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# **Oral health and dental care in Australia**

## **Key facts and figures 2011**

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ISBN 978-1-74249-266-7

### **Suggested citation**

Chrisopoulos S, Beckwith K & Harford JE 2011. Oral health and dental care in Australia: key facts and figures 2011. Cat. no. DEN 214. Canberra: AIHW.

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Published by the Australian Institute of Health and Welfare

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# Acknowledgments

The authors wish to acknowledge all those who contributed to the data collections used in this report.

This research was funded by the Australian Government Department of Health and Ageing.

# Abbreviations

|           |                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------|
| ABS       | Australian Bureau of Statistics                                                                                           |
| AEC       | Australian Electoral Commission                                                                                           |
| AHMAC     | Australian Health Ministers' Advisory Council                                                                             |
| AIHW      | Australian Institute of Health and Welfare                                                                                |
| ARCPOH    | Australian Research Centre for Population Oral Health                                                                     |
| ASGC      | Australian Standard Geographical Classification                                                                           |
| CDC       | Centers for Disease Control and Prevention                                                                                |
| CDHS      | Child Dental Health Survey                                                                                                |
| dmft      | The count of deciduous teeth that are decayed (d), missing due to caries (m) and filled due to caries (f)                 |
| DMFT      | The count of permanent teeth that are decayed (D), missing due to caries (M) and filled due to caries (F)                 |
| DSRU      | Dental Statistics and Research Unit                                                                                       |
| ERP       | estimated resident population                                                                                             |
| EWP       | Electronic White Pages                                                                                                    |
| ICD-10-AM | International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification |
| NDTIS     | National Dental Telephone Interview Survey                                                                                |
| NHMD      | National Hospital Morbidity Database                                                                                      |
| PCD       | per capita demand                                                                                                         |
| PPH       | potentially preventable hospitalisation                                                                                   |
| SDS       | school dental service                                                                                                     |
| WHO       | World Health Organization                                                                                                 |

# Places

|     |                              |
|-----|------------------------------|
| NSW | New South Wales              |
| Vic | Victoria                     |
| Qld | Queensland                   |
| WA  | Western Australia            |
| SA  | South Australia              |
| Tas | Tasmania                     |
| ACT | Australian Capital Territory |
| NT  | Northern Territory           |

# Summary

This report summarises the most recent key findings on the state of oral health and dental care of the Australian population. Data have been sourced from surveys managed by the Australian Research Centre for Population Oral Health (ARCPOH) and administrative data sets managed by the Australian Institute of Health and Welfare (AIHW).

In 2006, the proportion of children with caries experience in their deciduous teeth ranged from 40% in 4–5 year olds to 60% in 6–8 year olds. Caries experience in permanent teeth ranged from 1% in 5 year olds to 58% in 15 year olds.

In 2004–2006, among dentate adults (those with natural teeth), a higher proportion of those aged 25–44 had untreated decay (29%) than those aged 65 and over (22%). Adult males (28%) had higher rates of untreated decay than females (23%), adults living in *Remote/Very remote* areas (38%) had higher rates of untreated decay than those in *Major cities* (24%), and a higher proportion of uninsured adults (31%) had untreated decay compared to those with insurance (19%).

In 2010, approximately 21% of adults aged 65 and over were edentulous (without natural teeth), females having slightly higher rates of edentulism (25%) than males (17%). Of those aged 65 and over with natural teeth (dentate), nearly half (47%) wore dentures.

In 2010, around 15% of adults reported experiencing toothache in the previous 12 months, and 25% reported feeling uncomfortable about their dental appearance. A higher proportion of adults aged 45–64 felt uncomfortable about their dental appearance (29%) than those aged 15–24 (19%).

In 2010, 64% of persons aged 5 and over visited a dentist in the previous year, ranging from 78% in children aged 5–14, to 57% in adults aged 25–44. Almost half (49%) of adults aged over 18 had favourable visiting patterns.

The majority (54%) of persons aged 5 and over had some level of private dental cover, with those living in *Major cities* (59%) having higher rates of insurance than those in *Inner regional* (47%) and *Outer regional* areas (46%). Individuals with lower household incomes were less likely to have dental insurance than those in higher income households.

The vast majority (79%) of adults with some level of insurance made co-contributions towards the cost of dental visits, and 9% paid all their own expenses. Approximately 17% of insured adults who were required to pay all of their dental expenses indicated that doing so caused a large financial burden.

In 2009–10 the total expenditure on dental services was \$7,690 million, a 13% increase from the previous year. The largest contribution to dental expenditure in 2009–10 was made by individuals, accounting for 61% of the total dental expenditure.

Overall, in 2006 there were 50.3 dentists, 5.7 dental therapists, 3.3 dental hygienists, 1.8 oral health therapists and 4.4 prosthetists per 100,000 population. The majority of practising dentists (84%) were general dentists and 11% were specialists.

The capacity for the dental labour force to supply dental visits is expected to range between 33.0 and 40.1 million visits by 2020, compared to a projected demand for between 33.6 and 44.1 million visits.

# 1 Introduction

Oral health is an integral aspect of general health, and poor oral health is likely to exist when general health is poor and vice versa (AHMAC 2001). Oral health is a standard of health of the oral and related tissues that enable an individual to eat, speak and socialise without active disease, discomfort or embarrassment (UK Department of Health 1994).

Oral diseases are widespread but are largely preventable through population-level interventions, good personal oral hygiene and regular, preventive dental care. Better oral health should be a significant public health goal, and good dental care should be a significant health service goal.

This report summarises the latest key findings on the state of oral health of the Australian population. Data have been sourced from surveys managed by the Australian Research Centre for Population Oral Health (ARCPOH) and administrative data sets maintained by the Australian Institute of Health and Welfare (AIHW). Topics in this report are described below.

## Oral health indicators

Dental caries is the most prevalent, and periodontal disease the fifth most prevalent health problem among Australians. About 90% of all tooth loss can be attributed to these two health problems (AHMAC 2001). Data are presented on the dental caries experience and periodontal health of children attending public school dental services, and adults as part of the National Survey of Adult Oral Health.

Deciduous caries experience (dmft) is recorded as the number of deciduous teeth that are either decayed (d), missing (m) because of dental caries or filled (f) because of dental caries. It is based on the World Health Organization protocol (WHO 1997) with additional guidelines from Palmer et al. (1984).

Permanent caries experience (DMFT) is recorded as the number of permanent teeth that are either decayed (D), missing (M) because of dental caries, or filled (F) because of dental caries, and is also based on the WHO protocol (WHO 1997).

Periodontal health is based on the definition used by the Centers for Disease Control and Prevention (CDC). The CDC defines periodontal disease using a combination of deep periodontal pockets, clinical attachment loss and the number of sites affected (Page & Eke 2007).

Tooth loss occurs primarily because of a treatment decision to extract one or more teeth rather than use other treatment options (Slade et al. 2007). Teeth are extracted because of extensive disease precluding other treatments, the preference of a patient and the recommendation of a dentist (Slade et al. 2007). Measures of tooth loss include prevalence of complete tooth loss, the average number of missing teeth, and prevalence of an inadequate dentition.

The social impacts of dental problems include the experience of pain, the avoidance of certain foods and the feeling of discomfort about the appearance of one's teeth. These experiences may result in withdrawal behaviours or reduce an individual's ability to participate in certain activities.

## Hospital separations

Hospitalisations where the principal diagnosis was a dental-related condition are considered potentially preventable hospitalisations (PPHs). PPHs are those conditions where hospitalisation is thought to have been avoidable if timely and adequate non-hospital care had been provided. Separation rates for PPHs therefore have potential as indicators of the quality or effectiveness of non-hospital 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 appropriate use of the hospital system to respond to greater need (AIHW 2011a).

The rate of PPHs associated with dental treatment of adults and children is reported here.

## Use of dental services

A person's reason for seeking dental care influences the type of care they are likely to receive and the level of untreated problems they may have at any time. Individuals who visit a dental professional for the purpose of a routine check-up are most likely to benefit from early detection and treatment, and to receive preventive services. Conversely, those who seek care when they are experiencing a dental problem may receive less complete treatment, and are less likely to receive preventive services. Generally, people who seek regular and routine care should report low levels of extractions and relatively low levels of fillings.

Many factors influence how frequently individuals use dental services. Comparisons of the use of dental services – including time since last visit, usual dental visiting pattern and type of practice visited at last dental visit – are presented by age, sex, insurance status and annual household income.

## Financial barriers

Financial burden is an often-cited reason why people do not seek regular dental care or comply with recommended treatment (AHMAC 2001). Financial burden reflects both the direct and indirect cost of dental services to the individual, the disposable income of a household and the number of persons dependent on that income.

Respondents were asked a range of questions relating to the financial burden of dental care, including whether they had avoided or delayed dental care due to cost, whether cost had prevented dental treatment recommended by a dental professional, whether dental visits in the previous 12 months had been a large financial burden, and the level of difficulty they would experience in paying a \$150 dental bill. The cost of a basic preventive dental-care package was originally selected as the threshold for measuring the level of difficulty with paying a dental bill. In 2004 the Australian Dental Association Schedule of Fees cost for a dental visit comprising a dental examination, two bitewing X-rays and a scale and clean service was \$150.

The interest in affordability of dental care and hardship associated with its use arises from the potential for these to be a barrier to accessing timely dental care. Patterns of dental visiting that are characterised by visiting less frequently than once a year, usually visiting for a problem and not having a usual dental-care provider are associated with poorer oral health than patterns of care characterised by usually visiting at least once a year, usually visiting for a check-up and having a usual source of dental care (Ellershaw & Spencer 2011).

