



National Dental Inspection Programme (NDIP)

Report 2015

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 2014/15 (noted as 2015 throughout the report), the *Detailed Inspection* programme looked at P7 children.

This Executive Summary presents the main findings of the *Detailed Inspection* programme of P7 children in 2015. A more in-depth presentation of the results can be found at <http://www.isdscotland.org/Health-Topics/Dental-Care/National-Dental-Inspection-Programme/>.

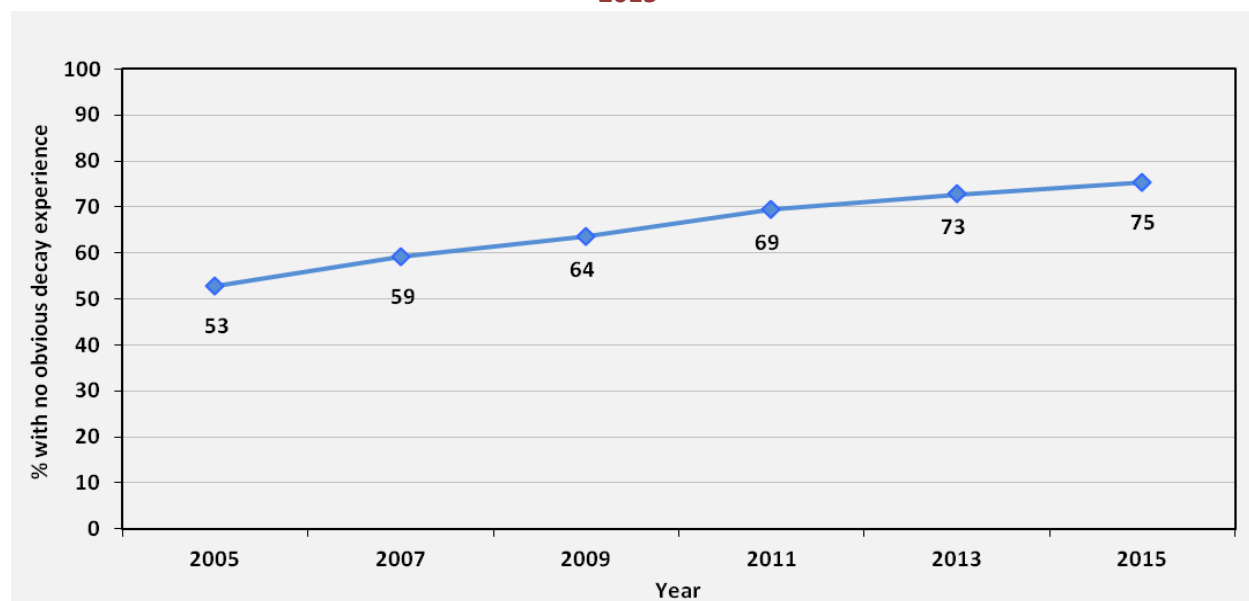
How many P7 children had a Detailed Inspection?

In total, 14,643 children from Local Authority schools across Scotland were inspected in detail. This represents 28% of the P7 population. Across the NHS Boards, the percentage of P7 children that were inspected ranged from 12% to 91%. 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 NHS Boards need to include large proportions to achieve statistically meaningful results.

What proportion of P7 children in Scotland had no obvious decay experience?

Figure 1 shows a large improvement in the oral health of P7 children in Scotland since 2005, with 75% having no obvious decay experience in 2015.

Figure 1: Trends in the percentage of P7 children with no obvious decay experience in Scotland; 2005-2015





