



National Dental Inspection Programme (NDIP) Report 2014 Executive Summary



National Dental Inspection Programme of Scotland

Information Services Division of NHS National Services Scotland

Introduction

The National Dental Inspection Programme (NDIP) is carried out annually under the auspices of the Scottish Dental Epidemiology Co-ordinating Committee on behalf of NHS Boards. Its principal aims are to inform parents/carers of the oral health status of their children and, through appropriately anonymised, aggregated data, advise the Scottish Government, NHS Boards and other organisations concerned with children's health of the prevalence of oral disease at national and local levels.

Two key child age groups are involved: i) at entry into Local Authority schools in primary one (P1) and ii) in primary seven (P7) before the move to secondary education. The Inspection Programme has two levels: a *Basic Inspection* (intended for all P1 and P7 children) and a *Detailed Inspection* (where a representative sample of either the P1 or the P7 age group is inspected in alternate years). In the school year 2013/14 (noted as 2014 throughout the report), the *Detailed Inspection* programme looked at P1 children.

This Executive Summary presents the main findings of the *Detailed Inspection* programme of P1 children in 2014. A more in-depth presentation of the results can be found at <http://www.isdscotland.org/Health-Topics/Dental-Care/National-Dental-Inspection-Programme/>.

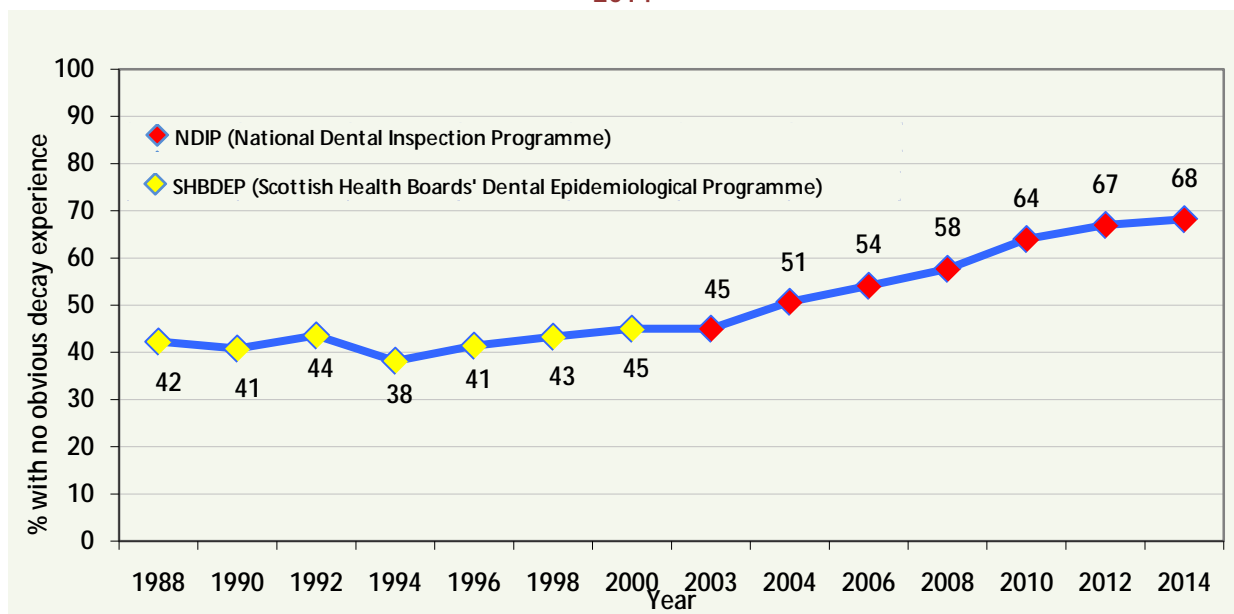
How many P1 children had a Detailed Inspection?

In total, 16,251 children from Local Authority schools across Scotland were inspected in detail. This represents 29% of the P1 population. Across the NHS Boards, the percentage of P1 children that were inspected ranged from 12% to 88%. This variation is because some NHS Boards inspect the minimum number that is required to produce a valid result at Board level, while others choose to increase the sample size to aid local planning needs. Additionally, some less populated Boards need to include large proportions to achieve statistically meaningful results.

What proportion of P1 children in Scotland had no obvious decay experience?

Figure 1 shows a slight improvement in the oral health of P1 children in Scotland since 2012, with 68% having no obvious decay experience in 2014.

