8,133 | 89.50% | 7,764 | 85.4% | 95.00% | 5,742 | 63.2% | 70.30% |
| GGC | 51,561 | 23,055 | 44.71% | 20,110 | 87.20% | 19,635 | 85.20% | 18,237 | 79.1% | 90.70% | 15,384 | 66.7% | 76.50% |
| H | 13,684 | 6,825 | 49.88% | 6,112 | 89.60% | 6,072 | 89.00% | 5,920 | 86.7% | 96.90% | 5,145 | 75.4% | 84.20% |
| La | 30,618 | 19,809 | 64.70% | 17,831 | 90.00% | 17,688 | 89.30% | 16,970 | 85.7% | 95.20% | 14,058 | 71.0% | 78.80% |
| Lo | 40,109 | 12,408 | 30.94% | 11,586 | 93.40% | 11,339 | 91.40% | 10,886 | 87.7% | 94.00% | 9,271 | 74.7% | 80.00% |
| T | 17,707 | 7,943 | 44.86% | 6,987 | 88.00% | 6,950 | 87.50% | 6,738 | 84.8% | 96.40% | 5,344 | 67.3% | 76.50% |
| Mainland - total | 238,402 | 97,611 | 40.94% | 87,540 | 89.70% | 86,397 | 88.50% | 82,492 | 84.5% | 94.20% | 68,292 | 70.0% | 78.00% |
| 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 two or more FVAs | | |
| | P | T | % of P | C | % of T | n | % of T | n | % of T | % of C | n | % of T | % of C |
| O | 463 | 370 | 79.9% | 344 | 93.0% | 339 | 91.6% | 337 | 91.1% | 98.0% | 294 | 79.5% | 85.5% |
| S | 550 | 495 | 90.0% | 475 | 96.0% | 461 | 93.1% | 445 | 89.9% | 93.7% | 382 | 77.2% | 80.4% |
| WI | 536 | 501 | 93.5% | 470 | 93.8% | 466 | 93.0% | 461 | 92.0% | 98.1% | 425 | 84.8% | 90.4% |
| Islands - total | 1,549 | 1,366 | 88.2% | 1,289 | 94.4% | 1,266 | 92.7% | 1,243 | 91.0% | 96.4% | 1,101 | 80.6% | 85.4% |

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) A new age filter has been applied when reporting Childsmile Nursery & School 2016/17 and 2017/18 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 data presented in previous reports.
- 3) The population baselines for 2017/2018 in this report are based on Small Area Population Estimates at 30 June 2017, 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) 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.
- 5) NHS Boards based on the boundaries as at 1st April 2014.
- 6) The way the number of targeted children in participating nurseries/schools is calculated has been changed for the 2015/16–2017/18 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 2015/16–2017/18 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 2015/16–2017/18 proportions of children with consents, with validated consents and those receiving fluoride varnish is not directly comparable with the previous years' proportions.

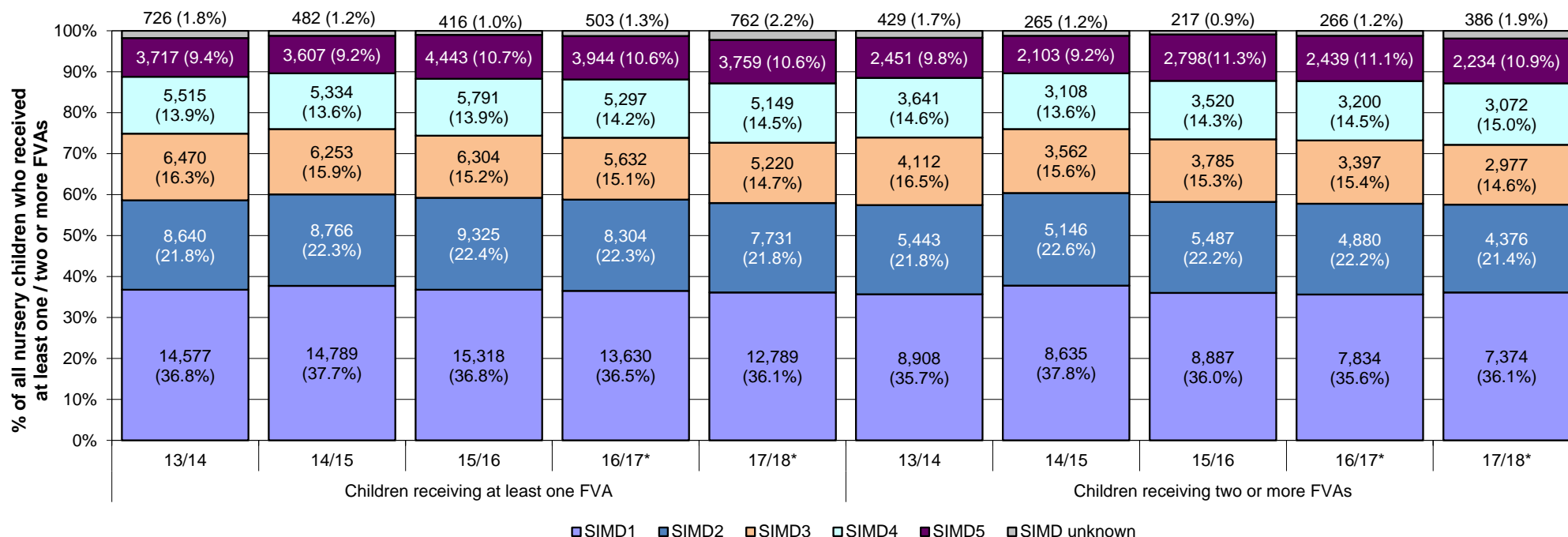


Figure 6: Nursery children receiving at least one and two or more FVAs by SIMD quintile - Scotland, 2013/14-2017/18 academic year

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 2017/2018 academic year, 7,374 children who received two or more FVAs belonged to SIMD1 quintile (36.1% of the total number of children who received two or more FVAs); 4,376 (21.4%) children belonged to SIMD2; 2,977 (14.6%) to SIMD3; 3,072 (15.0%) to SIMD4; 2,234 (10.9%) to SIMD5 quintile; and there were 386 (1.9%) children with unknown SIMD (due to insufficient postcode information). All six categories combined add up to 100%.
- SIMD 2016 (local) was used.
- * A new age filter has been applied when reporting Childsmile Nursery & School 2016/17 and 2017/18 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.

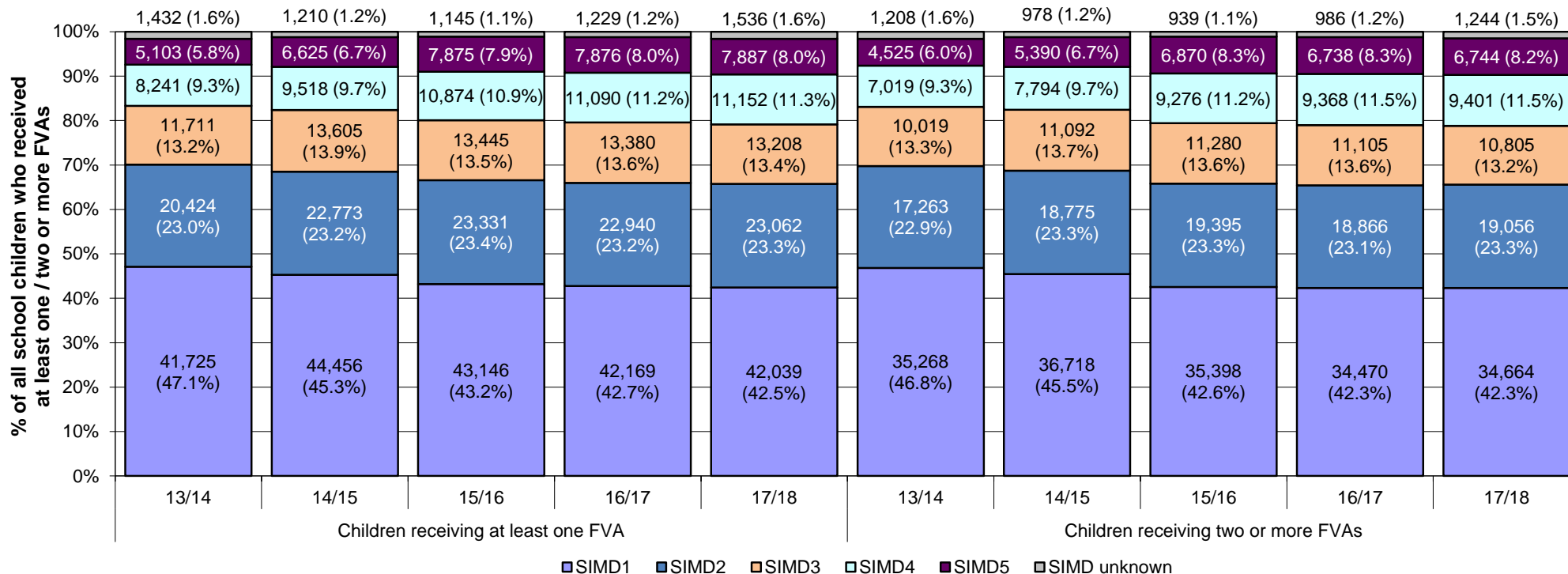


Figure 7: Primary school children receiving at least one and two or more FVAs by SIMD quintile - Scotland, 2013/14-2017/18 academic year

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) was used.