## **Private health insurance**

In Australia, the insurance system is based on individuals or families purchasing dental insurance which covers all or part of the cost of visiting a private dentist. This report provides information on the proportion of Australian adults who were covered by dental insurance at the time of the 2010 survey and their utilisation of dental services. Results have been provided separately for dentate and edentulous adults.

## **Dental labour force**

The dental labour force, consisting of registered dentists, dental therapists, dental hygienists, oral health therapists and dental prosthetists, has a vital role to play in the maintenance and improvement of the oral health of Australians through the provision of preventive and restorative dental services. This report provides an overview of the characteristics of the dental labour force and the projected size of the future labour force.

## 2 Oral health

### 2.1 Caries experience of children

The combined caries experience (dmft + DMFT) provides an indication of the total amount of disease seen in a school dental service (SDS). It provides a measure of the proportion of children who have decayed (d), missing (m) due to caries or filled (f) because of caries in either their deciduous teeth (dmft) or their permanent teeth (DMFT).

In 2006, the proportion of children with caries experience (dmft + DMFT > 0), in either their deciduous or permanent teeth, varied from 41.0% for 5 year olds to 67.0% for 8 year olds (Table 2.1).

**Table 2.1: Deciduous and permanent dentition: percentage of children with dmft + DMFT > 0 by age, children attending a school dental service, 2006**

|                 | Age (years) |      |      |      |      |      |      |      |
|-----------------|-------------|------|------|------|------|------|------|------|
|                 | 5           | 6    | 7    | 8    | 9    | 10   | 11   | 12   |
| dmft + DMFT > 0 | 41.0        | 63.0 | 61.6 | 67.0 | 62.0 | 59.0 | 62.6 | 54.0 |

*Note:* 95% confidence intervals for these estimates are available in Table B.2.1.

*Source:* Child Dental Health Survey, 2006.

The average deciduous teeth caries experience scores (dmft) for children attending a SDS varied between 1.94 for 4 year olds and 2.47 for 6 year olds, and was 1.24 for 10 year olds, as fewer deciduous teeth remain (Table 2.2).

Children aged 4–6 tended to have higher rates of untreated decay (d) than older children, while numbers of filled teeth (f) were highest for 7 year olds (1.45 teeth).

**Table 2.2: Deciduous dentition: average dmft by age, children attending a school dental service, 2006**

| Age (years) | Decayed teeth (d) | Missing teeth (m) | Filled teeth (f) | dmft        |
|-------------|-------------------|-------------------|------------------|-------------|
|             | Average           | Average           | Average          | Average     |
| 4           | 1.25              | 0.04              | 0.65             | <b>1.94</b> |
| 5           | 1.05              | 0.11              | 0.49             | <b>1.65</b> |
| 6           | 1.65              | 0.03              | 0.79             | <b>2.47</b> |
| 7           | 0.90              | 0.06              | 1.45             | <b>2.40</b> |
| 8           | 0.85              | 0.06              | 1.25             | <b>2.15</b> |
| 9           | 0.52              | 0.12              | 1.21             | <b>1.85</b> |
| 10          | 0.41              | 0.02              | 0.81             | <b>1.24</b> |

*Notes*

1. Total DMFT may not equal sum of parts due to rounding.
2. 95% confidence intervals for these estimates are available in Table B.2.2.

*Source:* Child Dental Health Survey, 2006.

The proportion of children with caries experience in their deciduous teeth (dmft > 0) increased from approximately 40% in 4–5 year olds to around 60% in 6–8 year olds, falling to approximately 45% in 10 year olds (Table 2.3).

**Table 2.3: Deciduous dentition: percentage of children with dmft > 0 by age, children attending a school dental service, 2006**

|          | Age (years) |      |      |      |      |      |      |
|----------|-------------|------|------|------|------|------|------|
|          | 4           | 5    | 6    | 7    | 8    | 9    | 10   |
| dmft > 0 | 41.2        | 40.4 | 61.4 | 57.5 | 61.5 | 54.7 | 44.7 |

Note: 95% confidence intervals for these estimates are available in Table B.2.3.

Source: Child Dental Health Survey, 2006.

Caries experience in permanent teeth (DMFT) was associated with age, varying from 0.03 in 5 year olds to 2.01 in 15 year olds (Table 2.4).

Untreated decay (D) accounted for most of the DMFT score in children aged 5–8 while filled (F) teeth accounted for most of the DMFT score from age 9.

**Table 2.4: Permanent dentition: average DMFT by age, children attending a school dental service, 2006**

| Age (years) | Decayed (D) | Missing (M) | Filled (F) | DMFT    |
|-------------|-------------|-------------|------------|---------|
|             | Average     | Average     | Average    | Average |
| 5           | 0.02        | —           | 0.01       | 0.03    |
| 6           | 0.09        | —           | 0.05       | 0.15    |
| 7           | 0.33        | —           | 0.13       | 0.47    |
| 8           | 0.24        | 0.01        | 0.13       | 0.38    |
| 9           | 0.22        | 0.01        | 0.27       | 0.49    |
| 10          | 0.23        | 0.05        | 0.31       | 0.60    |
| 11          | 0.44        | 0.07        | 0.69       | 1.20    |
| 12          | 0.58        | 0.06        | 0.61       | 1.24    |
| 13          | 0.53        | 0.07        | 0.63       | 1.23    |
| 14          | 0.59        | 0.08        | 1.07       | 1.73    |
| 15          | 0.76        | 0.11        | 1.14       | 2.01    |

— Nil or rounded to zero.

*Notes*

1. Total DMFT may not equal sum of parts due to rounding.
2. 95% confidence intervals for these estimates are available in Table B.2.4.

Source: Child Dental Health Survey, 2006.

The proportion of children with caries experience in their permanent teeth (DMFT > 0) was also associated with age, ranging from 1.4% for 5 year olds to 58.0% for 15 year olds (Table 2.5). The positive association between caries prevalence with age reflects the increased time that teeth are at risk of decay.

**Table 2.5: Permanent dentition: percentage of children with DMFT > 0 by age, children attending a school dental service, 2006 (per cent)**

| Age (years) | DMFT > 0 |
|-------------|----------|
|             | Per cent |
| 5           | 1.4      |
| 6           | 9.9      |
| 7           | 21.6     |
| 8           | 21.8     |
| 9           | 26.9     |
| 10          | 29.8     |
| 11          | 47.0     |
| 12          | 47.6     |
| 13          | 51.0     |
| 14          | 53.6     |
| 15          | 58.0     |

*Notes*

1. Missing teeth scores were based on missing teeth because of pathology recorded at clinical examination.
2. 95% confidence intervals for these estimates are available in Table B.2.5.

Source: Child Dental Health Survey, 2006.

## 2.2 Caries experience of adults

In 2004–2006, the overall average DMFT scores for adults were higher with age, from 3.17 for the 15–24 age group to 23.70 for those 65 and over. For persons aged 15–64, filled teeth due to caries explained the majority of the DMFT score. For those aged 65 and over, teeth missing due to caries accounted for the majority of the DMFT score (Table 2.6).

**Table 2.6: Average DMFT by age, dentate persons aged 15 and over, 2004–2006**

| Age (years)        | Decayed (D) | Missing (M) | Filled (F)  | DMFT         |
|--------------------|-------------|-------------|-------------|--------------|
| 15–24              | 0.62        | 0.60        | 1.96        | <b>3.17</b>  |
| 25–44              | 0.74        | 1.55        | 6.05        | <b>8.33</b>  |
| 45–64              | 0.50        | 7.27        | 12.07       | <b>19.84</b> |
| 65+                | 0.44        | 12.85       | 10.40       | <b>23.70</b> |
| <b>All persons</b> | <b>0.61</b> | <b>4.55</b> | <b>7.69</b> | <b>12.85</b> |

*Notes*

1. Missing teeth scores were based on missing teeth because of pathology recorded at clinical examination.
2. Total DMFT may not equal sum of parts due to rounding.
3. 95% confidence intervals for these estimates are available in Table B.2.6.

Source: National Survey of Adult Oral Health, 2004–2006.

Males had a higher number of teeth with untreated decay than females, while females had more teeth that had been treated with a filling (7.24 for males and 8.14 for females) (Table 2.7).

Persons living in *Inner regional* areas had the highest DMFT at 14.75 teeth. Filled teeth accounted for the majority of decay experience in all remoteness areas, and for the greatest proportion of DMFT in *Major cities*, at 61.8%. *Inner regional* areas had the highest average number of teeth missing due to decay.

Uninsured persons had a higher number of teeth with untreated decay and teeth missing due to decay, but a lower number of filled teeth. The number of filled teeth resulted in insured persons having a higher overall DMFT.

Total DMFT was associated with household income, with lower DMFT associated with higher income up to an income of \$60,000–<\$80,000, where DMFT scores levelled out. The number of teeth missing due to decay was highest in the lowest income group, and lower with higher household income.

