# Child Oral Health and Dental Visiting in Australia

Results from the National Dental Telephone Interview Survey 2021

Australian Research Centre for Population Oral Health The University of Adelaide

2023

## Contents

Acl	knowledgments	vi
Ab	breviationsv	ii
Syı	nbolsv	ii
Su	mmary vi	ii
1	Introduction	.1
	Measures reported in this publication	.1
	Data Analysis	.2
2	Oral health	.4
	What is oral health?	.4
	Why are we interested in knowing about oral health?	.4
	What are the known risk factors for oral disease?	.4
	Measures of oral health	.5
	What proportion of children experienced poor oral health?	.6
	Does oral health vary with age?	.7
	Does oral health vary by geographic location?	.8
	Does oral health vary by socioeconomic status?	.9
	Does oral health vary by insurance status?	11
	How has the oral health of children changed over time?	12
3	Dental visiting1	14
	Why is dental visiting important?	14
	Measures of dental visiting	14
	What percentage of children made a dental visit?	16
	Does dental visiting vary with age?	17
	Does dental visiting vary by geographic location?	18
	Does dental visiting vary by socioeconomic status?	19
	Does dental visiting vary by insurance status?	20
	Does dental visiting vary by eligibility for Child Dental Benefits Schedule?	21
	Has dental visiting changed over time?	22
4	Financial barriers and hardship	24
	Measures of financial barriers and hardship	24
	What percentage of children experienced financial barriers to dental visiting?	25

	Do financial barriers to dental visiting vary with age?	26
	Do financial barriers to dental visiting vary by geographic location?	27
	Do financial barriers and hardships vary by socioeconomic status?	28
	Do financial barriers and hardships vary by insurance status?	29
	Do financial barriers and hardships vary by eligibility for Child Dental Benefits Schedule?	30
	Have barriers to dental visiting changed over time?	31
5	Services received	32
	Measures of services received	32
	What preventive services did children receive?	33
	What diagnostic and treatment services did children receive?	34
	Did preventive services vary by age?	35
	Did diagnostic and treatment services vary by age?	36
	Did preventive services vary by geographic location?	37
	Did diagnostic and treatment services vary by geographic location?	38
	Did preventive services vary by socioeconomic status?	39
	Did diagnostic and treatment services vary by socioeconomic status?	40
	Did preventive services vary by insurance status?	41
	Did diagnostic and treatment services vary by insurance status?	42
	Did preventive services vary by eligibility for Child Dental Benefits Schedule status	;?43
	Did diagnostic and treatment services vary by eligibility for the Child Dental Benef Schedule?	its 44
	Did preventive services vary by reason for visit?	45
	Did diagnostic and treatment services vary by reason for visit?	46
	Did preventive services vary by type of practice visited?	47
	Did diagnostic and treatment services vary by type of practice visited?	48
	Did preventive services vary by experience of financial barriers or hardship?	49
	Did diagnostic and treatment services vary by experience of financial barriers or hardship?	50
	Have services received changed over time?	52
6	Perceived need for care	54
	Measure of perceived need for dental care	54
	How many children reported a need for dental care?	54
	Did perceived need for dental care vary by age?	55
	Does need for dental care vary by geographic location?	56

	Does need for dental care vary by socioeconomic status?	57
	Does need for dental care vary by insurance status?	58
	Does need for dental care vary by eligibility for the Child Dental Benefits Schedule?	59
	Is perceived need for care related to recent visiting experience or oral health?	60
	Is perceived need for care related to recent experience of financial barriers or hardship?	62
	Has perceived need for care changed over time?	64
7	Dental visiting, oral health and financial barriers	66
	Did dental visiting pattern vary by experience of financial barriers and hardship?	66
	Did experience of social impacts of oral health vary by dental visiting pattern?	68
	Did experience of social impacts of oral health vary by experience of barriers to dental care?	69
8	Hospital separations	71
	Potentially preventable hospitalisations	71
	Dental procedures requiring general anaesthetic	73
9	Synthesis of findings over time and between population groups	74
	General picture	74
	Changes over time	74
	Differences between males and females	75
	Differences between age groups	75
	Differences across geographic location	75
	Differences between socioeconomic groups	75
	Differences by dental insurance status	76
	Differences by financial barriers and hardships	76
Ap	pendix A: Data used in this report	77
	National Dental Telephone Interview Survey	77
Ap	pendix B: Estimates and confidence intervals for figures	79
Ap	pendix C: Child Dental Benefits Schedule – additional tables	84
Ref	ferences	88
Lis	t of tables	89
Lis	t of figures	92
Lis	t of boxes	92

## Acknowledgments

The National Dental Telephone Interview Survey (NDTIS) 2021 and this report were funded by the Australian Government Department of Health and Aged Care.

The authors would also like to acknowledge the technical support provided by Adam Zammit of the Australian Consortium for Social and Political Research Incorporated (ACSPRI). His prompt assistance and expertise with the set-up and use of the software used to conduct CATI interviews was invaluable.

The authors would like to acknowledge the staff at the Health Strategy Branch of Services Australia who assisted us with the sample extraction process.

The authors would like to acknowledge all those who participated in the Study. We are extremely grateful to the study participants who took the time from their busy schedules to participate in the study. Without their participation and feedback, this study would not have been possible.

## Contributors

#### Authors

Sergio Chrisopoulos, Research Fellow, Australian Research Centre for Population Oral Health, The University of Adelaide, SA, Australia

Liana Luzzi, Senior Research Fellow, Deputy Director, Australian Research Centre for Population Oral Health, The University of Adelaide, SA, Australia

David S Brennan, Australian Research Centre for Population Oral Health, The University of Adelaide, SA, Australia

#### **Administrative Personnel**

Nikkita Dodds, Jenny Kemp

#### **Telephone Interviewers**

Andrew Barker, Nicholas Gialamas, William Glonek, Alicia Helbers, Meredith Hoare, Jenny Kemp, Emma Meade, Katherine Muirhead, Aiden O'Keefe, Olga Ostapchuk, Sonia Nath, Anita Patton, Kevin Pilkington, Sarah Provis, Sneha Sethi, Mehrsa Zakershahrak

## **Abbreviations**

ABS	Australian Bureau of Statistics
AEC	Australian Electoral Commission
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
CIs	Confidence intervals
DSRU	Dental Statistics and Research Unit
ERP	Estimated resident population
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
NDTIS	National Dental Telephone Interview Survey
OHI	Oral hygiene instruction

# Symbols

- nil or rounded to zero
- .. not applicable
- \* Relative Standard Error (RSE) greater than 25%

# Summary

This publication reports on self-reported oral health, dental visiting and dental treatment needs of Australian children aged 5–17 years as reported in the National Dental Telephone Interview Survey (NDTIS) 2021. Time series data across all NDTISs conducted since 1994 are presented to provide a picture of how key measures have changed over time.

### **Oral health**

The majority of Australian children aged 5–17 years report good oral health. However, 9.1% reported that they had experienced toothache and 15.2% reported that they had avoided certain foods because of problems with their teeth or mouth during the previous 12 months. Data was similar across a range of socioeconomic and demographic characteristics.

### **Dental visiting**

Some 72% of children aged 5–17 years made a dental visit in the previous 12 months, of which the majority (79.8%) visited for a check-up. Children from the lowest income households were less likely than those from higher income households to have made a dental visit in the previous 12 months, as were children living in Outer regional/Remote areas. Dental visiting has remained fairly stable over time.

### Barriers to dental care use

Around 9% of children aged 5-17 years avoided or delayed making a dental visit in the previous 12 months due to cost. Some 5% did not have recommended treatment due to cost. Overall, almost 20% of children either avoided or delayed seeking care, did not have recommended treatment or their household experienced a large financial burden due to the cost of dental care. Children from low-income households were more likely than those from high income households to avoid or delay visiting due to cost and to not have had recommended treatment due to cost.

# 1 Introduction

While Australian children have enjoyed some improvements in their oral health over the last half of the 20<sup>th</sup> century, child oral health has remained a significant oral health issue in the 21<sup>st</sup> century. There has been an uneven distribution of children having had some experience of tooth decay, associated with socioeconomic and geographic characteristics (Australian Health Ministers' Advisory Council Steering Committee for National Planning for Oral Health 2001).

This publication reports on the self-reported oral health and dental visiting and dental treatment needs of Australian children aged 5–17 years as collected in the National Dental Telephone Interview Survey (NDTIS) 2021. Time series data across all NDTISs conducted since 1994 are presented to provide a picture of how key measures have changed over time.

## Measures reported in this publication

Information reported in this publication is taken from the NDTIS 2021 (details of NDTIS 2021 can be found in Appendix A). For some measures, time series information has been reported from previous NDTISs undertaken in 1994, 1996, 1999, 2002, 2005, 2008, 2010, 2013 and 2017. For all surveys, for children aged between 5 and 17 years, questions were answered by a parent or guardian on behalf of the selected child.

Measures reported are in five broad categories.

#### Oral health

Measures include self-rated oral health, which is reported as 'excellent', 'very good', 'good', 'fair' or 'poor'; and social impacts of oral health, including whether the child experienced toothache or avoided eating some foods due to problems with their teeth or mouth, which is reported as 'often', 'very often' or 'sometimes in the previous 12 months'.

#### Dental visiting

Measures relate to the time since the child's last dental visit and the reason for that dental visit. Time since last dental visit is reported as 'less than 12 months ago', '1 to less than 2 years ago', '2 to less than 5 five years ago', '5 or more years ago'. Reason for last dental visit is reported as 'check-up' or 'problem'. Site of last visit is reported as 'public' (which includes public dental services and school dental services) and 'private'.

#### Financial barriers and hardship

Measures include whether the child avoided or delayed visiting a dentist due to cost, whether cost prevented them having the recommended treatment and whether dental visits in the previous 12 months were a large financial burden.

#### Services received

Services received include the preventive services of 'fluoride treatment', 'fissure sealants' and 'oral hygiene instruction'. The diagnostic and treatment services 'check-up', 'x-ray', 'filling' and 'extraction' are also reported.

#### Perceived need for care

Perceived need for care is reported for the service types: 'check-up', 'scale and clean', 'filling', 'extraction', 'orthodontics' and 'other'.

## Socioeconomic characteristics

#### Sex

Sex was classified as 'Male' or 'Female'.

#### Age

The measures described in this report are presented for children aged 5-17 years for 2021.

#### **Residential location**

Residential location was classified as 'Major cities', 'Inner regional', 'Outer regional/Remote' based on the Australian Bureau of Statistics – Australian Statistical Geographical Standard (ASGS – remoteness – 2021). In this report, this measure was derived from the postcode of selected individuals.

#### Eligibility for public dental care

For this survey, eligibility for public dental care was based on responses to three questions in the Interview. People were first asked 'Do you currently receive a pension or allowance from the Government, or have a Pensioner Concession Card, a Health Care Card or a Department of Veterans Affairs card (not including Medicare)?' People who responded 'yes' were then given a list of six concession card types and asked to indicate if they were covered by each one. People were classified as eligible for public dental care if they responded 'yes' to the first question and reported that they were covered either by a pensioner concession card, health care card or both. They were classified as ineligible if they responded 'no' to the first question, or if they responded 'yes' to the first question but 'no' to both questions regarding pensioner concession card and health care.

#### **Dental insurance**

Dental insurance coverage was based on responses to three questions. People were first asked 'Do you have private health insurance other than Medicare?' People who responded 'Yes' or 'Don't know' were then asked 'What type of private medical insurance do you have?' and were given three options: 'Hospital only', 'Combined hospital and Extras/general' and 'Extras/general treatment only'. People who answered 'Combined hospital and extras/general' and extras/general' and 'Extras/general treatment only' or 'Don't know' were asked, 'Does your private health insurance provide cover for dental services?' If people responded 'Yes' to the final question then they were classified as having dental insurance.

#### Household income tertiles

The estimated total household income was asked of all adults using the question 'What is your total household income category before tax?' Response categories provided ranged from 'Up to \$20,000' to '\$250,000 and over' in \$10,000 increments. Individuals were then assigned into approximate thirds (tertiles). Families who either answered 'Don't know' or 'Rather not say' and were excluded from estimates for income.

## **Data Analysis**

The aim of the data analysis was to generate summary statistics describing oral health for the Australian population.

SAS software version 9.4 was used to conduct analyses and compute summary variables. For the results presented in this report, percentages, means and their associated standard errors

and 95% CIs were generated using SAS callable procedures from SUDAAN software release 11.0.3.

The SUDAAN procedures used sampling weights to generate population estimates and calculated 95% CIs that incorporated the complex sampling design used in this study. To reflect the sampling design, the stratification level was defined as the 15 Greater Capital City Statistical Areas (GCCSA regions) and the clustering level was defined at the unit record level to simulate a simple random sample. To indicate estimates that are subject to high sampling variability relative to the size of the estimate, Relative Standard Errors (RSEs) were calculated for each estimate in this report.

RSE was calculated using the formula:

$$RSE\% = \frac{SE}{Estimate} * 100$$

where SE is the standard error of the estimate. Estimates with an RSE greater than 25% are succeeded with an asterisk (e.g. 3.0\*) to indicate they are subject to high sampling errors and should be used with caution.

#### Reporting 95% confidence intervals to express variability

Population estimates derived from a sample of the target population rather than the whole population are subject to sampling variability. In theory, it is possible to draw a nearly infinite number of different samples of this size and it is likely that the population estimates from each sample will differ to a certain degree. The level of variability in these population estimates can be measured using statistical theory. In this study, the reliability of population estimates presented in the report is expressed using confidence intervals. A confidence interval is a range which is estimated to contain the true population.

Data in this report are presented as percentages or means, with 95% confidence intervals. The 95% confidence interval indicates the range values we can be 95% confident that contains the true value of the estimate.

# 2 Oral health

## What is oral health?

Oral health is a standard of health of the oral and related tissues that enables an individual to eat, speak and socialise without active disease, discomfort or embarrassment and which contributes to general wellbeing (UK Department of Health 1994). This means that oral health is more than the absence of disease, but the ability to function without limitation caused by problems with the teeth, mouth or gums. Oral health can be assessed using global ratings of oral health or by examining the impacts of oral health and disease on daily life. In children and adults, dental decay is the most commonly occurring oral disease.

## Why are we interested in knowing about oral health?

Oral health is a key aspect of health and has an impact on a range of daily activities. Dental caries, the most common childhood infection in Australia, results in costly treatment (up to one billion dollars annually), poor school performance, inadequate nutrition, problems with sleeping and adverse mental health (social and emotional wellbeing) (AIHW 2022). In addition to treatment costs, there are productivity losses due to carer absenteeism from work in the short-term, and long-term, economic costs to the child (Listl et al. 2015). The burden of child oral diseases is overrepresented among socially vulnerable groups. For example, in the 2012–14 National Child Oral Health Study, 23% of non-Indigenous children aged 5 to 10 years had dental caries in the primary dentition compared with 36% of Indigenous children, and 41% of non-Indigenous children aged 6 to 14 years had dental caries in the permanent dentition compared with 61% of Indigenous children (ARCPOH 2016).

Dental care is also a common reason for potentially preventable hospital admissions among Australian children. In 2019–20, there were 24,607 potentially preventable hospital admissions for oral health issues for children aged under 15; these hospitalisations were highest among socially vulnerable children (AIHW 2022).

## What are the known risk factors for oral disease?

Dental caries (commonly referred to as dental decay) is the most commonly occurring oral disease in children and teenagers. It is characterised by chronic loss of mineral from the tooth - a process where several factors play important roles. The five factors found to exert the strongest influence on dental decay are:

- frequency of carbohydrate intake, which allows bacteria in the plaque to produce concentrations of organic acids that can dissolve the tooth
- the accumulation and retention of plaque, which is a potential breeding ground for acid-producing bacteria
- frequency of exposure to dietary acids in addition to the bacterial acids
- exposure to fluoride and some other trace elements, which help in controlling the development of decay

• natural protective factors, such as saliva, which may help prevent or limit the progress of decay (Mount & Hume 2005).

Plaque, a semitransparent layer that adheres to the tooth surface, forms on all teeth and contains many disease-causing bacteria. Tooth brushing and/or the use of chemical solutions capable of killing the acid-causing bacteria can reduce plaque. However, the frequency of exposure to fermentable carbohydrates, such as sugar, is the most significant risk factor for dental decay. This exposure relates directly to patterns of consumption of foods and beverages containing sugar.

Behavioural risk factors for dental decay relate to the five risk and protective factors listed above. These include substandard tooth cleaning, poor diet involving high exposure to fermentable carbohydrates, such as sugars, and limited exposure to fluoride available in toothpastes, fluoridated public water or other sources (Mount & Hume 2005).

## Measures of oral health

The chapter reports on three self-reported measures of oral health and symptom experience.

## Self-reported oral health

Respondents to NDTIS were asked, 'How would you rate your oral health?' Five response categories were used: 'excellent', 'very good', 'good', 'fair' and 'poor'. Responses are reported in two categories: 'fair/poor' and 'excellent/very good/good'.

## **Experience of toothache**

Respondents were asked 'During the last 12 months how often has [child] had toothache caused by decayed teeth—NOT teething problems?' Five response categories were offered for this question: 'very often', 'often', 'sometimes', 'hardly ever' and 'never'. Results are reported in two categories: 'very often/often' and 'sometimes/hardly ever/never'.

## Experience of avoiding food due to oral problems

Respondents were asked 'How often have you had to avoid eating some foods because of problems with your teeth, mouth or dentures during the last 12 months?' Five response categories were offered for this question: 'very often', 'often', 'sometimes', 'hardly ever' and 'never'. Results are reported in two categories: 'very often/often' and 'sometimes/hardly ever/never'.

## Time trends

The trend over all NDTISs is reported for experience of either a toothache or avoiding foods. For self-rated oral health, the trend from 1999 (when children were first asked this question) until 2021 is reported for self-rated oral health.

# What proportion of children experienced poor oral health?

In 2021, 7.4% of children aged 5–17 years reported to having fair or poor oral health and 17.2% reported at least one of the social impact of oral health (toothache, food avoidance) (Table 2.1). Just over 15% of children avoided food because of oral problems and nearly one in ten (9.1%) reported experiencing toothache during the previous 12 months. Females (21.0%) were more likely to report having at least one of the social impacts (toothache, food avoidance) than males (13.7%).

Sex	Fair or poor oral health <sup>(a)</sup>	Toothache <sup>(b)</sup>	Avoid food <sup>(c)</sup>	Any social impact of oral health <sup>(d)</sup>
All children	7.4	9.1	15.2	17.2
95%Cl	5.4-10.2	6.7–12.3	12.1–18.9	14.0–21.0
Male	8.7	7.7	11.7	13.7
95%Cl	5.7–13.1	5.0–11.6	8.4–16.2	10.1–18.2
Female	6.1	10.6	18.8	21.0
95%CI	3.8–9.6	6.9–16.1	13.9–25.1	15.9–27.3

Table 2.1: Prevalence of fair or poor oral health and social impacts of oral health by sex, 2021 (pe	er
cent)	

Notes:

(a) Percentage of children reporting that they had 'fair' or 'poor' oral health.

(b) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months.

(c) Percentage of children reporting that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

(d) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months, or that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

## Does oral health vary with age?

The proportions of children experiencing fair or poor oral health, or a social impact of oral health in 2021 are shown, by age, in Table 2.2. The data suggests that each impact was more prevalent among older children, with children aged 11–17 years more likely than children aged 5–10 years to report any social impact of oral health (19.7% compared with 14.5%).

Age group (years)	Fair or poor oral health <sup>(a)</sup>	Toothache <sup>(b)</sup>	Avoid food <sup>(c)</sup>	Any social impact of oral health <sup>(d)</sup>
All children	7.4	9.1	15.2	17.2
95%Cl	5.4-10.2	6.7–12.3	12.1–18.9	14.0–21.0
5–10	8.5	7.7	12.0	14.5
95%Cl	5.5–12.8	5.0–11.6	8.5–16.7	10.7–19.5
11–17	6.5	10.4	18.0	19.7
95%Cl	4.0–10.3	6.8–15.7	13.4–23.8	14.9–25.5

Table 2.2: Prevalence of fair or poor oral health by age, 2021 (per cent)

(a) Percentage of children reporting that they had 'fair' or 'poor' oral health.

(b) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months.

(c) Percentage of children reporting that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

(d) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months or that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

## Does oral health vary by geographic location?

In 2021, children in Outer regional/Remote areas tended to have a lower prevalence of social impact of oral health than children in Major cities and Inner regional areas, although due to high sampling variability some caution should be used. Slightly higher percentages of children in Inner regional areas reported social impacts than children in Major cities (Table 2.3).

	Fair or poor			Any social impact
Geographic location	oral health <sup>(a)</sup>	Toothache <sup>(b)</sup>	Avoid food <sup>(c)</sup>	of oral health <sup>(d)</sup>
All children	7.4	9.1	15.2	17.2
95%Cl	5.4–10.2	6.7–12.3	12.1–18.9	14.0–21.0
Major cities	7.3	9.4	15.7	17.5
95%Cl	4.8–10.9	6.5–13.5	11. <del>9–</del> 20.4	13.6–22.2
Inner regional	6.9*	10.9*	17.3	21.0
95%Cl	3.8–12.1	5.7–19.8	11.0–26.1	14.1–30.1
Outer regional/Remote	9.3*	3.9*	8.0*	9.0*
95%Cl	4.4–18.5	1.4–10.6	2.8–20.4	3.7–20.7

Table 2.3: Children experiencing fair or poor oral health or oral health i	mpacts by
geographic location, 2021 (per cent)	

Notes:

(a) Percentage of children reporting that they had 'fair' or 'poor' oral health.