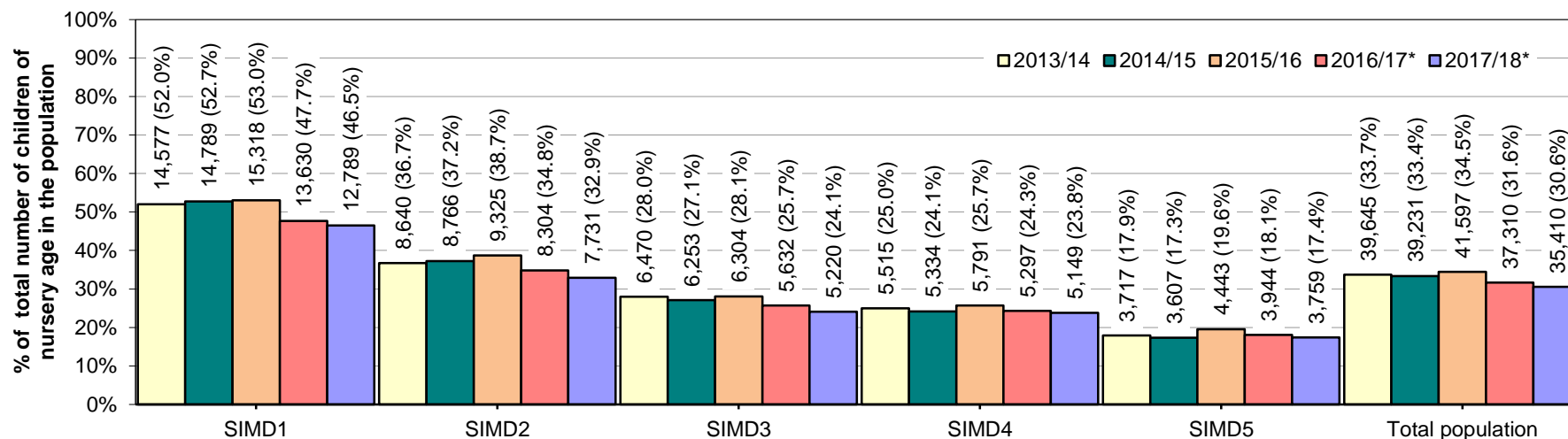


Figure 8: Proportion of population of nursery children in each SIMD (local) quintile who received at least one FVA – Scotland, 2013/14-2017/18 academic year

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) The numerator is nursery children who received *at least one* FVA.
- 3) * A new age filter has been applied when reporting Childsmile Nursery & School 2016/17–2017/18 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 the population of 3-4-year-olds in each SIMD quintile:
 - The population baselines for 2017/2018 in this report were calculated using Small Area Population Estimates at 30 June 2017 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 2016/2017 in this report were calculated using Small Area Population Estimates at 30 June 2016 provided by the NRS. These population estimates are based on the 2011 Census.
 - The population baselines for 2015/2016 in this report were calculated using Small Area Population Estimates at 30 June 2015 provided by the NRS (based on the 2011 Census).
 - The population baselines for 2013/2014 and 2014/2015 in this report were calculated using Small Area Population Estimates at 30 June 2013 provided by the NRS (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 child postcode).
- 6) SIMD 2016 (local) was used.

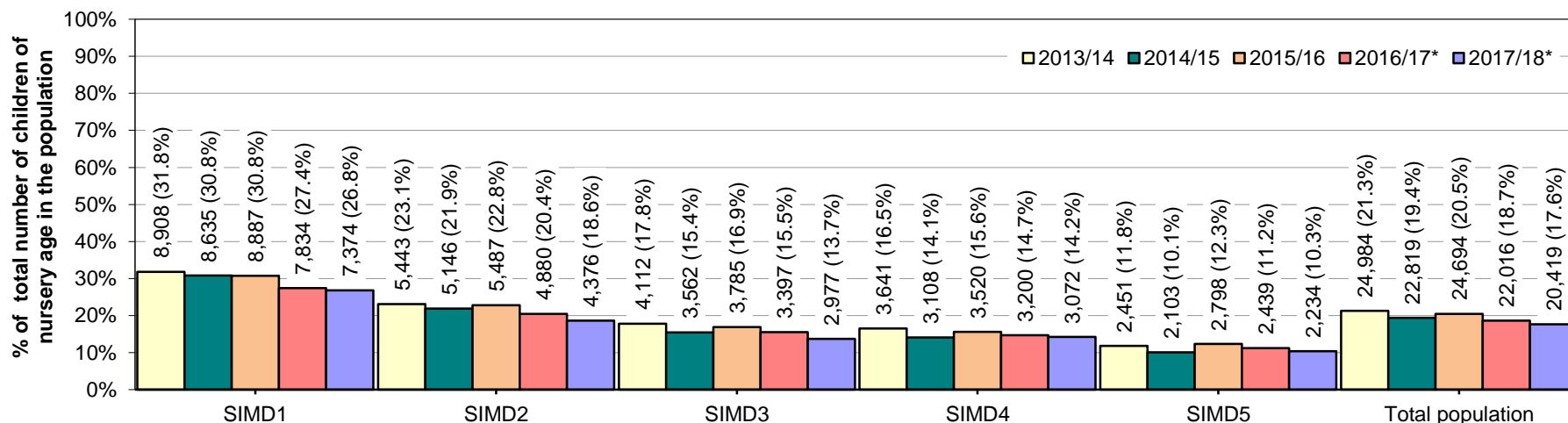


Figure 9: Proportion of population of nursery children in each SIMD (local) quintile who received two or more FVAs – Scotland, 2013/14-2017/18 academic year

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

NOTES:

- 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).
- The numerator is nursery children who received *two or more* FVAs.
- * A new age filter has been applied when reporting Childsmile Nursery & School 2016/17–2017/18 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 denominator is the population of 3-4-year-olds in each SIMD quintile:
 - The population baselines for 2017/2018 in this report were calculated using Small Area Population Estimates at 30 June 2017 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 2016/2017 in this report were calculated using Small Area Population Estimates at 30 June 2016 provided by the NRS. These population estimates are based on the 2011 Census.
 - The population baselines for 2015/2016 in this report were calculated using Small Area Population Estimates at 30 June 2015 provided by the NRS (based on the 2011 Census).
 - The population baselines for 2013/2014 and 2014/2015 in this report were calculated using Small Area Population Estimates at 30 June 2013 provided by the NRS (based on the 2011 Census).
- “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).
- SIMD 2016 (local) was used.

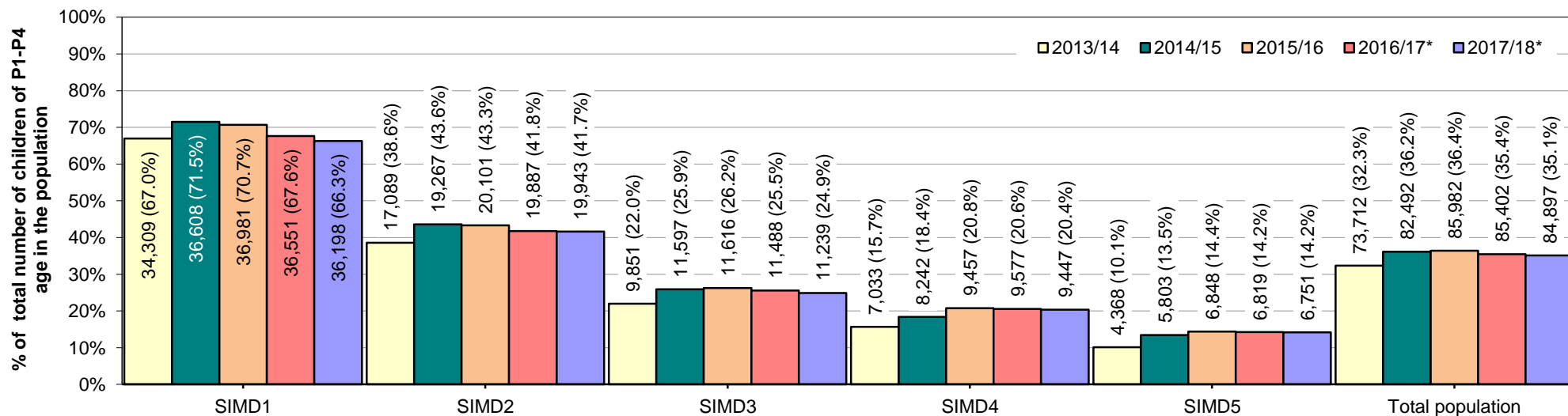


Figure 10: Proportion of population of P1-P4 age children in each SIMD (local) quintile who received at least one FVA – Scotland, 2013/14-2017/18 academic year

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) The numerator is children of P1-P4 age who received *at least one* FVA.
- 3) * A new age filter has been applied when reporting Childsmile Nursery & School 2016/17–2017/18 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 the population of P1-P4 age children (5 to 8 years old) in each SIMD quintile.
 - The population baselines for 2017/2018 in this report were calculated using Small Area Population Estimates at 30 June 2017 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 2016/2017 in this report were calculated using Small Area Population Estimates at 30 June 2016 provided by the NRS. These population estimates are based on the 2011 Census.
 - The population baselines for 2015/2016 in this report were calculated using Small Area Population Estimates at 30 June 2015 provided by the NRS (based on the 2011 Census).
 - The population baselines for 2013/2014 and 2014/2015 in this report were calculated using Small Area Population Estimates at 30 June 2013 provided by the NRS (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 child postcode).
- 6) SIMD 2016 (local) was used.