**Table 2.7: Average DMFT by sex, remoteness area and dental insurance status, dentate persons aged 15 and over, 2004–2006**

|                                     | Decayed (D) | Missing (M) | Filled (F) | DMFT         |
|-------------------------------------|-------------|-------------|------------|--------------|
| <b>Sex</b>                          |             |             |            |              |
| Male                                | 0.70        | 4.47        | 7.24       | <b>12.42</b> |
| Female                              | 0.51        | 4.64        | 8.14       | <b>13.29</b> |
| <b>Remoteness area</b>              |             |             |            |              |
| Major cities                        | 0.54        | 4.16        | 7.61       | <b>12.31</b> |
| Inner regional                      | 0.78        | 5.80        | 8.17       | <b>14.75</b> |
| Outer regional                      | 0.68        | 4.98        | 7.40       | <b>13.06</b> |
| Remote/Very remote                  | 0.97        | 3.68        | 6.40       | <b>11.07</b> |
| <b>Dental insurance status</b>      |             |             |            |              |
| Insured                             | 0.38        | 4.17        | 8.99       | <b>13.54</b> |
| Uninsured                           | 0.81        | 5.04        | 6.79       | <b>12.64</b> |
| <b>Annual household income (\$)</b> |             |             |            |              |
| <12,000                             | 1.06        | 11.02       | 7.66       | <b>19.74</b> |
| 12,000–<20,000                      | 0.89        | 9.59        | 7.98       | <b>18.45</b> |
| 20,000–<30,000                      | 0.55        | 7.21        | 8.36       | <b>16.11</b> |
| 30,000–<40,000                      | 0.79        | 5.17        | 8.45       | <b>14.41</b> |
| 40,000–<60,000                      | 0.68        | 3.97        | 8.22       | <b>12.87</b> |
| 60,000–<80,000                      | 0.50        | 2.82        | 7.56       | <b>10.89</b> |
| 80,000–<100,000                     | 0.41        | 3.07        | 8.11       | <b>11.59</b> |
| 100,000+                            | 0.43        | 2.64        | 7.77       | <b>10.84</b> |

*Notes*

1. Total DMFT may not equal sum of parts due to rounding.
2. 95% confidence intervals for these estimates are available in Table B.2.7.

Source: National Survey of Adult Oral Health, 2004–2006.

The proportion of persons with untreated decay was highest among 25–44 year olds (28.5%) and lowest among those aged 65 and over (21.8%) (Table 2.8).

**Table 2.8: Percentage of persons with untreated decay by age, dentate persons aged 15 and over, 2004–2006**

|                      | Age (years) |       |       |      | All persons |
|----------------------|-------------|-------|-------|------|-------------|
|                      | 15–24       | 25–44 | 45–64 | 65+  |             |
| With untreated decay | 24.4        | 28.5  | 23.8  | 21.8 | 25.5        |

Note: 95% confidence intervals for these estimates are available in Table B.2.8.

Source: National Survey of Adult Oral Health, 2004–2006.

A higher proportion of males had untreated decay (28.2%) than females (22.7%) (Table 2.9).

The proportion of persons with untreated decay increased across areas by remoteness, from 23.5% in *Major cities* to 37.6% in *Remote/ Very remote* areas.

A higher proportion of uninsured persons (31.1%) than insured persons (19.4%) had untreated decay.

**Table 2.9: Percentage of persons with untreated decay by sex, remoteness area and dental insurance status, dentate persons aged 15 and over, 2004–2006**

|                      | Sex  |        | Remoteness area |                |                |                     | Dental insurance status |           |
|----------------------|------|--------|-----------------|----------------|----------------|---------------------|-------------------------|-----------|
|                      | Male | Female | Major cities    | Inner regional | Outer regional | Remote/ Very remote | Insured                 | Uninsured |
| With untreated decay | 28.2 | 22.7   | 23.5            | 29.8           | 30.4           | 37.6                | 19.4                    | 31.1      |

Note: 95% confidence intervals for these estimates are available in Table B.2.9.

Source: National Survey of Adult Oral Health, 2004–2006.

Overall, the proportion of persons with untreated decay was lower at higher levels of household income. The highest proportion was seen in persons living in households earning less than \$12,000 per year, while the lowest was seen in persons living in households earning \$100,000 or more per year (Table 2.10).

**Table 2.10: Percentage of persons with untreated decay by income group, dentate persons aged 15 and over, 2004–2006**

|                      | Annual household income (\$) |                |                |                |                |                |                 |          |
|----------------------|------------------------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------|
|                      | <12,000                      | 12,000–<20,000 | 20,000–<30,000 | 30,000–<40,000 | 40,000–<60,000 | 60,000–<80,000 | 80,000–<100,000 | 100,000+ |
| With untreated decay | 35.4                         | 35.1           | 23.6           | 28.9           | 31.0           | 22.3           | 22.2            | 16.5     |

Note: 95% confidence intervals for these estimates are available in Table B.2.10.

Source: National Survey of Adult Oral Health, 2004–2006.

## 2.3 Periodontal disease

Periodontal disease (or periodontitis) is the inflammation of tissues surrounding the tooth affecting the gum, ligaments and the bone, caused by bacterial infection. In severe forms there can be loss of bone that supports the tooth, resulting in the tooth becoming loose and even causing tooth loss. The loss of supporting structures can result in the formation of 'pockets' between the gum and the tooth. The depth of the pocket is an indication of the severity of the destructive process. In the National Survey of Adult Oral Health, deep periodontal pockets were defined as a pocket depth of 4+ mm. Attachment loss was measured using a combination of gum recession and periodontal probing depth of three sites per tooth. Clinical attachment loss of 4+ mm was reported (Roberts-Thomson & Do 2007).

In 2004–2006, attachment loss 4+ mm and periodontal disease varied with age, from 10.5% at age 15–24 to 77.4% at age 65 and over for attachment loss 4+ mm, and 2.7% at age 15–24 to 53.4% at age 65 and over for periodontal disease. Persons aged 45–64 had the highest proportion with deep pockets of 4+ mm (25.4%) (Table 2.11).

**Table 2.11: Prevalence of deep periodontal pocket, clinical attachment loss and periodontal disease by age, dentate persons aged 15 and over, 2004–2006 (per cent)**

|                       | Age (years) |       |       |      | All persons |
|-----------------------|-------------|-------|-------|------|-------------|
|                       | 15–24       | 25–44 | 45–64 | 65+  |             |
| Deep pocket 4+ mm     | 8.3         | 20.2  | 25.4  | 22.7 | 19.8        |
| Attachment loss 4+ mm | 10.5        | 31.5  | 65.2  | 77.4 | 42.5        |
| Periodontal disease   | 2.7         | 15.3  | 35.3  | 53.4 | 22.9        |

*Note:* 95% confidence intervals for these estimates are available in Table B.2.11.

*Source:* National Survey of Adult Oral Health, 2004–2006.

Males had a higher proportion than females for all three periodontal measures. The largest difference of 8.3% was for attachment loss 4+ mm, with 46.6% of males compared to 38.3% of females showing this problem (Table 2.12).

Persons living in *Major cities* had the lowest proportion with attachment loss 4+ mm (40.8%) and periodontal disease (22.1%). Both measures increased with remoteness, to 55.5% for attachment loss 4+ mm and 36.3% for periodontal disease in *Remote/Very remote* areas. The proportion of persons with deep pocket 4+ mm also increased with remoteness, with the exception of those living in *Inner regional* areas having the lowest proportion at 15.3%.

A lower proportion of insured (19.4%) than uninsured (27.0%) persons had periodontal disease.

**Table 2.12: Prevalence of deep periodontal pocket, clinical attachment loss and periodontal disease by sex, remoteness area and dental insurance status, dentate persons aged 15 and over, 2004–2006 (per cent)**

|                       | Sex  |        | Remoteness area |                |                |                     | Dental insurance status |           |
|-----------------------|------|--------|-----------------|----------------|----------------|---------------------|-------------------------|-----------|
|                       | Male | Female | Major cities    | Inner regional | Outer regional | Remote/ Very remote | Insured                 | Uninsured |
| Deep pocket 4+ mm     | 22.8 | 16.6   | 20.0            | 15.3           | 26.2           | 45.8                | 18.3                    | 21.7      |
| Attachment loss 4+ mm | 46.6 | 38.3   | 40.8            | 45.1           | 48.8           | 55.5                | 42.1                    | 44.1      |
| Periodontal disease   | 26.8 | 19.0   | 22.1            | 23.0           | 28.5           | 36.3                | 19.4                    | 27.0      |

Note: 95% confidence intervals for these estimates are available in Table B.2.12.

Source: National Survey of Adult Oral Health, 2004–2006.

The proportion of persons with periodontal disease was consistently lower for high household income groups, varying from 42.3% for those in households earning less than \$12,000 per year to 14.3% among those earning \$100,000 or more per year. The proportion of persons with deep pocket 4+ mm and attachment loss 4+ mm tended to be inversely related to household income, but the highest proportion was seen for those in the \$12,000–<\$20,000 income group and the lowest for those in the \$80,000–<\$100,000 income group (Table 2.13).

**Table 2.13: Prevalence of deep periodontal pocket, clinical attachment loss and periodontal disease by annual household income, dentate persons aged 15 and over, 2004–2006 (per cent)**

|                       | Annual household income (\$) |                |                |                |                |                |                 |          |
|-----------------------|------------------------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------|
|                       | <12,000                      | 12,000–<20,000 | 20,000–<30,000 | 30,000–<40,000 | 40,000–<60,000 | 60,000–<80,000 | 80,000–<100,000 | 100,000+ |
| Deep pocket 4+ mm     | 20.7                         | 25.8           | 24.3           | 21.6           | 20.5           | 21.8           | 13.8            | 19.6     |
| Attachment loss 4+ mm | 61.0                         | 63.2           | 53.3           | 44.7           | 44.0           | 39.1           | 32.3            | 38.7     |
| Periodontal disease   | 42.3                         | 41.0           | 31.8           | 26.8           | 24.8           | 19.8           | 15.2            | 14.3     |

Note: 95% confidence intervals for these estimates are available in Table B.2.13.

Source: National Survey of Adult Oral Health, 2004–2006.

## 2.4 Tooth retention and loss

In 2010, the proportion of persons aged 15 and over who were edentulous (no natural teeth) was 5.2%. Overall, males had lower rates of edentulism (4.1%) than females (6.4%) (Table 2.14).

The proportion who were edentulous was negligible for the 25–44 age group. In those aged 45–64, it was 5.5%, and for the 65 and over, 21.1%.