(b) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months.

(c) Percentage of children reporting that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

(d) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months or that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

## Does oral health vary by socioeconomic status?

Children from households in the lowest income bracket were more likely to report fair or poor oral health, toothache, avoiding food due to oral problems and any social impact of oral health compared to children from higher income (Table 2.4).

The proportion of children experiencing fair or poor oral health or a social impact in 2021 are also shown by concession cardholder status (Box 2.1) in Table 2.4. Cardholders reported higher rates of self-reported poor oral health (13.9% compared to 5.3%). Across oral health impacts, Cardholders tended to have higher rates of toothache, avoidance of food due to oral problems or any oral heath impact.

#### Box 2.1: Cardholders

'Cardholders' are people who hold an Australian Government concession card, generally by virtue of their household income. Cardholder status is used to determine eligibility for free or subsidised dental care provided by state and territory governments.

	Fair or poor oral health <sup>(a)</sup>	Toothache <sup>(b)</sup>	Avoid food <sup>(c)</sup>	Any social impact of oral health <sup>(d)</sup>
All children	7.4	9.1	15.2	17.2
95%CI	5.4-10.2	6.7–12.3	12.1–18.9	14.0–21.0
Annual household income tertile <sup>(e)</sup>				
Less than \$100,000	10.3	8.7*	17.5	19.9
95%CI	6.5–15.8	5.3–14.0	12.0–24.7	14.2–27.1
\$100,000-<\$180,000	6.3*	8.6*	13.7	15.1
95%CI	3.3–11.9	4.6–15.5	8.6–20.9	9.9–22.3
\$180,000 or more	6.6*	8.4*	14.2	16.1
95%CI	3.3–12.8	4.5–15.3	9.1–21.5	10.7–23.6
Cardholder status				
Cardholder	13.9	14.6	17.2	22.1
95%CI	8.6–21.8	8.8–23.3	10.4-27.1	14.5–32.1
Non-cardholder	5.3	7.6	14.8	16.0
95%CI	3.4–8.2	5.1–11.2	11.4–18.9	12.5–20.2

Table 2.4: Children experiencing fair or poor oral health or oral health impacts by socioeconomic status, 2021 (per cent)

Notes:

(a) Percentage of children reporting that they had 'fair' or 'poor' oral health.

(b) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months.

(c) Percentage of children reporting that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

(d) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months or that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

(e) Annual household income based on approximate tertiles.

## Does oral health vary by insurance status?

The proportion of children experiencing fair or poor oral health or a social impact of oral health in 2021 are shown, by insurance status, in Table 2.5. The insured category represents children covered by private dental insurance (i.e. extras cover for dental care with or without private health insurance).

Children covered by private dental insurance were less likely than those without insurance to report fair or poor oral health (5.5% compared with 10.5%). The experience of toothache, avoiding food due to oral problems or the experience of any social impact between children with and those without dental insurance was similar.

Insurance status	Fair or poor oral health <sup>(a)</sup>	Toothache <sup>(b)</sup>	Avoid food <sup>(c)</sup>	Any social impact of oral health <sup>(d)</sup>
All children	7.4	9.1	15.2	17.2
95%Cl	5.4-10.2	6.7–12.3	12.1–18.9	14.0–21.0
Insured	5.5*	9.0	16.7	17.7
95%CI	3.2–9.1	5.8–13.6	12.6–21.8	13.5–22.8
Uninsured	10.5	9.8	12.0	16.0
95%CI	7.0–15.5	6.4–14.9	8.2–17.2	11.6–21.7

## Table 2.5: Children experiencing poor oral health or oral health impacts by dental insurance status, 2021 (per cent)

Notes:

(a) Percentage of children reporting that they had 'fair' or 'poor' oral health.

(b) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months.

(c) Percentage of children reporting that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

(d) Percentage of children reporting that they had experienced toothache 'very often', 'often' or 'sometimes' during the previous 12 months or that they had avoided certain foods 'very often', 'often' or 'sometimes' during the previous 12 months.

# How has the oral health of children changed over time?

The proportion of children aged 5–17 years reporting fair or poor oral health over the period 1999–2021 is shown in Figure 2.1. Information on self-reported oral health was not collected for children aged 5–17 years in 1994 and 1996.

The proportion of children reporting fair or poor oral health fluctuated between a high of 10.3% in 1999 to a low of 5.7% in 2013 (Figure 2.1). There is an overall trend towards an improvement in self-rated oral health.



The proportion of children experiencing any social impact of oral health showed a general increase between 1994 and 2021, with the prevalence of any oral health impact ranging between 13.0% to 19.7% (Figure 2.2). The increase in avoiding certain foods due to dental problems was more pronounced than the experience of toothache in the previous 12 months.



## 3 Dental visiting

## Why is dental visiting important?

Patterns of dental visiting can have an important influence on an individual's oral health (Crocombe et al. 2012). A dental visit can provide an opportunity for the provision of preventive dental care to maintain existing healthy teeth, as well as delivering treatment services that may reverse disease or rehabilitate teeth and gums after damage occurs because of that disease. Preventive care is most likely to occur when regular dental visiting for a check-up occurs. Regular visiting also increases the likelihood that disease will be detected in its early stages and can be managed before significant damage occurs to teeth and gums. Individuals who undertake 'problem-oriented' visiting are more likely to lose teeth to decay (Thomson et al. 2000), have poorer oral-health-related quality of life (McGrath & Bedi 2000) and experience greater limitations in everyday activities such as eating, talking and sleeping (Gilbert et al. 1997). Individuals who visit regularly are more likely (than those who do not) to report that their oral health has a positive effect on their quality of life (McGrath & Bedi 2000). It has also been shown that regular visiting in childhood is associated with better oral health in adulthood (Crocombe et al. 2012).

## **Measures of dental visiting**

This chapter reports on three measures of dental visiting: frequency of visiting, reason for visiting and type of practice visited.

## **Frequency of visiting**

Respondents to NDTIS 2021 were asked 'How long ago did you last see a dental professional about your teeth, dentures or gums?' Responses were categorised as 'within the previous 12 months', '1 to less than 2 years', '2 to less than 5 years' and '5 or more years'.

## **Reason for visiting**

Respondents to NDTIS 2021 who had made a dental visit were asked 'Was that dental visit for a check-up or for a dental problem?' Reason for last dental visit is reported as 'check-up' or 'problem'.

## Type of practice visited

Respondents to NDTIS 2021 were asked 'Where did you make your last dental visit? Was it at a private dental practice (including specialist), government dental clinic (including dental hospital), school dental service, dental technician, a clinic operated by health insurance fund, armed services/defence force clinic or other site?'

Type of dental practice last visited is reported in two categories: 'public dental clinic' or 'private practice'. Public dental clinic includes the responses 'government dental clinic' and 'school dental service'. All other responses are reported as 'private practice'.

## **Time trends**

Time trends for the proportion of children visiting and reason for visiting are shown across all NDTISs (1994–2021).

## What percentage of children made a dental visit?

In 2021, 72.0% of children aged 5–17 years made a dental visit in the previous 12 months and 4.2% had not made a dental visit in the previous 5 years (Table 3.1). The vast majority (79.8%) of children who made a dental visit in the previous 12 months did so for a check-up. Private dental practices were the most common type of practice visited (79.5%). Females were more likely to have made a visit in the previous 12 months (76.0%) than males (68.4%). The reason for the last dental visit was similar for males and females (80.3% and 79.4%, respectively), while 74.9% of males visited private practices compared with 84.1% of females.

	Time since last dental visit <sup>(a)</sup>			Reason for last dental visit <sup>(b)</sup>		Type of practice <sup>(b)</sup>		
Sex	<12 months	1-<2 years	2-<5 years	5+ years	Check-up	Problem	Public	Private
All children	72.0	18.6	5.1	4.2	79.8	20.2	20.5	79.5
95%CI	67.7–76.0	15.2–22.5	3.4-7.7	2.8–6.3	74.7–84.1	15.9–25.3	16.5–25.1	74.9–83.5
Male	68.4	20.9	4.8*	5.9*	80.3	19.7	25.1	74.9
95%CI	62.2–74.0	16.1–26.7	2.9–7.9	3.5–9.5	73.2–85.8	14.2–26.8	19.4–31.9	68.1–80.6
Female	76.0	16.0	5.5*	2.5*	79.4	20.6	15.9	84.1
95%CI	69.7–81.4	11.7–21.6	2.8–10.4	1.3–4.7	71.6–85.5	14.5–28.4	10.6–23.0	77.0–89.4

Notes:

(a) The category '5+ years' includes children who have never made a dental visit.

(b) Children who made a dental visit in the previous 12 months.

## Does dental visiting vary with age?

In 2021, nearly three-quarters of children (70.4% of children aged 5–10 years and 73.5% of children aged 11–17 years) had made a dental visit in the previous 12 months (Table 3.2). Children aged 5–10 years were more likely to report not having visited a dentist in the previous 5 years than older children (7.5% compared with 1.2%).

The majority of children who visited in the previous 12 months, had done so for a check-up, with 80.2% of children aged 5–10 years and 79.5% of children aged 11–17 years visiting for a check-up. Some 73.7% and 84.7% of children aged 5–10 years and 11–17 years, respectively, made their last dental visit to a private dental practice.

Across the two age groups, children aged 5–10 years had higher rates of not visiting in the previous 5 years than 11–17 year-olds (7.5% compared to 1.2%), however, this would be expected, especially for the younger children in the 5–10 years age group. Older children tended to have higher rates of visiting a private dentist than the younger age group.

	Tir	ne since last	dental visit <sup>(a)</sup>		Reason fo dental v	or last isit <sup>(b)</sup>	Type of p	ractice <sup>(b)</sup>
(years)	<12 months	1-<2 years	2-<5 years	5+ years	Check-up	Problem	Public	Private
All children	72.0	18.6	5.1	4.2	79.8	20.2	20.5	79.5
95%CI	67.7–76.0	15.2–22.5	3.4-7.7	2.8–6.3	74.7–84.1	15.9–25.3	16.5–25.1	74.9–83.5
5–10	70.4	16.0	6.0*	7.5	80.2	19.8	26.3	73.7
95%CI	63.9–76.2	11.8–21.3	3.1–11.3	4.8–11.5	72.1–86.4	13.6–27.9	19.7–34.1	65.9-80.3
11–17	73.5	20.9	4.3	1.2*	79.5	20.5	15.3	84.7
95%CI	67.5–78.8	16.0–26.9	2.7–6.8	0.5–3.3	72.6–85.1	14.9–27.4	11.0–21.0	79.0–89.0

#### Table 3.2: Prevalence of dental visiting indicators by age, 2021 (per cent)

Notes:

(a) The category '5+ years' includes children who have never made a dental visit.

(b) Children who made a dental visit in the previous 12 months.

## Does dental visiting vary by geographic location?

Children living in Major cities or Inner regional areas tended to have more frequent visits to a dentist than those in Outer regional/Remote areas (Table 3.3). Nearly three-quarters of children in Major cities and Inner regional areas visited in the previous 12 months compared to less than two-thirds (58.1%) in Outer regional/Remote areas.

Children from Major cities tended to have higher rates of visiting a private dentist at their last visit, than those living in other regions (Table 3.3).

In terms of reason for last visit, children in Inner regional areas who visited in the previous 12 months, were less likely to report visiting for a check-up compared with those in Outer regional/Remote areas (76.0% and 85.3%, respectively).

Geographic	Tin	ne since last	dental visit <sup>(a</sup>	)	Reason fo dental v	or last isit <sup>(b)</sup>	Type of p	ractice <sup>(b)</sup>
location	<12 months	1-<2 years	2–<5 years	5+ years	Check-up	Problem	Public	Private
All children	72.0	18.6	5.1	4.2	79.8	20.2	20.5	79.5
95%Cl	67.7–76.0	15.2–22.5	3.4–7.7	2.8–6.3	74.7–84.1	15.9–25.3	16.5–25.1	74.9–83.5
Major cities	74.1	18.1	4.4	3.4*	80.2	19.8	18.5	81.5
95%Cl	69.0–78.6	14.2–22.9	2.8–6.8	2.0–5.7	73.9–85.3	14.7–26.1	13.8–24.2	75.8–86.2
Inner regional	72.4	15.3	3.3*	9.0*	76.0	24.0	25.5	74.5
95%Cl	63.4-79.9	9.8–23.0	1.4–7.4	4.6–16.9	64.6-84.5	15.5–35.4	17.1–36.2	63.8–82.9
Outer regional/Remote	56.3	28.2*	14.0*	1.5*	85.3	14.7*	27.4	72.6
95%CI	40.0–71.4	16.0–44.6	4.5–36.2	0.4–5.2	69.4–93.7	6.3–30.6	16.7–41.6	58.4-83.3

#### Table 3.3: Prevalence of dental visiting indicators by geographic location, 2021 (per cent)

Notes:

(a) The category '5+ years' includes children who have never made a dental visit.

(b) Children who made a dental visit in the previous 12 months.

## Does dental visiting vary by socioeconomic status?

Children from households in the lowest household income group were less likely to have visited a dental practitioner in the previous 12 months than those from the highest household income group, (66.1% and 77.2%, respectively) (Table 3.4). Conversely, a higher percentage of children in the lowest income group had their last dental visit between 1 and 2 years previously compared with those in the highest income group (21.9% and 16.4%, respectively).

A higher percentage of children from the middle income group visited for a check-up (87.7%), compared with 75.3% and 74.8% for the lowest and highest income groups, respectively.

Children living in households in the two higher income categories were more likely to have visited a private dental practice than children from the lowest income category (83.7% and 87.1% compared with 64.7%).

Cardholders were also more likely than non-cardholders to have visited for a dental problem at their last visit (35.1% compared to 16.9%) and less likely to visit a private dentist than non-cardholders (60.4% compared to 83.8%).

	Tir	ne since last	dental visit <sup>(a)</sup>	)	Reason for I visit	ast dental	Type of p	ractice <sup>(b)</sup>
	<12 months	1-<2 years	2-<5 years	5+ years	Check-up	Problem	Public	Private
All children	72.0	18.6	5.1	4.2	79.8	20.2	20.5	79.5
95%CI	67.7–76.0	15.2–22.5	3.4-7.7	2.8–6.3	74.7–84.1	15.9–25.3	16.5–25.1	74.9–83.5
Annual household income tertile								
Less than \$100,000	66.1	21.9	7.0*	5.0*	75.3	24.7	35.3	64.7
95%CI	58.6–72.9	16.2–28.8	4.2–11.6	2.8–8.8	64.2–83.8	16.2–35.8	26.0–45.8	54.2–74.0
\$100,000-<\$180,000	70.9	18.8	5.5*	4.8*	87.7	12.3*	16.3	83.7
95%CI	62.2–78.4	12.8–26.7	2.2–13.4	2.3–9.5	78.6–93.3	6.7–21.4	10.7–24.1	75.9–89.3
\$180,000 or more	77.2	16.4	3.3*	3.1*	74.8	25.2	12.9*	87.1
95%CI	68.8–83.9	10.7–24.4	1.4–7.4	1.1–8.6	65.2–82.4	17.6–34.8	7.6–21.1	78.9–92.4
Cardholder status								
Cardholder	67.0	23.6	5.6	3.8	64.9	35.1	39.6	60.4
95%CI	57.3–75.5	16.3–32.9	2.7–11.0	1.7–8.4	50.3-77.1	22.9–49.7	27.4–53.3	46.7–72.6
Non-cardholder	73.6	17.0	5.1	4.4	83.1	16.9	16.2	83.8
95%CI	68.6–78.0	13.3–21.4	3.1–8.3	2.8–6.9	77.9–87.3	12.7–22.1	12.4–20.9	79.1–87.6

Notes:

(a) The category '5+ years' includes children who have never made a dental visit.

(b) Children who made a dental visit in the previous 12 months.

## Does dental visiting vary by insurance status?

Children with dental insurance were more likely than children without dental insurance to have made a dental visit in the previous 12 months in 2021 (76.8% compared with 63.7%) and less likely to have visited 1–<2 years ago (15.8% compared with 23.5%) (Table 3.5).

Insured children were more likely than uninsured children to have visited for a check-up (83.4% compared with 75.0%). Consequently, uninsured children were more likely to have visited for a problem (25.0% compared with 16.6%).

Children who were covered by dental insurance were also more likely than uninsured children to have made their last dental visit to a private dental practice (89.1% compared with 60.9%).

Insurance	Ti	ime since las	t dental visit <sup>(a)</sup>		Reason for la visit	ast dental	Type of p	ractice <sup>(b)</sup>
status	<12 months	1-<2 years	2-<5 years	5+ years	Check-up	Problem	Public	Private
All children	72.0	18.6	5.1	4.2	79.8	20.2	20.5	79.5
95%Cl	67.7–76.0	15.2–22.5	3.4-7.7	2.8–6.3	74.7–84.1	15.9–25.3	16.5–25.1	74.9–83.5
Insured	76.8	15.8	4.3*	3.1*	83.4	16.6	10.9	89.1
95%Cl	70.9–81.7	11.7–21.1	2.2–8.4	1.6–6.0	77.7–87.8	12.2–22.3	7.6–15.3	84.7–92.4
Uninsured	63.7	23.5	6.8	6.0*	75.0	25.0	39.1	60.9
95%CI	56.6-70.2	18.0–30.0	4.2–10.8	3.6–9.9	64.8-83.0	17.0–35.2	30.1–49.0	51.0–69.9

Table 3.5: Prevalence of dental visiting indicators by insurance status, 2021 (per cent)

Notes:

(a) The category '5+ years' includes children who have never made a dental visit.

(b) Children who made a dental visit in the previous 12 months.

# Does dental visiting vary by eligibility for Child Dental Benefits Schedule?

The Child Dental Benefits Schedule (CDBS) was introduced on 1 January 2014 and provides benefits that cover part or the full cost of some dental services for eligible children. A child is eligible for the CDBS if they are: eligible for Medicare, aged 0 to 17 years at some point in the calendar year; and receive, or have their parent/guardian receive, an eligible Australian Government payment (such as Family Tax Benefit Part A) at least once that calendar year (refer to the <u>website</u> for full details).

In 2021, nearly half of children (46.0%) aged 5–17 years reported that they were eligible for the CDBS, while almost 20% of parents/guardians reported not knowing if their child was eligible (Table 3.6).

#### Table 3.6: Eligibility for the Child Dental Benefits Schedule, 2021 (per cent)

		CDBS eligibility	
	Eligible	Not eligible	Don't know
All children	46.0	34.7	19.4
95%Cl	48.2–43.6	34.3–35.1	17.6–21.3

Children who were not eligible for the CDBS were more likely than eligible children to have made a dental visit in the last 12 months (79.9% compared to 67.4%) (Table 3.7). Those eligible for CDBS were more likely to have visited in the last 1–<2 years than those who were not eligible (23.0% compared with 11.9%).

Children eligible for CDBS were more likely to have visited a public dental clinic than those not eligible (29.0% compared with 8.6%) and tended to have a lower rate of visiting for a check-up (74.1% compared with 84.1%).

CDBS	Ti	ime since las	t dental visit <sup>(a)</sup>		Reason for la visit	ast dental	Type of p	ractice <sup>(b)</sup>
eligibility	<12 months	1-<2 years	2-<5 years	5+ years	Check-up	Problem	Public	Private
All children	72.0	18.6	5.1	4.2	79.8	20.2	20.5	79.5
95%Cl	67.7–76.0	15.2–22.5	3.4-7.7	2.8–6.3	74.7–84.1	15.9–25.3	16.5–25.1	74.9–83.5
Eligible	67.4	23.0	6.2	3.4*	74.1	25.9	29.0	71.0
95%Cl	60.8–73.3	17.7–29.3	3.9–9.7	1.9–6.1	65.7–81.1	18.9–34.3	22.1–37.0	63.0–77.9
Not eligible	79.9	11.9	3.7*	4.5*	84.1	15.9	8.6*	91.4
95%Cl	72.3–85.9	7.7–17.8	1.1–11.9	2.2–9.0	75.5–90.0	10.0–24.5	4.8–15.1	84.9–95.2
Don't know	69.6	19.4	5.2*	5.8*	84.4	15.6*	25.2	74.8
95%CI	59 6-78 1	12 2 20 2	2 5-10 7	2 5-12 8	73 0-01 2	88-261	15 0-37 5	62 5-84 1

Table 3.7:	Prevalence of dental visiting indicators by eligibility for the Child Dental Benefits
Schedule,	2021 (per cent)

Notes:

(a) The category '5+ years' includes children who have never made a dental visit.

(b) Children who made a dental visit in the previous 12 months.

## Has dental visiting changed over time?

For each survey year, the proportion of children aged 5–17 years making a dental visit in the previous 12 months is shown in Figure 3.1. The proportion of children aged 5–17 years making a dental visit in the previous 12 months remained largely unchanged between 1994 and 2021, fluctuating between 72% to 83% (Table B.3). Across age groups, 15–17 year-olds tended to show a slight increase in visiting in the previous 12 months over time (from 69.2% in 1994 to 74.9% in 2021), while younger age groups tended to show slight declines between 1994 and 2021 (from 77.3% to 70.1% for 5–9 year-olds and 81.4% to 72.6% for 10–14 year-olds).



The proportion of children who visited for a check-up is shown in Figure 3.2 for each survey year. After declining from 79.1% in 1994 to 70.4% in 1996, the proportion of children who visited for a check-up steadily increased until it reached a high of 84.2% in 2010, then dropping slightly to 79.8% in 2021 (Figure 3.2, Table B.4).