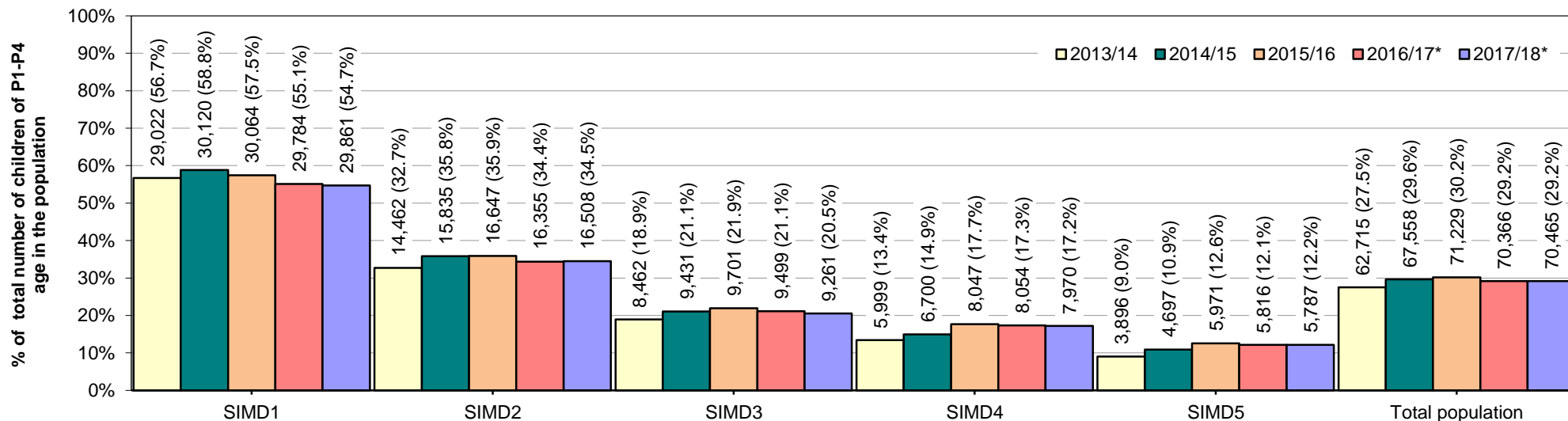


Figure 11: Proportion of population of P1-P4 age children in each SIMD (local) quintile who received two or more FVAs – Scotland, 2013/14-2017/18 academic year

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

NOTES:

- 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).
- The numerator is children of P1-P4 age who received *two or more* FVAs.
- * A new age filter has been applied when reporting Childsmile Nursery & School 2016/17–2017/18 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 denominator is the population of P1-P4 age children (5 to 8 years old) in each SIMD quintile.
 - The population baselines for 2017/2018 in this report were calculated using Small Area Population Estimates at 30 June 2017 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 2016/2017 in this report were calculated using Small Area Population Estimates at 30 June 2016 provided by the NRS. These population estimates are based on the 2011 Census.
 - The population baselines for 2015/2016 in this report were calculated using Small Area Population Estimates at 30 June 2015 provided by the NRS (based on the 2011 Census).
 - The population baselines for 2013/2014 and 2014/2015 in this report were calculated using Small Area Population Estimates at 30 June 2013 provided by the NRS (based on the 2011 Census).
- “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).
- SIMD 2016 (local) was used.

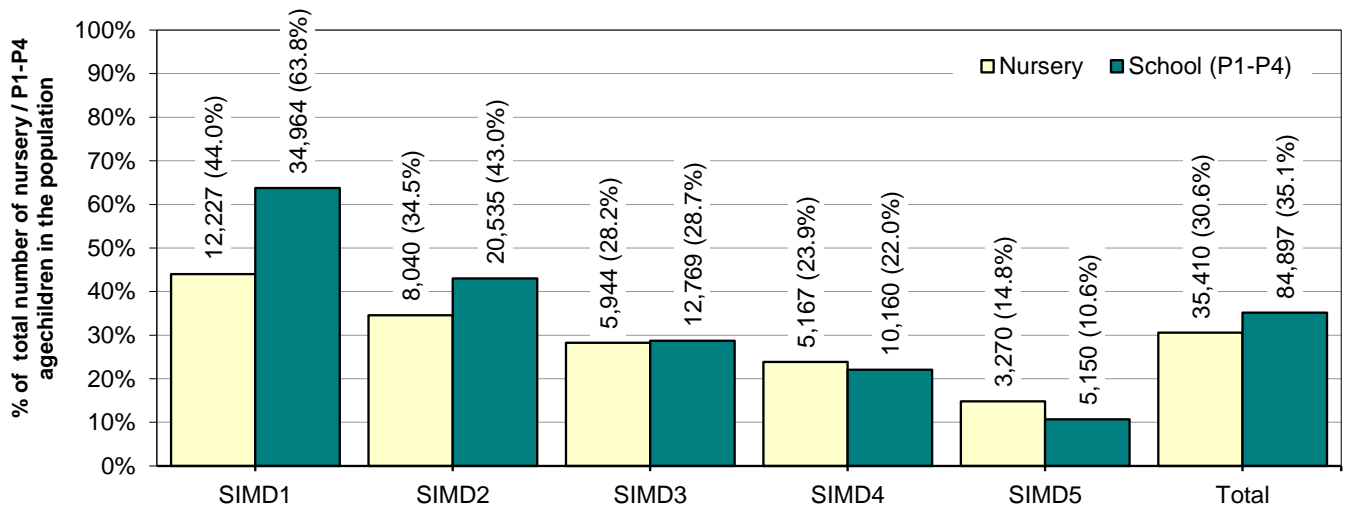


Figure 12: Proportion of population of nursery (3-4 year olds) and P1-P4 children receiving at least one FVA, by national SIMD – Scotland, 2017/2018 academic year

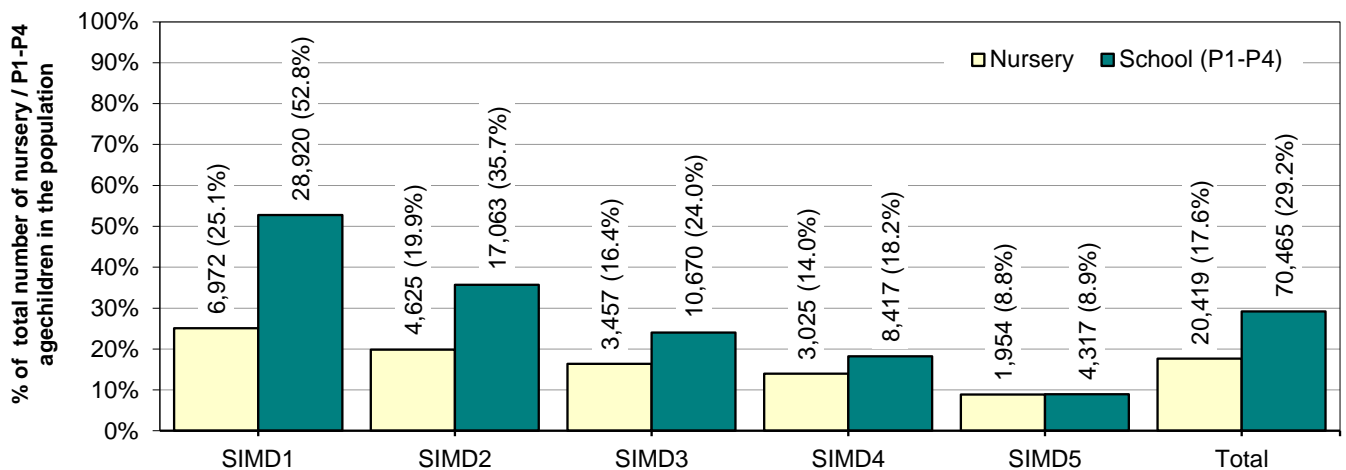


Figure 13: Proportion of population of nursery (3-4 year olds) and P1-P4 children receiving two or more FVAs, by national SIMD – Scotland, 2017/2018 academic year

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 2016/17 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 2016/17–2017/18 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 2017/2018 in this report were calculated using Small Area Population Estimates at 30 June 2017 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) was used.

Table 6: Additional support needs children receiving FVA, by NHS Board, 2017/2018 academic year

| Health Board | Number of ASN children in fluoride varnishing establishments | ASN children receiving at least one FVA | | ASN children receiving two or more FVAs | |
|-----------------|--|---|--------------|---|--------------|
| | N | n | % of N | n | % of N |
| AA | 581 | 387 | 66.6% | 284 | 48.9% |
| B | 71 | 36 | 50.7% | 27 | 38.0% |
| DG | 17 | 0 | 0.0% | 0 | 0.0% |
| F | 271 | 150 | 55.4% | 87 | 32.1% |
| FV | 210 | 77 | 36.7% | 48 | 22.9% |
| G | 65 | 37 | 56.9% | 27 | 41.5% |
| GGC | 82 | 29 | 35.4% | 0 | 0.0% |
| H | 231 | 89 | 38.5% | 38 | 16.5% |
| La | 1,857 | 1,111 | 59.8% | 698 | 37.6% |
| Lo | 1,177 | 572 | 48.6% | 349 | 29.7% |
| O | 1 | 0 | 0.0% | 0 | 0.0% |
| S | 16 | 6 | 37.5% | 0 | 0.0% |
| T | 355 | 236 | 66.5% | 156 | 43.9% |
| WI | 3 | 2 | 66.7% | 1 | 33.3% |
| Scotland | 4,937 | 2,732 | 55.3% | 1,715 | 34.7% |

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.