**Table 2.14: Percentage of edentulous persons by age and sex, persons aged 15 and over, 2010**

| Age group (years)  | Sex        |            | All persons |
|--------------------|------------|------------|-------------|
|                    | Male       | Female     |             |
| 15–24              | —          | —          | —           |
| 25–44              | 0.1        | 0.2        | <b>0.2</b>  |
| 45–64              | 4.9        | 6.1        | <b>5.5</b>  |
| 65+                | 16.5       | 24.9       | <b>21.1</b> |
| <b>All persons</b> | <b>4.1</b> | <b>6.4</b> | <b>5.2</b>  |

— Nil or rounded to zero.

Note: 95% confidence intervals for these estimates are available in Table B.2.14.

Source: National Dental Telephone Interview Survey, 2010.

The proportion of dentate persons aged 15 and over who wore dentures was 13.2%, ranging from 0.9% for those aged 15–24 to 47.4% for those aged 65 and over (Table 2.15).

**Table 2.15: Percentage of persons wearing dentures by age, dentate adults aged 15 and over, 2010**

|               | Age (years) |       |       |      | All persons |
|---------------|-------------|-------|-------|------|-------------|
|               | 15–24       | 25–44 | 45–64 | 65+  |             |
| With dentures | 0.9         | 2.5   | 16.2  | 47.4 | <b>13.2</b> |

Note: 95% confidence intervals for these estimates are available in Table B.2.15.

Source: National Dental Telephone Interview Survey, 2010.

The average number of missing teeth in 2010 was 5.3. Females had higher average rates of tooth loss than males (5.7 and 4.8 teeth, respectively). Across age groups, the average number of missing teeth varied from 2.2 teeth for persons aged 15–24 to 11.9 teeth for those aged 65 and over (Table 2.16).

**Table 2.16: Average number of missing teeth by age and sex, dentate persons aged 15 and over, 2010**

| Age group (years)  | Sex        |            | All persons |
|--------------------|------------|------------|-------------|
|                    | Male       | Female     |             |
| 15–24              | 1.8        | 2.6        | <b>2.2</b>  |
| 25–44              | 2.9        | 3.6        | <b>3.3</b>  |
| 45–64              | 5.6        | 6.3        | <b>6.0</b>  |
| 65+                | 11.3       | 12.4       | <b>11.9</b> |
| <b>All persons</b> | <b>4.8</b> | <b>5.7</b> | <b>5.3</b>  |

*Notes*

1. The number of missing teeth was derived from the self-reported number of natural teeth at the time of the interview and includes all missing teeth regardless of reason.
2. 95% confidence intervals for these estimates are available in Table B.2.16.

*Source:* National Dental Telephone Interview Survey, 2010.

The average number of missing teeth was inversely related to household income. Adults in the lowest four household income categories had between 6.7 and 10.3 missing teeth, more than those in higher household income groups (Table 2.17).

Overall, adults with some level of dental insurance had a significantly lower number of missing teeth than those without insurance (4.7 compared to 6.2 missing teeth, respectively). Across remoteness areas, adults in *Major cities* with dental insurance had fewer missing teeth compared to adults in *Major cities* without insurance (4.4 and 5.8 teeth, respectively).

**Table 2.17: Average number of missing teeth by annual household income, dental insurance status and region, dentate persons aged 15 and over, 2010**

|                        | Annual household income (\$) |                |                |                |                |                |                 |          |             |
|------------------------|------------------------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------|-------------|
| Insurance status       | <12,000                      | 12,000–<20,000 | 20,000–<30,000 | 30,000–<40,000 | 40,000–<60,000 | 60,000–<80,000 | 80,000–<100,000 | 100,000+ | All persons |
| Insured                |                              |                |                |                |                |                |                 |          |             |
| Major cities           | 6.0                          | 7.2            | 8.7            | 6.4            | 4.6            | 4.9            | 4.0             | 3.5      | 4.4         |
| Inner regional         | 1.9                          | 9.5            | 11.8           | 6.6            | 6.1            | 4.7            | 3.6             | 4.4      | 5.6         |
| Outer regional         | 7.2                          | 12.0           | 8.1            | 7.9            | 9.5            | 4.5            | 4.5             | 4.0      | 5.7         |
| Remote/<br>Very remote | ..                           | 7.5            | 17.0           | 3.8            | 8.8            | 4.7            | 3.1             | 3.7      | 5.0         |
| All insured            | 5.1                          | 8.0            | 9.7            | 6.5            | 5.3            | 4.8            | 3.9             | 3.7      | 4.7         |
| Uninsured              |                              |                |                |                |                |                |                 |          |             |
| Major cities           | 8.9                          | 8.6            | 10.0           | 7.1            | 6.0            | 3.9            | 3.3             | 3.7      | 5.8         |
| Inner regional         | 14.9                         | 10.8           | 11.6           | 6.1            | 5.1            | 3.7            | 3.9             | 2.9      | 6.7         |
| Outer regional         | 13.6                         | 9.1            | 11.7           | 7.9            | 4.6            | 4.8            | 5.3             | 4.0      | 6.6         |
| Remote/<br>Very remote | ..                           | 12.0           | 9.9            | 4.7            | 10.4           | 12.1           | 2.7             | 3.8      | 8.8         |
| All uninsured          | 11.0                         | 9.3            | 10.6           | 6.9            | 5.8            | 4.0            | 3.7             | 3.5      | 6.2         |
| All persons            |                              |                |                |                |                |                |                 |          |             |
| Major cities           | 8.0                          | 8.2            | 9.6            | 6.8            | 5.4            | 4.5            | 3.7             | 3.5      | 5.0         |
| Inner regional         | 11.4                         | 10.5           | 11.7           | 6.3            | 5.5            | 4.0            | 3.7             | 3.9      | 6.2         |
| Outer regional         | 11.6                         | 9.6            | 10.6           | 7.9            | 6.3            | 4.7            | 4.9             | 4.0      | 6.2         |
| Remote/<br>Very remote | ..                           | 9.7            | 12.2           | 4.6            | 9.8            | 8.0            | 3.0             | 3.8      | 6.7         |
| All regions            | 8.8                          | 8.9            | 10.3           | 6.7            | 5.6            | 4.4            | 3.8             | 3.6      | 5.4         |

.. Not applicable.

Note: 95% confidence intervals for these estimates are available in Table B.2.17.

Source: National Dental Telephone Interview Survey, 2010.

## 2.5 Social impact

In 2010, 15.0% of all dentate persons aged 15 and over reported that they had experienced toothache in the previous 12 months, ranging from 10.1% for those aged 65 and over to 17.1% for those aged 25–44 (Table 2.18).

**Table 2.18: Percentage of persons who experienced toothache in previous 12 months by age, dentate persons aged 15 and over, 2010**

|                      | Age (years) |       |       |      | All persons |
|----------------------|-------------|-------|-------|------|-------------|
|                      | 15–24       | 25–44 | 45–64 | 65+  |             |
| Toothache experience | 16.4        | 17.1  | 13.8  | 10.1 | 15.0        |

*Note:* 95% confidence intervals for these estimates are available in Table B.2.18.

*Source:* National Dental Telephone Interview Survey, 2010.

One-quarter (25.0%) of all adults over the age of 15 reported they had felt uncomfortable about their dental appearance in the previous 12 months, ranging from 18.7% for those aged 15–24 to 28.8% for those aged 45–64 (Table 2.19). Dentate adults aged 45–64 were more concerned about their dental appearance than dentate adults aged 15–24 (28.7% and 18.7%, respectively). Edentulous adults aged 65 and over were less concerned about their dental appearance than edentulous adults aged 25–44 and 45–64 (11.3%, compared to 75.2% and 29.6%, respectively).

**Table 2.19: Percentage of persons uncomfortable about their dental appearance in previous 12 months by age and dentate status, persons aged 15 and over, 2010**

| Age group (years) | Dentate status |             | All persons |
|-------------------|----------------|-------------|-------------|
|                   | Dentate        | Edentulous  |             |
| 15–24             | 18.7           | —           | 18.7        |
| 25–44             | 25.2           | 75.2        | 25.3        |
| 45–64             | 28.7           | 29.6        | 28.8        |
| 65+               | 24.0           | 11.3        | 21.4        |
| <b>Total</b>      | <b>25.4</b>    | <b>18.0</b> | <b>25.0</b> |

— Nil or rounded to zero.

*Note:* 95% confidence intervals for these estimates are available in Table B.2.19.

*Source:* National Dental Telephone Interview Survey, 2010.

Approximately 17% of adults avoided eating certain foods because of problems with their teeth, ranging from 12.2% for persons aged 15–24 to 20.9% for those aged 45–64 (Table 2.20). Dentate adults were less likely to avoid eating certain foods because of problems with their teeth than edentulous adults (16.5% and 30.6%, respectively). Dentate persons aged 15–24 had significantly lower rates of avoiding certain foods than the two age groups 45 and over (12.2%, 19.7% and 19.3%, respectively).

**Table 2.20: Percentage of persons who avoided certain foods in previous 12 months by age and dentate status, persons aged 15 and over, 2010**

| Age (years)  | Dentate status |             | All persons |
|--------------|----------------|-------------|-------------|
|              | Dentate        | Edentulous  |             |
| 15–24        | 12.2           | —           | <b>12.2</b> |
| 25–44        | 15.0           | 75.2        | <b>15.1</b> |
| 45–64        | 19.7           | 40.5        | <b>20.9</b> |
| 65+          | 19.3           | 25.0        | <b>20.5</b> |
| <b>Total</b> | <b>16.5</b>    | <b>30.6</b> | <b>17.3</b> |

— Nil or rounded to zero.

Note: 95% confidence intervals for these estimates are available in Table B.2.20.

Source: National Dental Telephone Interview Survey, 2010.