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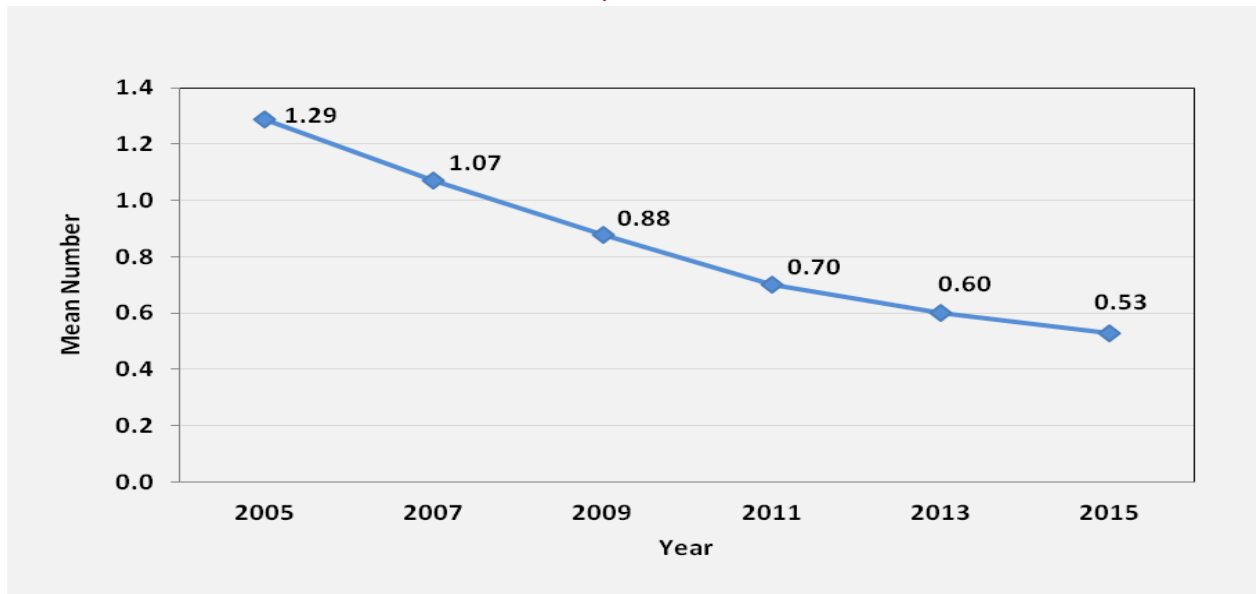
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What levels of obvious decay experience were seen in P7 children?

The mean number of teeth that were decayed, missing or filled (D₃MFT) continues to decline. In 2015, the mean number of teeth affected by obvious decay experience fell to 0.53.

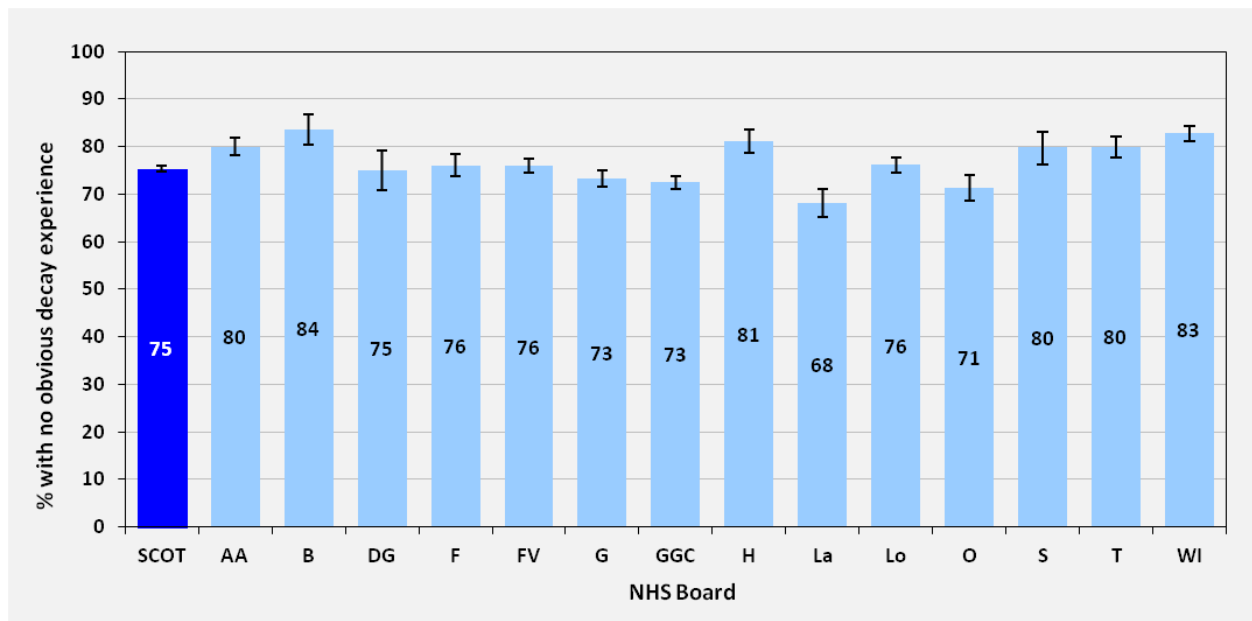
Figure 2: Mean number of decayed, missing and filled permanent teeth (D₃MFT) in the P7 population in Scotland; 2005-2015



What is the picture of oral health of P7 children across Scotland?