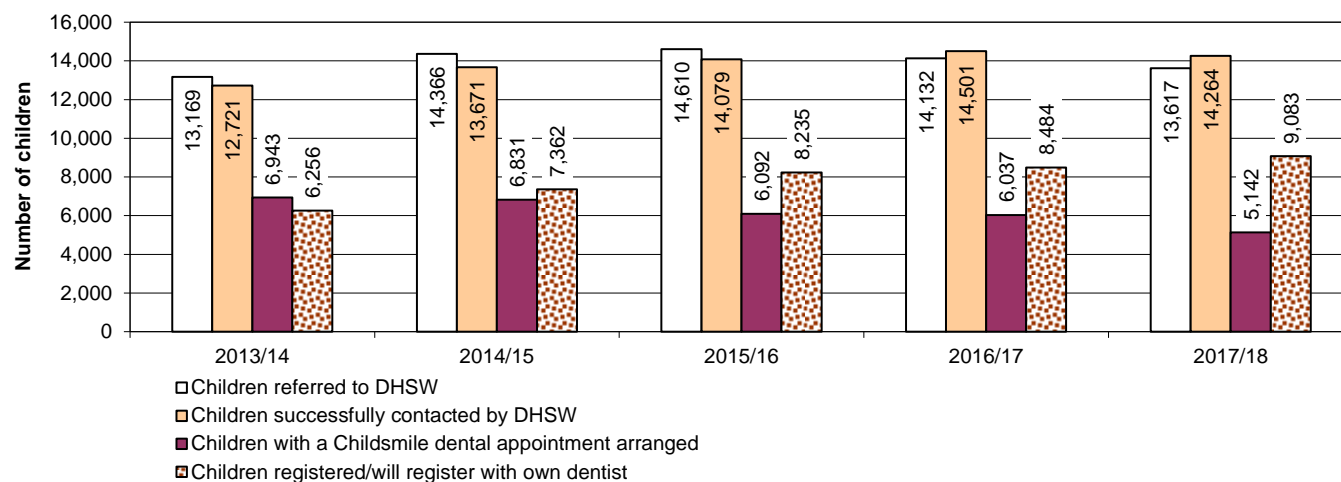


Figure 14: DHSW: Child referrals, contacts, practice appointments made and children registered/will register with own dentist – Scotland, 2013/14-2017/18 financial year

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 2013/14-2017/18.

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.

Table 7: DHSW: Child referrals, contacts, practice appointments made and children registered with own dentist – by NHS Board, 2017/2018 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 | 302 | 325 | 166 | 171 |
| B | 407 | 471 | 284 | 141 |
| DG | 228 | 307 | 191 | 130 |
| F | 466 | 528 | 304 | 212 |
| FV | 483 | 467 | 110 | 357 |
| G | 284 | 286 | 47 | 237 |
| GGC | 7,716 | 7,907 | 2,526 | 5,433 |
| H | 797 | 944 | 574 | 361 |
| La | 1,527 | 1,513 | 755 | 799 |
| Lo | 746 | 860 | 56 | 709 |
| O | 116 | 110 | 1 | 109 |
| S | 1 | 1 | 1 | 0 |
| T | 140 | 127 | 2 | 127 |
| WI | 0 | 0 | 0 | 0 |
| Unknown NHS Board | 404 | 418 | 125 | 297 |
| Scotland | 13,617 | 14,264 | 5,142 | 9,083 |

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

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

In total, according to the Childsmile@HIC system data, in the 2017/2018 financial year: 10,254 children were referred to Childsmile from a Health Visitor; 1,971 via 'Other' source; 489 from a dentist; 286 via Clinic; 184 were referred by NHS 24; 172 were self-referrals and for 261 children the type of referral was not specified.

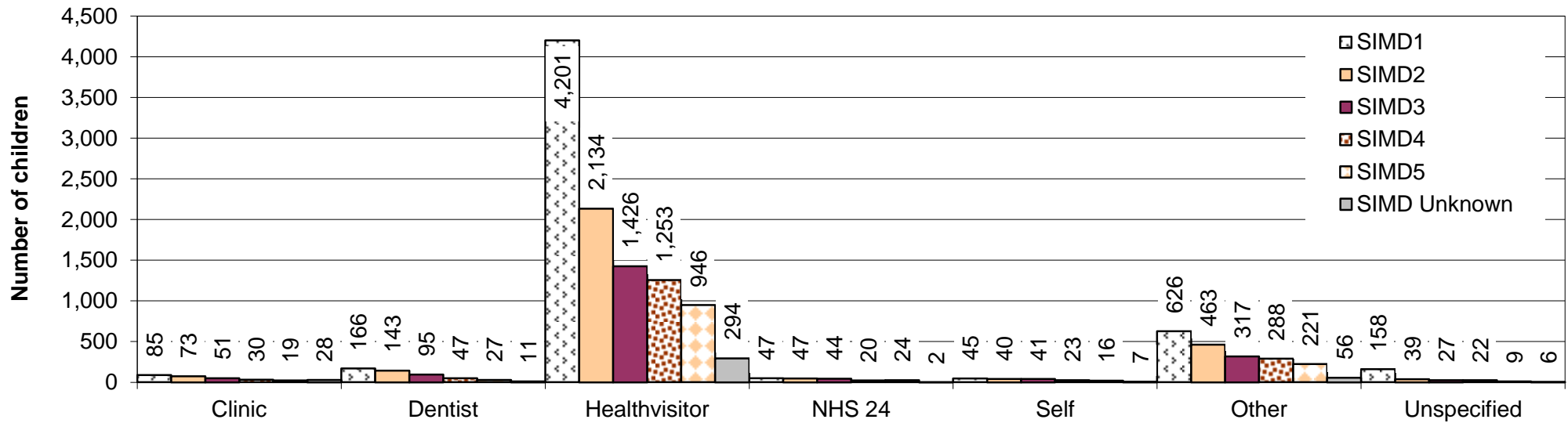


Figure 15: Number of children referred to DHSW by national SIMD of child – Scotland, 2017/2018 financial year

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 2017/2018 financial year there were: 13,947 children with at least one kept DHSW appointment; 332 families who refused Childsmile; 201 families that could not be contacted; and for 1,955 families the end result was an 'FTA / Not at home'.

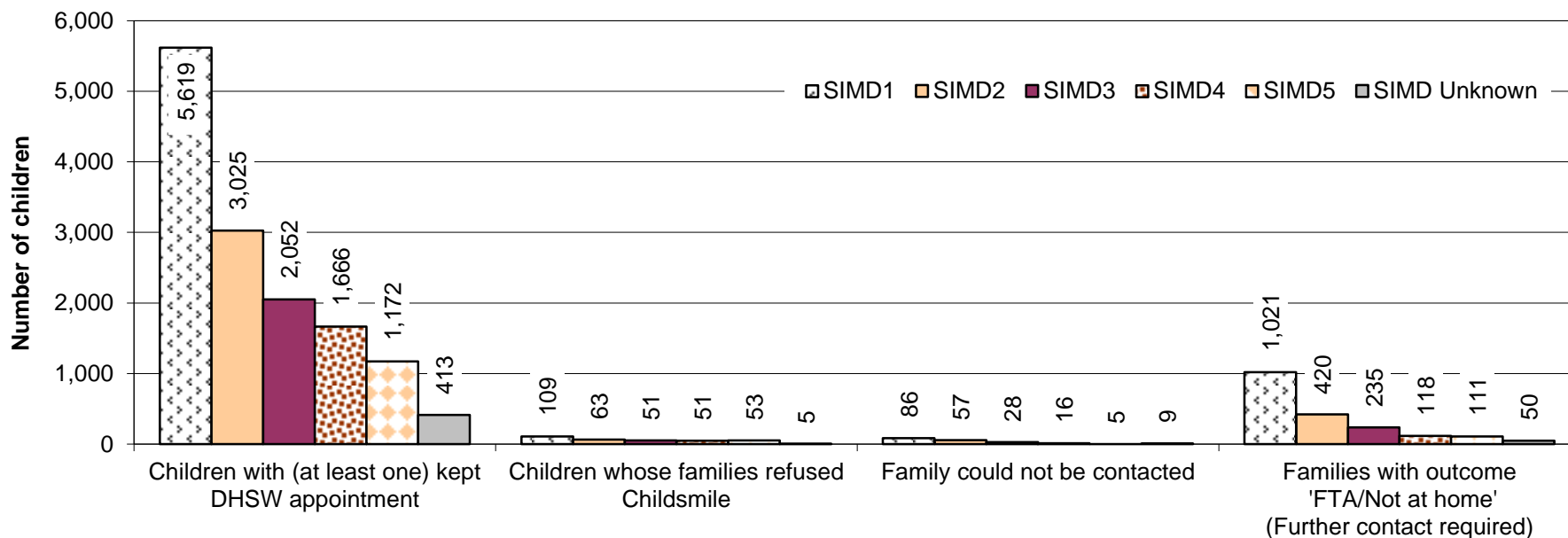


Figure 16: Children successfully contacted and not contacted by DHSW, and families who refused Childsmile, by national SIMD of child – Scotland, 2017/2018 financial year

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 2015/16–2017/18 data are comparable, however these are not comparable with the numbers in earlier reports.

Within the 2017/2018 financial year 13,947 children had at least one kept DHSW appointment. Of these children, 12,353 had their first kept appointment within the reporting period. 1,997 children had their second kept appointment and 744 had their third (or greater) kept appointment within 2017/2018. For these children, their prior kept appointment may have occurred in an earlier reporting period (from January 2010 onwards).