### 3 Potentially preventable hospital separations

Potentially preventable hospitalisations (PPHs) are hospital separations where the principal diagnosis of the hospitalisation is thought to be avoidable if timely and adequate non-hospital care had been provided. Separation rates, or rates of completed episodes of care, for PPHs therefore provide an indicator of the potential inadequacy of dental care in the community.

The total number of PPHs related to dental conditions was 60,251 or 2.8 separations per 1,000 population in 2009–10. The age-standardised separation rate ranged from 1.8 separations per 1,000 population in the Australian Capital Territory to 3.6 in Western Australia (Table 3.1).

**Table 3.1: Hospital separations for potentially preventable hospitalisations due to dental conditions<sup>(a)</sup>, state or territory of usual residence, 2009–10**

|                                | NSW    | Vic    | Qld    | WA    | SA    | Tas   | ACT | NT  | Total         |
|--------------------------------|--------|--------|--------|-------|-------|-------|-----|-----|---------------|
| Number <sup>(b)</sup>          | 15,757 | 16,583 | 12,592 | 7,919 | 5,002 | 1,105 | 610 | 663 | <b>60,251</b> |
| Separation rate <sup>(c)</sup> | 2.3    | 3.1    | 2.9    | 3.6   | 3.2   | 2.3   | 1.8 | 2.8 | <b>2.8</b>    |

- (a) Potentially avoidable 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.
- (b) Excludes multiple diagnoses for the same separation within the same group and 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, using the estimated resident populations as at 30 June 2009. The estimated resident populations use a highest age group of 85 and over (see AIHW 2011a for more detail).

Source: Australian Hospitals Statistics 2009–10, AIHW.

Across remoteness areas, the rate of PPHs due to dental conditions was lowest for *Major cities* (2.6) and highest for *Very remote* (3.7) (Table 3.2).

**Table 3.2: Hospital separations for potentially preventable hospitalisations due to dental conditions<sup>(a)</sup>, remoteness area of usual residence, 2009–10**

|                                | Major cities | Inner regional | Outer regional | Remote | Very remote | Total         |
|--------------------------------|--------------|----------------|----------------|--------|-------------|---------------|
| Number <sup>(b)</sup>          | 38,383       | 13,508         | 6,450          | 1,143  | 736         | <b>60,251</b> |
| Separation rate <sup>(c)</sup> | 2.6          | 3.2            | 3.1            | 3.4    | 3.7         | <b>2.8</b>    |

- (a) Potentially avoidable hospitalisations related to dental care are defined as the following ICD-10-AM 6th edn 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.
- (b) Excludes multiple diagnoses for the same separation within the same group and 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, using the estimated resident populations as at 30 June 2009. The estimated resident populations use a highest age group of 85 and over (see AIHW 2011a for more detail).

Source: Australian Hospitals Statistics 2009–10, AIHW.

In 2009–10 children aged 5–9 had the highest number of separations related to potentially avoidable dental conditions (12,291 separations or 9.0 separations per 1,000 children aged 5–9), followed by children aged 0–4 (7,681, or 5.3 per 1,000 children aged 0–4) (Table 3.3).

**Table 3.3: Number and rate of hospital separations for potentially preventable hospitalisations due to dental conditions<sup>(a)</sup>, by sex and age group, 2009–10**

|                                | Age (years) |        |       |       |       |       |       |       |       | Total <sup>(d)</sup> |
|--------------------------------|-------------|--------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|                                | 0–4         | 5–9    | 10–14 | 15–24 | 25–34 | 35–44 | 45–54 | 55–64 | 65+   |                      |
| Number <sup>(b)</sup>          |             |        |       |       |       |       |       |       |       |                      |
| Male                           | 4,104       | 6,498  | 1,635 | 2,700 | 2,694 | 2,706 | 2,840 | 3,026 | 3,200 | 29,403               |
| Female                         | 3,577       | 5,793  | 1,641 | 3,505 | 2,717 | 3,030 | 3,937 | 3,578 | 3,496 | 31,274               |
| All persons                    | 7,681       | 12,291 | 3,276 | 6,205 | 5,411 | 5,736 | 6,777 | 6,604 | 6,696 | 60,677               |
| Separation rate <sup>(c)</sup> |             |        |       |       |       |       |       |       |       |                      |
| Male                           | 5.5         | 9.3    | 2.3   | 1.7   | 1.7   | 1.7   | 1.9   | 2.4   | 2.4   | 2.7                  |
| Female                         | 5.1         | 8.7    | 2.4   | 2.3   | 1.7   | 1.9   | 2.6   | 2.8   | 2.2   | 2.8                  |
| All persons                    | 5.3         | 9.0    | 2.3   | 2.0   | 1.7   | 1.8   | 2.2   | 2.6   | 2.3   | 2.7                  |

(a) Potentially avoidable hospitalisations related to dental care are defined as the following ICD-10-AM 6th edn 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.

(b) Excludes multiple diagnoses for the same separation within the same group and records with care type of Newborn (without qualified days) and records for Hospital boarders and Posthumous organ procurement.

(c) The separation rate used in this table (number of separations per 1,000 population) is a crude population rate based on the 2009 estimated resident population.

(d) Totals differ from those in Tables 3.1 and 3.2 due to differences in data sources. Totals presented here were extracted from the AIHW data cubes.

Source: Australian Hospitals Statistics 2009–10 data cubes, AIHW (accessed 28 September 2011).

## 4 Use of dental services

### 4.1 Time since last dental visit

Approximately two-thirds (64.0%) of persons aged 5 and over visited a dental practitioner in the previous 12 months in 2010, with more females visiting within the previous year than males (67.4% and 60.6%, respectively) (Table 4.1).

Almost four in five children aged 5–14 visited in the previous 12 months (78.0%), with 91.1% visiting within the previous 2 years. In contrast, 57.1% of adults aged 25–44 had visited a dental practitioner in the previous 12 months, with 77.6% having visited in the previous 2 years.

**Table 4.1: Time since last dental visit by age and sex, percentage of dentate persons aged 5 and over, 2010**

|                    | Time since last visit |             |             |                        |
|--------------------|-----------------------|-------------|-------------|------------------------|
|                    | <12 months            | 1–<2 years  | 2–<5 years  | 5+ years (incl. never) |
| <b>Sex</b>         |                       |             |             |                        |
| Male               | 60.6                  | 18.6        | 11.3        | 9.5                    |
| Female             | 67.4                  | 16.3        | 9.9         | 6.4                    |
| <b>Age (years)</b> |                       |             |             |                        |
| 5–14               | 78.0                  | 13.1        | 2.5         | 6.4                    |
| 15–24              | 63.9                  | 17.8        | 12.8        | 5.5                    |
| 25–44              | 57.1                  | 20.5        | 13.2        | 9.2                    |
| 45–64              | 63.6                  | 18.4        | 10.8        | 7.2                    |
| 65+                | 66.9                  | 12.2        | 9.8         | 11.1                   |
| <b>All persons</b> | <b>64.0</b>           | <b>17.5</b> | <b>10.6</b> | <b>7.9</b>             |

*Note:* 95% confidence intervals for these estimates are available in Table B.4.1.

*Source:* National Dental Telephone Interview Survey, 2010.

The proportion of adults who visited a dental practitioner within the previous 12 months ranged from 49.8% for those with a household income less than \$12,000 per year, to 66.8% for those in the \$100,000 or more per year income group. In contrast, the percentage of dentate adults whose last visit was more than 2 years ago ranged from 34.4% to 15.7% across the same income groups (Table 4.2).

**Table 4.2: Time since last dental visit by annual household income, percentage of dentate persons aged 18 and over, 2010**

| Annual household income (\$) | Time since last visit |             |             |                        |
|------------------------------|-----------------------|-------------|-------------|------------------------|
|                              | <12 months            | 1–<2 years  | 2–<5 years  | 5+ years (incl. never) |
| <12,000                      | 49.8                  | 15.8        | 13.9        | 20.5                   |
| 12,000–<20,000               | 55.6                  | 14.6        | 12.0        | 17.9                   |
| 20,000–<30,000               | 56.3                  | 16.1        | 16.7        | 10.9                   |
| 30,000–<40,000               | 53.7                  | 21.9        | 14.4        | 10.0                   |
| 40,000–<60,000               | 57.2                  | 18.2        | 13.6        | 10.9                   |
| 60,000–<80,000               | 62.2                  | 20.8        | 11.1        | 5.8                    |
| 80,000–<100,000              | 61.8                  | 20.8        | 11.1        | 6.3                    |
| 100,000+                     | 66.8                  | 17.5        | 10.5        | 5.2                    |
| <b>All persons</b>           | <b>64.0</b>           | <b>17.5</b> | <b>10.6</b> | <b>7.9</b>             |

Note: 95% confidence intervals for these estimates are available in Table B.4.2.

Source: National Dental Telephone Interview Survey, 2010.

Across remoteness areas, a higher proportion of adults living in *Major cities* had visited a dental practitioner in the previous year (63.8%) than those living in *Inner regional* areas (56.8%) (Table 4.3).

**Table 4.3: Time since last dental visit by remoteness area, percentage of dentate persons aged 18 and over, 2010**

| Remoteness area    | Time since last visit |             |             |                        |
|--------------------|-----------------------|-------------|-------------|------------------------|
|                    | <12 months            | 1–<2 years  | 2–<5 years  | 5+ years (incl. never) |
| Major cities       | 63.8                  | 17.7        | 10.8        | 7.7                    |
| Inner regional     | 56.8                  | 18.9        | 14.3        | 10.0                   |
| Outer regional     | 57.4                  | 19.9        | 15.5        | 7.2                    |
| Remote/Very remote | 57.1                  | 22.5        | 12.2        | 8.2                    |
| <b>All persons</b> | <b>64.0</b>           | <b>17.5</b> | <b>10.6</b> | <b>7.9</b>             |

Note: 95% confidence intervals for these estimates are available in Table B.4.3.