## 4 Financial barriers and hardship

## Measures of financial barriers and hardship

Financial burden is often cited as a reason why people do not seek regular dental care or comply with recommended treatment (Chrisopoulos et al. 2016). Financial burden reflects the direct and indirect cost of dental services to the individual, the disposable income of a household and the number of people dependent on that income. Respondents to the NDTIS 2021 were asked a range of questions relating to the financial burden of dental care.

This chapter reports on three measures of financial barriers and hardship relating to dental visiting and treatment.

### Avoided or delayed due to cost

Respondents to NDTIS 2021 were asked 'During the last 12 months, have you avoided or delayed visiting a dental professional because of the cost?' The response categories were 'yes' and 'no'.

### Cost prevented recommended treatment

Respondents to NDTIS 2021 were asked 'Has the cost prevented you from having any dental treatment that was recommended by a dental professional at a visit during the last 12 months?' The response categories were 'yes' and 'no'.

## Dental visits in the previous 12 months were a large financial burden

Respondents to NDTIS 2021 were asked 'In the last 12 months, how much of a financial burden have dental visits been for you?' The response categories were 'none', 'hardly any', 'a little' and 'a large burden'. The responses are reported as 'experienced a large burden' and 'did not experience a large burden'.

## **Time trends**

Time trends for the proportion of children experiencing any financial barrier or burden are reported for 1994 to 2021.

# What percentage of children experienced financial barriers to dental visiting?

Overall, 19.7% of children experienced at least one financial barrier or hardship associated with dental care in 2021 (Table 4.1). The most frequently reported barrier was avoiding or delaying making a dental visit due to cost and dental visits being a large financial burden (8.9%), while cost prevented recommended treatment was reported for 5.2% of children. Data indicates 21.5% of females reported experiencing financial barriers or hardship associated with dental care compared with 17.8% of males, and 12.1% of females reported that dental visits in the previous 12 months were a large financial burden compared with 5.7% of males.

Sex	Avoided or delayed due to cost	Cost prevented recommended treatment <sup>(a)</sup>	Dental visits in previous 12 months were a large financial burden <sup>(a)</sup>	Experienced any financial barrier or hardship
All children	8.9	5.2	8.9	19.7
95%Cl	6.8–11.7	3.2–8.2	6.0–13.0	15.9–24.2
Male	9.1	5.2*	5.7*	17.8
95%Cl	6.2–13.2	2.8–9.4	3.1–10.1	13.1–23.9
Female	8.8	5.2*	12.1	21.5
95%CI	5.9–12.9	2.6–10.3	7.3–19.2	15.9–28.5

#### Table 4.1: Financial barriers and hardship associated with dental visits by sex, 2021 (per cent)

Notes:

(a) Children whose last dental visit was in the previous 12 months.

## Do financial barriers to dental visiting vary with age?

The prevalence of all measures of financial barriers, by age, is presented in Table 4.2. One in five children experienced some financial barrier or hardship (19.7%).

Children aged 11–17 years were more likely than children aged 5–10 years to report that dental visits in the previous 12 months had been a large financial burden (14.8% compared with 2.2%) and to have experienced any financial barrier or hardship (23.9% compared with 15.0%).

Age group (years)	Avoided or delayed due to cost	Cost prevented recommended treatment <sup>(a)</sup>	Dental visits in previous 12 months were a large financial burden <sup>(a)</sup>	Experienced any financial barrier or hardship
All children	8.9	5.2	8.9	19.7
95%Cl	6.8–11.7	3.2-8.2	6.0–13.0	15.9–24.2
5–10	8.0	4.4*	2.2*	15.0
95%Cl	5.3–11.9	2.2-8.6	0.8–5.8	10.6–20.9
11–17	9.8	5.9*	14.8	23.9
95%CI	6.8–14.0	3.2–10.8	9.8–21.7	18.2–30.7

Table 4.2. Financial barriers and narusing associated with dental visits by age, 2021 (per cent
---

Notes:

(a) Children whose last dental visit was in the previous 12 months.

# Do financial barriers to dental visiting vary by geographic location?

In 2021, children in Inner regional areas were more likely to report experiencing any financial barrier to dental visiting or financial hardship associated with dental care than children in other regions (25.3% compared with 14.6% in Outer regional/ Remote areas and 18.7% in Major cities)(Table 4.3).

	Avoided or delayed	Cost prevented recommended	Dental visits in previous 12 months were a large	Experienced any financial barrier or
Geographic location	due to cost	treatment <sup>(a)</sup>	tinancial burden <sup>(a)</sup>	hardship
All children	8.9	5.2	8.9	19.7
95%Cl	6.8–11.7	3.2–8.2	6.0–13.0	15.9–24.2
Major cities	8.8	4.5*	7.8*	18.7
95%Cl	6.3–12.1	2.5–7.9	4.6–12.9	14.2–24.3
Inner regional	10.8*	6.5*	13.5*	25.3
95%Cl	6.3–17.8	2.6–15.5	7.5–23.2	17.5–35.1
Outer regional/Remote	6.9*	8.7*	7.9*	14.6*
95%Cl	2.3–18.7	1.8–32.8	1.4–33.7	5.5–33.4

Table 4.3: Financial barriers and hardship associated with dental visits by geographic location, 2021 (per cent)

Notes:

(a) Children whose last dental visit was in the previous 12 months.

# Do financial barriers and hardships vary by socioeconomic status?

Children in the lowest income tertile (<\$100,000) were more likely to report having experienced any financial barrier or hardship associated with dental care than the middle or high income groups (21.6% and 13.6%, respectively). They were also more likely to avoid or delay visiting a dentist due to cost (12.6%), and not receive recommended treatment due to cost (7.5%) than those in the highest income tertile (4.3% and 1.6%, respectively), although due to high Relative Standard Errors, these estimates should be treated with caution (Table 4.4).

Financial barriers between children eligible for public dental care (Cardholders) and those who were not (Non-cardholders) were similar, although Cardholders were more likely to report experiencing any financial barrier or hardship than Non-cardholders (23.3% compared with 18.4%).

Table 4.4: Financial barriers and hardship associated with dental visits by socioeconomic status
2021 (per cent)

	Avoided or delayed due to cost	Cost prevented recommended treatment <sup>(a)</sup>	Dental visits in previous 12 months were a large financial burden <sup>(a)</sup>	Experienced any financial barrier or hardship
All children	8.9	5.2	8.9	19.7
95%Cl	6.8–11.7	3.2-8.2	6.0–13.0	15.9–24.2
Annual household income (tertiles)				
Less than \$100,000	12.6	7.5*	12.7*	27.8
95%Cl	8.4–18.5	3.6–15.1	6.7–22.9	20.0–37.1
\$100,000-<\$180,000	11.7	7.4*	8.6*	21.6
95%Cl	7.4–17.8	3.7–14.5	4.6–15.7	15.0–29.9
\$180,000 or more	4.3*	1.6*	7.0*	13.6*
95%Cl	2.1–8.8	0.4-7.1	2.9–15.9	8.0–22.3
Cardholder status				
Cardholder	6.9*	8.1*	10.1*	23.3
95%Cl	3.8–12.1	3.4–18.1	3.6–25.3	14.1–36.1
Non-cardholder	9.1	4.6*	8.7	18.4
95%CI	6.6–12.3	2.6–7.9	5.7–13.0	14.4–23.3

Notes:

(a) Children whose last dental visit was in the previous 12 months.

# Do financial barriers and hardships vary by insurance status?

In 2021, uninsured children were 2.6 times more likely than insured children to have avoided or delayed making a dental visit due to cost (14.6% compared with 5.7%) (Table 4.5). Consequently, they were more likely than insured children to report they had experienced any financial barrier or hardship (26.5% compared with 15.3%).

Insurance status	Avoided or delayed due to cost	Cost prevented recommended treatment <sup>(a)</sup>	Dental visits in previous 12 months were a large financial burden <sup>(a)</sup>	Experienced any financial barrier or hardship
All children	8.9	5.2	8.9	19.7
95%Cl	6.8–11.7	3.2–8.2	6.0–13.0	15.9–24.2
Insured	5.7	4.9*	7.8*	15.3
95%Cl	3.6-8.8	2.7–8.7	4.7–12.7	11.2–20.7
Uninsured	14.6	6.2*	9.2*	26.5
95%Cl	10.3–20.2	2.9–12.7	4.9–16.5	19.7–34.6

Table 4.5: Financial barriers and hardship associated with dental visits by insurance status, 2021 (per cent)

Notes:

(a) Children whose last dental visit was in the previous 12 months.
# Do financial barriers and hardships vary by eligibility for Child Dental Benefits Schedule?

In 2021, 25.4% of children who were eligible for the CDBS reported experiencing any financial barrier to dental care compared with those who were not eligible (16.7%). Children eligible for CDBS also tended to report that cost had prevented recommended treatment (8.6% compared to 3.3%) (Table 4.6).

CDBS eligibility	Avoided or delayed due to cost	Cost prevented recommended treatment <sup>(a)</sup>	Dental visits in previous 12 months were a large financial burden <sup>(a)</sup>	Experienced any financial barrier or hardship
All children	8.9	5.2	8.9	19.7
95%Cl	6.8–11.7	3.2–8.2	6.0–13.0	15.9–24.2
Eligible	11.0	8.6*	11.9*	25.4
95%CI	7.6–15.6	5.0–14.4	7.1–19.4	19.1–33.0
Not eligible	9.3	3.3*	6.9*	16.7
95%CI	5.7–14.7	1.1–8.9	3.3–14.0	11.2–24.2
Don't know	3.6*	1.0*	5.9*	11.9*
95%CI	1.7–7.7	0.2–5.1	2.2–14.8	6.6–20.6

### Table 4.6: Prevalence of dental visiting indicators by eligibility for the Child Dental Benefits Schedule, 2021 (per cent)

Notes:

<sup>(</sup>a) Children whose last dental visit was in the previous 12 months.

#### Have barriers to dental visiting changed over time?

Figure 4.1 shows the proportion of children reporting financial barriers to dental care over the period 1994 to 2021.

In 1994, 20% of children reported that they experienced at least one barrier to dental visiting. This remained steady until 2008. By 2008, the proportion reporting any barrier had increased to 25.5%, which was higher than the previous 2005 time point. By 2021, the proportion experiencing any barrier or hardship decreased from 2010 levels (19.8% compared with 26.6% respectively) (Figure 4.1, Table B.5).

The proportion of children reporting that they avoided or delayed visiting a dentist due to cost declined between 1994 and 2005, then generally increased until it returned to 1994 levels in 2010, before declining again in 2021 to 8.9% (Figure 4.1, Table B.5).

The proportion who reported that cost prevented recommended treatment or that dental visits were a large financial burden was relatively stable over time.



### **5** Services received

Services received reflect the oral health needs of the individual and their access to dental care. Timely dental care is dominated by preventive and diagnostic care, with smaller amounts of low-level treatment services, such as restorations. This reflects the predominantly preventive focus that dental practitioners ideally maintain. However, if there is inadequate preventive care or problems are not identified at an early stage, then more complex restorations and, in extreme cases, extractions may be required.

The total number of fillings and extractions indicate the amount of active disease in children and the timing of the dental visit. Extraction of a tooth due to caries indicates that a failure of both prevention and treatment and can lead to oral disability. Fillings in permanent teeth may indicate a need for future restorative services.

#### Measures of services received

Respondents to NDTIS 2021 who had made a dental visit in the previous 12 months were asked to report the number of each type of preventive service and diagnostic or treatment service they had received in the previous 12 months.

#### **Preventive services**

Preventive services reported in this chapter are 'fluoride treatment', 'fissure sealant', 'scale and clean' and 'oral hygiene instruction' (OHI, e.g. advice on tooth brushing). Receipt of these services is shown as the proportion of children that visited who reported receiving each service and the average number of services received per child.

#### **Diagnostic and treatment services**

Diagnostic and treatment services reported in this chapter are 'check-up', 'x-ray', 'filling', 'extraction', 'orthodontics' and 'other'. Extractions for orthodontic care are not included in the estimates of extractions in this report. Receipt of these services is shown as the proportion of children that visited who reported receiving each service and the average number of services received per child.

### What preventive services did children receive?

The most commonly received preventive service in 2021 was scale and clean, with around 68% of children who had visited in the previous 12 months receiving this service (Table 5.1). Just under a third of children received fluoride treatment (31.6%), about one in 10 children received oral hygiene instruction (11.1%), and 9.1% received one or more fissure sealants. The proportions of males and females receiving any of these preventive services were similar.

	Fluoride t	reatment	Fissure	Sealant	Scale an	d clean	Oral hygiene instruction		
Sex	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15	
95%CI	26.9–36.8	0.37–0.53	6.4-12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22	
Males	30.8	0.44	7.6*	0.10*	67.5	0.97	9.3	0.11	
95%CI	24.4–38.0	0.33–0.55	4.3–13.2	0.03–0.16	60.4–73.8	0.85–1.09	6.0–14.0	0.06–0.16	
Females	32.4	0.47	10.5	0.15*	68.8	0.93	12.8	0.19*	
95%CI	25.6–40.0	0.35–0.59	6.8–16.0	0.07–0.22	61.3–75.5	0.03–0.16	8.0–20.0	0.07–0.32	

## What diagnostic and treatment services did children receive?

The majority of children in 2021 who had made a dental visit in the previous 12 months reported that they had received at least one check-up service (91.7%) and one-third received an x-ray (35.9%) (Table 5.2). About one in five children received a filling (17.4%), while 24% received orthodontic care and 7.3% received an extraction. Females were more likely to receive an orthodontic service than males (29.8% compared with 18.1%).

	Chec	Check-up		X-ray		Filling		Extraction		Orthodontics	
Sex	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11	24.0	0.95	
95%Cl	88.2–94.2	1.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8	0.06–0.16	19.5–29.2	0.67–1.23	
Males	90.5	1.39	33.2	0.37	19.2	0.28	5.0*	0.07*	18.1	0.54	
95%Cl	85.2–94.0	1.28–1.49	26.4–40.7	0.29–0.45	13.7–26.3	0.19–0.37	2.8–8.8	0.03–0.11	13.0–24.6	0.32–0.75	
Females	92.9	1.37	38.6	0.55	15.6	0.27*	9.5*	0.15*	29.8	1.35	
95%CI	87.7–96.0	1.20–1.54	31.2–46.4	0.40-0.69	10.5–22.5	0.14–0.40	5.5–15.9	0.05–0.24	22.9–37.8	0.86–1.85	

Table 5.2: Diagnostic and treatment s	ervices received by sex,	2021 (per cent and mean)
---------------------------------------	--------------------------	--------------------------

#### Did preventive services vary by age?

Generally, children aged 5–10 years tended to have slightly lower rates of fluoride treatments than children aged 11–17 years (29.4% compared with 33.5%) and higher rates of oral hygiene instruction (14.1% compared with 8.5%). The proportions receiving fissure sealants and scale and cleans were similar for males and females (Table 5.3).

Fluoride treatment		Fissure	sealant	Scale an	d clean	Oral hygiene instruction		
Age group (years)	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15
95%Cl	26.9–36.8	0.37–0.53	6.4–12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22
5–10	29.4	0.39	9.4*	0.12*	66.9	0.87	14.1	0.15
95%Cl	23.0–36.6	0.29–0.49	5.6–15.5	0.05–0.19	59.0–74.0	0.76–0.99	9.3–20.7	0.09–0.21
11–17	33.5	0.51	8.8	0.12	69.3	1.01	8.5*	0.16*
95%Cl	26.9–40.9	0.39–0.63	5.4–13.8	0.06–0.19	62.5–75.2	0.89–1.13	4.9–14.4	0.04–0.27

#### Did diagnostic and treatment services vary by age?

In 2021, a higher proportion of children aged 5–10 years received a check-up service (96.2%) and a filling (19.7%) than children aged 11–17 years (87.9% and 15.4%, respectively) (Table 5.4).

A higher proportion of children aged 11–17 years received orthodontic services than children aged 5–10 years (37.8% compared with 7.9%). This is also associated with a higher average number of orthodontics services for 11–17 year-olds (1.61 compared with 0.18). The difference in orthodontic service use is mainly due to the presence of permanent dentition in 11–17 years-olds, as opposed to the presence of deciduous teeth in the younger age group.

Children aged 11–17 years were also more likely to receive x-ray services than children aged 5–10 years (39.8% compared with 31.3%).

	Chec	Check-up		X-ray		Filling		Extraction		Orthodontics	
(years)	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11*	24.0	0.95	
95%Cl	88.2–94.2	1.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8	0.06–0.16	19.5–29.2	0.67–1.23	
5–10	96.2	1.42	31.3	0.38	19.7	0.33	9.6*	0.14*	7.9*	0.18*	
95%CI	92.1–98.2	1.25–1.60	24.1–39.6	0.26–0.50	13.7–27.7	0.19–0.47	5.5–16.1	0.05–0.23	3.9–15.5	0.00–0.38	
11–17	87.9	1.34	39.8	0.53	15.4	0.23	5.3*	0.08*	37.8	1.61	
95%CI	82.2–91.9	1.22–1.45	32.9–47.1	0.41–0.64	10.8–21.5	0.14-0.31	2.9–9.6	0.03–0.14	31.0–45.2	1.14–2.07	

Table 5.4: Diagnostic and treatment services received by age, 2021 (per cent)

## Did preventive services vary by geographic location?

The proportion of children receiving preventive services (fluoride treatment, sealant, scale and clean, oral hygiene instruction (e.g. advice on tooth brushing)) by geographic location, is presented in Table 5.5.

Children in Major cities and Inner regional areas were more likely to report having received a fluoride treatment than children in Outer regional/Remote areas (31.8%, 33.6% and 24.5%, respectively). Conversely, children in Outer regional/Remote areas were more likely to report having received a fissure sealant than those in Major cities (22.9% compared with 7.0%). Scale and clean services were more prevalent in Major cities (70.6%) and Outer regional/Remote areas (68.1%) than in Inner regional areas (58.5%). Oral hygiene instruction was more prevalent in Inner regional areas (20.0%) than in Major cities (9.1%) and Outer regional/Remote areas (8.2%).

	Fluoride tre	eatment <sup>(a)</sup>	Fissure	sealant	Scale and	l clean <sup>(a)</sup>	Oral hygiene instruction <sup>(a)</sup>	
Geographic location	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15
95%Cl	26.9–36.8	0.37–0.53	6.4–12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22
Major cities	31.8	0.47	7.0	0.08	70.6	0.98	9.1	0.13*
95%Cl	26.2–38.1	0.37–0.57	4.5–10.7	0.05–0.12	64.4–76.1	0.88–1.09	5.7–14.3	0.04–0.21
Inner regional	33.6	0.43	11.6*	0.16*	58.5	0.79	20.0	0.27*
95%Cl	23.9–44.9	0.28–0.57	6.1–21.0	0.04–0.27	47.7–68.5	0.63–0.95	12.4–30.6	0.13–0.41
Outer regional/ Remote	24.5*	0.38*	22.9*	0.40*	68.1	0.98	8.2*	0.09*
95%Cl	12.7–41.8	0.10–0.66	8.7–47.9	0.01–0.80	52.7-80.30	0.72–1.25	3.4–18.4	0.02–0.17

#### Table 5.5: Preventive services received by geographic location, 2021 (per cent)

## Did diagnostic and treatment services vary by geographic location?

In 2021, children in Outer regional/Remote areas who visited in the previous year, reported higher rates of x-ray services (54.2%) than those in Inner regional areas (43.6%) and Major cities (32.1%). The proportion of children reporting having received a check-up, filling, extraction or orthodontic service was similar across geographic locations, as was the average number of services received (Table 5.6).

Goographia	Check-	Check-up		X-ray		Filling		Extraction		Orthodontics	
location	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11	24.0	0.95	
95%CI	88.2–94.2 1.	.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8 0	.06–0.16	19.5–29.2 0	.67–1.23	
Major cities	91.2	1.38	32.1	0.41	17.3	0.26	6.1*	0.10*	23.2	1.02	
95%CI	86.8–94.3 1.	.24–1.51	26.2–38.5	0.31–0.51	12.6–23.2	0.17–0.36	3.5–10.3 0	0.04-0.16	17.9–29.4 0	.66–1.37	
Inner regional	92.2	1.35	43.6	0.54	16.7*	0.32*	12.3*	0.16*	26.6	0.94*	
95%CI	84.9–96.1 1.	.21–1.50	32.9–54.9	0.39–0.69	10.0–26.6	0.14–0.51	6.2–22.9 0	0.06–0.26	17.9–37.7 0	.45–1.43	
Outer regional /Remote	94.9	1.45	54.2	0.72	20.1*	0.24*	6.6*	0.07*	25.7*	0.33*	
95%CI	83.3–98.6 1.	.24–1.66	36.7–70.7	0.36–1.08	9.0–39.0	0.08–0.41	1.5–24.2 0	0.00–0.16	11.1–49.1 0	.13–0.53	

Table 5.6: Diagnostic and treatment services received by geographic location, 2021 (per cent)

## Did preventive services vary by socioeconomic status?

The proportion of children receiving preventive services (fluoride treatment, sealant, scale and clean, oral hygiene instruction (e.g. advice on tooth brushing)) by annual household income groups, is presented in Table 5.7.

Generally, the proportion of children receiving preventive services across annual household income tertiles in 2021 were similar. Small differences were observed for fluoride treatment, with 28.7% of children in the low income households receiving fluoride treatment compared with 33.0% for those in high income households. There was also a small difference for scale and clean services with 66.3% of children in high income households receiving this service compared with 70.9% for those in middle income households (\$100,000-<\$180,000 households).