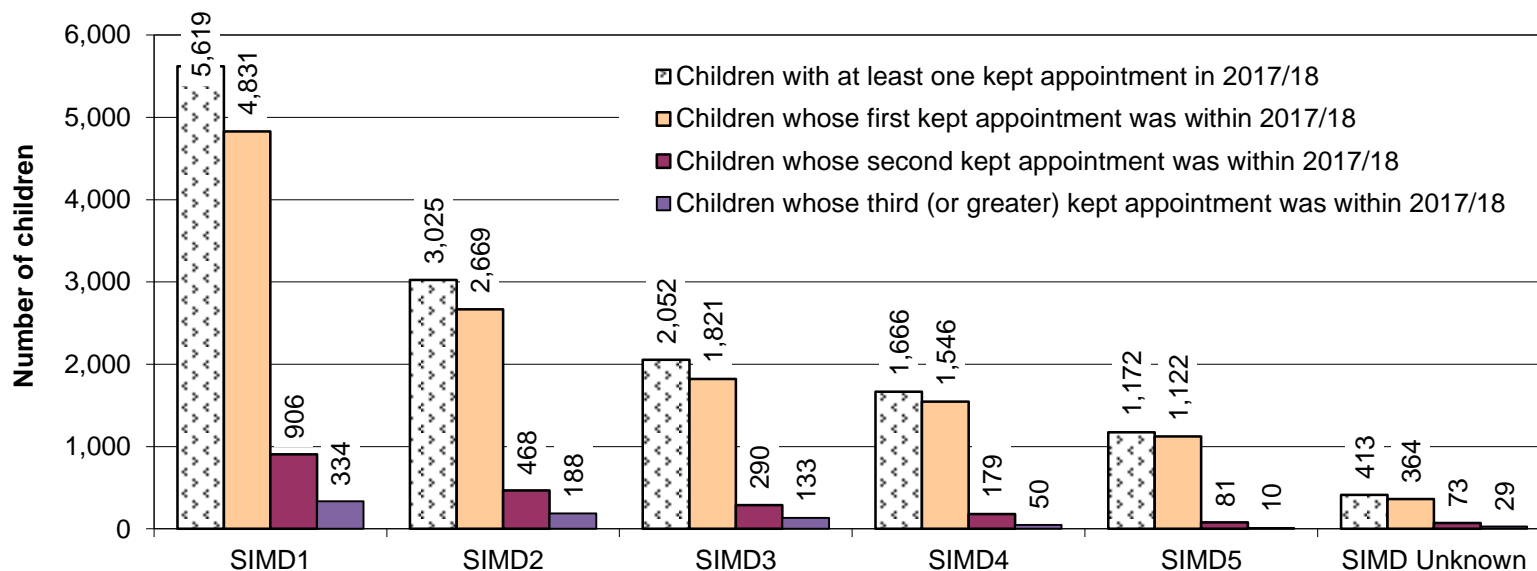


Figure 17: Children with different numbers of kept DHSW appointments by national SIMD of child – Scotland, 2017/2018 financial year

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 2017/2018 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 (from January 2010 onwards).
- 3) The numbers in the last three bars (children with 1st kept appointment, those whose 2nd appointment was within 2017/18 and those whose 3rd (or greater) appointment was within 2017/18 are not mutually exclusive, as some children might have had several appointments within the same 2017/18 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 PDS data therefore the total number of PDS practices and those delivering Childsmile interventions cannot be reported.

In total, 909 independent contractor GDS practices were delivering Childsmile interventions during 2017/2018 financial year in Scotland, which is a 3.8% increase in comparison with 876 independent contractor GDS practices that were delivering Childsmile interventions in 2016/2017.

Table 8: Independent contractor GDS practices delivering Childsmile interventions – Scotland, by NHS Board, 2017/2018 financial year

| NHS Board | Total GDS Dental Practices | GDS Dental Practices Delivering Childsmile | |
|-----------------|----------------------------|--|--------------|
| | N | n | % of N |
| AA | 69 | 62 | 89.9% |
| B | 16 | 15 | 93.8% |
| DG | 35 | 33 | 94.3% |
| F | 66 | 60 | 90.9% |
| FV | 47 | 43 | 91.5% |
| G | 93 | 84 | 90.3% |
| GGC | 273 | 232 | 85.0% |
| H | 54 | 47 | 87.0% |
| La | 117 | 106 | 90.6% |
| Lo | 175 | 155 | 88.6% |
| O | 3 | 2 | 66.7% |
| S | 1 | 1 | 100.0% |
| T | 78 | 68 | 87.2% |
| WI | 1 | 1 | 100.0% |
| Scotland | 1,028 | 909 | 88.4% |

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

NOTES:

- 1) Table 8 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 2018, 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 1 April 2014.

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 (2017/2018 financial year) and who had also received another FVA in the 12 months prior to that application.

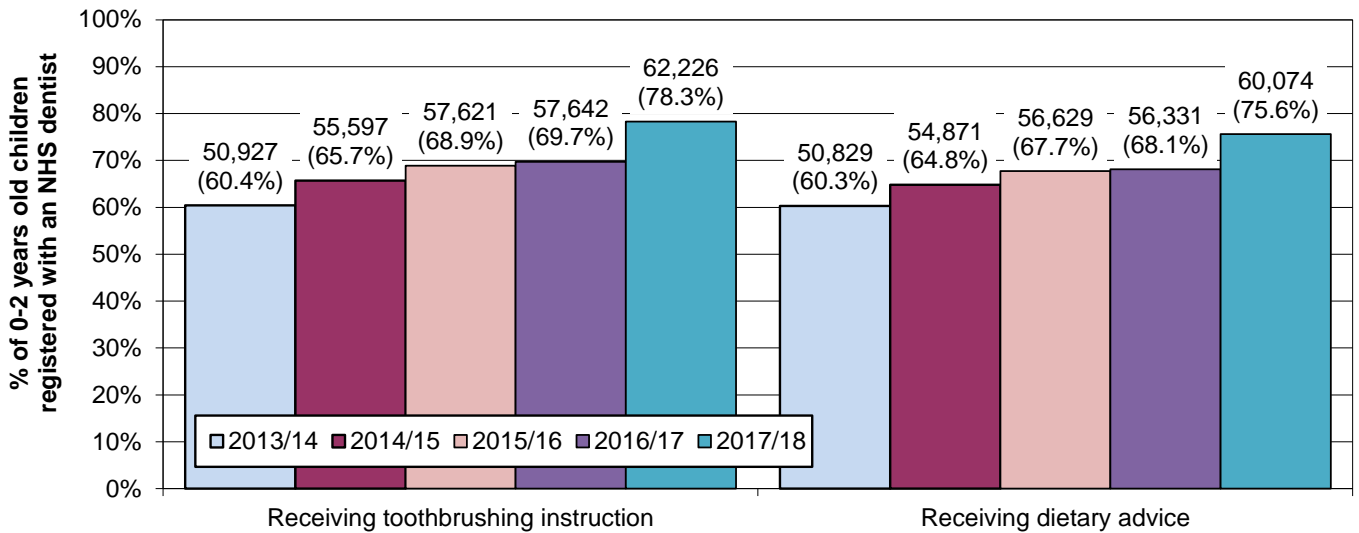


Figure 18: Proportion of 0-2 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, 2013/14-2017/18 financial year

NOTES: Numbers of children registered with an NHS dentist, as at 31st March 2018, were provided by ISD

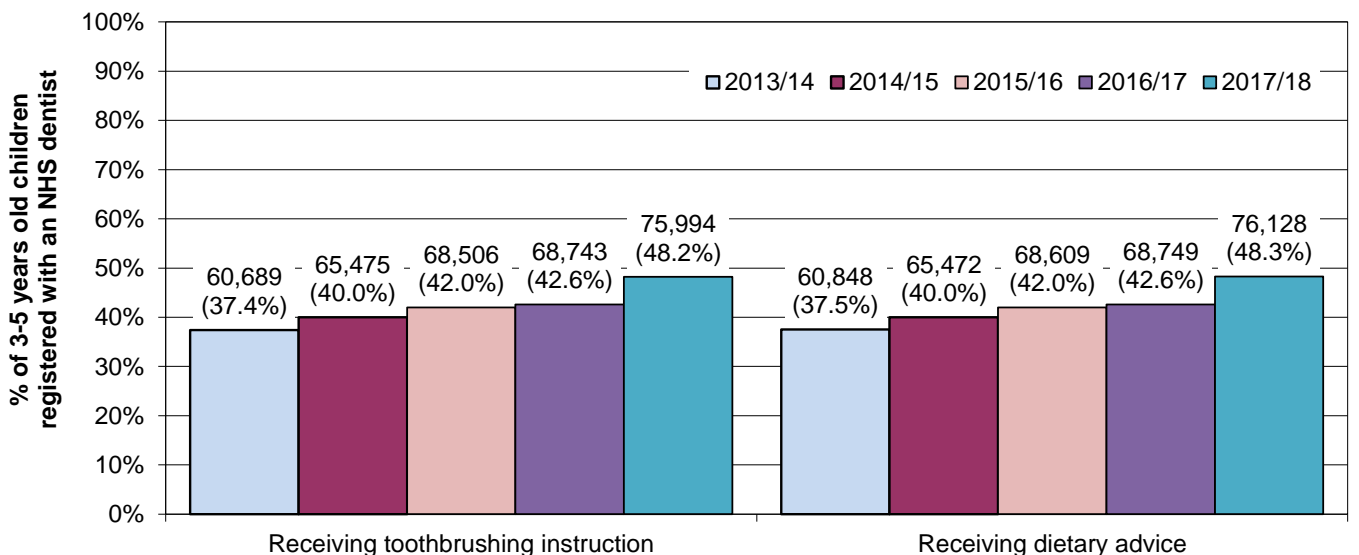


Figure 19: Proportion of 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, 2013/14-2017/18 financial year