The percentage of P7 children with no obvious decay experience now ranges from 68% to 84% across all NHS Boards in Scotland in 2015.

Figure 3: Percentage of P7 children in Scotland with no obvious decay experience in 2015; by NHS Board





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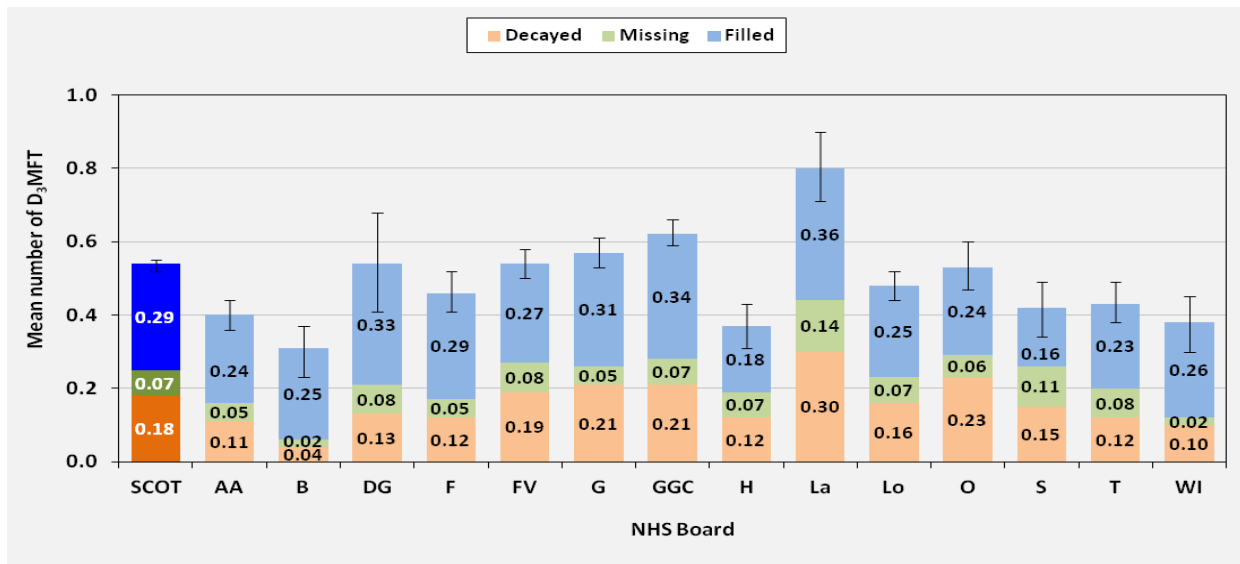


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The mean number of teeth with obvious decay experience ranged from 0.30 to 0.80 across NHS Boards. The contribution of the components of the index to the overall D₃MFT value can be seen in Figure 4.

Figure 4 Mean number of obviously decayed, missing and filled permanent teeth (D₃MFT) of P7 children in 2015 in Scotland and by NHS Board