The proportion of children who reported having received a fluoride treatment, fissure sealant or a scale and clean were similar by cardholder status (Table 5.7). Children covered by a concession card more likely to receive oral hygiene instruction (18.0% compared to 9.6%).

	Fluoride t	Fluoride treatment		Fissure sealant		Scale and clean		Oral hygiene instruction	
	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15	
95%Cl	26.9–36.8	0.37–0.53	6.4–12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22	
Annual household income									
Less than \$100,000	28.7	0.42	9.1*	0.12*	68.7	1.01	16.9*	0.21	
95%Cl	20.6–38.4	0.27–0.57	4.7–16.7	0.04–0.20	59.3–76.8	0.84–1.17	10.1–27.0	0.10–0.32	
\$100,000-<\$180,000	30.1	0.46	9.1*	0.12*	70.9	0.99	10.4*	0.18*	
95%Cl	22.3–39.4	0.31–0.62	5.0–15.9	0.04–0.20	62.1–78.3	0.85–1.14	6.0–17.5	0.00–0.36	
\$180,000 or more	33.0	0.44	11.1*	0.16*	66.3	0.86	7.4*	0.09*	
95%Cl	24.4-43.0	0.29–0.58	6.0–19.6	0.04–0.27	56.2–75.1	0.72–1.01	3.5–15.2	0.03–0.16	
Cardholder status									
Cardholder	27.8	0.37	8.3*	0.10	65.4	0.93	18.0	0.18*	
95%Cl	17.5–41.2	0.18–0.56	3.6–18.1	0.02–0.18	52.7–76.3	0.71–1.15	9.2–32.3	0.07–0.29	
Non-cardholder	31.9	0.46	9.3	0.13	68.6	0.95	9.6	0.15	
95%CI	26.8–37.6	0.37–0.55	6.3–13.5	0.07–0.18	62.9–73.7	0.86–1.04	6.6–13.8	0.07–0.23	

Table 5.7: Preventive services received by socioeconomic status, 2021 (per cent)

### Did diagnostic and treatment services vary by socioeconomic status?

Generally, the proportion of children receiving diagnostic and treatment services across annual household income groups in 2021 were similar. However, of the three income categories, children from the highest income households were more likely than those from the middle(\$100,000-\$180,000) income households to report receiving orthodontic services (32.0% compared with 16.9%) (Table 5.8).

In terms of cardholder status, children covered by a concession card were more likely to report having received an x-ray than non-cardholders (46.3% compared with 33.8%), and more likely to report receiving an extraction (16.4% compared with 5.2%).

	Chec	Check-up		X-ray		Filling		Extraction		ontics
	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11	24.0	0.95
95%Cl	88.2–94.2	1.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8	0.06–0.16	19.5–29.2	0.67–1.23
Annual household	d income									
Less than \$100,000	93.7	1.57	38.3	0.50	17.8	0.32*	8.4*	0.12*	26.3	1.28*
95%Cl	86.7–97.2	1.31–1.83	28.6–49.0	0.34–0.66	10.7–28.1	0.12–0.53	3.6–18.3	0.00–0.25	17.6–37.2	0.58–1.97
\$100,000– <\$180,000	91.8	1.35	33.3	0.39	16.3	0.25	4.1*	0.06*	16.9	0.55*
95%Cl	84.9–95.7	1.20–1.50	24.9-42.9	0.26–0.51	9.9–25.9	0.14-0.36	1.8–9.1	0.01–0.12	11.0–25.0	0.27–0.83
\$180,000 or more	89.0	1.25	35.3	0.49	17.8	0.26	5.9*	0.08*	32.0	1.26
95%Cl	81.0–93.8	1.12–1.38	26.4–45.2	0.31–0.66	11.7–26.1	0.14-0.38	2.8–11.8	0.02–0.14	23.1–42.3	0.71–1.81
Cardholder status										
Cardholder	95.0	1.67	46.3	0.60	21.9*	0.38	16.4*	0.28	25.8*	1.13
95%Cl	84.4–98.5	1.29–2.05	33.3–59.9	0.39–0.81	12.0–36.7	0.08–0.67	7.8–31.5	0.05–0.50	14.6–41.5	0.17–2.09
Non-cardholder	90.9	1.31	33.8	0.43	16.5	0.25	5.2	0.07	23.8	0.92
95%Cl	86.9–93.7	1.23–1.40	28.5–39.7	0.34–0.52	12.5–21.6	0.18–0.32	3.3–8.1	0.04–0.11	19.0–29.3	0.65–1.19

Table 5.8: Diagnostic and treatment services	received by socioeconomic status,	2021 (per cent)
--	-----------------------------------	-----------------

#### Did preventive services vary by insurance status?

The proportion of children receiving preventive services (fluoride treatment, fissure sealant, scale and clean, oral hygiene instruction (e.g. advice on tooth brushing)) by dental insurance status, is presented in Table 5.9.

The proportion of children that reported receiving various preventive services were similar by dental insurance status. However, children with dental insurance who visited in the previous 12 months tended to report higher rates of fluoride treatment (34.0% compared with 26.7%), higher rates of scale and clean services (70.4% compared with 65.7%) and lower rates of oral health instruction (8.0% compared with 14.7%) than children without dental insurance (Table 5.9).

Insurance	Fluoride (	Fluoride treatment		Fissure sealant		d clean	Oral hygiene instruction		
status	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15	
95%Cl	26.9–36.8	0.37–0.53	6.4–12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22	
Insured	34.0	0.49	10.5	0.14	70.4	0.99	8.0	0.13*	
95%CI	28.2–40.5	0.39–0.60	7.0–15.4	0.07–0.21	64.1–76.0	0.89–1.09	5.2–12.2	0.03–0.22	
Uninsured	26.7	0.36	7.1*	0.09*	65.7	0.88	14.7	0.18*	
95%CI	19.4–35.6	0.24–0.47	3.5–13.8	0.02–0.16	56.6–73.8	0.73–1.02	8.9–23.3	0.09-0.27	

#### Table 5.9: Preventive services received by dental insurance status, 2021 (per cent)

## Did diagnostic and treatment services vary by insurance status?

The proportion of children aged 5–17 years receiving a check-up, x-ray, extraction or other diagnostic or treatment services, by insurance status, in 2021 is shown in Table 5.10. The proportion of children receiving diagnostic and treatment services in the previous 12 months, or the average number of services received were similar (Table 5.10). Uninsured children tended to have more extraction services than insured children (12.6% compared with 4.8%), although these estimates had high Relative Standard Errors and should be treated with caution. Children without insurance were less likely to receive orthodontic services than those covered by insurance (19.1% compared to 25.5%).

Table 5.10: Diagnostic and treatment services received by dental insurance status, 2021 (per cent and mean)

Incurance	Chec	Check-up		X-ray		Filling		Extraction		Orthodontics	
status	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11*	24.0	0.95	
95%Cl	88.2–94.2	1.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8	0.06–0.16	19.5–29.2	0.67–1.23	
Insured	92.3	1.40	36.4	0.47	17.3	0.25	4.8*	0.07*	25.5	0.99	
95%Cl	87.7–95.2	1.30–1.50	30.5-42.8	0.36–0.57	12.9–22.7	0.17–0.33	2.9–8.0	0.03–0.11	20.0–31.8	0.67–1.31	
Uninsured	89.9	1.34	32.0	0.38	16.7*	0.30*	12.6*	0.19*	19.1	0.69*	
95%Cl	83.3–94.1	1.11–1.58	23.2–42.2	0.26–0.50	9.8–27.0	0.12–0.48	6.9–21.8	0.06–0.32	12.4–28.4	0.31–1.07	

# Did preventive services vary by eligibility for Child Dental Benefits Schedule status?

The proportion of children receiving preventive services (fluoride treatment, sealant, scale and clean, oral hygiene instruction (e.g. advice on tooth brushing)) by eligibility for the Child Dental Benefits Schedule (CDBS), is presented in Table 5.11. Also presented is the mean number of each type of service received by CDBS eligibility.

There were a similar proportion of children receiving fluoride treatment, fissure sealants, scale and clean and oral hygiene instruction by CDBS eligibility.

CDBS	Fluoride	treatment	Fissure	Fissure sealant		d clean	Oral hy instru	Oral hygiene instruction		
Eligibility	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean		
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15		
95%CI	26.9–36.8	0.37–0.53	6.4–12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22		
Eligible	32.5	0.44	12.5	0.17*	66.2	0.94	13.2	0.16		
95%CI	25.4–40.6	0.32–0.56	7.9–19.4	0.08–0.25	58.4–73.2	0.80–1.07	8.2–20.5	0.08–0.23		
Not eligible	34.6	0.52	8.1*	0.11*	71.9	1.02	7.2*	0.08*		
95%CI	26.7–43.5	0.38–0.67	4.5–14.2	0.04–0.19	63.3–79.1	0.89–1.16	3.6–13.7	0.03–0.13		
Don't know	23.2	0.34	3.1*	0.03*	65.1	0.82	14.1*	0.28*		
95%CI	15.1–34.0	0.19–0.50	1.1–8.0	0.00–0.06	53.1–75.4	0.66–0.99	7.6–24.9	0.00–0.58		

Table 5.11: Preventive services received by eligibility for CDBS, 2021 (per cent and mean)

### Did diagnostic and treatment services vary by eligibility for the Child Dental Benefits Schedule?

The proportion of children aged 5–17 years receiving a check-up, x-ray, extraction or other diagnostic or treatment services in the previous 12 months, by self-reported eligibility for the CDBS are shown in Table 5.12. Children eligible for CDBS reported higher rates of receiving an extraction than those that were not eligible (12.1% compared with 3.0%) and higher rates of x-ray services than those who were not eligible (40.7% compared with 30.3%).

CDBS	Chec	k-up	X-r	ay	Fill	ing	Extra	ction	Orthod	lontics
eligibility	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11*	24.0	0.95
95%CI	88.2–94.2	1.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8	0.06–0.16	19.5–29.2	0.67–1.23
Eligible	93.1	1.44	40.7	0.53	15.7	0.26*	12.1*	0.18*	24.1	1.00
95%CI	87.8–96.2	1.26–1.63	32.7–49.2	0.39–0.67	10.3–23.3	0.12–0.41	7.3–19.5	0.08–0.29	17.2–32.6	0.51–1.48
Not eligible	90.1	1.35	30.3	0.38	14.9	0.20	3.0*	0.05*	26.8	1.10
95%CI	83.7–94.2	1.21–1.49	22.7–39.1	0.26–0.50	9.2–23.3	0.11–0.29	1.3–6.8	0.00–0.09	19.6–35.5	0.64–1.56
Don't know	91.7	1.28	36.2	0.45	26.4	0.44	4.7*	0.06*	18.1*	0.52*
95%CI	80.9–96.6	1.13–1.43	25.8–48.0	0.29–0.62	17.3–38.2	0.24–0.63	1.9–11.4	0.00–0.13	10.5–29.3	0.18–0.87

Table 5.12: Diagnostic and treatment services received by eligibility for the Child Dental Bene	efits
Schedule, 2021 (per cent and mean)	

#### Did preventive services vary by reason for visit?

In 2021, the proportion of children who visited for a check-up at their last dental visit were slightly more likely to report having received a scale and clean service in the previous 12 months than those who visited for a problem (69.1% compared with 64.3%). The proportion of children receiving fluoride treatment, sealants or oral hygiene instruction were similar by reason for last dental visit (Table 5.13).

Fluoride treatment		reatment	Fissure	sealant	Scale an	d clean	Oral hy instru	Oral hygiene instruction		
Visit reason	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean		
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15		
95%CI	26.9–36.8	0.37–0.53	6.4–12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22		
Check-up	32.0	0.46	9.9	0.13	69.1	0.98	10.3	0.15*		
95%CI	26.8–37.6	0.38–0.55	6.8–14.2	0.07–0.19	63.5–74.2	0.89–1.07	7.1–14.8	0.07–0.24		
Problem	30.2	0.41	5.8*	0.07*	64.3	0.82	14.0*	0.14*		
95%CI	19.4–43.7	0.21–0.60	2.4–13.7	0.01–0.13	51.7–75.3	0.63–1.00	6.9–26.4	0.05–0.24		

|--|

## Did diagnostic and treatment services vary by reason for visit?

Check-ups were the most common reason for a child's last dental visit in 2021. Although 93.0% of children who last visited for a check-up received that service, 86.4% of those who visited for a problem also received a check-up (Table 5.14).

Children whose last dental visit was for a problem were twice as likely to receive an x-ray (66.9% compared with 28.0%) and nearly four times more likely to receive a filling (42.6% compared with 11.0%) than those children who last visited for a check-up.

Children whose last dental visit was for a problem were also five times as likely to receive an extraction (21.0% compared with 3.8%; although this should be treated with caution as both estimates had Relative Standard Errors greater than 25%), and they were almost twice as likely to have received orthodontic care than those who visited for a check-up (36.7% compared with 20.8%).

For each of these diagnostic and treatment services, other than check-ups, children who visited for a problem received more services on average.

	Chec	k-up	X-r	ay	Fill	ing	Extra	ction	Orthod	ontics
Visit reason	Per cent	Mean								
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11*	24.0	0.95
95%CI	88.2–94.2	1.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8	0.06–0.16	19.5–29.2	0.67–1.23
Check-up	93.0	1.38	28.0	0.35	11.0	0.17	3.8*	0.05	20.8	0.79
95%CI	89.2–95.6	1.29–1.46	23.2–33.4	0.28–0.43	8.0–15.0	0.11–0.23	2.2–6.6	0.02–0.08	16.3–26.2	0.55–1.04
Problem	86.4	1.38	66.9	0.86	42.6	0.68	21.0*	0.36*	36.7	1.56*
95%CI	76.4–92.6	1.02–1.75	54.5–77.3	0.63–1.10	29.9–56.4	0.40–0.95	11.9–34.3	0.14–0.57	24.5–50.8	0.61–2.52

Table 5.14: Diagnostic and treatment services received by reason for last dental visit, 2021 (per cent)

# Did preventive services vary by type of practice visited?

The proportion of children receiving fluoride treatments, fissure sealants and oral hygiene instruction by type of practice visited in 2021 were similar, as were the mean number of fissure sealants received and the mean number of oral hygiene instruction (Table 5.15).

While similar proportions of children visiting a public or private clinic received fluoride treatment services, children visiting a public clinic received less fluoride treatment services, on average, than those who visited a private clinic (0.25 fluoride treatments compared with 0.50 treatments).

Children who visited a public clinic were less likely to receive a scale and clean than children who visited privately (54.6% compared with 71.5%). Consequently, children visiting public clinics received fewer of these services, on average, than those children visiting privately (0.66 compared with 1.02 scale and clean services).

	Fluoride t	Fluoride treatment		Fissure sealant		d clean	Oral hygiene instruction		
Practice type	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15	
95%CI	26.9–36.8	0.37–0.53	6.4–12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22	
Public	21.4	0.25	10.4*	0.12*	54.6	0.66	16.5*	0.18*	
95%Cl	13.6–32.0	0.14-0.36	5.2–19.7	0.04–0.19	42.2–66.4	0.48–0.84	8.7–29.0	0.07–0.29	
Private	34.1	0.50	8.8	0.12	71.5	1.02	9.8	0.14*	
95%Cl	28.6–40.0	0.40–0.60	5.8–13.0	0.06–0.18	66.0–76.4	0.92–1.11	6.6–14.1	0.06–0.23	

Table 5.15: Preventive services received by type of practice visited, 2021 (per cent)

## Did diagnostic and treatment services vary by type of practice visited?

The proportion of children who received a check-up, x-ray, extraction or filling according to type of practice visited were similar (Table 5.16). Children who visited a private practice were more likely to receive orthodontics than those who visited a public practice (26.0% compared to 16.3%).

	Chec	Check-up		X-ray		Filling		Extraction		Orthodontics	
Practice type	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11*	24.0	0.95	
95%CI	88.2–94.2	1.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8	0.06–0.16	19.5–29.2	0.67–1.23	
Public	95.9	1.53	38.3	0.48	18.5*	0.35*	11.2*	0.20*	16.3*	0.53*	
95%Cl	89.6–98.5	1.17–1.88	27.2–50.8	0.32–0.64	10.1–31.3	0.07–0.62	4.6–24.8	0.01–0.39	8.4–29.4	0.06–1.01	
Private	90.6	1.34	35.4	0.45	17.2	0.25	6.3	0.09	26.0	1.06	
95%Cl	86.4–93.6	1.25–1.43	29.8–41.4	0.36–0.55	13.0–22.5	0.18–0.33	4.0–9.8	0.05–0.13	20.9–31.9	0.73–1.39	

Table 5.16: Diagnostic and treatment services received by type of practice visited, 2021 (per cent)

## Did preventive services vary by experience of financial barriers or hardship?

The proportions of children that received fluoride treatments, scale and clean or oral hygiene instruction received, by any financial barriers or hardship in 2021 were similar (Table 5.17). Children that reported they avoided or delayed dental care were more likely to report receiving a fissure sealant than those who didn't avoid or delay care due to cost (25.1% compared with 7.9%). Similarly, those reporting that cost prevented recommended treatment were more likely to have received a fissure sealant (32.3%) than those who didn't report cost prevented recommended treatment (7.9%).

Financial barrier or	Fluoride t	reatment	Fissure	sealant	Scale an	d clean	Oral hygiene instruction		
hardship	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	
All children	31.6	0.45	9.1	0.12	68.2	0.95	11.1	0.15	
95%CI	26.9–36.8	0.37–0.53	6.4–12.7	0.07–0.17	63.1–72.8	0.86–1.03	8.0–15.2	0.08–0.22	
Avoided or delayed									
Yes	32.0*	0.47*	25.1*	0.46*	69.7	0.91	14.4*	0.21*	
95%Cl	15.5–54.7	0.11–0.83	10.5–48.8	0.08–0.83	49.2–84.6	0.60–1.22	4.8–36.2	0.00–0.48	
No	31.6	0.45	7.9	0.10	68.2	0.95	10.9	0.15*	
95%Cl	26.7–36.9	0.37–0.53	5.4–11.4	0.05–0.14	62.9–73.0	0.87–1.04	7.7–15.2	0.08–0.22	
Cost prevented recommended treatment <sup>(a)</sup>									
Yes	30.9*	0.54*	32.3*	0.61*	69.3	1.08	27.2*	0.37*	
95%Cl	12.5–58.4	0.06–1.01	13.4–59.5	0.12–1.10	44.9-86.2	0.65–1.50	10.7–53.9	0.00–0.74	
No	31.6	0.45	7.9	0.10	68.3	0.94	10.3	0.14*	
95%CI	26.8–36.9	0.37–0.53	5.4–11.4	0.05–0.14	63.1–73.1	0.86–1.03	7.2–14.4	0.07–0.21	
Dental visits were a burden <sup>(a)</sup>									
Yes	43.6	0.76*	19.5*	0.31*	74.4	1.17	24.4*	0.34*	
95%CI	24.7–64.5	0.35–1.18	7.7–41.5	0.01–0.61	56.0-86.9	0.84–1.50	10.3–47.7	0.07–0.61	
No	30.5	0.42	8.2	0.10	67.8	0.93	9.9	0.13*	
95%CI	25.7–35.7	0.35–0.50	5.6–11.7	0.06–0.15	62.5–72.7	0.85–1.02	7.0–13.9	0.06–0.21	
Any financial barrier or burden									
Yes	35.5	0.56*	17.9	0.28	75.3	1.08	22.2	0.28	
95%CI	22.0–51.9	0.27–0.86	8.9–32.7	0.07–0.48	61.9–85.1	0.84–1.31	11.5–38.4	0.10–0.46	
No	31.0	0.44	7.7	0.10	67.6	0.94	9.4	0.13	
95%Cl	26.0-36.4	0.35-0.52	5.2–11.4	0.05-0.14	62.0-72.7	0.85-1.03	6.4–13.5	0.06-0.21	

#### Table 5.17: Preventive services received by financial barriers, 2021 (per cent)

Notes:

(a) Children who visited a dentist in the previous 12 months.

## Did diagnostic and treatment services vary by experience of financial barriers or hardship?

In 2021, the services received by children who avoided or delayed making a dental visit due to cost were similar to those who did not avoid or delay due to cost (Table 5.18).

A higher proportion of children who reported that cost prevented the recommended treatment received an x-ray (73.7%) and received more of these services, on average, (1.27 x-rays) compared to those not reporting that cost prevented recommended treatment (34.1% and 0.42 services, respectively).

Children who reported that dental visits were a large financial burden were more likely to report receiving an x-ray (55.6% compared with 33.4%) and orthodontic service (78.7% compared with 18.6%) than those for whom visits were not a financial burden. These same children also received, on average, more x-ray services (1.15 compared with 0.38) and orthodontic services (3.82 compared with 0.67).

Overall, children who reported any financial barriers or burden were more likely to receive an x-ray (46.7% compared with 33.6%) and an orthodontic service (53.5% compared with 18.8%) than children who did not report any financial barriers or burden. These same children also reported receiving, on average, twice as many x-rays (0.86 compared to 0.39) and almost 4 times as many orthodontic services (2.59 compared to 0.68) as those who did not report any financial barrier or burden.