Table 9: Proportion of 0-2 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2017/2018 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 | 5,208 | 3,990 | 76.6% | 3,837 | 73.7% |
| B | 1,516 | 1,114 | 73.5% | 1,090 | 71.9% |
| DG | 1,780 | 1,406 | 79.0% | 1,377 | 77.4% |
| F | 5,660 | 4,703 | 83.1% | 4,344 | 76.7% |
| FV | 4,119 | 3,186 | 77.3% | 3,103 | 75.3% |
| G | 8,724 | 6,238 | 71.5% | 5,963 | 68.4% |
| GGC | 19,611 | 15,112 | 77.1% | 14,741 | 75.2% |
| H | 4,095 | 2,619 | 64.0% | 2,539 | 62.0% |
| La | 10,297 | 8,586 | 83.4% | 8,402 | 81.6% |
| Lo | 11,938 | 9,993 | 83.7% | 9,528 | 79.8% |
| O | 402 | 317 | 78.9% | 310 | 77.1% |
| S | 544 | 418 | 76.8% | 419 | 77.0% |
| T | 4,998 | 3,714 | 74.3% | 3,601 | 72.0% |
| WI | 339 | 310 | 91.4% | 314 | 92.6% |
| Scotland | 79,484 | 62,226 | 78.3% | 60,074 | 75.6% |

NOTES:

- 1) Numbers of children registered with an NHS dentist, as at 31st March 2018, 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 1 April 2014.

Table 10: Proportion of 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction and dietary advice – Scotland, by NHS Board, 2017/2018 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 | 10,290 | 4,756 | 46.2% | 4,771 | 46.4% |
| B | 3,099 | 1,773 | 57.2% | 1,774 | 57.2% |
| DG | 3,788 | 2,028 | 53.5% | 2,023 | 53.4% |
| F | 11,133 | 5,690 | 51.1% | 5,697 | 51.2% |
| FV | 8,678 | 4,602 | 53.0% | 4,594 | 52.9% |
| G | 17,259 | 8,109 | 47.0% | 8,085 | 46.8% |
| GGC | 35,129 | 16,427 | 46.8% | 16,442 | 46.8% |
| H | 8,767 | 2,876 | 32.8% | 2,921 | 33.3% |
| La | 19,866 | 9,376 | 47.2% | 9,392 | 47.3% |
| Lo | 25,856 | 13,947 | 53.9% | 14,022 | 54.2% |
| O | 600 | 278 | 46.3% | 276 | 46.0% |
| S | 792 | 279 | 35.2% | 278 | 35.1% |
| T | 11,092 | 5,079 | 45.8% | 5,073 | 45.7% |
| WI | 694 | 442 | 63.7% | 443 | 63.8% |
| Scotland | 157,705 | 75,994 | 48.2% | 76,128 | 48.3% |

NOTES:

- 1) Numbers of children registered with an NHS dentist, as at 31st March 2018, 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 1 April 2014.

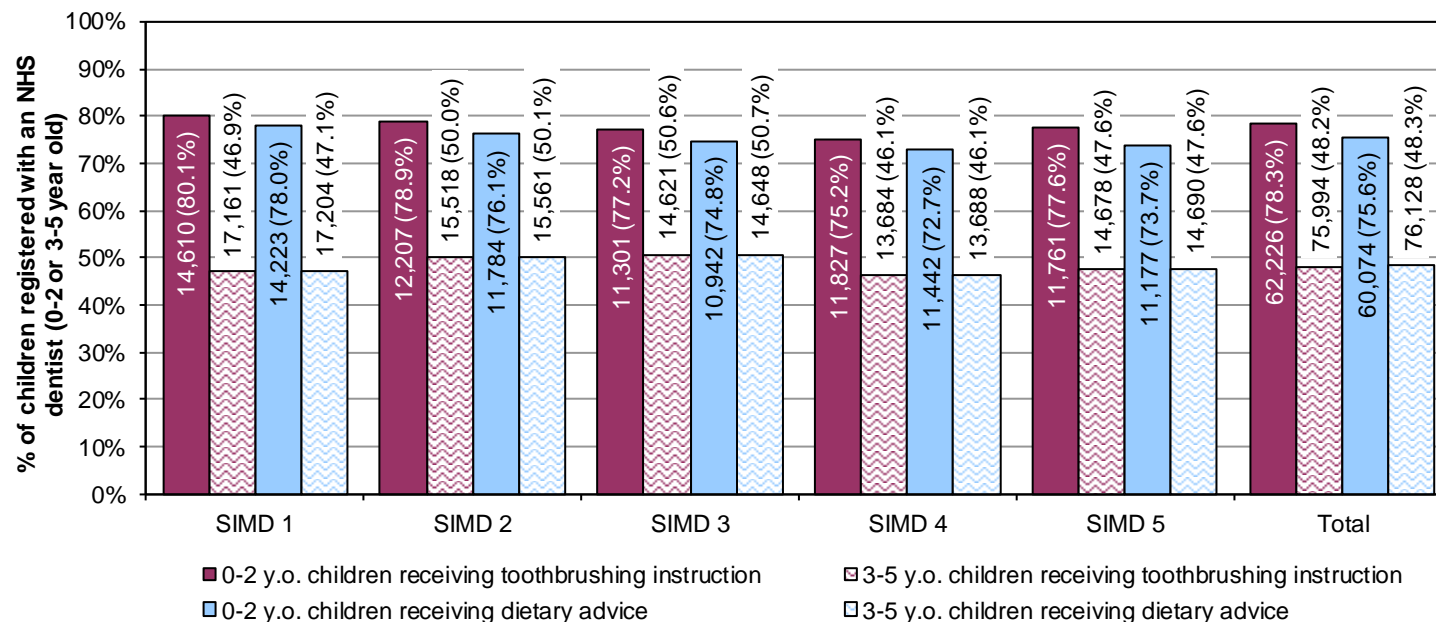


Figure 20: Proportion of 0-2 and 3-5 year old children registered with an NHS dentist receiving toothbrushing instruction / dietary advice – Scotland, by national SIMD, 2017/2018 financial year

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 – 18,240 children; SIMD 2 – 15,477; SIMD 3 – 14,636; SIMD 4 – 15,737; SIMD 5 – 15,159; and in total – 79,484 (including SIMD Unknown).
 - 3-5 year olds: SIMD 1 – 36,556 children; SIMD 2 – 31,060; SIMD 3 – 28,897; SIMD 4 – 29,666; SIMD 5 – 30,864; and in total – 157,705 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 2017/2018 financial year 80.1% of 0-2 year old children residing in SIMD 1 and registered with an NHS dentist received toothbrushing instruction at least once (14,610 children), and 78.0% of such children received dietary advice at least once (14,223 children).

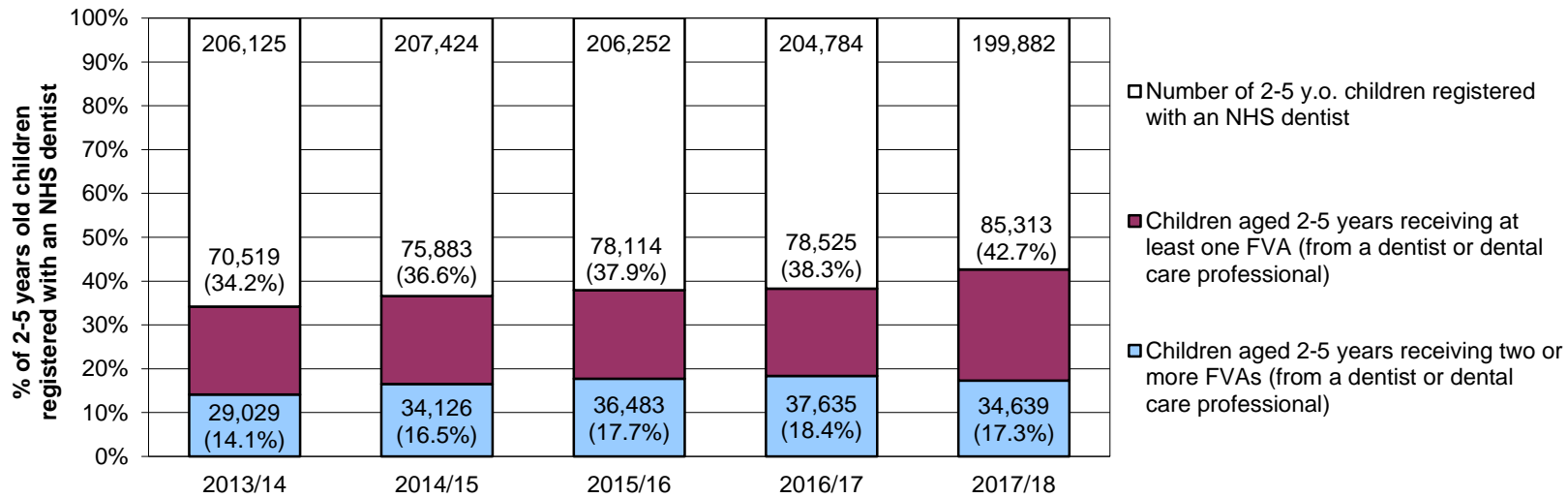


Figure 21: Proportion of 2-5 year old children registered with an NHS dentist receiving at least one FVA or two or more FVAs – Scotland, 2013/14-2017/18 financial year