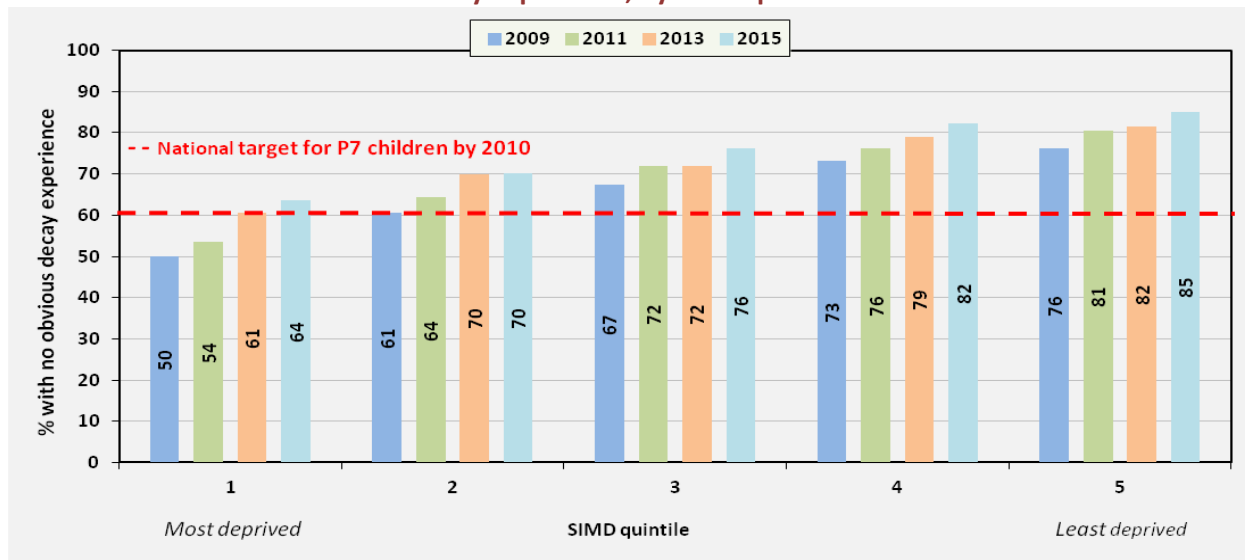


Note: There may be some rounding issues.

Is there a link between area-based socio-economic deprivation and poor oral health in P7 children?

Socio-economic inequalities in the oral health of P7 children remain, with the percentages with no obvious decay experience ranging from 64% for children in the most deprived quintile to 85% for those in least deprived quintile. The difference in values between SIMD 1 and SIMD 5 was 21 percentage points (the difference was also 21 percentage points in the 2013 report), an improvement from the 2009 and 2011 reports where the difference was 26 percentage points and 27 percentage points, respectively.

Figure 5: Change between 2009 and 2015 in the percentage of P7 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 2015 survey of P7 children for each NHS Board in Scotland. Although the mean D₃MFT for all P7 children in Scotland is now only 0.53, for those children with caries experience, the average number of decayed, missing and filled teeth is 2.16.

Table 1: Obvious decay experience in permanent teeth of P7 children for each NHS Board and Scotland in 2015

| NHS Board | % with no obvious decay experience in permanent teeth | Mean number of: | | | | |
|-----------------|---|--|----------------------------------|--------------------|-------------------|--|
| | | decayed, missing and filled teeth (D ₃ MFT) | decayed teeth (D ₃ T) | missing teeth (MT) | filled teeth (FT) | decayed, missing and filled teeth for those with obvious decay experience (D ₃ MFT>0) |
| SCOTLAND | 75.3 | 0.53 | 0.18 | 0.07 | 0.29 | 2.16 |
| AA | 80.0 | 0.40 | 0.11 | 0.05 | 0.24 | 2.01 |
| B | 83.6 | 0.30 | 0.04 | 0.02 | 0.25 | 1.84 |
| DG | 75.1 | 0.54 | 0.13 | 0.08 | 0.33 | 2.13 |
| F | 76.1 | 0.46 | 0.12 | 0.05 | 0.29 | 1.96 |
| FV | 75.9 | 0.54 | 0.19 | 0.08 | 0.27 | 2.27 |
| G | 73.2 | 0.57 | 0.21 | 0.05 | 0.31 | 2.15 |
| GGC | 72.5 | 0.62 | 0.21 | 0.07 | 0.34 | 2.27 |
| H | 81.2 | 0.37 | 0.12 | 0.07 | 0.18 | 1.95 |
| La | 68.1 | 0.80 | 0.30 | 0.14 | 0.36 | 2.49 |
| Lo | 76.2 | 0.48 | 0.16 | 0.07 | 0.25 | 2.03 |
| O | 71.3 | 0.54 | 0.23 | 0.06 | 0.24 | 1.88 |
| S | 79.8 | 0.42 | 0.15 | 0.11 | 0.16 | 2.13 |
| T | 80.0 | 0.44 | 0.12 | 0.08 | 0.23 | 2.23 |
| WI | 82.8 | 0.38 | 0.10 | 0.02 | 0.26 | 2.12 |

Note: There may be some rounding issues.

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 | Lo LOTHIAN | O ORKNEY | S SHETLAND | T TAYSIDE | WI WESTERN ISLES |

Conclusions

The findings of the Detailed Inspection of P7 children in 2015 show some improvements in oral health in terms of both a slight increase in the percentage 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 2014/15 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.