Financial	Chec	k-up	X-ra	iy	Filli	ng	Extra	ction	Orthod	ontics
barrier or hardship	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean	Per cent	Mean
All children	91.7	1.38	35.9	0.46	17.4	0.27	7.3	0.11*	24.0	0.95
95%CI	88.2–94.2	1.28–1.48	30.8–41.3	0.37–0.54	13.5–22.2	0.19–0.35	4.8–10.8	0.06–0.16	19.5–29.2	0.67–1.23
Avoided or de	layed									
Yes	84.1	1.24	40.4*	0.76*	27.2*	0.37*	8.0*	0.15*	33.5*	1.17*
95%CI	63.3–94.2	0.94–1.53	22.3–61.6	0.26–1.27	12.3–50.0	0.10–0.65	2.0–27.0	0.00–0.37	16.3–56.5	0.14–2.20
No	92.2	1.39	35.6	0.43	16.7	0.27	7.2	0.11*	23.4	0.94
95%CI	88.7–94.7	1.28–1.49	30.3–41.2	0.35–0.52	12.7–21.6	0.18–0.35	4.6–10.9	0.05–0.16	18.8–28.7	0.64–1.23
Cost prevente	d recommen	ded treatm	ent <sup>(a)</sup>							
Yes	79.9	1.42	73.7	1.27	33.4*	0.41*	12.6*	0.23*	39.8*	1.01*
95%CI	53.6–93.2	1.02–1.82	49.6–88.9	0.71–1.83	14.6–59.5	0.11–0.72	3.6–35.7	0.00–0.53	18.9–65.4	0.09–1.92
No	92.4	1.38	34.1	0.42	16.6	0.27	7.0	0.10*	23.1	0.95
95%CI	89.0–94.9	1.27–1.48	28.9–39.6	0.34–0.50	12.7–21.5	0.18–0.35	4.5–10.7	0.05–0.15	18.5–28.4	0.66–1.24
Dental visits v	vere a large l	burden <sup>(a)</sup>								
Yes	78.3	1.31	55.6	1.15	21.2*	0.28*	10.0*	0.19*	78.7	3.82
95%CI	58.6–90.2	0.97–1.65	35.8–73.8	0.60–1.71	9.2–41.8	0.06–0.50	3.4–25.8	0.00–0.38	60.6–89.9	2.25–5.38
No	92.9	1.38	33.4	0.38	17.0	0.27	6.8	0.10*	18.6	0.67
95%CI	89.5–95.3	1.27–1.49	28.3–39.0	0.32–0.45	12.9–22.0	0.19–0.36	4.3–10.7	0.05–0.15	14.5–23.5	0.45-0.90
Any financial	barrier or bu	rden								
Yes	82.2	1.28	46.7	0.86	20.4*	0.29*	7.0*	0.12*	53.5	2.59
95%CI	68.4–90.8	1.05–1.52	32.4–61.6	0.48–1.24	11.0–34.7	0.11–0.47	2.7–16.9	0.01–0.24	39.0–67.5	1.40–3.77
No	93.4	1.39	33.6	0.39	16.9	0.27	7.1	0.11*	18.8	0.68
95%CI	89.8–95.7	1.28–1.51	28.3–39.5	0.32–0.45	12.7–22.2	0.18–0.36	4.5–11.2	0.05–0.16	14.5–24.0	0.45–0.91

Table 5.18: Diagnostic and treatment services received by financial barriers, 2021 (per cent)

(a) Children who visited a dentist in the previous 12 months.

#### Have services received changed over time?

Complete time series data are available for the four key services of 'Scale and cleans', 'Fluoride', 'Fillings' and 'Extractions'. The proportions of children receiving each service, and the average number of services received, are shown in Figures 5.1 and 5.2 respectively.

There was an overall increase in proportion of children receiving scale and cleans over the period, increasing from 53.6% in 1994 to 68.1% in 2021. There was a downward trend in fillings, from 28.5% in 1994 to 17.5% in 2021. Extraction rates remained low across the period, fluctuating between 8.1% and 13.7% over the 27-year period. Fluoride treatments were higher than in 1994 (9.6%) but remained stable over most of the period, fluctuating between 24.1% and 33.7% (Table B.6).



The downward trend in the proportion of children receiving a filling is reflected in the decrease in the average number of fillings received, from 0.53 in 1994 to 0.27 in 2021. For the other services received, there were fluctuations over the period but no clear directional trends (Table B.7).



### 6 Perceived need for care

Perceived need for the most common dental treatments is presented to provide an additional subjective indicator of oral health in Australian children.

A person's perception of their need for dental care has been shown to be a factor in whether or not they visit a dentist. Experience of oral disease or oral disorders may result in symptoms that create a perceived need for care. Dental visiting and resolution of symptoms should reduce a person's perceived needs.

Perceived need for different types of dental care gives an indication of the dental services that could be required. However, the actual services provided in a dental visit are the result of a professional diagnosis and negotiated treatment plan, where both the professional judgement of a dentist and the patient's perceptions are important considerations.

#### Measure of perceived need for dental care

Respondents to NDTIS 2021 were asked 'Currently do you think that the child needs to have: any filling(s), any extraction(s), scale and clean, a dental check-up?'

#### How many children reported a need for dental care?

Over half (58.2%) of children reported needing a check-up and almost half (45.9%) reported needing a scale and clean in 2021 (Table 6.1). Some 27.2% reported needing orthodontic care, 5.4% needed a filling and 4.5% needed an extraction.

The proportions of males and females reporting a need for dental care across any of the services examined were similar, except for orthodontics where 33.8% of females reported requiring this service compared with 20.7% of males.

		Scale and				
Sex	Check-up	clean	Filling	Extraction	Orthodontics	Other
All children	58.2	45.9	5.4	4.5	27.2	6.4
95%Cl	53.4–62.9	40.9–50.9	3.8–7.7	2.9–6.8	23.0–32.0	4.4–9.2
Male	59.9	49.4	6.7	5.5*	20.7	6.3*
95%CI	53.2–66.2	42.5–56.3	4.2–10.7	3.2–9.3	15.8–26.7	3.8–10.3
Female	56.5	42.3	4.1*	3.5*	33.8	6.5*
95%CI	49.4–63.3	35.2–49.6	2.4–7.1	1.8–6.7	27.2–41.1	3.8–10.9

#### Did perceived need for dental care vary by age?

There was no significant difference by age in reporting a need for a check-up, filling, extraction or other services in 2021 (Table 6.2).

Children aged 11–17 years were more likely to report needing a scale and clean than those aged 5–10 years (51.5% compared with 39.4%). They were also twice as likely to report needing orthodontic care than children aged 5–10 years (35.8% compared with 17.3%).

Age group (years)	Check-up	Scale and clean <sup>(a)</sup>	Filling	Extraction	Orthodontics	Other
All children	58.2	45.9	5.4	4.5	27.2	6.4
95%Cl	53.4–62.9	40.9–50.9	3.8–7.7	2.9–6.8	23.0-32.0	4.4–9.2
5–10	56.9	39.4	5.9*	3.0*	17.3	6.2*
95%Cl	49.8–63.7	32.5-46.7	3.6–9.5	1.5–5.9	12.2–24.1	3.6–10.5
11–17	59.4	51.5	5.0*	5.9*	35.8	6.6*
95%Cl	52.7–65.7	44.7–58.3	2.9–8.4	3.4–9.8	29.6–42.6	4.0–10.7

Table 6.2: Perceived need for care by age group, 2021 (per cent)

# Does need for dental care vary by geographic location?

Reported need for dental care across the services examined in 2021 by geographic location was similar (Table 6.3). The perceived need for a check-up and scale and clean was slightly higher for Outer regional/Remote areas (61.3% and 53.1%, respectively) than Inner regional areas (54.2% and 42.5%, respectively). Perceived need for Orthodontics was also lower in Outer regional/Remote areas compared with Major cities and Inner regional areas (18.5% compared with 25.9% and 35.8%, respectively).

		Scale and				
Geographic location	Check-up	clean	Filling	Extraction	Orthodontics	Other
All children	58.2	45.9	5.4	4.5	27.2	6.4
95%CI	53.4-62.9	40.9–50.9	3.8–7.7	2.9–6.8	23.0–32.0	4.4–9.2
Major cities	58.9	45.9	4.9	3.9*	25.9	6.8
95%CI	53.0–64.5	39.9–52.0	3.1–7.7	2.2–6.7	20.8–31.7	4.4–10.3
Inner regional	54.2	42.5	5.4*	7.8*	35.8	5.9*
95%CI	44.5–63.6	33.0–52.5	2.4–11.8	3.8–15.3	26. <del>9</del> –45.9	2.7–12.3
Outer regional/Remote	61.3	53.1	9.8*	2.2*	18.5*	4.3*
95%CI	45.1–75.4	36.7–68.9	4.3–20.8	0.7–6.8	8.6–35.3	1.1–15.4

Table 6.3: Perceived need for care by	y geographic location, 2021	(per cent)
---------------------------------------	-----------------------------	------------

# Does need for dental care vary by socioeconomic status?

Children from the lowest household income tertile (less than \$100,000) were more likely than those from the middle income group (\$100,000-<\$180,000) to perceive a need for a check-up (68.1% compared with 47.7%) and a filling (55.7% compared with 36.6%) (Table 6.4).

Children who were cardholders were more likely than non-cardholders to report needing a check-up(67.3% compared with 55.5%), a scale and clean (56.7% compared with 43.2%), a filling (9.7% compared with 4.2%) and an extraction (10.7% compared with 3.0%).

		Scale and				
	Check-up	clean	Filling	Extraction	Orthodontics	Other
All children	58.2	45.9	5.4	4.5	27.2	6.4
95%Cl	53.4-62.9	40.9–50.9	3.8–7.7	2.9–6.8	23.0–32.0	4.4–9.2
Annual household income						
<\$100,000	68.1	55.7	8.9*	6.4*	32.2	9.9
95%Cl	60.1–75.1	46.9–64.2	5.2–14.9	3.2–12.2	24.0–41.5	6.1–15.9
\$100-<\$180,000k	47.7	36.6	4.1*	3.4*	22.2	3.7*
95%Cl	39.1–56.5	28.4–45.7	2.1–7.5	1.4–8.1	15.9–30.0	1.5–9.1
\$180,000 or more	53.7	40.6	3.2*	4.4*	29.7	5.2*
95%Cl	44.4–62.7	31.8–50.1	1.2–8.0	2.1–9.1	21.9–38.9	2.4–11.3
Cardholder status						
Cardholder	67.3	56.7	9.7	10.7	28.7	6.5
95%Cl	56.9–76.2	45.4–67.3	5.0–18.1	5.5–19.9	18.7–41.3	3.2–13.0
Non-cardholder	55.5	43.2	4.2	3.0	26.9	6.4
95%Cl	50.0–60.9	37.7–48.8	2.7–6.4	1.8–5.0	22.3–32.0	4.2–9.7

#### Table 6.4: Perceived need for care by socioeconomic status, 2021 (per cent)

### Does need for dental care vary by insurance status?

The prevalence of requiring dental treatment was similar by insurance status across all the services examined in 2021 (Table 6.5).

		Scale and				
Insurance status	Check-up	clean	Filling	Extraction	Orthodontics	Other
All children	58.2	45.9	5.4	4.5	27.2	6.4
95%CI	53.4-62.9	40.9–50.9	3.8–7.7	2.9–6.8	23.0–32.0	4.4–9.2
Insured	55.6	44.5	4.7*	3.9*	26.2	5.7*
95%CI	49.3–61.7	38.3–51.0	2.8–7.8	2.1–7.0	21.1–32.2	3.3–9.5
Uninsured	61.7	48.0	7.0	5.9*	26.9	7.5*
95%Cl	54.0-68.9	40.0–56.1	4.2–11.3	3.3–10.3	20.3–34.8	4.5-12.2

#### Table 6.5: Perceived need for care by insurance status, 2021 (per cent)

## Does need for dental care vary by eligibility for the Child Dental Benefits Schedule?

Children who were eligible for CDBS were more likely to report requiring a check-up (63.7%) than those who were not eligible (48.3%) (Table 6.5). Children who were eligible for CDBS were also more likely to report requiring a scale and clean (53.7%) than those who were not eligible (37.8%).

CDBS eligibility	Check-up	Scale and clean	Filling	Extraction	Orthodontics	Other					
All children	58.2	45.9	5.4	4.5	27.2	6.4					
95%Cl	53.4–62.9	40.9–50.9	3.8–7.7	2.9–6.8	23.0–32.0	4.4–9.2					
Eligible	63.7	53.7	7.2	6.0*	25.5	7.0*					
95%Cl	56.8-70.0	46.4-60.8	4.5–11.4	3.4–10.4	19.4–32.7	4.2–11.4					
Not eligible	48.3	37.8	3.6*	2.2*	30.5	3.6*					
95%Cl	40.0–56.7	30.0–46.3	1.8–7.3	1.0–5.1	23.2–39.0	1.6–8.1					
Don't know	61.9	41.4	4.5*	5.0*	25.8	10.6*					

1.7–11.2

Table 6.6: Perceived need for care by eligibility for the Child Dental Benefits Schedule, 2021 (p	er
cent)	

\* Estimates succeeded by \* indicate a Relative Standard Error of at least 25% and should be used with caution.

50.9-71.9

95%CI

31.2–52.5

17.6-36.2

5.2-20.2

2.1-11.4

## Is perceived need for care related to recent visiting experience or oral health?

Compared to those children who made a dental visit in the last 12 months, children who did not visit in the previous 12 months were more likely to report the need for a check-up (84.1% compared with 46.9%) and a scale and clean service (69.3% compared with 36.5%). Conversely, children who visited in the previous 12 months were more likely to report a perceived need for Orthodontics (30.2%) than those who did not visit in the previous 12 months (19.2%) (Table 6.7).

Children who last visited for a problem rather than a check-up were more likely to report the need for a filling (11.1% compared with 3.8%), an extraction (11.2% compared with 2.6%) or Orthodontic care (36.3% compared with 26.0%).

Compared to children who last visited a private dental practice, children who visited a public dental practice were more likely to report the need for check-up (69.8% compared to 53.6%) and for a filling (10.8% compared to 3.9%).

Those who reported having fair or poor oral health were more likely to report a need for a check-up (78.3% compared to 56.4%), a scale and clean (71.5% compared with 43.7%), a filling (29.2% compared with 4.1%) and an extraction (19.2% compared with 3.5%) than those who did not report having fair or poor oral health.

	Chec	k-up	Scale ar	nd clean	Filli	ing	Extrac	ction	Orthod	lontics	Otl	her
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Visited in the last 12 m	onths											
Yes	46.9	53.1	36.5	63.5	4.4	95.6	4.4	95.6	30.2	69.8	6.6	93.4
95%Cl	41.3–52.7	47.3–58.7	31.0-42.4	57.6–69.0	2.8–6.9	93.1–97.2	2.7–7.1	92.9–97.3	25.0–36.0	64.0–75.0	4.3–9.9	90.1–95.7
No	84.1	15.9	69.3	30.7	8.6*	91.4	5.1*	94.9	19.2	80.8	6.0*	94.0
95%Cl	76.9–89.3	10.7–23.1	60.5–76.9	23.1–39.5	4.7–15.2	84.8–95.3	2.2–11.1	88.9–97.8	13.0–27.4	72.6–87.0	2.8–12.2	87.8–97.2
Reason for last visit												
Check-up	56.1	43.9	44.7	55.3	3.8*	96.2	2.6*	97.4	26.0	74.0	4.7*	95.3
95%Cl	50.5–61.6	38.4–49.5	39.1–50.5	49.5–60.9	2.2–6.4	93.6–97.8	1.4–4.8	95.2–98.6	21.3–31.4	68.6–78.7	2.8–7.7	92.3–97.2
Problem	54.4	45.6	45.1	54.9	11.1*	88.9	11.2*	88.8	36.3	63.7	11.6*	88.4
95%Cl	41.7–66.6	33.4–58.3	32.6–58.4	41.6–67.4	6.1–19.4	80.6–93.9	5.6–21.1	78.9–94.4	24.5–49.9	50.1–75.5	6.1–20.9	79.1–93.9
Type of practice visited												
Public	69.8	30.2	56.8	43.2	10.8*	89.2	7.5*	92.5	27.2	72.8	6.5*	93.5
95%Cl	60.4–77.8	22.2–39.6	46.4-66.6	33.4–53.6	6.1–18.4	81.6–93.9	3.7–14.7	85.3–96.3	18.4–38.3	61.7–81.6	3.4-12.1	87.9–96.6
Private	53.6	46.4	42.9	57.1	3.9	96.1	3.3*	96.7	28.0	72.0	5.8	94.2
95%Cl	47.8–59.2	40.8–52.2	37.2–48.8	51.2–62.8	2.4-6.2	93.8–97.6	1.9–5.8	94.2–98.1	23.1–33.5	66.5–76.9	3.6–9.2	90.8–96.4
Fair or poor oral health												
Yes	78.3	21.7*	71.5	28.5*	29.2*	70.8	19.2	80.8	31.3*	68.7	24.8*	75.2
95%Cl	60.9–89.3	10.7–39.1	52.6-84.9	15.1–47.4	15.2–48.7	51.3–84.8	9.1–36.1	63.9–90.9	16.5–51.2	48.8–83.5	11.6–45.4	54.6–88.4
No	56.4	43.6	43.7	56.3	4.1	95.9	3.5*	96.5	26.8	73.2	5.1	94.9
95%Cl	51.3–61.3	38.7–48.7	38.6–48.9	51.1–61.4	2.7–6.4	93.6–97.3	2.1–5.7	94.3–97.9	22.4–31.7	68.3–77.6	3.3–7.8	92.2–96.7

Table 6.7: Recent visiting experience and oral health by perceived need for care, 2021 (per cent)

## Is perceived need for care related to recent experience of financial barriers or hardship?

For most types of dental care, children who avoided or delayed seeking dental care due to cost were more likely to report a need for care than those children who did not avoid or delay seeking care due to cost (Table 6.8: Barriers and hardship by perceived need for care, 2021 (per cent)Table 6.8).

Children who avoided or delayed visiting due to cost were more likely than those who did not avoid or delay visiting to report the need for a check-up (85.0% compared with 55.6%), scale and clean (71.6% compared with 43.5%), and orthodontic care (52.9% compared with 24.8%).

For most types of care, those who reported that cost had prevented recommended dental care were more likely to perceive a need for care. Compared to children who didn't report financial hardship, children for whom cost had prevented recommended dental care were more likely to report the need for a check-up (82.3% compared to 45.2%), scale and clean (71.7% compared to 34.8%), extraction (28.9% compared to 3.0%) and orthodontic care (65.4% compared to 28.1%).

Children who reported dental visits were a large financial burden in the last 12 months were more likely than those whose dental visits weren't a large financial burden to report the need for a check-up (56.5% compared with 45.5%), a scale and clean (56.4% compared with 34.2%) and orthodontic care (72.2% compared with 25.3%).

Overall, children who reported any burden were more likely to perceive the need for all care types compared to those who did not report any burden. The likelihood was nearly two-fold for check-up (73.9% compared with 43.6%), two-fold for scale and clean (64.4% compared with 32.9%) and nearly three-fold for orthodontics (60.4% compared to 23.6%).

	Chec	k-up	Scale an	d clean	Fill	ing	Extra	ction	Orthod	ontics	Ot	her
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Avoided or delayed due to	cost											
Yes	85.0	15.0*	71.6	28.4	14.3*	85.7	12.2*	87.8	52.9	47.1	12.4*	87.6
95%Cl	69.1–93.5	6.5–30.9	55.9–83.3	16.7–44.1	6.7–28.1	71.9–93.3	5.5–25.0	75.0–94.5	37.0–68.3	31.7–63.0	4.6–29.2	70.8–95.4
No	55.6	44.4	43.5	56.5	4.6	95.4	3.8*	96.2	24.8	75.2	6.0	94.0
95%Cl	50.4–60.6	39.4–49.6	38.3–48.8	51.2–61.7	3.0–7.0	93.0–97.0	2.3–6.2	93.8–97.7	20.5–29.7	70.3–79.5	4.0–8.8	91.2–96.0
Cost prevented recommended treatment												
Yes	82.3	17.7*	71.7	28.3*	11.6*	88.4	28.9*	71.1	65.4	34.6*	17.0*	83.0
95%Cl	57.4–94.1	5.9-42.6	46.3-88.2	11.8–53.7	3.0–35.4	64.6–97.0	12.4–53.8	46.2–87.6	38.7–85.0	15.0–61.3	4.1–49.8	50.2–95.9
No	45.2	54.8	34.8	65.2	4.1	95.9	3.0*	97.0	28.1	71.9	6.2	93.8
95%Cl	39.4–51.1	48.9–60.6	29.2–40.8	59.2–70.8	2.5–6.7	93.3–97.5	1.6–5.4	94.6–98.4	22.9–34.0	66.0–77.1	4.0–9.6	90.4–96.0
Dental visits were a large financial burden												
Yes	56.5	43.5*	56.4	43.6*	5.2*	94.8	5.8*	94.2	72.2	27.8*	18.2*	81.8
95%Cl	34.8–76.0	24.0–65.2	34.4–76.2	23.8–65.6	1.3–19.0	81.0–98.7	1.3–22.4	77.6–98.7	51.0–86.6	13.4–49.0	6.5–41.5	58.5–93.5
No	45.5	54.5	34.2	65.8	4.4	95.6	4.3*	95.7	25.3	74.7	5.6	94.4
95%Cl	39.7–51.5	48.5–60.3	28.7–40.1	59.9–71.3	2.7–7.1	92.9–97.3	2.5–7.1	92.9–97.5	20.3–30.9	69.1–79.7	3.5–8.8	91.2–96.5
Any burden												
Yes	73.9	26.1	64.4	35.6	9.6*	90.4	11.2*	88.8	60.4	39.6	13.5*	86.5
95%Cl	61.0–83.7	16.3–39.0	51.3–75.7	24.3–48.7	4.9–17.9	82.1–95.1	5.6–21.1	78.9–94.4	47.3–72.2	27.8–52.7	6.3–26.6	73.4–93.7
No	43.6	56.4	32.9	67.1	4.4*	95.6	3.1*	96.9	23.6	76.4	5.5	94.5
95%CI	37.7–49.8	50.2–62.3	27.3–39.0	61.0–72.7	2.6–7.2	92.8–97.4	1.7–5.9	94.1–98.3	18.7–29.4	70.6–81.3	3.4-8.9	91.1–96.6

Table 6.8: Barriers and hardship by perceived need for care, 2021 (per cent)

#### Has perceived need for care changed over time?

Figure 6.1 presents the proportion of children reporting a need for preventive dental care (i.e. check-up and scale and clean) between 1994 and 2021.