Source: National Dental Telephone Interview Survey, 2010.

Almost three-quarters of dentate adults (71.9%) with dental insurance saw a dentist within the previous year compared to around half of those without dental insurance (49.6%) (Table 4.4).

**Table 4.4: Time since last dental visit by dental insurance status, percentage of dentate persons aged 18 and over, 2010**

| Insurance status   | Time since last visit |             |             |                           |
|--------------------|-----------------------|-------------|-------------|---------------------------|
|                    | <12 months            | 1–<2 years  | 2–<5 years  | 5+ years<br>(incl. never) |
| Insured            | 71.9                  | 16.3        | 7.8         | 4.1                       |
| Uninsured          | 49.6                  | 20.6        | 16.6        | 13.2                      |
| <b>All persons</b> | <b>64.0</b>           | <b>17.5</b> | <b>10.6</b> | <b>7.9</b>                |

Note: 95% confidence intervals for these estimates are available in Table B.4.4.

Source: National Dental Telephone Interview Survey, 2010.

## 4.2 Reason for last dental visit

Younger people were more likely to attend a dental visit for a check-up compared to adults in 2010. More than four in five children and young adults aged less than 25 reported that their last dental visit was for a check-up (83.2% for children aged 5–14 and 80.3% for those aged 15–24). By contrast, just under half of adults aged 45–64 attended because of a problem (46.6%) (Table 4.5).

**Table 4.5: Reason for last dental visit by age group, percentage of dentate persons aged 5 and over, 2010**

| Age (years)        | Reason for last visit |             |
|--------------------|-----------------------|-------------|
|                    | Check-up              | Problem     |
| 5–14               | 83.2                  | 16.8        |
| 15–24              | 80.3                  | 19.7        |
| 25–44              | 61.1                  | 38.9        |
| 45–64              | 53.4                  | 46.6        |
| 65+                | 56.0                  | 44.0        |
| <b>All persons</b> | <b>65.2</b>           | <b>34.8</b> |

Notes

1. Dentate persons aged 5 and over who made a dental visit in the previous 2 years.
2. 95% confidence intervals for these estimates are available in Table B.4.5.

Source: National Dental Telephone Interview Survey, NDTIS 2010.

With the exception of individuals living in the lowest household income group (less than \$12,000 per year), the proportion of individuals who reported that their last visit was for a check-up was positively associated with household income, varying from 53.0% for those in the \$12,000–\$20,000 income group to 72.3% for those in the \$100,000+ group (Table 4.6).

**Table 4.6: Reason for last dental visit by household income, percentage of dentate persons aged 5 and over, 2010**

| Annual household income (\$) | Reason for last visit |             |
|------------------------------|-----------------------|-------------|
|                              | Check-up              | Problem     |
| <12,000                      | 62.9                  | 37.1        |
| 12,000–<20,000               | 53.0                  | 47.0        |
| 20,000–<30,000               | 51.7                  | 48.3        |
| 30,000–<40,000               | 50.9                  | 49.1        |
| 40,000–<60,000               | 61.9                  | 38.1        |
| 60,000–<80,000               | 61.2                  | 38.8        |
| 80,000–<100,000              | 71.8                  | 28.2        |
| 100,000+                     | 72.3                  | 27.7        |
| <b>All persons</b>           | <b>65.2</b>           | <b>34.8</b> |

*Notes*

1. Dentate persons aged 5 and over who made a dental visit in the previous 2 years.
2. 95% confidence intervals for these estimates are available in Table B.4.6.

Source: National Dental Telephone Interview Survey, 2010.

People living in *Major cities* had higher rates of visiting for a check-up (66.8%) than those in *Outer regional* areas (58.1%) (Table 4.7).

**Table 4.7: Reason for last dental visit by remoteness area, percentage of dentate persons aged 5 and over, 2010**

| Remoteness         | Reason for last visit |             |
|--------------------|-----------------------|-------------|
|                    | Check-up              | Problem     |
| Major cities       | 66.8                  | 33.2        |
| Inner regional     | 62.3                  | 37.7        |
| Outer regional     | 58.1                  | 41.9        |
| Remote/Very remote | 62.0                  | 38.0        |
| <b>All persons</b> | <b>65.2</b>           | <b>34.8</b> |

*Notes*

1. Dentate persons aged 5 and over who made a dental visit in the previous 2 years.
2. 95% confidence intervals for these estimates are available in Table B.4.7.

Source: National Dental Telephone Interview Survey, 2010.

More insured individuals (70.3%) reported their last visit was for a check-up than those without insurance (57.1%) (Table 4.8).

**Table 4.8: Reason for last dental visit by dental insurance status, percentage of dentate persons aged 5 and over, 2010**

| Insurance status   | Reason for last visit |             |
|--------------------|-----------------------|-------------|
|                    | Check-up              | Problem     |
| Insured            | 70.3                  | 29.7        |
| Uninsured          | 57.1                  | 42.9        |
| <b>All persons</b> | <b>65.2</b>           | <b>34.8</b> |

*Notes*

1. Dentate persons aged 5 and over who made a dental visit in the previous 2 years.
2. 95% confidence intervals for these estimates are available in Table B.4.8.

Source: National Dental Telephone Interview Survey, 2010.

## 4.3 Type of practice visited at last dental visit

In 2010, well over three-quarters (88.3%) of people reported that their last dental visit was to a private dental practice, compared to 6.0% at a public dental service and 4.8% to a SDS (Table 4.9).

Just under one-quarter (22.8%) of children aged 5–14 attended a SDS for their last dental visit and over two-thirds (68.2%) attended a private practice.

Adults aged 65 and over had higher rates of public dental service attendance than younger age groups.

**Table 4.9: Type of practice visited at last dental visit by age, percentage of dentate persons aged 5 and over who visited in last 12 months, 2010**

| Age (years)        | Type of practice visited at last dental visit |            |            |            |
|--------------------|-----------------------------------------------|------------|------------|------------|
|                    | Private                                       | Public     | SDS        | Other      |
| 5–14               | 68.2                                          | 8.6        | 22.8       | 0.3        |
| 15–24              | 87.8                                          | 5.8        | 5.1        | 1.2        |
| 25–44              | 94.6                                          | 4.0        | ..         | 1.4        |
| 45–64              | 95.3                                          | 3.8        | ..         | 0.9        |
| 65+                | 87.9                                          | 11.6       | ..         | 0.5        |
| <b>All persons</b> | <b>88.3</b>                                   | <b>6.0</b> | <b>4.8</b> | <b>0.9</b> |

.. Not applicable.

Note: 95% confidence intervals for these estimates are available in Table B.4.9.

Source: National Dental Telephone Interview Survey, 2010.

Across household income groups, with the exception of the lowest group, those in the \$12,000 to <\$40,000 income groups had higher rates of public dental service visits than those in the higher income groups. Approximately 28.3% of dentate persons in the \$12,000–<\$20,000 bracket visited a public dental service at their last visit, compared to 1.3% of those in the \$100,000 and over income group. SDS use was relatively even across all income groups (Table 4.10).

**Table 4.10: Type of practice visited at last dental visit by household, percentage of dentate persons aged 5 and over who visited in last 12 months, 2010**

| Annual household income (\$) | Type of practice visited at last dental visit |            |            |            |
|------------------------------|-----------------------------------------------|------------|------------|------------|
|                              | Private                                       | Public     | SDS        | Other      |
| <12,000                      | 84.0                                          | 11.9       | 4.2        | —          |
| 12,000–<20,000               | 64.8                                          | 28.3       | 6.7        | 0.3        |
| 20,000–<30,000               | 77.6                                          | 16.9       | 4.4        | 1.0        |
| 30,000–<40,000               | 80.0                                          | 14.5       | 4.6        | 1.0        |
| 40,000–<60,000               | 88.6                                          | 4.6        | 6.3        | 0.4        |
| 60,000–<80,000               | 87.5                                          | 3.9        | 7.1        | 1.5        |
| 80,000–<100,000              | 89.8                                          | 3.3        | 6.0        | 0.9        |
| 100,000+                     | 94.2                                          | 1.3        | 3.4        | 1.1        |
| <b>All persons</b>           | <b>88.3</b>                                   | <b>6.0</b> | <b>4.8</b> | <b>0.9</b> |

— Nil or rounded to zero.

Note: 95% confidence intervals for these estimates are available in Table B.4.10.

Source: National Dental Telephone Interview Survey, 2010.

Across remoteness areas, use of a SDS was highest in *Remote/Very remote* areas, with 21.2% of dentate persons in *Remote/Very remote* areas accessing this service compared with 3.3% of persons living in *Major cities*. The proportion of dentate persons using public dental services was lower in *Major cities* (5.1%) than in *Inner regional* (8.3%) and *Outer regional* areas (8.6%) (Table 4.11).

**Table 4.11: Type of practice visited at last dental visit by remoteness area, percentage of dentate persons aged 5 and over who visited in last 12 months, 2010**

| Remoteness area    | Type of practice visited at last dental visit |            |            |            |
|--------------------|-----------------------------------------------|------------|------------|------------|
|                    | Private                                       | Public     | SDS        | Other      |
| Major cities       | 90.8                                          | 5.1        | 3.3        | 0.9        |
| Inner regional     | 83.8                                          | 8.3        | 6.7        | 1.2        |
| Outer regional     | 80.0                                          | 8.6        | 10.3       | 1.1        |
| Remote/Very remote | 71.4                                          | 6.3        | 21.2       | 1.1        |
| <b>All persons</b> | <b>88.3</b>                                   | <b>6.0</b> | <b>4.8</b> | <b>0.9</b> |

Note: 95% confidence intervals for these estimates are available in Table B.4.11.