Figure 1: Trends in the proportion of P1 children in Scotland with no obvious decay experience; 1988-2014





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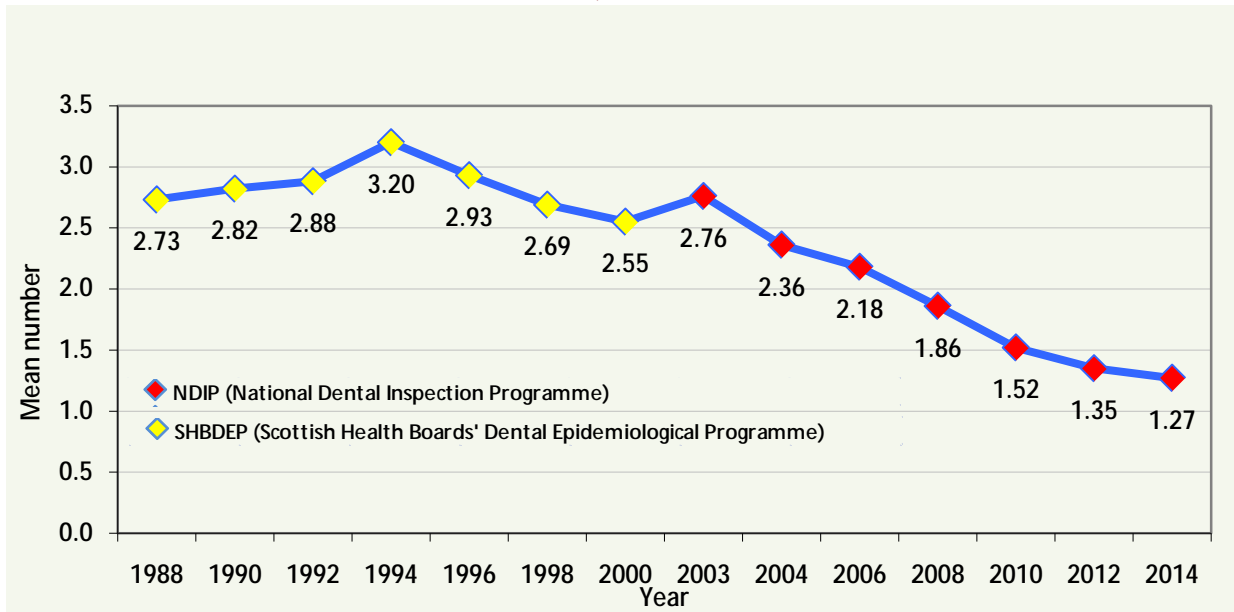
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What levels of obvious decay experience were seen in P1 children?

The mean number of teeth that were decayed, missing or filled continues to decline. In 2014, the mean number of teeth affected by obvious decay experience fell to 1.27.

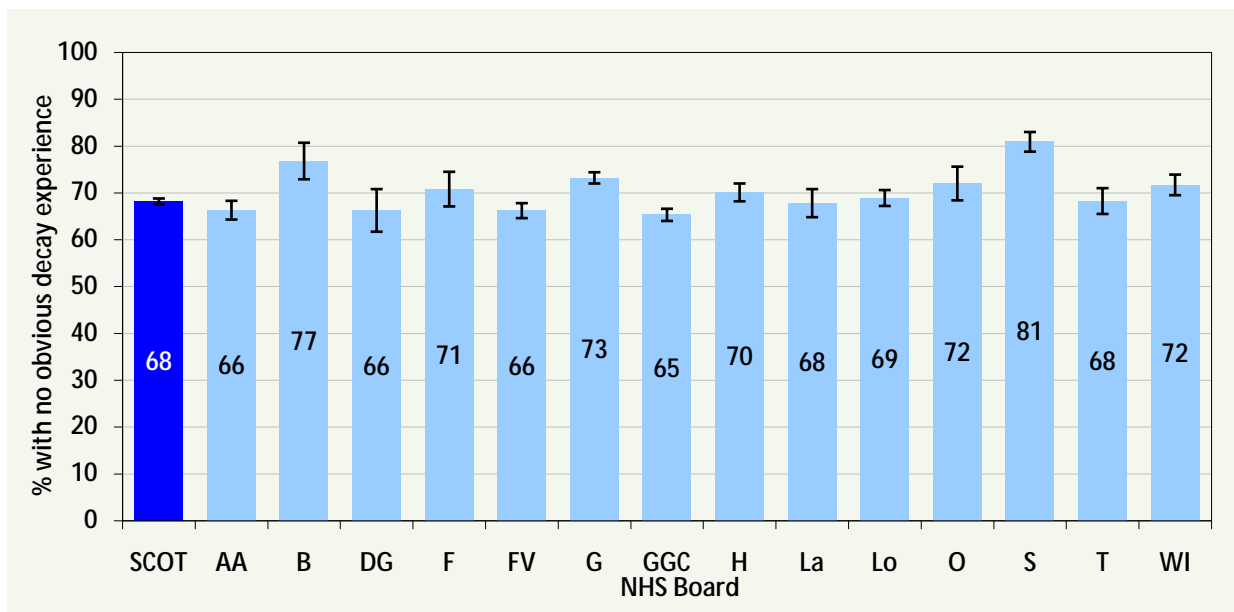
Figure 2: Mean number of decayed, missing and filled primary teeth (d₃mft) in the P1 population in Scotland; 1988-2014



What is the picture of oral health of P1 children across Scotland?