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 2018). Numbers and percentages inside the columns represent the numbers/percentages of such children who received FVA at least once within 2017/2018 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 2017/18 financial year 42.7% (85,313) of children registered with an NHS dentist received at least one FVA, and 17.3% (34,639) children received an FVA within 2017/18 and had also received another FVA in the 12 months prior to that application

Table 11: Proportion of 2-5 year old children registered with an NHS dentist receiving at least one FVA or two or more FVAs – Scotland, by NHS Board, 2017/2018 financial year

| HB | 2-5-year-olds registered with an NHS dentist | 2-5-year-olds receiving at least one FVA | | 2-5-year-olds receiving two or more FVAs | |
|-----------------|--|--|--------------|--|--------------|
| | N | n | % of N | n | % of N |
| AA | 13,065 | 5,698 | 43.6% | 2,288 | 17.5% |
| B | 3,934 | 2,117 | 53.8% | 966 | 24.6% |
| DG | 4,790 | 2,211 | 46.2% | 876 | 18.3% |
| F | 14,117 | 5,768 | 40.9% | 2,277 | 16.1% |
| FV | 10,951 | 4,819 | 44.0% | 1,885 | 17.2% |
| G | 22,043 | 11,123 | 50.5% | 4,961 | 22.5% |
| GGC | 44,972 | 18,103 | 40.3% | 7,228 | 16.1% |
| H | 10,957 | 3,039 | 27.7% | 983 | 9.0% |
| La | 25,189 | 9,310 | 37.0% | 3,624 | 14.4% |
| Lo | 32,525 | 16,441 | 50.5% | 7,170 | 22.0% |
| O | 788 | 427 | 54.2% | 192 | 24.4% |
| S | 1,021 | 322 | 31.5% | 78 | 7.6% |
| T | 13,868 | 4,902 | 35.3% | 1,921 | 13.9% |
| WI | 872 | 512 | 58.7% | 92 | 10.6% |
| Scotland | 199,882 | 85,313 | 42.7% | 34,639 | 17.3% |

FVA – fluoride varnish application.

NOTES:

- 1) Numbers of children registered with an NHS dentist, as at 31st March 2018, 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 1 April 2014.

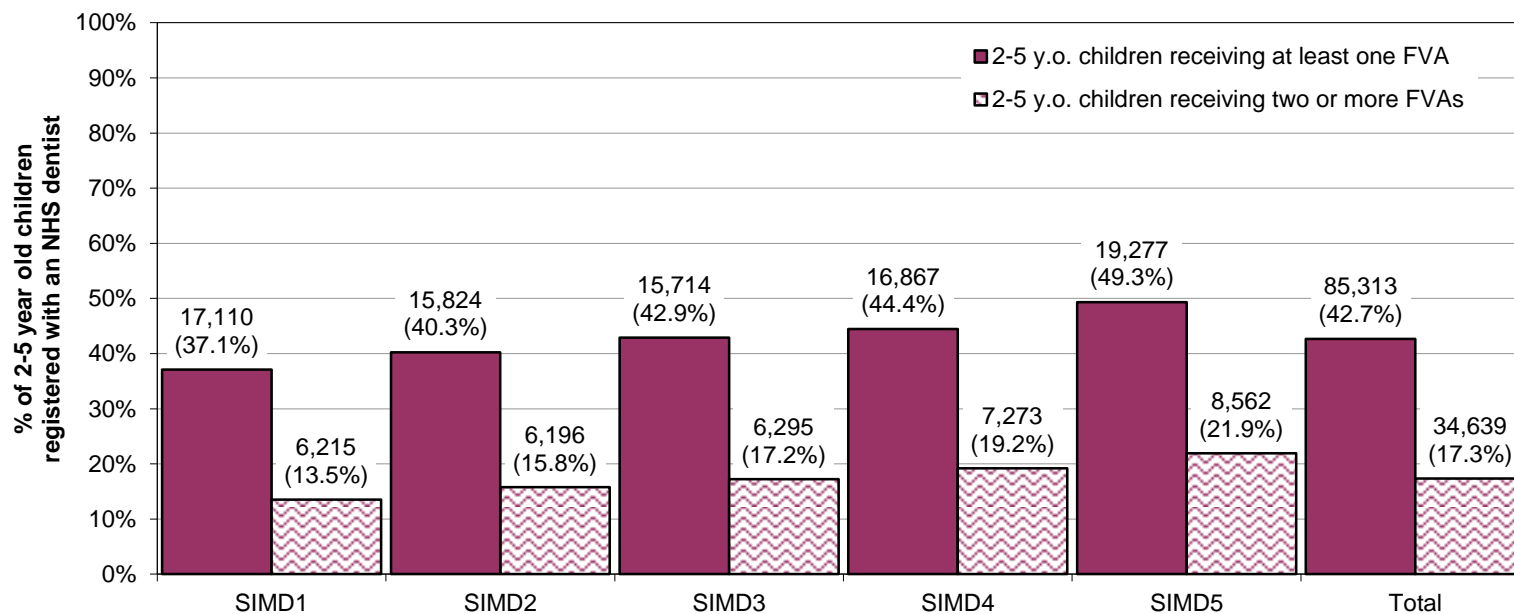


Figure 22: Proportion of 2-5 year old children registered with an NHS dentist receiving at least one / two or more FVAs – Scotland, by national SIMD, 2017/2018 financial year

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.
- 2) The numbers of 2-5 year old children registered with an NHS dentist as of 31st March 2018 were as follows (data supplied by ISD): SIMD 1 – 46,114 children; SIMD 2 – 39,314; SIMD 3 – 36,636; SIMD 4 – 37,960; SIMD 5 – 39,068; and in total there were 199,882 (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 2017/2018 financial year, 37.1% of 2-5 year old children residing in SIMD 1 and registered with an NHS dentist received at least one FVA (17,110 children), and 13.5% (6,215 children) received an FVA within the 2017/2018 financial year and had also received another FVA in the 12 months prior to that application (labelled “two or more FVAs”).

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

In the 2017/2018 academic year, 364,076 FVAs were applied across all three arms of the programme (Nursery, School and Practice).

Table 12: Number of FVAs in nursery, school and practice settings, 2013/14-2017/18

| Health Board | 2013/2014 | | | 2014/2015 | | | 2015/2016 | | | 2016/2017 | | | 2017/2018 | | |
|--------------------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|
| | Nursery | School | Practice | Nursery | School | Practice | Nursery | School | Practice | Nursery | School | Practice* | Nursery | School | Practice* |
| AA | 2,971 | 7,119 | 4,972 | 2,974 | 7,122 | 5,676 | 3,852 | 8,882 | 6,079 | 3,327 | 8,733 | 6,160 | 3,196 | 8,585 | 6,658 |
| B | 1,037 | 4,458 | 2,396 | 1,038 | 4,458 | 2,360 | 1,176 | 5,879 | 2,543 | 1,072 | 5,260 | 2,551 | 1,029 | 5,886 | 2,484 |
| DG | 878 | 2,384 | 2,160 | 878 | 2,384 | 2,594 | 977 | 2,449 | 2,720 | 893 | 2,493 | 2,604 | 868 | 2,923 | 2,520 |
| F | 3,460 | 12,993 | 6,235 | 3,457 | 12,995 | 7,117 | 3,311 | 14,453 | 7,530 | 3,319 | 14,923 | 7,052 | 2,801 | 15,083 | 6,671 |
| FV | 2,554 | 5,360 | 4,571 | 2,556 | 5,358 | 4,670 | 3,496 | 5,841 | 4,662 | 3,389 | 5,989 | 5,127 | 2,983 | 6,362 | 5,557 |
| G | 9,198 | 17,326 | 9,442 | 9,204 | 17,323 | 12,206 | 10,004 | 19,468 | 12,982 | 9,623 | 19,973 | 13,374 | 8,323 | 17,795 | 13,150 |
| GGC | 8,257 | 33,508 | 16,597 | 8,253 | 33,379 | 18,490 | 11,233 | 36,198 | 19,557 | 9,636 | 34,877 | 20,562 | 9,087 | 37,242 | 21,166 |
| H | 4,139 | 17,639 | 4,304 | 4,141 | 17,643 | 3,741 | 4,316 | 18,436 | 3,572 | 4,336 | 18,735 | 3,415 | 4,048 | 18,621 | 3,448 |
| La | 21,267 | 23,966 | 10,446 | 21,249 | 23,969 | 11,033 | 19,584 | 35,452 | 10,980 | 19,338 | 36,389 | 10,855 | 17,928 | 35,750 | 10,778 |
| Lo | 8,108 | 26,937 | 15,496 | 8,113 | 26,942 | 16,759 | 6,746 | 23,277 | 17,749 | 6,476 | 23,071 | 18,787 | 6,373 | 23,996 | 19,600 |
| O | 539 | 1,639 | 494 | 539 | 1,639 | 547 | 559 | 2,072 | 640 | 586 | 2,443 | 644 | 606 | 2,742 | 488 |
| S | 799 | 1,337 | 688 | 799 | 1,337 | 553 | 847 | 1,405 | 442 | 903 | 1,531 | 349 | 724 | 1,741 | 355 |
| T | 3,129 | 18,093 | 5,445 | 3,131 | 18,093 | 5,610 | 3,508 | 20,841 | 5,657 | 3,702 | 13,959 | 5,691 | 3,406 | 12,843 | 5,663 |
| WI | 640 | 1,448 | 833 | 640 | 1,448 | 633 | 717 | 2,073 | 698 | 734 | 2,499 | 546 | 761 | 2,800 | 538 |
| Unknown NHS Board | - | - | 2,642 | - | - | 1,661 | - | - | 1,213 | - | - | 153 | - | - | 588 |
| Scotland | 66,976 | 174,207 | 86,721 | 66,972 | 174,090 | 93,650 | 70,326 | 196,726 | 97,024 | 67,334 | 190,875 | 97,870 | 62,133 | 192,369 | 99,664 |

FVA – fluoride varnish application.

