

Publication Report



Dental Statistics – HEAT Target: Fluoride varnishing for 3- and 4-year-olds

First release (data as at 31st March 2012)

Publication date – 27th November 2012

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Introduction

[Childsmile](#) is a national programme designed to improve the oral health of children in Scotland and to reduce inequalities in dental health and in access to dental services.

The [Nursery, School](#) and [Practice](#) elements of the *Childsmile* programme include the application of fluoride varnish among the services provided. Fluoride varnishing (FV) is shown to be effective in reducing tooth decay in children when used in combination with brushing teeth regularly with fluoride toothpaste. In the *Childsmile* Nursery and School programme, dental teams work in educational establishments focusing on children living in the most deprived local quintile as defined by [SIMD](#). Fluoride varnish can also be applied in dental practices, and dentists are remunerated for providing this service to children.

This release provides information, as part of the *Childsmile* programme designed to improve the dental health of children in Scotland, on the [application of fluoride varnish to children's teeth](#). The recorded clinical activity is also being monitored under the Scottish Government's [HEAT target](#) (at least 60% of 3- and 4-year-old children in each SIMD quintile to receive at least two applications of fluoride varnish per year by March 2014). These figures cover fluoride varnish applications carried out in nurseries, schools and dental practices and are consolidated across the different settings using data linkage.

Key points

- The data presented here for each NHS board are the number of 3- or 4-year-old children resident in that NHS board area who received two or more applications of fluoride varnish in the previous year, the estimated population of 3- or 4-year-old children, and hence the proportion of the population receiving two or more applications of fluoride varnish, by deprivation quintile. This first release covers the period 1st April 2011 to 31st March 2012.
- There is extensive variation in these reported quintile scores between NHS boards, but generally more deprived SIMD quintiles are attaining higher scores than the less deprived quintiles.
- ISD reports this data quarterly on the HEAT dashboard, and based on trajectories made by each NHS board these figures are expected to increase – across quintiles – towards the March 2014 end-point (of this HEAT target's clinical activity), as *Childsmile* activity increases. For example, it is only since October 2011 that dentists have been remunerated under the terms of NHS general dental services for providing *Childsmile* fluoride varnishing.

Results and Commentary

The following tables present the number on children aged 3 and then the number of children aged 4 who have had two or more fluoride varnish treatments, the estimated population of children aged 3 or 4, and the proportion of children who have had two or more treatments, by SIMD quintile for Scotland. This release covers the period 1st April 2011 to 31st March 2012 for fluoride varnish applications carried out in nurseries, schools and dental practices.

Table 1: Number of children aged 3 who had two or more Fluoride Varnish treatments, estimated population, and % of children who have had two or more treatments, by SIMD quintile. April 2011 – March 2012.

NHS board	Data	SIMD Quintile					
		1	2	3	4	5	Unknown
Scotland	No. of children aged 3 who had 2+ FVs	3,394	2,113	1,465	1,081	648	172
	Estimated popn. of children aged 3	13,187	11,030	10,501	11,026	10,307	-
	% of children aged 3 having 2+ FVs	25.7%	19.2%	14.0%	9.8%	6.3%	-

Source: ISD, MIDAS.

Table 2: Number of children aged 4 who had two or more Fluoride Varnish treatments, estimated population, and % of children who have had two or more treatments, by SIMD quintile. April 2011 – March 2012.

NHS board	Data	SIMD Quintile					
		1	2	3	4	5	Unknown
Scotland	No. of children aged 4 who had 2+ FVs	4,631	2,558	1,766	1,251	652	158
	Estimated popn. of children aged 4	12,874	10,743	10,491	10,789	10,740	-
	% of children aged 4 having 2+ FVs	36.0%	23.8%	16.8%	11.6%	6.1%	-

Source: ISD, MIDAS.

At a national level the more deprived SIMD quintiles are attaining higher scores than the less deprived quintiles. This due to the *Childsmile* programme's targeting of schools and nurseries attended by children from more socioeconomically deprived backgrounds. There is extensive variation in these reported quintile scores between NHS boards, but the same trend is observed with generally more deprived SIMD quintiles attaining higher scores than the less deprived quintiles. Across NHS boards, NHS Orkney and NHS Shetland have higher scores largely because the lower populations can be targeted more comprehensively. Figures for individual boards can be accessed in a [supplementary table](#).