For both check-up and scale and clean there was an upward trend since 1994 but followed by a decline from 2010, reversing again in 2021. The reversal in perceived need may be a lagged effect of the COVID-19 pandemic that resulted in a reduction in access to dental care or other service types. Alternatively, it may indicate a continued trend in the upward trend demonstrated until 2010.

Overall, the perceived need for a check-up increased from 33.3% in 1994 to 58.4% in 2021. The reported perceived need for scale and cleans increased from 3.4% in 1994 to 45.9% in 2021 (Table B.8).



Figure 6.2 presents the proportion of children reporting a need for dental treatments, such as a filling, an extraction, and orthodontic services, over the period from 1994 to 2021.

There was an upward trend in perceived need for both extractions and fillings over the first part of the period, but perceived need for filling declined over the latter part of the period. However, the proportion of children reporting a need for both these services began at a low baseline level.


# 7 Dental visiting, oral health and financial barriers

So far in this report, visiting, oral health and financial barriers have been examined separately. This chapter examines variations in dental visiting by financial barriers and burden, as well as self-reported oral health and impacts by dental visiting and financial barriers and burden.

## Did dental visiting pattern vary by experience of financial barriers and hardship?

Over half (53.8%) of children who reported avoiding or delaying a dental visit due to cost made a dental visit within the previous 12 months in 2021 (Table 7.1). This compares with 74.0% of those who did not avoid or delay due to cost.

The reason for the last visit (i.e. check-up vs problem) was similar between children who avoided making a dental visit due to cost and those who did not. For each group, nearly four in five children visited for a check-up. A higher proportion of children who reported that they avoided making a dental visit due to cost visited a private dental clinic (89.2%) compared with those that didn't avoid a dental visit due to cost (77.4%).

Children who reported that cost had prevented recommended treatment were less likely to report that their last visit was for a check-up and more likely to report that their last visit was to a private clinic than those that didn't report that cost had prevented recommended treatment (70.0% and 87.2% compared with 80.4% and 77.5%, respectively).

Children that reported that dental costs were a large financial burden were less likely to report that their last visit was for a check-up (64.9%) and more likely to report that they visited a private clinic (93.2%) compared with those who reported their dental costs were not a financial burden (80.6% and 78.0% respectively).

	Time	e since last	dental vis	sit	Reason for	last visit	Type of clinic		
Financial hardship or barrier	<12 months	1–<2 years	2–<5 years	5+ years/ never	Check-up	Problem	Public	Private	
All children	72.0	18.6	5.1	4.2	79.9	20.1	21.9	78.1	
95%CI	67.7–76.0	15.2–22.5	3.4–7.7	2.8-6.3	74.2–84.6	15.4–25.8	17.3–27.3	72.7–82.7	
Avoided or delayed	due to cost								
Yes	53.8	21.8*	16.1*	8.3*	83.9	16.1*	10.8*	89.2	
95%CI	39.8–67.2	12.8–34.5	8.3–28.9	3.6–18.0	63.2–94.0	6.0–36.8	3.7–27.7	72.3–96.3	
No	74.0	18.2	4.0*	3.9	79.7	20.3	22.6	77.4	
95%CI	69.4–78.1	14.6–22.3	2.3–6.7	2.4-6.1	73.7–84.6	15.4–26.3	17.7–28.3	71.7–82.3	
Cost prevented reco	ommended trea	atment <sup>(a)</sup>							
Yes					70.0	30.0*	12.8*	87.2	
95%CI					43.3–87.8	12.2–56.7	4.3–32.2	67.8–95.7	
No					80.4	19.6	22.5	77.5	
95%CI					74.5–85.2	14.8–25.5	17.7–28.1	71.9–82.3	
Dental costs were a	large financia	l burden <sup>(b)</sup>							
Yes					64.9	35.1*	6.8*	93.2	
95%CI					40.4–83.5	16.5–59.6	1.6–24.7	75.3–98.4	
No					80.6	19.4	22.0	78.0	
95%CI					74.6–85.5	14.5–25.4	17.2–27.7	72.3–82.8	

#### Table 7.1: Variations in dental visiting by financial barriers and hardship, 2021 (per cent)

Notes:

(a) Only children who visited in the previous 12 months were asked if cost prevented recommended treatment.

(b) Only children who visited in the previous 12 months were asked if dental costs were a large financial burden.

.. not applicable.

## Did experience of social impacts of oral health vary by dental visiting pattern?

Time since last dental visit was associated with avoiding certain foods due to dental problems with 16.6% and 16.2% of children who visited in the previous 12 months and previous 2 years, respectively, reporting they avoided certain foods, compared with 0.7% of those who either have never visited or visited more than 5 years previously (Table 7.2).

Children who last visited for a problem had higher prevalence of any social impact than children who visited for a check-up (44.2% compared to 12.7%). Children who visited for a problem were four times more likely than children who visited for a check-up to report fair or poor oral health (18.5% compared with 4.4%). Children who visited for a problem were more than five times as likely to report toothache experience in the previous 12 months (28.9% compared with 5.2%) and three times more likely to have avoided food (37.8% compared with 11.6%) than those who visited for a check-up.

The proportion of children who reported a social impact was similar by type of practice visited at their last dental visit. Table 7.2: Prevalence of social impacts of oral health by dental visiting, 2021 (per cent)

	Fair or poor oral health	Toothache	Avoid food	Any impact
All children	7.4	9.1	15.2	17.2
95%Cl	5.4-10.2	6.7–12.3	12.1–18.9	14.0–21.0
Time since last dental visit				
<12 months	5.5	8.4	16.6	18.5
95%Cl	3.6-8.5	5.8–12.0	12.9–21.1	14.7–23.1
1-<2 years	12.8*	14.0	16.2*	18.8
95%Cl	7.0–22.3	7.3–25.3	9.1–27.2	11.3–29.6
2-<5 years	12.6*	8.9*	7.3*	10.0*
95%Cl	4.6-30.1	2.8–25.1	2.1–22.1	3.5–25.4
5+ years	7.9*	_	0.7*	0.7*
95%Cl	2.3–24.1	_	0.1–4.4	0.1–4.4
Reason for last dental visit <sup>(a)</sup>				
Check-up	4.4*	5.2*	11.6	12.7
95%Cl	2.7–7.2	3.1–8.6	8.6–15.6	9.6–16.7
Problem	18.5	28.9	37.8	44.2
95%Cl	11.1–29.0	19.3–40.8	26.9-50.2	32.7–56.3
Type of practice visited <sup>(a)</sup>				
Public	11.2	10.3*	12.7	15.1
95%Cl	6.9–17.9	6.2–16.5	8.0–19.7	10.1–22.1
Private	6.3	9.1	16.8	18.9
95%Cl	4.1–9.5	6.2–13.3	13.0-21.6	14.9–23.7

(a) Children who visited in the previous 12 months.

Zero or rounded to zero.

## Did experience of social impacts of oral health vary by experience of barriers to dental care?

Children who reported any one of the financial barriers to, or hardships from, accessing dental care had higher rates than children overall, to experience any social impact of oral health (Table 7.3). Although 17.2% of children overall experienced any impact, 34.1% of children who avoided or delayed due to cost, 50.5% who did not have the recommended treatment and 44.8% for whom dental visits were a large financial burden reported any oral health impact.

Children who had avoided or delayed due to cost and those for whom cost had prevented recommended treatment were more likely to report fair or poor oral health, to have experienced toothache and to have avoided certain foods due to dental problems.

Children who had avoided or delayed making a dental visit due to cost had higher rates of reporting avoiding food due to dental problems (29.8% compared with 13.8%) and to report any impact (34.1% compared to 15.5%).

Children for whom cost had prevented recommended dental treatment had higher rates of reporting fair or poor oral health than children who did not report this barrier (30.8% compared with 7.2%), and to experience any impact (50.5% compared to 16.6%).

Children who reported that dental visits were a large financial burden were more likely than those who did not report that dental visits were a large financial burden to avoid some foods due to oral problems (44.3% compared with 13.4%) and to experience any impact (44.8% compared with 15.5%).

Eineneiel berrier er berdebin	Fair or poor	Toothooho	Avoid food	Any impost
	Oral fiealth	Tootnache	Avoia loou	Any impact
All children	7.4	9.1	15.2	17.2
95%Cl	5.4–10.2	6.7–12.3	12.1–18.9	14.0–21.0
Avoided or delayed due to cost				
Yes	16.5*	17.4*	29.8	34.1
95%CI	8.6–29.4	9.4–30.0	18.3–44.5	22.0–48.6
No	6.4*	8.2	13.8	15.5
95%CI	4.4–9.2	5.7–11.6	10.7–17.7	12.2–19.5
Cost prevented recommended treatment <sup>(a)</sup>				
Yes	19.3*	30.8*	39.2*	50.5
95%Cl	6.7–44.1	14.0–55.0	19.0–64.0	28.4-72.5
No	4.8	7.2	15.3	16.6
95%Cl	2.9–7.7	4.7–10.7	11.6–19.8	12.9–21.2
Dental visits in previous 12 months were a large financial burden <sup>(a)</sup>				
Yes	14.6*	15.2*	44.3	44.8
95%Cl	5.5–33.5	6.0–33.5	25.7–64.7	26.1–65.0
No	4.8	7.5	13.4	15.5
95%Cl	2.9–7.8	4.9–11.2	10.1–17.5	12.0–19.9
Any financial burden				
Yes	16.4	16.2*	32.1	36.4
95%CI	9.5–26.8	9.5–26.2	21.7–44.6	25.7–48.6
No	4.1	6.8	12.5	14.0
95%Cl	2.3-7.1	4.3–10.6	9.2–16.8	10.5–18.5

Table 7.3: Prevalence of oral health impacts by experience of barriers and hardship, 2021 (per cent)

(a) Children who visited in the previous 12 months.

## 8 Hospital separations

This chapter draws on hospital separations data published by the Australian Institute of Health and Welfare (AIHW) and reports on dental conditions resulting in the provision of services in hospitals under two broad measures:

- 1. Potentially preventable hospitalisations (PPHs) related to dental conditions
- 2. Hospitalisations for dental procedures requiring general anaesthetic.

It should be noted that while many PPHs will require a general anaesthetic, not all dental care provided under general anaesthetic is for potentially preventable care.

#### Potentially preventable hospitalisations

Potentially preventable hospitalisations (PPHs) are those conditions where hospitalisation is thought to have been avoidable if timely and adequate non-hospital care had been provided. PPHs are one of the key performance indicators for the National Oral Health Plan 2015–2024 and provide important information about the receipt of quality, timely and adequate non-hospital dental care. A high rate of PPHs may indicate an increased prevalence of the conditions in the community, poorer functioning of the non-hospital care system or an inappropriate use of the hospital system to respond to greater need (AIHW, 2022).

Hospitalisations where the principal diagnosis was a dental-related condition are considered dental PPHs for this report. The number and separation rate of these PPHs for children aged 0–14 years is reported in this section.

In the 2020–21 financial year, the total number of PPHs related to dental conditions for children aged 0–14 years was 31,110 or 6.6 separations per 100,000 population. Children aged 5–9 years had a considerable higher number of PPHs (17,826) compared with those aged 10–14 years (4,578) (Table 8.1).

Between 2016–17 and 2020–21, the total number of PPHs increased from 26,379 to 26,900 in 2018-19, dropping to 24,607 in 2019–20 and then increasing to 31,110 in 2020–21. Taking into account population growth, the separation rate of dental related PPHs was 5.7 separations per 100,000 population between 2016–17 to 2018–19, dropping to 5.2 in 2019–20 and then increasing to 6.6 in 2020–21.

		Age group (ye	ars)	
Financial Year	0–4	5–9	10–14	Total <sup>(b)</sup>
		Number		
2020–21	8,706	17,826	4,578	31,110
2019–20	7,212	13,880	3,515	24,607
2018–19	7,963	15,017	3,920	26,900
2017–18	7,757	15,114	3,798	26,669
2016–17	7,738	14,857	3,784	26,379
		Separation rat	te <sup>(c)</sup>	
2020–21	5.8	11.0	2.8	6.6
2019–20	4.7	8.6	2.2	5.2
2018–19	5.1	9.3	2.5	5.7
2017–18	5.0	9.4	2.5	5.7
2016–17	4.9	9.4	2.6	5.7

Table 8.1: Hospital separations for potentially preventable hospitalisations due to dental conditions<sup>(a)</sup>, by age group, children aged 0–14 years, 2016–17 to 2020–21

Notes:

a) Potentially preventable hospitalisations related to dental care are defined as the following ICD-10-AM 6th edn (see NCCH 2008) Principal diagnosis categories: K02 Dental caries; K03 Other diseases of hard tissues of teeth; K04 Diseases of pulp and periapical tissues; K05 Gingivitis and periodontal diseases; K06 Other diseases of gingival and edentulous alveolar ridge; K08 Other disorders of teeth and supporting structures; K09.8 Other cysts of oral region, not elsewhere classified; K09.9 Cyst of oral region, unspecified; K12 Stomatitis and related lesions; K13 Other diseases of lip and oral mucosa; K14.0 Glossitis. Data are defined using ICD-10-AM 9th- 11<sup>th</sup> edn.

b) Excludes records with care type of Newborn (without qualified days), Hospital boarders and Posthumous organ procurement.
 c) Number of separations per 1,000 population. Separation rates were directly age standardised to the Australian population, using the estimated resident populations as at 30 June for the respective year.

Sources: AIHW Hospital Morbidity database 2016–17 to 2020–21; ABS (2023) Quarterly Population Estimates (ERP), by State/Territory, Sex and Age.

#### Dental procedures requiring general anaesthetic

Depending on the severity of the dental condition, or other factors such as medical conditions or physical/behavioural considerations, care may be provided to some children under general anaesthesia. Aside from the risks associated with a general anaesthetic, providing dental care under a general anaesthetic is resource intensive.

In 2020–21, the total number of hospital separations for dental procedures requiring a general anaesthetic for children aged 0–14 years was 41,278, or 8.7 separations per 1,000 population. Across age groups, children aged 5–9 years had the highest number of separations (20,276, or 12.5 per 1,000 children aged 5–9), and those aged 0–4 had the lowest (9,689, or 6.4 per 1,000 children aged 0–4) (Table 8.2).

Between 2016–17 and 2020–21, there was a 21% increase in the total number of separations (from 34,107 to 41,278), with a corresponding increase in separation rate from 7.4 separations per 1,000 population to 8.7 separations per 1,000 population.

		Age group (ye	ars)	
Financial Year	0–4	5–9	10–14	Total
		Number		
2020–21	9,689	20,276	11,313	41,278
2019–20	8,134	16,014	8,566	32,714
2018–19	8,760	17,247	9,486	35,493
2017–18	8,604	17,106	9,035	34,745
2016–17	8,409	16,742	8,956	34,107
		Separation ra	te <sup>(c)</sup>	
2020–21	6.4	12.5	7.0	8.7
2019–20	5.3	9.9	5.3	6.9
2018–19	5.6	10.7	6.1	7.5
2017–18	5.5	10.7	6.0	7.4
2016–17	5.3	10.5	6.1	7.4

Table 8.2: Hospital separations requiring general anaesthesia for procedures related to dental conditions<sup>a</sup> by age group, children aged 0–14 years, 2016–17 to 2020–21

Notes:

a) Hospital separations for any of the dental conditions listed that required a general anaesthesia. Dental conditions are as defined by following Australian Classification of Health interventions 10th edn block numbers and procedure codes: 457 Nonsurgical removal of tooth; 458 Surgical removal of tooth; 462 Pulp treatment; 463 Periradicular surgery; 465 Metallic restoration; 466 Tooth-coloured restoration; 469 Other restorative dental service; 470 Crown; 471 Bridge; 472 Other dental service on crown and bridge; 97241–00 Tooth root resection, per root; 97387–00 Replantation and splinting of tooth; 97388–00 Transplantation of tooth or tooth bud; 97445-00 Exploration or negotiation of calcified root canal, per canal; 97455-00 Irrigation and dressing of root canal system; 97457-00 Obturation of metal splint, indirect; 97778–00 Provision of metal splint, indirect; 97773–00 Provision of metal splint, indirect; 97778–00 Metallic inlay for denture tooth, with general anaesthesia (92514-XX). Data for 2016–17 are defined using ACHI 9<sup>th</sup> to 11<sup>th</sup> Ed.

b) Excludes records with care type of Newborn (without qualified days), Hospital boarders and Posthumous organ procurement.
 c) Number of separations per 1,000 population. Separation rates were directly age standardised to the Australian population, using the estimated resident populations as at 30 June for the respective year.

Sources: AIHW Hospital Morbidity database 2016-17 to 2020-21; ABS (2023) Quarterly Population Estimates (ERP).

# 9 Synthesis of findings over time and between population groups

This chapter examines the picture of the oral health of Australian children aged 5–17 years and summarises the experience of the population groups examined in this report.

#### **General picture**

Overall, the majority of Australian children reported having good, very good or excellent oral health. However, there is evidence that oral problems start having an impact early in life, with 14.5% of children aged 5–10 years and 19.7% of children aged 11–17 years reporting experience of either toothache or avoiding foods due to oral problems.

In 2021, 80% of children aged 5–17 years made a dental visit for a check-up. Approximately 20% of children reported at least one financial barrier or hardship associated with dental care. The most commonly reported financial barrier was avoiding or delaying a dental visit due to cost (8.9%) and dental visits in the previous 12 months causing large financial burden (8.9%). Approximately 5% of children reported that cost prevented recommended dental treatment.

Of those children who made a dental visit in 2021, nearly 92% received at least one check-up, 68% received a scale and clean, nearly one-third received fluoride treatment (31.6%) and 11% received oral hygiene instructions. Approximately 17% received a filling and around 7% had at least one tooth extracted. The most frequently reported need for dental care was for a check-up (58.2%), followed by scale and clean (45.9%) and orthodontic care (27.2%).

#### Changes over time

The proportion of children reporting fair or poor oral health and the proportion of children experiencing any oral health impacts did not vary greatly between 1994 and 2021 although there was a downwards trend towards reports of fair/poor self-rated oral health. The prevalence of reporting fair or poor oral health was estimated to be about 7% and any oral health impact was estimated to be 17.2% in 2021.

The proportion who made a dental visit in the previous 12 months stayed fairly constant over time, with the prevalence estimated to be just over 72% in 2021. Among those who visited, the proportion visiting for a check-up also remained fairly stable over time, with an estimated 80% last visiting for a check-up. People who visit for a routine check-up are most likely to benefit from early detection and treatment and receive preventive services.

Generally, people who seek regular and routine care report low levels of extractions and relatively low levels of fillings. There was evidence of decline in the average number of fillings received over time, from 0.53 per child in 1994 to 0.27 in 2021. There was no change over time in the average number of extractions, which remained at around 0.2 teeth extracted per child.

#### **Differences between males and females**

There were no marked differences between males and females in measures of self-reported oral health, dental visiting patterns, experience of financial barriers or hardship, or treatment services received. Females were more likely than males to report experiencing a social impact of oral health, attending a private dental clinic, receiving Orthodontic care and perceiving the need for Orthodontic care.

#### Differences between age groups

There was evidence that oral health declined from an early age. Overall, 17% of children aged 5–17 years reported experiencing a social impact of oral health, with children aged 11–17 years more likely than children aged 5–10 years to report any oral health impact. In addition, the prevalence of dental visits being a large financial burden was higher among children aged 11–17 years than children aged 5–10 years. Almost one quarter of children aged 11–17 years experienced some financial barrier or hardship. Younger children were more likely than older children aged 11–17 years were more likely to receive orthodontics care. In addition, children aged 11–17 years to report a need for a scale and clean and for orthodontic care.

#### **Differences across geographic location**

Measures of self-reported oral health, dental visiting patterns and experience of financial barriers and hardship were similar across geographic location. A higher proportion of children from Outer regional/Remote areas received an x-ray compared to Major cities and Inner regional areas, while fewer children in Inner regional areas received a scale and clean service compared with other areas. Children living in Major cities received more orthodontic services, on average, than children living in Outer regional/Remote areas.

#### Differences between socioeconomic groups

Children from the lowest income tertile were more likely to report any oral health impact than children from the middle and high household income tertiles. Children from households on the higher household income tertiles were more likely to have visited a dental practitioner in the previous 12 months than those from low income households. Children in the lowest household income group were more likely to visit public dental clinics compared to other children.

Generally, the proportion of children receiving preventive services (fluoride treatment, sealant, scale and clean) across annual household income groups were similar. There were also few differences for diagnostic and treatment services (check-up, x-ray, filling, extraction) across annual household income groups, but a higher proportion of children in the highest income tertile reported attending for orthodontic services in 2021.