The percentage of P1 children with no obvious decay experience now ranges from 65% to 81% across all NHS Boards in Scotland in 2014.

Figure 3: Percentage of P1 children in Scotland with no obvious decay experience in 2014; by NHS Board





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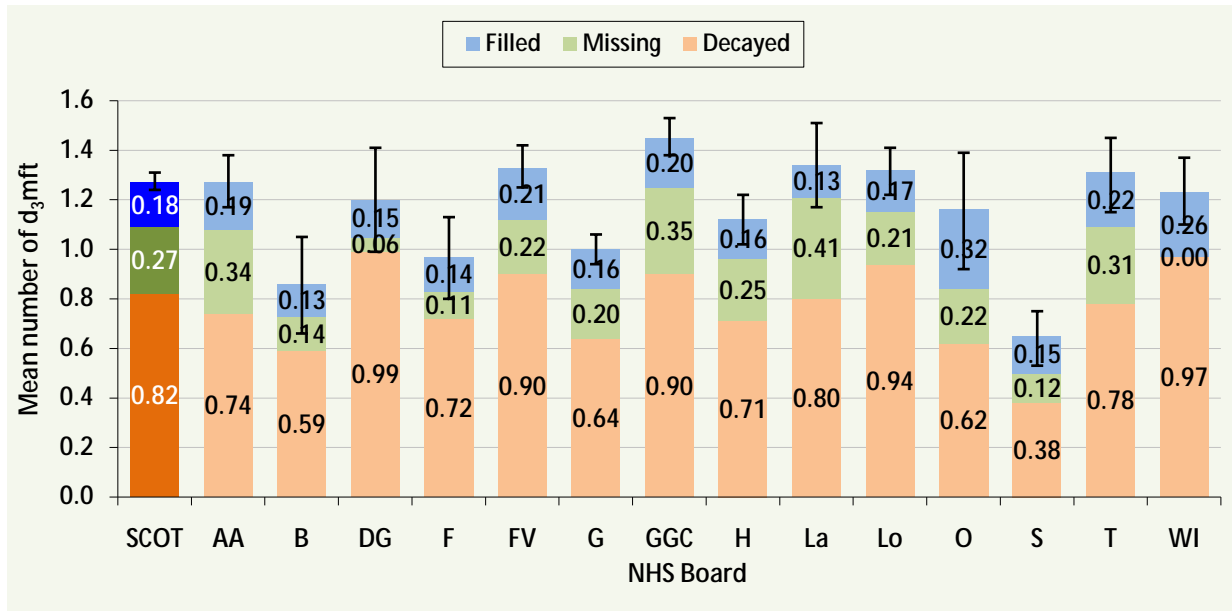


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The mean number of teeth with obvious decay experience ranged from 0.64 to 1.45 across NHS Boards. The contribution of the components of the index to the overall d_3mft value can be seen in Figure 4.