Source: National Dental Telephone Interview Survey, 2010.

More insured persons accessed private care at their last visit compared to uninsured persons (94.9% compared to 76.8%, respectively) (Table 4.12).

**Table 4.12: Type of practice visited at last dental visit by dental insurance status, percentage of dentate persons aged 5 and over who visited in last 12 months, 2010**

| Insurance status   | Type of practice visited at last dental visit |            |            |            |
|--------------------|-----------------------------------------------|------------|------------|------------|
|                    | Private                                       | Public     | SDS        | Other      |
| Insured            | 94.9                                          | 1.7        | 2.8        | 0.6        |
| Uninsured          | 76.8                                          | 13.4       | 8.2        | 1.6        |
| <b>All persons</b> | <b>88.3</b>                                   | <b>6.0</b> | <b>4.8</b> | <b>0.9</b> |

Note: 95% confidence intervals for these estimates are available in Table B.4.12.

Source: National Dental Telephone Interview Survey, 2010.

## 4.4 Dental visiting patterns

The composite indicator of ‘visiting patterns’ was derived from characteristics of people’s dental attendance. Favourable attendance relates to visiting a dentist once or more per year, usually for a check-up, and having a usual dental provider. Unfavourable attendance relates to visiting less than once every 2 years and usually visiting for a problem, or visiting once every 2 years usually for a problem and without a regular dental provider. The remaining combinations are classified as intermediate visiting patterns.

Overall in 2010, approximately half (49.4%) of all dentate adults over the age of 18 had favourable visiting patterns and a third (33.2%) had intermediate visiting patterns (Table 4.13).

Females were more likely to have favourable visiting patterns (53.4%) than males (45.3%).

Dentate adults 65 and over had higher rates of favourable attendance than those aged 25–44 (56.6% and 46.4%, respectively). In contrast, 25–44 year olds had higher rates of unfavourable attendance than 18–24 year olds (19.0% and 12.3%, respectively).

**Table 4.13: Dental visiting pattern by age and sex, percentage of dentate persons aged 18 and over, 2010**

|                    | Dental visiting pattern |              |              |
|--------------------|-------------------------|--------------|--------------|
|                    | Favourable              | Intermediate | Unfavourable |
| <b>Sex</b>         |                         |              |              |
| Male               | 45.3                    | 35.7         | 19.1         |
| Female             | 53.4                    | 30.9         | 15.7         |
| <b>Age (years)</b> |                         |              |              |
| 18–24              | 48.2                    | 39.5         | 12.3         |
| 25–44              | 46.4                    | 34.6         | 19.0         |
| 45–64              | 50.5                    | 31.9         | 17.6         |
| 65+                | 56.6                    | 26.3         | 17.1         |
| <b>All persons</b> | <b>49.4</b>             | <b>33.2</b>  | <b>17.3</b>  |

*Note:* 95% confidence intervals for these estimates are available in Table B.4.13.

*Source:* National Dental Telephone Interview Survey, 2010.

The proportion of dentate adults with favourable visiting patterns varied by household income. Just over one-third (35.3%) of adults in the lowest income group had favourable visiting patterns compared to well over half (59.2%) of those in the highest group (Table 4.14).

**Table 4.14: Dental visiting pattern by household income, percentage of dentate persons aged 18 and over, 2010**

| Annual household income (\$) | Dental visiting pattern |              |              |
|------------------------------|-------------------------|--------------|--------------|
|                              | Favourable              | Intermediate | Unfavourable |
| <12,000                      | 35.3                    | 37.6         | 27.1         |
| 12,000–<20,000               | 37.7                    | 33.3         | 29.0         |
| 20,000–<30,000               | 38.9                    | 34.3         | 26.9         |
| 30,000–<40,000               | 36.8                    | 42.4         | 20.9         |
| 40,000–<60,000               | 44.8                    | 33.9         | 21.2         |
| 60,000–<80,000               | 48.2                    | 35.9         | 15.9         |
| 80,000–<100,000              | 51.9                    | 33.2         | 15.0         |
| 100,000+                     | 59.2                    | 29.5         | 11.4         |
| <b>All persons</b>           | <b>49.4</b>             | <b>33.2</b>  | <b>17.3</b>  |

*Note:* 95% confidence intervals for these estimates are available in Table B.4.14.

*Source:* National Dental Telephone Interview Survey, 2010.

Across remoteness areas, dentate adults in *Major cities* had higher rates of favourable attendance (52.6%) than those in *Remote/Very remote* areas (34.0%). Dentate adults in *Major cities* had the lowest rates of unfavourable attendance (15.0%) while those in *Outer regional* areas had the highest (25.5%) (Table 4.15).

**Table 4.15: Dental visiting pattern by remoteness area, percentage of dentate persons aged 18 and over, 2010**

| Remoteness area    | Dental visiting pattern |              |              |
|--------------------|-------------------------|--------------|--------------|
|                    | Favourable              | Intermediate | Unfavourable |
| Major cities       | 52.6                    | 32.4         | 15.0         |
| Inner regional     | 44.2                    | 33.4         | 22.4         |
| Outer regional     | 36.4                    | 38.1         | 25.5         |
| Remote/Very remote | 34.0                    | 46.6         | 19.4         |
| <b>All persons</b> | <b>49.4</b>             | <b>33.2</b>  | <b>17.3</b>  |

*Note:* 95% confidence intervals for these estimates are available in Table B.4.15.

*Source:* National Dental Telephone Interview Survey, 2010.

Almost two-thirds (62.8%) of insured dentate adults had favourable visiting patterns compared to just under one-third (31.1%) of those without dental insurance (Table 4.16).

**Table 4.16: Dental visiting pattern by dental insurance status, percentage of dentate persons aged 18 and over, 2010**

| Insurance status | Dental visiting pattern |              |              |
|------------------|-------------------------|--------------|--------------|
|                  | Favourable              | Intermediate | Unfavourable |
| Insured          | 62.8                    | 27.9         | 9.3          |
| Uninsured        | 31.1                    | 40.3         | 28.7         |
| <b>Total</b>     | <b>49.4</b>             | <b>33.2</b>  | <b>17.3</b>  |

Note: 95% confidence intervals for these estimates are available in Table B.4.16.

Source: National Dental Telephone Interview Survey, 2010.

## 4.5 Dental services received

In 2010, dentate persons who visited a dentist in the last 12 months made, on average, 2.34 visits. On average, they received 0.94 scale and clean services, 0.69 fillings and 0.25 extractions. There was no significant difference between the average number of services for males and females (Table 4.17).

Across age groups, adults aged 25–44 had a lower average number of dental visits (2.13) than 15–24 year olds (2.63) and those aged 65 and over (2.55). Adults aged 25 and over had, on average, more fillings than 5–14 year olds (0.43) and 15–24 year olds (0.47).

**Table 4.17: Average number of dental services received in last 12 months by age and sex, dentate persons aged 5 and over who visited in previous 12 months, 2010**

|                    | Number of visits | Extraction(s) | Filling(s)  | Scale and clean |
|--------------------|------------------|---------------|-------------|-----------------|
| <b>Sex</b>         |                  |               |             |                 |
| Male               | 2.30             | 0.26          | 0.73        | 0.89            |
| Female             | 2.39             | 0.23          | 0.66        | 0.98            |
| <b>Age (years)</b> |                  |               |             |                 |
| 5–14               | 2.31             | 0.20          | 0.43        | 0.73            |
| 15–24              | 2.63             | 0.26          | 0.47        | 0.92            |
| 25–44              | 2.13             | 0.25          | 0.80        | 0.93            |
| 45–64              | 2.33             | 0.21          | 0.84        | 1.04            |
| 65+                | 2.55             | 0.36          | 0.80        | 1.07            |
| <b>All persons</b> | <b>2.34</b>      | <b>0.25</b>   | <b>0.69</b> | <b>0.94</b>     |

Note: 95% confidence intervals for these estimates are available in Table B.4.17.

Source: National Dental Telephone Interview Survey, NDTIS 2010.

The average number of dental visits made in the past 12 months by dentate persons aged 5 and over who visited a dental provider in the previous 12 months ranged from 2.01 to 2.73 visits (Table 4.18).

The average number of extractions ranged from 0.15 to 0.35, however there were no significant differences between household income groups. Persons in the highest and second highest income groups had on average fewer fillings (0.57 and 0.55, respectively) than those in the \$20,000–<\$30,000, \$30,000–<\$40,000 and \$40,000–<\$60,000 income groups (0.87, 1.03 and 0.99, respectively).

**Table 4.18: Average number of dental services received in previous 12 months by annual household income, dentate persons aged 5 and over who visited in previous 12 months, 2010**

| Annual household income (\$) | Number of visits | Extraction(s) | Filling(s)  | Scale and clean |
|------------------------------|------------------|---------------|-------------|-----------------|
| <12,000                      | 2.01             | 0.15          | 0.91        | 0.76            |
| 12,000–<20,000               | 2.73             | 0.35          | 0.76        | 0.91            |
| 20,000–<30,000               | 2.42             | 0.31          | 0.87        | 0.81            |
| 30,000–<40,000               | 2.61             | 0.34          | 1.03        | 0.89            |
| 40,000–<60,000               | 2.41             | 0.24          | 0.99        | 0.81            |
| 60,000–<80,000               | 2.25             | 0.21          | 0.66        | 0.88            |
| 80,000–<100,000              | 2.11             | 0.17          | 0.55        | 0.92            |
| 100,000+                     | 2.37             | 0.24          | 0.57        | 1.06            |
| <b>All persons</b>           | <b>2.34</b>      | <b>0.25</b>   | <b>0.69</b> | <b>0.94</b>     |

*Note:* 95% confidence intervals for these estimates are available in Table B.4.18.