Children who were cardholders consistently reported higher rates across all impacts and perception of fair/poor self-rated oral health. Children who were cardholders were more likely to have visited for a problem and more likely to have visited a public dental clinic than non-cardholders. Children who were cardholders were more likely to report having received Oral hygiene instruction and an x-ray than non-cardholder children. In addition, children of

cardholders were more likely to report needing a check-up, scale and clean, filling or an extraction.

#### **Differences by dental insurance status**

Children who were covered by private health insurance that included insurance for some or all of the cost of dental care were more likely to have made a dental visit in the previous 12 months, more likely to have visited for a check-up, and more likely to have visited a private dental clinic. Insured children were less likely to have avoided or delayed making a dental visit due to cost and less likely to have reported experiencing a financial barrier to dental care. Insured children were more likely to report receiving fluoride treatments, scale and clean services, and Orthodontic services than uninsured children.

#### Differences by financial barriers and hardships

Experience of any financial barrier was higher among older children (aged 11–17 years), those living in lower income households, cardholders and uninsured children. Avoiding or delaying due to cost was not associated with a lower rate of visiting in the previous 12 months for a range of services. Children who did not have the recommended treatment due to cost were more likely to have received a fissure sealant and less likely to have received a check-up. Dental costs were more likely to be a large financial burden for children who last visited for orthodontic services. Children who visited for a problem reported higher rates of receiving an x-ray, fillings and extractions than those who last visited for a check-up and were more likely to report fair or poor oral health, or to report having experienced toothache or avoiding foods due to oral problems.

Children who experienced a financial barrier or burden were also more likely to report fair or poor oral health, experience of toothache or that they avoided food due to oral problems than children who did not experience the barrier or hardship.

Reporting a perceived need for care was usually associated with not having visited in the previous 12 months, and with visiting for a problem among those who did visit. It was also associated with higher rates of perceiving one's oral health to be fair or poor. For most types of dental care (check-up, scale and clean and orthodontics), children who avoided or delayed seeking dental care due to cost, or for whom cost had prevented recommended dental treatment, were more likely to report a need for care than those children who did not report these financial barriers.

## Appendix A: Data used in this report

#### National Dental Telephone Interview Survey

#### Purpose

The purposes of the National Dental Telephone Interview Survey (NDTIS) are to:

- collect basic features of oral health and dental care within the Australian population
- provide information on the broader parameters of oral health and access to services
- monitor the extent of social inequalities within the dental sector
- investigate the underlying reasons behind dental behaviours and the consequences of these behaviours.

#### Sampling procedure

In this survey a stratified sampling design was used to select a sample of adults aged 18 years or over and a sample of children aged 5–17 years from the Australian population. The first stage of selection was undertaken by the Services Australia (formerly the Department of Human Services (DHS)) using the Medicare database as the sampling frame. The sample frame was split into strata using the Australian Statistical Geography Standard – Greater Capital City Statistical Areas (GCCSA) classification that groups areas into Greater City/Rest of State within each state/territory.

Persons aged 18 years or over who were listed on the Medicare database were randomly selected for inclusion in the study. To ensure targets were achieved, the number of individuals randomly selected in each stratum was inflated by a factor of 5 to allow for attrition due to non-contact and refusals.

On completion of the adult questionnaire via telephone interview or online survey, adults were asked if there were any children aged 5–17 years usually resident in their household. One child was then selected from eligible households by identifying the child who had the last birthday. This sampling methodology was expected to yield approximately 1,500 children across Australia. The target number of adults aged 18 years or older and target number of children aged 5–17 years are provided in Table 2 by state and territory.

State/Territory	Aged 18 years or older	Aged 5–17 years	Total
NSW	1,350	330	1,680
VIC	1,200	285	1,485
QLD	1,000	240	1,240
SA	700	150	850
WA	750	165	915
TAS	500	110	610
ACT	500	110	610
NT	500	110	610
AUST	6,500	1,500	8,000

Table A.1: Target number of participants

#### Weighting procedure

The purpose of sampling weights is to ensure that population estimates derived from a sample survey are representative of the target Australian population. NDTIS 2021 sampled 5,526 adults aged 18 years or over and 872 children aged 5–17 years using a stratified sampling design. People within households were sampled with differential probabilities of selection and therefore initial weights were derived to reflect this. Furthermore, analysis of the NDTIS sample indicated survey participation rates varied across a range of sociodemographic characteristics.

As this report focuses on children aged 5–17 years the methodology used to derive the survey weights will be described for the child sample only. A household's probability of selection in the survey was determined by their stratum (state/territory by GCCSA region). Within sampled households, a child's probability of selection was determined by the number of children aged 5–17 years usually resident in the household. An initial weight was derived for each child based on the inverse of each child's probability of selection in the survey.

To ensure the weighted sample reflected the sociodemographic characteristics of Australian children aged 5–17 years, weighted sample percentage distributions were compared with corresponding 2021 population distributions. Sociodemographic information collected in the survey included the child's age, sex, Indigenous status, country of birth and household characteristics including household size and dwelling tenure type. Population distributions by age and sex were sourced from the ABS AUSSTATS product, Population Estimates by Age and Sex, Regions of Australia (2021 Estimated Resident Population by GCCSA region). For the other sociodemographic characteristics, child population distributions were derived using 2021 Census data available from the ABS Census Table Builder product. Separate population distributions were derived for each State/Territory by GCSSA strata.

For comparison purposes, a child's age was classified into three age groups (5–9, 10–14 or 15– 17 years), Indigenous status was classified as non-Indigenous or Indigenous and country of birth was classified as Australian born or overseas born. For household characteristics, household size was classified into four categories (2, 3, 4 or 5 or more persons) and dwelling tenure type was classified into four categories (owned outright, being purchased, rented or other).

If there were discrepancies between the weighted sample distributions and corresponding population distributions for any of the sociodemographic characteristics then children's weights were progressively adjusted until consistency was achieved. This weighting adjustment procedure, known as raking ratio estimation, was performed by a SAS® macro called 'Rake\_and\_Trimm' developed by Izrael et al (2009, 2000). Sample data including the child's initial weight, the sociodemographic categories the child was classified to, and the population distributions for each sociodemographic characteristic were submitted to the SAS macro to derive the child's final weight.

The weighting strategy ensured that the weighted sample distributions by sex and age group were equivalent to the corresponding stratum Estimated Residential Population distributions, and therefore the corresponding State and Territory population distributions. Furthermore, the weighting strategy ensured the marginal weighted sample distributions for the remaining sociodemographic characteristics closely reflected the 2021 Census distributions at both the stratum and State/Territory level.

# Appendix B: Estimates and confidence intervals for figures

Table B.1: Prevalence of fair or	poor oral health 1999 to 2021 (	per cent)

		1999	2002	2005	2007	2010	2013	2017	2021
All Children	Per cent	10.3	9.8	6.6	8.8	6.3	5.7	8.7	7.5
	95% Cl <sup>#</sup>	8.0–13.2	7.8–12.3	5.2–8.4	6.8–11.4	5.1–7.6	4.3–7.6	7.2–10.4	5.4-10.2
Male	Per cent	11.4	10.9	8.4	7.4	5.6	7.0	9.7	8.6
	95% CI	7.8–16.2	8.1–14.6	6.1–11.3	4.9–10.9	4.3–7.3	5.0–9.6	7.7–12.2	5.6–12.9
Female	Per cent	9.4	8.9	4.7	10.5	6.8	4.2	7.6	6.4
	95% Cl	6.9–12.6	6.3–12.5	3.2–6.9	7.4–14.7	5.1–9.0	2.6–6.9	5.7–10.1	3.9–10.1

# CI = confidence interval.

Notes.

Parent-reported oral health status was not collected in the 1994 and 1996 surveys.

Estimates are age standardised to the 2001 Census population estimates for 5-17 year-olds

This table relates to Figure 2.1

#### Table B.2: Prevalence of any oral health impact 1994 to 2021 (per cent)

		1994	1996	1999	2002	2005	2008	2010	2013	2018	2021
Toothache	Per cent	8.2	7.1	7.7	5.5	10.4	9.9	8.0	6.1	10.7	9.0
	95% C <i>\</i> <sup>#</sup>	6.4–10.4	5.4–9.4	5.8–10.1	4.2–7.2	8.5–12.6	7.7–12.6	6.8–9.4	4.4–8.4	9.1–12.6	6.6–12.1
Avoiding											
certain foods	Per cent	10.5	8.7	11.0	8.3	10.8	10.0	10.3	13.6	14.9	15.1
	95% Cl	8.5–12.9	7.0–10.8	8.8–13.7	6.5–10.6	8.9–13.0	7.9–12.5	9.0–11.8	11.1–16.5	13.0–17.0	12.0–18.8
Any Oral											
Health Impact	Per cent	15.3	13.4	16.7	13.0	16.3	15.4	13.7	15.4	19.7	17.1
	95% Cl	12.9–18.0	11.1–16.1	13.9–19.8	10.8–15.6	14.0–18.9	12.8–18.5	12.2–15.4	12.9–18.4	17.5–22.1	13.9–20.9

# CI = confidence interval.

Estimates are age standardised to the 2001 Census population estimates for 5-17 year-olds

This table relates to Figure 2.2

		1994	1996	1999	2002	2005	2007	2010	2013	2017	2021
Total <sup>(a)</sup>	Per cent	77.2	79.0	77.8	79.0	83.0	77.0	78.6	78.0	78.1	72.2
	95% Cl <sup>(b)</sup>	74.0–80.1	75.9–81.7	74.0–81.2	75.7–81.9	80.4–85.3	73.5–80.2	76.4–80.6	74.7–80.9	76.0–80.1	67.9–76.1
5–9	Per cent	77.3	76.4	78.5	82.8	80.7	76.7	72.9	77.5	76.3	70.1
	95% Cl	72.1–81.9	71.1–81.0	72.6–83.4	78.0–86.8	76.6–84.3	70.4–81.9	68.7–76.7	72.1–82.1	72.9–79.4	62.9–76.5
10–14	Per cent	81.4	87.2	79.5	80.6	85.5	79.7	83.0	80.1	80.3	72.6
	95% CI	76.0–85.8	82.5–90.8	73.4–84.5	74.6–85.5	82.0-88.4	74.4–84.1	79.8–85.8	74.9–84.5	76.8–83.4	65.4–78.7
15–17	Per cent	69.2	67.8	74.0	70.8	73.6	72.8	80.7	76.5	77.6	74.9
	95% CI	61.5–76.0	60.2–74.5	64.8–81.5	63.6–77.2	68.5–78.2	64.4–79.9	76.8–84.1	69.2–82.5	72.6–81.9	65.7–82.2

Table B.3: Prevalence of making a dental visit in the past 12 months, 1994-2021 (per cent)

(a) Total estimates age standardised to the 2001 Census population for 5–17 year-olds.

(b) CI = confidence interval.

This table relates to Figure 3.1

#### Table B.4 Prevalence of visiting for a check-up at their last dental visit in the past 12 months, 1994–2021 (per cent)

		1994	1996	1999	2002	2005	2007	2010	2013	2017	2021
Total <sup>(a)</sup>	Per cent	79.1	70.4	71.8	75.0	79.4	80.9	84.2	80.7	80.5	79.8
	95% Cl <sup>(b)</sup>	75.7–82.1	66.6–74.0	67.8–75.5	71.2–78.4	76.7–81.9	77.1–84.2	82.1–86.1	77.1–83.9	77.9–82.8	74.8–84.1
5–9	Per cent	82.9	69.1	75.4	75.6	78.3	80.7	81.5	76.1	82.7	79.8
	95% Cl	78.0–86.9	63.2–74.5	68.8–81.0	69.7–80.8	73.2–82.7	73.9–86.0	77.4–85.0	69.5–81.7	78.8–85.9	70.7–86.6
10–14	Per cent	76.8	71.3	71.0	72.6	79.3	79.4	86.0	83.9	77.0	80.1
	95% Cl	71.3–81.5	65.0–76.9	64.4–76.8	65.7–78.6	75.1–83.0	73.3–84.5	82.8–88.6	78.6–88.2	72.4–80.9	72.5–86.0
15–17	Per cent	76.5	69.3	68.2	76.1	80.4	83.2	85.6	80.9	81.8	79.5
	95% Cl	67.8–83.4	60.3–77.0	58.8–76.3	67.9–82.7	75.2–84.7	74.9–89.2	82.2–88.5	73.2–86.9	75.6–86.6	66.7–88.2

(a) Total estimates age standardised to the 2001 Census population for 5–17 year-olds.

(b) CI = confidence interval.

This table relates to Figure 3.2

	1994	1996	1999	2002	2005	2008	2010	2013	2018	2021
Avoided or delayed visit	ing due to co	ost								
Per cent	14.3	8.8	9.6	10.0	8.6	15.4	14.1	11.2	11.1	8.9
95% Cl <sup>#</sup>	12.0–17.0	7.0–11.0	7.5–12.2	8.0–12.6	7.1–10.3	12.7–18.5	12.4–15.9	9.2–13.7	9.5–13.1	6.8–11.6
Cost prevented recomme	ended treatm	nent								
Per cent	6.7	8.5	6.6	4.6	5.2	7.0	5.9	7.0	6.6	5.1
95% CI	5.1–8.8	6.7–10.9	5.0–8.8	3.3–6.5	4.0–6.7	5.1–9.5	4.8–7.1	5.3–9.3	5.2–8.3	3.2–8.1
Dental visit in previous 1 were a large financial bu	2 months rden									
Per cent	6.1	7.4	7.5	8.6	9.0	7.6	10.7	11.3	8.3	9.3
95% CI	4.3-8.4	5.5–9.8	5.4-10.3	6.4–11.5	7.4–10.9	5.6–10.2	9.3–12.3	8.9–14.2	6.8–10.1	6.4–13.3
Any financial barrier										
Per cent	19.8	17.1	16.2	16.8	17.4	25.5	26.6	23.3	22.0	19.8
95% Cl	17.1–22.8	14.6–20.1	13.4–19.3	14.1–19.9	15.4–19.6	21.8–29.4	24.4–29.0	20.3–26.6	19.6–24.5	16.0–24.3

#### Table B.5: Financial barriers and hardship associated with dental visits, 1994-2021 (per cent)

Estimates age standardised to the 2001 Census population for 5–17 year-olds.

# CI = confidence interval.

This table relates to Figure 4.1

#### Table B.6: Proportion of children aged 5-17 years who received a dental service in the previous 12 months, 1994-2021 (per cent)

		1994	1996	1999	2002	2005	2008	2010	2013	2017	2021
Fillingo	Dor cont	<u> </u>	26.4	26.7	20.4	26.0	06.7	00.4	20.6	10.1	17 5
Fillings	Per cent	28.5	26.1	26.7	30.1	26.9	20.7	23.1	20.6	19.1	17.5
	95% C <b>I</b> <sup>#</sup>	25.1–32.2	22.8–29.6	23.0–30.7	26.3–34.1	24.2–29.8	23.0–30.9	20.9–25.5	17.6–23.8	16.6–21.9	13.6–22.2
Extractions	Per cent	11.1	8.6	13.7	9.1	8.1	10	10.3	10	8.1	7.3
	95% CI	8.8–14.0	6.6–11.0	10.9–17.2	7.0–11.7	6.6–10.0	7.7–12.9	8.8–12.0	7.6–13.1	6.5–10.0	4.8–10.9
Scale and cleans	Per cent	53.6	56.3	49.1	50.6	41.7	55.5	63.6	68.7	61.9	68.1
	95% CI	49.7–57.6	52.4–60.1	44.7–53.5	46.2–55.0	38.7–44.8	51.0–60.0	61.1–66.1	64.8–72.4	58.9–64.9	63.2–72.7
Fluoride	Per cent	9.6	33.7	32.5	28.1	22.6	24.1	31.4	31.1	25.8	31.7
	95% Cl	7.6–12.1	29. <i>0</i> –38.8	27.4–37.9	23.6–33.1	19.6–25.9	20.1–28.7	29.1–33.9	27.6–34.9	22.8–29.0	27.0–36.8

Estimates age standardised to the 2001 Census population for 5–17 year-olds.

# CI = confidence interval.

This table relates to Figure 5.1.

		1994	1996	1999	2002	2005	2007	2010	2013	2017	2021
Check-ups	Mean				2.04		1.56	1.47	1.65	1.45	1.38
	95% C <b>I</b> <sup>#</sup>				1.86–2.22		1.43–1.68	1.41–1.53	1.50–1.80	1.40–1.51	1.27–1.48
X-rays	Mean						0.42	0.48	0.55	0.42	0.46
	95% CI						0.36–0.48	0.44–0.52	0.47–0.63	0.37–0.47	0.38–0.54
Fillings	Mean	0.53	0.53	0.48	0.56	0.46	0.48	0.43	0.39	0.34	0.27
	95% CI	0.44–0.61	0.44–0.62	0.39–0.58	0.47–0.65	0.40–0.52	0.38–0.58	0.37–0.48	0.29–0.50	0.28–0.39	0.19–0.36
Extractions	Mean	0.23	0.18	0.29	0.22	0.15	0.17	0.20	0.18	0.19	0.14
	95% CI	0.16–0.29	0.12–0.24	0.21–0.37	0.13–0.32	0.12–0.19	0.12–0.22	0.17–0.24	0.13–0.23	0.14–0.24	0.09–0.20
Scale and cleans	Mean	0.79	0.81	0.65	0.64		1.18	0.82	0.95	0.88	0.95
	95% CI	0.68–0.90	0.73–0.89	0.58–0.73	0.57–0.71		1.04–1.31	0.78–0.86	0.87–1.02	0.83–0.94	0.87–1.03
Fluoride	Mean						0.32	0.41	0.41	0.32	0.45
	95% CI						0.26–0.38	0.38–0.45	0.36–0.47	0.28–0.36	0.37–0.53
Orthodontic	Mean						1.83	0.96	1.01	0.76	0.97
	95% CI						1.80–1.86	0.85–1.06	0.79–1.23	0.62–0.89	0.70–1.24
Fissure sealants	Mean							0.26	0.30	0.21	0.12
	95% CI							0.22–0.30	0.20–0.39	0.16–0.25	0.07–0.17

#### Table B.7: Average number of services received in the previous 12 months, 1994–2021

Estimates age standardised to the 2001 Census population for 5–17 year-olds.

 $^{\scriptscriptstyle \#}$  CI = confidence interval; . . not collected.

This table relates to Figure 5.2.