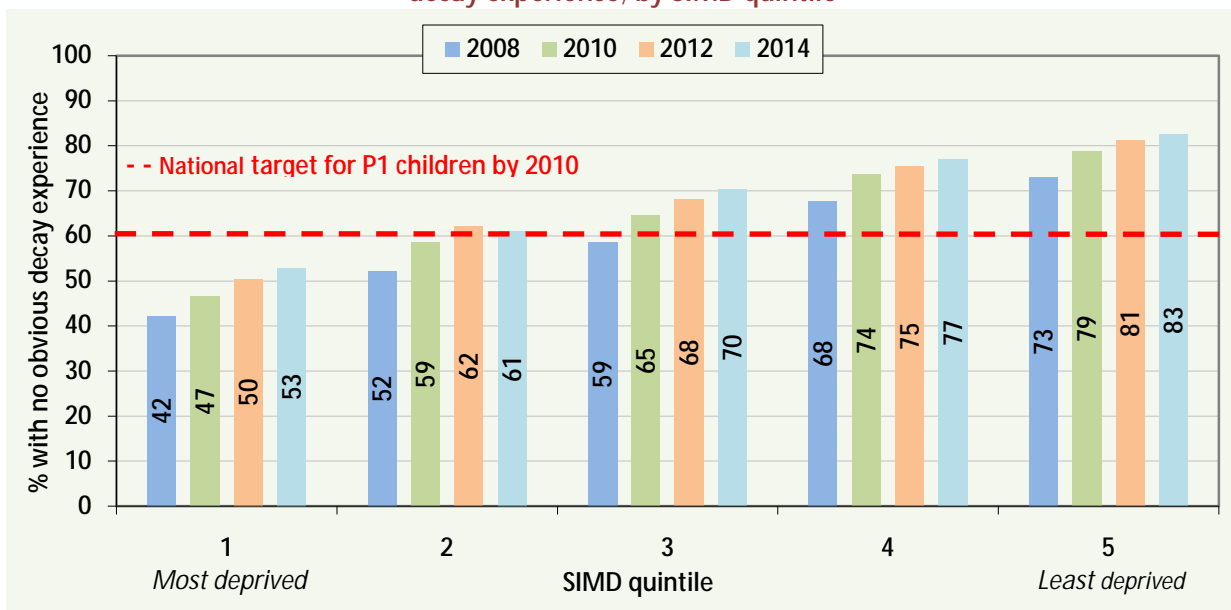
Figure 4 Mean number of obviously decayed, missing and filled primary teeth (d_3mft) of P1 children in 2014 in Scotland and by NHS Board



Is there a link between area-based socio-economic deprivation and poor oral health in P1 children?

Socio-economic inequalities in the oral health of P1 children remain, with the percentages with no obvious decay experience ranging from 53% for children in the most deprived quintile to 83% for those in least deprived quintile. The difference in values between SIMD 1 and SIMD 5 has remained at around 30% over the past four reports. The national target (60% of children to have no obvious decay experience) has still not been met in the most deprived quintile (53%).

Figure 5: Change between 2008 and 2014 in the proportion of P1 children in Scotland with no obvious decay experience; by SIMD quintile





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Summary of findings by NHS Board

The following table summarises the findings of the 2014 survey of P1 children for each NHS Board in Scotland. Although the mean d_3mft for all P1 children in Scotland is now only 1.27, for those children with caries experience, the average number of decayed, missing and filled teeth is 3.97.

Table 1: Obvious decay experience in primary teeth of P1 children for each NHS Board and Scotland in 2014

NHS Board	% with no obvious decay experience in primary teeth	Mean number of:				
		decayed, missing and filled teeth (d_3mft)	decayed teeth (d_3t)	missing teeth (mt)	filled teeth (ft)	decayed, missing and filled teeth for those with obvious decay experience ($d_3mft > 0$)
SCOTLAND	68.2	1.27	0.82	0.27	0.18	3.97
AA	66.3	1.27	0.74	0.34	0.19	3.78
B	76.8	0.85	0.59	0.14	0.13	3.59
DG	66.2	1.20	0.99	0.06	0.15	3.64
F	70.8	0.97	0.72	0.11	0.14	3.23
FV	66.2	1.33	0.90	0.22	0.21	3.97
G	73.2	1.00	0.64	0.20	0.16	3.84
GGC	65.3	1.45	0.90	0.35	0.20	4.10
H	70.1	1.12	0.71	0.25	0.16	3.76
La	67.8	1.34	0.80	0.41	0.13	4.15
Lo	68.9	1.31	0.94	0.21	0.17	4.27
O	72	1.16	0.62	0.22	0.32	3.83
S	80.9	0.64	0.38	0.12	0.15	3.30
T	68.3	1.30	0.78	0.31	0.22	4.13
WI	71.7	1.23	0.97	0.00	0.26	4.35

NHS BOARD ABBREVIATIONS

AA AYRSHIRE & ARRAN	B BORDERS	DG DUMFRIES & GALLOWAY	F FIFE	FV FORTH VALLEY	G GRAMPIAN	GGC GREATER GLASGOW & CLYDE
H HIGHLAND	LA LANARKSHIRE	O ORKNEY	Lo LOTHIAN	S SHETLAND	T TAYSIDE	WI WESTERN ISLES

Conclusions

The findings of the Detailed Inspection of P1 children in the school year 2013/14 show some improvements in oral health in terms of both a slight increase in the proportion with no obvious decay experience and a decrease in mean number of decayed, filled or missing teeth. However, clear health inequalities persist, and reducing dental health inequality must remain a priority.

Acknowledgements

The Scottish Dental Epidemiology Coordinating Committee is grateful to the many people and organisations throughout Scotland involved in the 2013/14 programme. This includes participating children, parents and schools, Local Authorities, NHS Boards and the dental teams conducting the inspections, and ISD and the Community Oral Health Section of Glasgow University Dental School for the analysis of the data.