NOTES:

- 1) Table 12 presents number of FVAs applied in different settings by academic year, apart from 2016/17 and 2017/18 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 2013/14 – 2017/18.
- 4) NHS Boards based on the boundaries as at 1 April 2014.

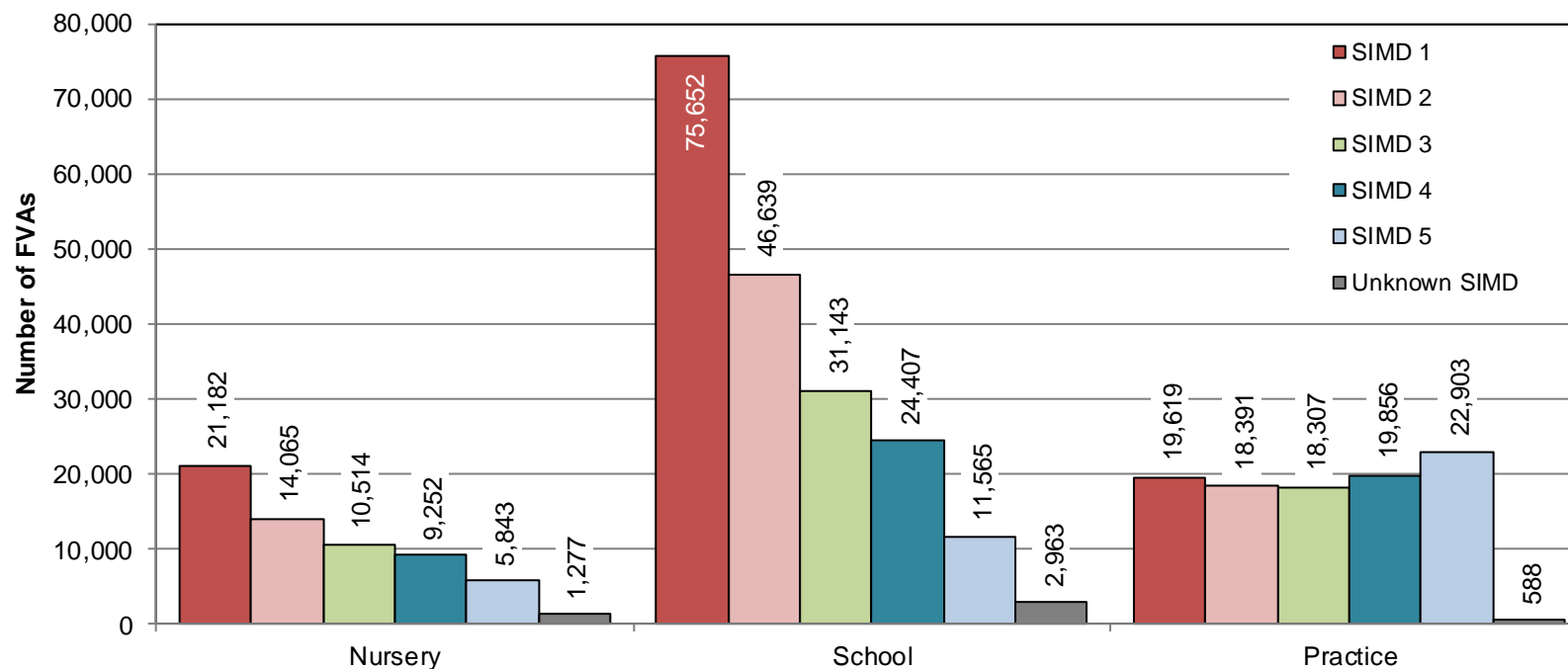


Figure 23: SIMD (national) distribution of FVAs in nursery, school and practice settings – Scotland, 2017/2018

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 2017/18 academic (Childsmile Nursery and School) or financial (Childsmile Practice) year.
 Across the settings, 116,453 FVAs were applied to SIMD 1 children; 79,095 FVAs to SIMD 2 children; 59,964 to SIMD 3; 53,515 to SIMD 4; and 40,311 FVAs were applied to SIMD 5 children. In total, 354,166 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.

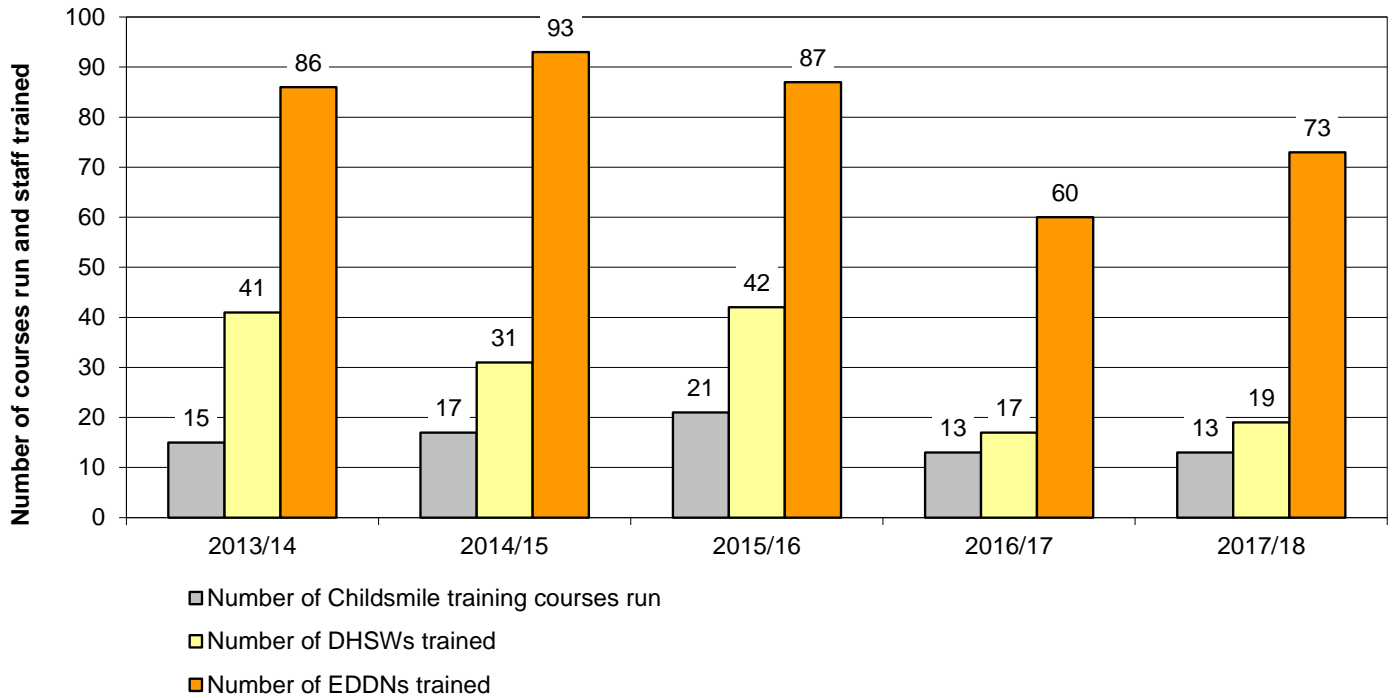


Figure 24: NES Childsmile training courses and staff trained – Scotland, 2013/14-2017/18 financial year

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 (as of 2017/18).

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 2018 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 2017 are from <i>Openings and Closings Exercise</i> , June 2017, by the Scottish Government (available online at: http://www.scotland.gov.uk/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, 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 dentists 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 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 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 (based on the 2001 Census). The baselines for 2013/14 and 2014/15 in this report are based on Small Area Population Estimates at 30 June 2013, for 2015/16 – on Small Area Population Estimates at 30 June 2015, for 2016/17 based on Small Area Population Estimates at 30 June 2016, and 2017/18 based on Small Area Population Estimates at 30 June 2017. The population estimates were provided by the National Records of Scotland (NRS; http://www.nrscotland.gov.uk) for each datazone by single year of age. 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): http://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 are those 2-5 years old children (inclusive) who received a FVA from a dentist or dental care professional, within the reporting period. |
| 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 | <p>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.</p> <p>ISD are unable to report robust PDS data therefore the total number of PDS practices delivering Childsmile interventions cannot be reported.</p> |
| Independent contractor GDS (independent contractor General Dental Services) | <p>Independent contractor General Dental Services are independent practices contracted to work on behalf of local NHS Boards.</p> <p>Independent contractor GDS were called non-salaried GDS in previous reports.</p> |
| PDS (Public Dental Service) | <p>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).</p> <p>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.</p> |
| SIMD | <p>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.</p> <p>SIMD 2012 was used for 2013/14–2014/15 and SIMD 2016 was used for reporting 2015/16–2017/18 data.</p> <p>National SIMD is used for Childsmile Practice as payments are processed for General Dental Practitioners using the national SIMD index.</p> |
| 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 2018 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 |
|------|--|
| 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. |
| EDDN | Extended Duty Dental Nurses may be employed by NHS Boards or independent contractors (family dentists) and provide preventive advice and regular Fluoride Varnish applications. |

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

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