	1994	1996	1999	2002	2005	2007	2010	2013	2017	2021
Per cent	33.3	33.0	24.4	45.5	50.1	58.1	56.6	54.6	39.5	58.4
95% C <i>l</i> <sup>#</sup>	30.0–36.8	29.7–36.4	20.8–28.4	41.7–49.3	47.3–53.0	54.1–62.0	54.2–58.9	51.0–58.2	36.8-42.3	53.6–63.0
Per cent	3.4	17.8	14.4	27.6	32.4	38.9	41.2	37.0	25.9	45.9
95% CI	2.2–5.3	15.2–20.7	11.5–17.9	24.3–31.1	29.9–35.1	35.2–42.8	38.9–43.5	33.6–40.6	23.6–28.4	41.1–50.8
Per cent	4.5	7.6	5.3	11.3	11.3	14.2	11.9	10.5	6.2	5.5
95% CI	3.1–6.6	5.7–10.0	3.3–8.4	9.1–13.9	9.6–13.1	11.7–17.1	10.4–13.6	8.4–13.1	4.9–7.8	3.8–7.9
Per cent	2.0	1.1	3.3	4.2	5.8	5.6	6.0	6.2	3.6	4.6
95% CI	1.1–3.6	0.4–3.2	1.8–5.9	3.1–5.7	4.6–7.4	4.1–7.7	4.9–7.2	4.6–8.3	2.6–4.9	3.0–7.0
Per cent						23.7	23.0	19.8	18.9	26.9
95% CI						20.7–27.0	21.2–25.0	17.2–22.7	16.9–21.1	22.7–31.6
	Per cent 95% Cl <sup>#</sup> Per cent 95% Cl Per cent 95% Cl Per cent 95% Cl	1994           Per cent         33.3           95% Cl <sup>#</sup> 30.0–36.8           Per cent         3.4           95% Cl         2.2–5.3           Per cent         4.5           95% Cl         3.1–6.6           Per cent         2.0           95% Cl         1.1–3.6           Per cent            95% Cl            95% Cl            95% Cl	1994         1996           Per cent         33.3         33.0           95% Cl <sup>#</sup> 30.0–36.8         29.7–36.4           Per cent         3.4         17.8           95% Cl         2.2–5.3         15.2–20.7           Per cent         4.5         7.6           95% Cl         3.1–6.6         5.7–10.0           Per cent         2.0         1.1           95% Cl         1.1–3.6         0.4–3.2           Per cent             95% Cl	1994         1996         1999           Per cent         33.3         33.0         24.4           95% Cl <sup>#</sup> 30.0–36.8         29.7–36.4         20.8–28.4           Per cent         3.4         17.8         14.4           95% Cl         2.2–5.3         15.2–20.7         11.5–17.9           Per cent         4.5         7.6         5.3           95% Cl         3.1–6.6         5.7–10.0         3.3–8.4           Per cent         2.0         1.1         3.3           95% Cl         1.1–3.6         0.4–3.2         1.8–5.9           Per cent              95% Cl	1994         1996         1999         2002           Per cent         33.3         33.0         24.4         45.5           95% Cl <sup>#</sup> 30.0-36.8         29.7-36.4         20.8-28.4         41.7-49.3           Per cent         3.4         17.8         14.4         27.6           95% Cl         2.2-5.3         15.2-20.7         11.5-17.9         24.3-31.1           Per cent         4.5         7.6         5.3         11.3           95% Cl         3.1-6.6         5.7-10.0         3.3-8.4         9.1-13.9           Per cent         2.0         1.1         3.3         4.2           95% Cl         1.1-3.6         0.4-3.2         1.8-5.9         3.1-5.7           Per cent                95% Cl	1994         1996         1999         2002         2005           Per cent         33.3         33.0         24.4         45.5         50.1           95% Cl <sup>#</sup> 30.0–36.8         29.7–36.4         20.8–28.4         41.7–49.3         47.3–53.0           Per cent         3.4         17.8         14.4         27.6         32.4           95% Cl         2.2–5.3         15.2–20.7         11.5–17.9         24.3–31.1         29.9–35.1           Per cent         4.5         7.6         5.3         11.3         11.3           95% Cl         3.1–6.6         5.7–10.0         3.3–8.4         9.1–13.9         9.6–13.1           Per cent         2.0         1.1         3.3         4.2         5.8           95% Cl         1.1–3.6         0.4–3.2         1.8–5.9         3.1–5.7         4.6–7.4           Per cent                 95% Cl	199419961999200220052007Per cent $33.3$ $33.0$ $24.4$ $45.5$ $50.1$ $58.1$ $95\% Cl^{\#}$ $30.0-36.8$ $29.7-36.4$ $20.8-28.4$ $41.7-49.3$ $47.3-53.0$ $54.1-62.0$ Per cent $3.4$ $17.8$ $14.4$ $27.6$ $32.4$ $38.9$ $95\% Cl$ $2.2-5.3$ $15.2-20.7$ $11.5-17.9$ $24.3-31.1$ $29.9-35.1$ $35.2-42.8$ Per cent $4.5$ $7.6$ $5.3$ $11.3$ $11.3$ $14.2$ $95\% Cl$ $3.1-6.6$ $5.7-10.0$ $3.3-8.4$ $9.1-13.9$ $9.6-13.1$ $11.7-17.1$ Per cent $2.0$ $1.1$ $3.3$ $4.2$ $5.8$ $5.6$ $95\% Cl$ $1.1-3.6$ $0.4-3.2$ $1.8-5.9$ $3.1-5.7$ $4.6-7.4$ $4.1-7.7$ Per cent $\ldots$ $\ldots$ $\ldots$ $\ldots$ $\ldots$ $20.7-27.0$ $95\% Cl$ $\ldots$ $\ldots$ $\ldots$ $\ldots$ $\ldots$ $20.7-27.0$	1994         1996         1999         2002         2005         2007         2010           Per cent         33.3         33.0         24.4         45.5         50.1         58.1         56.6           95% Cl <sup>#</sup> 30.0-36.8         29.7-36.4         20.8-28.4         41.7-49.3         47.3-53.0         54.1-62.0         54.2-58.9           Per cent         3.4         17.8         14.4         27.6         32.4         38.9         41.2           95% Cl         2.2-5.3         15.2-20.7         11.5-17.9         24.3-31.1         29.9-35.1         35.2-42.8         38.9-43.5           Per cent         4.5         7.6         5.3         11.3         11.3         14.2         11.9           95% Cl         3.1-6.6         5.7-10.0         3.3-8.4         9.1-13.9         9.6-13.1         11.7-17.1         10.4-13.6           Per cent         2.0         1.1         3.3         4.2         5.8         5.6         6.0           95% Cl         1.1-3.6         0.4-3.2         1.8-5.9         3.1-5.7         4.6-7.4         4.1-7.7         4.9-7.2           Per cent             23.7         23.0      <	1994         1996         1999         2002         2005         2007         2010         2013           Per cent         33.3         33.0         24.4         45.5         50.1         58.1         56.6         54.6           95% Cl <sup>#</sup> 30.0-36.8         29.7-36.4         20.8-28.4         41.7-49.3         47.3-53.0         54.1-62.0         54.2-58.9         51.0-58.2           Per cent         3.4         17.8         14.4         27.6         32.4         38.9         41.2         37.0           95% Cl         2.2-5.3         15.2-20.7         11.5-17.9         24.3-31.1         29.9-35.1         35.2-42.8         38.9-43.5         33.6-40.6           Per cent         4.5         7.6         5.3         11.3         11.3         14.2         11.9         10.5           95% Cl         3.1-6.6         5.7-10.0         3.3-8.4         9.1-13.9         9.6-13.1         11.7-17.1         10.4-13.6         8.4-13.1           Per cent         2.0         1.1         3.3         4.2         5.8         5.6         6.0         6.2           95% Cl         1.1-3.6         0.4-3.2         1.8-5.9         3.1-5.7         4.6-7.4         4.1-7.7         4.9-7.2	1994         1996         1999         2002         2005         2007         2010         2013         2017           Per cent         33.3         33.0         24.4         45.5         50.1         58.1         56.6         54.6         39.5           95% Cl <sup>#</sup> 30.0-36.8         29.7-36.4         20.8-28.4         41.7-49.3         47.3-53.0         54.1-62.0         54.2-58.9         51.0-58.2         36.8-42.3           Per cent         3.4         17.8         14.4         27.6         32.4         38.9         41.2         37.0         25.9           95% Cl         2.2-5.3         15.2-20.7         11.5-17.9         24.3-31.1         29.9-35.1         35.2-42.8         38.9-43.5         33.6-40.6         23.6-28.4           Per cent         4.5         7.6         5.3         11.3         11.3         14.2         11.9         10.5         6.2           95% Cl         3.1-6.6         5.7-10.0         3.3-8.4         9.1-13.9         9.6-13.1         11.7-17.1         10.4-13.6         8.4-13.1         4.9-7.8           Per cent         2.0         1.1         3.3         4.2         5.8         5.6         6.0         6.2         3.6 <td< td=""></td<>

Table B.8: Proportion of children reporting a need for dental care, 1994–2021 (per cent)

Estimates age standardised to the 2001 Census population for 5–17 year-olds.

 $^{\scriptscriptstyle\#}$  CI = confidence interval; . . not collected.

This table relates to Figure 6.1 and Figure 6.2.

### Appendix C: Child Dental Benefits Schedule — additional tables

Table C.1: Have ever been eligible for Child Dental Benefits Schedule by selected characteristics,2021 (per cent)

		CDBS eligibility	
	Eligible	Not eligible	Don't know
All children	46.0	34.7	19.4
95%Cl <sup>#</sup>	41.5–50.5	30.4–39.2	16.0–23.2
Sex			
Male	48.2	34.3	17.6
95%Cl	42.1–54.3	28.6-40.4	13.4–22.7
Female	43.6	35.1	21.3
95%Cl	37.1–50.4	28.9–41.9	16.3–27.3
Age group (years)			
5–10	46.2	32.3	21.5
95%Cl	39.8–52.8	26.1–39.1	16.7–27.3
11–17	45.8	36.8	17.4
95%Cl	39.7–52.0	31.1–42.9	13.2–22.7
Geographic location			
Major cities	41.6	37.6	20.8
95%Cl	36.3-47.1	32.4-43.1	16.8–25.5
Inner regional	63.3	21.7	15.0
95%Cl	54.2–71.6	15.1–30.1	9.7–22.5
Outer regional/Remote	44.8	37.8	17.4*
95%Cl	30.3–60.3	23.4–54.7	8.1–33.5
Annual household income			
<\$100,000	78.9	6.9*	14.1
95%CI	71.5–84.9	4.1–11.4	9.1–21.4
\$100-<\$180,000	39.5	37.3	23.2
95%CI	31.7–47.8	29.4–45.8	17.2–30.6
\$180,000 and over	19.2	58.8	22.0
95%CI	13.2–27.0	50.1–66.9	15.9–29.7
Cardholder status			
Cardholder	85.9	4.5*	9.6*
95%CI	75.3–92.4	1.6–11.7	4.3–20.2
Non-cardholder	35.4	43.0	21.6
95%CI	30.7–40.4	38.0–48.2	17.8–25.9
Insurance status			
Insured	33.8	43.9	22.3
95%CI	28.5–39.5	38.2–49.9	17.9–27.4
Uninsured	64.6	21.7	13.7
95%Cl	57.1–71.5	15.9–28.8	9.3–19.8

	С	DBS eligibility	
	Yes	No	Don't know
All children	46.0	34.7	19.4
95%Cl <sup>#</sup>	41.5–50.5	30.4-39.2	16.0–23.2
Whether aware of CDBS			
Yes	87.3	40.6	25.2
95%Cl	82.5–90.8	33.0–48.8	17.8–34.5
No	12.7	59.4	74.8
95%CI	9.2–17.5	51.2–67.0	65.5-82.2
Whether used CDBS benefit			
Yes	78.7		
95%Cl	73.0–83.5		
No	21.3		
95%CI	16.5–27.0		
Reason for not using CDBS			
benefit			
Letter from the government	7.4*		
95%Cl	2.8–18.0		
MyGov notification	28.9		
95%Cl	18.1–42.7		
Family/Friend	3.1*		
95%Cl	0.9–9.9		
Dental practitioner/dental clinic	0.5*		
95%Cl	0.1–3.7		
Contact with Medicare	6.7*		
95%Cl	1.8–22.3		
Online media/social media	18.5*		
95%Cl	9.6–32.7		
Other source	12.1*		
95%CI	5.2–25.8		
Don't know	22.8		
95%CI	14.2–34.6		

Table C.1 *continued*: Have ever been eligible for Child Dental Benefits Schedule by selected characteristics, 2021 (per cent)

# CI = confidence interval; . . not collected

	Whether aware of CDI	35
	Yes	No
All children	59.2	40.8
95%Cl <sup>#</sup>	54.7-63.5	36.5-45.3
Sex		
Male	62.0	38.0
95%Cl	56.0-67.7	32.3-44.0
Female	56.1	43.9
95%Cl	49.4-62.7	37.3–50.6
Age group (years)		
5–10	61.7	38.3
95%Cl	55.1–67.9	32.1–44.9
11–17	56.9	43.1
95%Cl	50.7–63.0	37.0–49.3
Geographic location		
Major cities	55.9	44.1
95%Cl	50.5-61.2	38.8–49.5
Inner regional	72.9	27.1
95%Cl	64.1–80.2	19.8–35.9
Outer regional/Remote	57.1	42.9
95%Cl	41.1–71.8	28.2–58.9
Annual household income		
<\$100,000	82.4	17.6
95%Cl	75.5–87.7	12.3–24.5
\$100-<\$180,000	56.0	44.0
95%Cl	47.7–64.0	36.0–52.3
\$180,000 and over	35.5	64.5
95%Cl	27.6–44.3	55.7-72.4
Cardholder status		
Cardholder	84.2	15.8*
95%Cl	74.6–90.7	9.3–25.4
Non-cardholder	52.8	47.2
95%Cl	47.7–57.8	42.2–52.3
Insurance status		
Insured	48.4	51.6
95%Cl	42.7–54.2	45.8–57.3
Uninsured	76.9	23.1
95%Cl	70.2–82.5	17.5–29.8
CDBS eligibility		
Eligible	87.3	12.7
95%Cl	82.5–90.8	9.2–17.5
Not eligible	40.6	59.4
95%Cl	33.0–48.8	51.2–67.0
Don't know	25.2	74.8
95%Cl	17.8–34.5	65.5–82.2

Table C.2: Awareness of the Child Dental Benefits Schedule by selected characteristics, 2021 (per cent)

# CI = confidence interval

 Table C.2 continued: Awareness of the Child Dental Benefits Schedule by selected characteristics,

 2021 (per cent)

	Whether aw	are of CDBS
	Yes	No
All children	59.2	40.8
95%Cl#	54.7–63.5	36.5–45.3
Information source for CDBS		
Letter from the government	41.1	
95%Cl	35.3–47.2	
MyGov notification	16.9	
95%Cl	12.8–21.8	
Family/Friend	11.3	
95%Cl	8.0–15.8	
Dental practitioner/dental clinic	11.3	
95%Cl	8.0–15.5	
Contact with Medicare	0.9*	
95%Cl	0.4–2.5	
Online media/social media	4.8*	
95%Cl	2.8-8.0	
Other source	0.1	
95%Cl	0.0–1.0	
Don't know	13.5	
95%Cl	9.9–18.2	

# CI = confidence interval; . . not collected

### References

ARCPOH. In: Do LG, Spencer AJ. Oral health of Australian children: the National Child Oral Health Study 2012–14. Adelaide: University of Adelaide Press, 2016.

Australian Health Ministers' Advisory Council Steering Committee for National Planning for Oral Health 2001. Oral Health of Australians: national planning for oral health improvement. Adelaide: South Australian Department of Human Services, on behalf of the Australian Health Ministers' Conference.

Australian Institute of Health and Welfare. Oral health and dental care in Australia. Canberra, AIHW, 2022.

Chrisopoulos S, Harford JE & Ellershaw A 2016. Oral health and dental care in Australia: key facts and figures 2015. Cat. no. DEN 229. Canberra: AIHW.

Crocombe LA, Broadbent JM, Thomson WM, Brennan DS & Poulton R 2012. Impact of dental visiting trajectory patterns on clinical oral health and oral health-related quality of life. Journal of Public Health Dentistry 72:36–44.

Gilbert G, Duncan R, Heft M, Dolan TA & Vogel W 1997. Oral disadvantage among dentate adults. Community Dentistry and Oral Epidemiology 25:301–313.

Izrael D, Hoaglin DC & Battaglia MP 2000. A SAS macro for balancing a weighted sample. Paper 258-25. Proceedings of the Twenty-Fifth Annual SAS Users Group International Conference, SAS Institute Inc., Cary, NC.

Izrael D, Battaglia MP & Frankel MR 2009. Extreme Survey Weights Adjustment as a Component of Sample Balancing (a.k.a. Raking). Paper 247-2009. SAS Global Forum: Washington, D.C.

Listl S, Galloway J, Mossey PA, Marcenes W. Global Economic Impact of Dental Diseases. J Dent Res. 2015;94:1355-61.

McGrath C & Bedi R 2000. Can dental attendance improve quality of life? British Dental Journal 190:262–265.

Mount G & Hume W 2005. Preservation and restoration of tooth structure, 2nd edn. Sandgate, Queensland: Knowledge Books.

Thomson M, Poulton R, Kruger E & Boyd D 2000. Socio-economic and behavioural risk factors for tooth loss from age 18 to 26 among participants in the Dunedin Multidisciplinary Health and Development Study. Caries Research 34:361–366.

UK Department of Health 1994. An oral health strategy for England. London: Department of Health.

### List of tables

Table 2.1: Pre 20	evalence of fair or poor oral health and social impacts of oral health by sex, D21 (per cent)	6
Table 2.2: Pre	evalence of fair or poor oral health by age, 2021 (per cent)	7
Table 2.3: Chi lo	ildren experiencing fair or poor oral health or oral health impacts by geographic cation, 2021 (per cent)	8
Table 2.4: Chi sta	ildren experiencing fair or poor oral health or oral health impacts by socioeconomic atus, 2021 (per cent)	10
Table 2.5: Chi sta	ildren experiencing poor oral health or oral health impacts by dental insurance atus, 2021 (per cent)	11
Table 3.1: Pre	evalence of dental visiting indicators by sex, 2021 (per cent)	16
Table 3.2: Pre	evalence of dental visiting indicators by age, 2021 (per cent)	17
Table 3.3: Pre	evalence of dental visiting indicators by geographic location, 2021 (per cent)	18
Table 3.4: Pre	evalence of dental visiting indicators by socioeconomic status, 2021 (per cent)	19
Table 3.5: Pre	evalence of dental visiting indicators by insurance status, 2021 (per cent)	20
Table 3.6: Eliş	gibility for the Child Dental Benefits Schedule, 2021 (per cent)	21
Table 3.7: Pro Sc	evalence of dental visiting indicators by eligibility for the Child Dental Benefits hedule, 2021 (per cent)	21
Table 4.1: Fin	ancial barriers and hardship associated with dental visits by sex, 2021 (per cent)	25
Table 4.2: Fin	ancial barriers and hardship associated with dental visits by age, 2021 (per cent)	26
Table 4.3: Fin 20	ancial barriers and hardship associated with dental visits by geographic location, 021 (per cent)	27
Table 4.4: Fin 20	ancial barriers and hardship associated with dental visits by socioeconomic status, 021 (per cent)	28
Table 4.5: Fin 20	ancial barriers and hardship associated with dental visits by insurance status, 021 (per cent)	29
Table 4.6: Pre Sc	evalence of dental visiting indicators by eligibility for the Child Dental Benefits Thedule, 2021 (per cent)	30
Table 5.1: Pre	eventive services received by sex, 2021 (per cent and mean)	33
Table 5.2: Dia	agnostic and treatment services received by sex, 2021 (per cent and mean)	34
Table 5.3: Pre	eventive services received by age, 2021 (per cent)	35
Table 5.4: Dia	agnostic and treatment services received by age, 2021 (per cent)	36
Table 5.5: Pre	eventive services received by geographic location, 2021 (per cent)	37
Table 5.6: Dia	agnostic and treatment services received by geographic location, 2021 (per cent)	38
Table 5.7: Pre	eventive services received by socioeconomic status, 2021 (per cent)	39
Table 5.8: Dia	agnostic and treatment services received by socioeconomic status, 2021 (per cent)	40
Table 5.9: Pre	eventive services received by dental insurance status, 2021 (per cent)	41
Table 5.10: Di ar	iagnostic and treatment services received by dental insurance status, 2021 (per cent nd mean)	42

Table 5.11: Preventive services received by eligibility for CDBS, 2021 (per cent and mean)	43
Table 5.12: Diagnostic and treatment services received by eligibility for the Child Dental Benefits         Schedule, 2021 (per cent and mean)	44
Table 5.13: Preventive services received by reason for last dental visit, 2021 (per cent)	45
Table 5.14: Diagnostic and treatment services received by reason for last dental visit, 2021 (per cent	).46
Table 5.15: Preventive services received by type of practice visited, 2021 (per cent)	47
Table 5.16: Diagnostic and treatment services received by type of practice visited, 2021 (per cent)	48
Table 5.17: Preventive services received by financial barriers, 2021 (per cent)	49
Table 5.18: Diagnostic and treatment services received by financial barriers, 2021 (per cent)	51
Table 6.1: Perceived need for care by sex, 2021 (per cent)	54
Table 6.2: Perceived need for care by age group, 2021 (per cent)	55
Table 6.3: Perceived need for care by geographic location, 2021 (per cent)	56
Table 6.4: Perceived need for care by socioeconomic status, 2021 (per cent)	57
Table 6.5: Perceived need for care by insurance status, 2021 (per cent)	58
Table 6.6: Perceived need for care by eligibility for the Child Dental Benefits Schedule, 2021 (per cent)	59
Table 6.7: Recent visiting experience and oral health by perceived need for care, 2021 (per cent)	61
Table 6.8: Barriers and hardship by perceived need for care, 2021 (per cent)	63
Table 7.1: Variations in dental visiting by financial barriers and hardship, 2021 (per cent)	67
Table 7.2: Prevalence of social impacts of oral health by dental visiting, 2021 (per cent)	68
Table 7.3: Prevalence of oral health impacts by experience of barriers and hardship, 2021 (per cent)	70
Table 8.1: Hospital separations for potentially preventable hospitalisations due to dental conditions <sup>(a)</sup> , by age group, children aged 0–14 years, 2016–17 to 2020–21	72
Table 8.2: Hospital separations requiring general anaesthesia for procedures related to dental conditions <sup>a</sup> by age group, children aged 0–14 years, 2016–17 to 2020–21	73
Table A.1: Target number of participants	77
Table B.1: Prevalence of fair or poor oral health 1999 to 2021	79
Table B.2: Prevalence of any oral health impact 1994 to 2021	79
Table B.3: Prevalence of making a dental visit in the past 12 months, 1994–2021	80
Table B.4 Prevalence of visiting for a check-up at their last dental visit in the past 12 months,         1994–2021	80
Table B.5: Financial barriers and hardship associated with dental visits, 1994–2021	81
Table B.6: Proportion of children aged 5–17 years who received a dental service in the previous         12 months, 1994–2021	81
Table B.7: Average number of services received in the previous 12 months, 1994–2021	82
Table B.8: Proportion of children reporting a need for dental care, 1994–2021	83

Table C. 1: Have ever been eligible for Child Dental Benefits Schedule by selected characteristics,	
2021 (per cent)	84
Table C.2: Awareness of the Child Dental Benefits Schedule by selected characteristics, 2021 (per cent)	86

## List of figures

Figure 2.1: Prevalence of fair or poor oral health 1999–2021 (per cent)	12
Figure 2.2: Prevalence of any oral health impact 1994-2021 (per cent)	13
Figure 3.1: Prevalence of making a dental visit in the past 12 months, 1994–2021 (per cent)	22
Figure 3.2: Prevalence of visiting for a check-up at last dental visit by survey year, children aged 5–17 years who visited in previous 12 months 1994–2021 (per cent)	23
Figure 4.1: Financial barriers and hardship associated with dental visits, 1994-2021 (per cent)	31
Figure 5.1: Proportion of children receiving various services 1994-2021	52
Figure 5.2: Average number of services received in the previous 12 months, 1994–2021	53
Figure 6.1: Children reporting a need for preventive dental care 1994-2021 (per cent)	64
Figure 6.2: Children reporting a need for dental treatments 1994–2021 (per cent)	65

## List of boxes

Box 2.1: Cardholders
----------------------