ISD reports this data quarterly on the HEAT dashboard, and based on trajectories made by each NHS board these figures are expected to increase – across quintiles – towards the March 2014 end-point (of this HEAT target's clinical activity), as *Childsmile* activity increases. For example, it is only since October 2011 that dentists have been remunerated under the terms of NHS general dental services for providing *Childsmile* fluoride varnishing. Additionally, population denominators are to be improved, and minor deficits in data submitted to ISD which result in a small element of undercounting are being addressed in collaboration by partners across the service.

Glossary

SIMD	Scottish Index of Multiple Deprivation
HEAT	Health Improvement, Efficiency, Access and Treatment
MIDAS	Management Information & Dental Accounting System
FV	Fluoride Varnish

List of Tables

Table No.	Name	Time period	File & size
1.	Fluoride Varnish Statistics by Board	April 2011 – March 2012	Excel - 44kb

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Further Information

Further information can be found on the [ISD website](#)

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Appendix

A1 – Background Information

These HEAT target Official Statistics releases will be published annually until 2014. The database managed by ISD records the number of 3- and 4-year olds in each SIMD quintile of an NHS board who have received fluoride varnish applications. Performance “scores” are given as the number of children treated two or more times divided by the total population of 3- and four-year-olds.

The data presented in this report for each NHS board are the level (percentage) of population who received at least two applications of fluoride varnish in each deprivation quintile of 3- or 4-year-old children resident in that NHS board area in the previous year. The Scottish Government’s [HEAT target](#) is for “at least 60% of 3- and 4-year-old children in each SIMD quintile to receive at least two applications of fluoride varnish per year by March 2014”. This first release covers the period 1st April 2011 to 31st March 2012.

A2 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	Dental Statistics – Fluoride varnishing for 3- and 4-year-olds.
Description	This release provides information, as part of the <i>Childsmile</i> programme, on the application of fluoride varnish to children's teeth and specifically on the Scottish Government's HEAT target (at least 60% of 3- and 4-year-old children in each SIMD quintile to receive at least two applications of fluoride varnish per year by March 2014).
Theme	Dental Care.
Topic	HEAT Target: fluoride varnishing.
Format	PDF and external excel file.
Data source(s)	MIDAS; <i>Childsmile</i> database, Health Informatics Centre, University of Dundee; <i>Childsmile</i> database, Glasgow Dental Hospital and School.
Date that data are acquired	14 th August 2012.
Release date	27th November 2012.
Frequency	Annual
Timeframe of data and timeliness	Year of 1 st April 2011 to 31 st March 2012; currently 8 months in arrears.
Continuity of data	Data recorded and analysed quarterly since 2010.
Revisions statement	These data are not subject to planned major revisions. However, ISD aims to continually improve the interpretation of the data and therefore analysis methods are regularly reviewed and may be updated in the future.
Revisions relevant to this publication	None
Concepts and definitions	See glossary and notes
Relevance and key uses of the statistics	Making information publicly available for planning, provision of services, research, etc.
Accuracy	Data are generally accurate and timeous.
Completeness	Small element of data incompleteness may result in under-counting. Partner organisations are addressing this in collaboration with ISD.
Comparability	n/a
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines .
Coherence and clarity	Single relevant external table supplied. Coherent and consistent with table in publication body.
Value type and unit of measurement	Number of 3- or 4-year-old children who received at least two applications of fluoride varnish in the previous year, estimated population of 3- or 4-year-old children, and percentage of population who received at least two applications of fluoride varnish, by deprivation quintile of residence nationally and in each NHS board area in the previous year.
Disclosure	The ISD protocol on Statistical Disclosure Protocol is followed.

Official Statistics designation	Official Statistics
UK Statistics Authority Assessment	Not assessed at this time.
Last published	First publication
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A3 – Early Access details (including Pre-Release Access)

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access and, separately, those receiving extended Pre-Release Access.

Standard Pre-Release Access:

Scottish Government Health Department
NHS Board Chief Executives
NHS Board Communication leads

Extended Pre-Release Access

Extended Pre-Release Access of 8 working days is given to a small number of named individuals in the Scottish Government Health Department (Analytical Services Division). This Pre-Release Access is for the sole purpose of enabling that department to gain an understanding of the statistics prior to briefing others in Scottish Government (during the period of standard Pre-Release Access).

Scottish Government Health Department (Analytical Services Division)

A4 – ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

Purpose: To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

Mission: Better Information, Better Decisions, Better Health

Vision: To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#).