*Source:* National Dental Telephone Interview Survey, 2010.

Across remoteness areas, there were no significant differences in the average number of dental visits (ranging from 2.27 to 2.39), number of extractions (0.21 to 0.74) or the number of fillings (0.53 to 0.84) received in the past 12 months. Those in *Major cities* had higher rates of scale and clean services (1.01) than other regions (Table 4.19).

**Table 4.19: Average number of dental services received in previous 12 months by remoteness area, dentate persons aged 5 and over who visited in previous 12 months, 2010**

| Remoteness area    | Number of visits | Extraction(s) | Filling(s)  | Scale and clean |
|--------------------|------------------|---------------|-------------|-----------------|
| Major cities       | 2.37             | 0.21          | 0.66        | 1.01            |
| Inner regional     | 2.27             | 0.27          | 0.77        | 0.79            |
| Outer regional     | 2.34             | 0.40          | 0.84        | 0.76            |
| Remote/Very remote | 2.39             | 0.74          | 0.53        | 0.53            |
| <b>All persons</b> | <b>2.34</b>      | <b>0.25</b>   | <b>0.69</b> | <b>0.94</b>     |

Note: 95% confidence intervals for these estimates are available in Table B.4.19.

Source: National Dental Telephone Interview Survey, 2010.

There was no significant difference in the average number of visits received in the previous 12 months between insured and uninsured persons (2.37 compared to 2.32). However, insured individuals had fewer extractions (0.21 compared to 0.31), fewer fillings (0.62 compared to 0.83) and more scale and clean services (1.09 compared to 0.68) than uninsured individuals (Table 4.20).

**Table 4.20: Average number of dental services received in previous 12 months by dental insurance status, dentate persons aged 5 and over who visited in previous 12 months, 2010**

| Insurance status   | Number of visits | Extraction(s) | Filling(s)  | Scale and clean |
|--------------------|------------------|---------------|-------------|-----------------|
| Insured            | 2.37             | 0.21          | 0.62        | 1.09            |
| Uninsured          | 2.32             | 0.31          | 0.83        | 0.68            |
| <b>All persons</b> | <b>2.34</b>      | <b>0.25</b>   | <b>0.69</b> | <b>0.94</b>     |

Note: 95% confidence intervals for these estimates are available in Table B.4.20.

Source: National Dental Telephone Interview Survey, 2010.

## 4.6 Fissure sealants in children

A common and effective preventive practice to halt the development of active decay in permanent teeth is to seal or cover the pits and fissures of teeth (normally molars) with a resin or glass-ionomer (cement) material. This prevents the future build-up of plaque and bacteria in the more decay-susceptible tooth grooves.

In 2006, children aged 6–15 with permanent tooth decay experience (DMFT > 0) were more likely to have a fissure sealant than were children with no permanent decay experience at every age. This could be interpreted as a tendency towards the provision of fissure sealants to children deemed to have a greater likelihood of developing dental decay (Table 4.21).

**Table 4.21: Percentage of children with fissure-sealed teeth by DMFT status and age, children attending a school dental service, 2006**

|          | Age (years) |      |      |      |      |      |      |      |      |      |
|----------|-------------|------|------|------|------|------|------|------|------|------|
|          | 6           | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   |
| DMFT = 0 | 3.5         | 7.6  | 17.9 | 17.0 | 19.7 | 18.9 | 15.7 | 24.2 | 27.8 | 15.8 |
| DMFT > 0 | 36.4        | 25.1 | 21.3 | 29.4 | 28.1 | 31.2 | 38.7 | 43.8 | 32.4 | 28.3 |

*Note:* 95% confidence intervals for these estimates are available in Table B.4.21.

*Source:* Child Dental Health Survey, 2006.

The average number of fissure-sealed teeth in children attending a school dental service increased from 0.16 teeth in 6 year olds to 1.08 in 14 year olds, dropping to 0.67 in 15 year olds (Table 4.22).

**Table 4.22: Average number of fissure-sealed teeth by age, children attending a school dental service, 2006**

|         | Age (years) |      |      |      |      |     |      |      |      |      |
|---------|-------------|------|------|------|------|-----|------|------|------|------|
|         | 6           | 7    | 8    | 9    | 10   | 11  | 12   | 13   | 14   | 15   |
| Average | 0.16        | 0.29 | 0.57 | 0.57 | 0.58 | 0.6 | 0.57 | 0.88 | 1.08 | 0.67 |

*Note:* 95% confidence intervals for these estimates are available in Table B.4.22.

*Source:* Child Dental Health Survey, 2006.

## 5 Financial barriers

The overall proportion of people who avoided or delayed visiting a dentist due to cost in 2010 was 28.2%, ranging from 13.9% for children aged 5–14 to 37.0% for adults aged 25–44 (Table 5.1)

Those in lower household income groups were more likely to delay visiting a dentist due to cost than those in the \$80,000 and over income groups.

Across all income groups, those aged 25–44 and 45–64 were more likely to avoid or delay seeing a dentist, although this pattern was most prevalent in the lower income groups.

**Table 5.1: Percentage of persons who avoided or delayed visiting a dentist due to cost, by age and household income, dentate persons aged 5 and over, 2010**

| Annual household income (\$) | Age (years) |             |             |             |             | All persons |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                              | 5–14        | 15–24       | 25–44       | 45–64       | 65+         |             |
| <12,000                      | 29.1        | 72.7        | 21.4        | 54.5        | 30.0        | <b>40.4</b> |
| 12,000–<20,000               | 31.4        | 49.8        | 45.0        | 55.9        | 26.8        | <b>39.0</b> |
| 20,000–<30,000               | 30.6        | 32.1        | 67.0        | 48.3        | 27.8        | <b>39.4</b> |
| 30,000–<40,000               | 15.4        | 24.1        | 49.3        | 50.1        | 22.8        | <b>36.6</b> |
| 40,000–<60,000               | 19.0        | 31.3        | 58.1        | 36.3        | 8.7         | <b>37.0</b> |
| 60,000–<80,000               | 12.6        | 35.9        | 44.8        | 34.5        | 14.4        | <b>34.0</b> |
| 80,000–<100,000              | 11.2        | 22.0        | 34.0        | 25.4        | 4.2         | <b>24.8</b> |
| 100,000+                     | 7.0         | 19.2        | 23.8        | 13.1        | 3.9         | <b>17.2</b> |
| <b>All persons</b>           | <b>13.9</b> | <b>26.2</b> | <b>37.0</b> | <b>30.0</b> | <b>19.8</b> | <b>28.2</b> |

*Note:* 95% confidence intervals for these estimates are available in Table B.5.1.

*Source:* National Dental Telephone Interview Survey, 2010.

Nearly one-fifth (18.3%) of persons aged 5 and over indicated that cost prevented them from receiving recommended dental treatment (Table 5.2).

The cost of receiving recommended treatment was less of an issue for children aged 5–14 (5.3%) whereas adults aged 25–44 and 45–64 had the highest rates of not receiving recommended dental treatment due to cost (24.5% and 24.2%, respectively).

Across household income groups, the overall proportion of persons not receiving recommended dental treatment due to cost was inversely associated with household income.

**Table 5.2: Percentage of persons stating cost prevented recommended dental treatment, by age and household income, dentate persons aged 5 and over, 2010**

| Annual household income (\$) | Age (years) |             |             |             |             | All persons |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                              | 5–14        | 15–24       | 25–44       | 45–64       | 65+         |             |
| <12,000                      | 1.0         | 81.2        | 40.9        | 74.6        | 12.0        | 40.8        |
| 12,000–<20,000               | 2.6         | 14.1        | 49.0        | 48.3        | 24.8        | 29.8        |
| 20,000–<30,000               | 18.5        | 26.5        | 61.7        | 25.3        | 18.5        | 25.6        |
| 30,000–<40,000               | 5.8         | 8.1         | 30.0        | 33.7        | 24.0        | 22.8        |
| 40,000–<60,000               | 8.4         | 24.3        | 33.6        | 28.0        | 8.6         | 22.6        |
| 60,000–<80,000               | 5.9         | 12.5        | 25.4        | 27.0        | 15.9        | 19.5        |
| 80,000–<100,000              | 3.1         | 12.4        | 28.4        | 25.0        | —           | 18.0        |
| 100,000+                     | 3.5         | 9.6         | 17.8        | 16.0        | 4.0         | 13.1        |
| <b>All persons</b>           | <b>5.3</b>  | <b>13.5</b> | <b>24.5</b> | <b>24.2</b> | <b>15.5</b> | <b>18.3</b> |

— Nil or rounded to zero

Note: 95% confidence intervals for these estimates are available in Table B.5.2.

Source: National Dental Telephone Interview Survey, 2010.

A higher proportion of adults aged 18–24 (24.9%) would have a lot of difficulty paying a \$150 dental bill than adults aged 25–44 and 45–54 (17.7% and 17.6%, respectively) (Table 5.3).

The difficulty in paying a \$150 dental bill was inversely related to household income, with over one-third of adults (between 33.7% and 45.1%) with a household income of less than \$40,000 per year expressing a lot of difficulty, compared to 6.9% of adults in the \$100,000 and over income bracket.

**Table 5.3: Percentage of persons who would have a lot of difficulty paying a \$150 dental bill, by age and household income, dentate persons aged 18 and over, 2010**

| Annual household income (\$) | Age (years) |             |             |             | All persons |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
|                              | 18–24       | 25–44       | 45–64       | 65+         |             |
| <12,000                      | 34.9        | 28.9        | 46.9        | 32.9        | <b>36.6</b> |
| 12,000–<20,000               | 58.9        | 52.4        | 59.1        | 32.9        | <b>45.1</b> |
| 20,000–<30,000               | 63.8        | 37.1        | 47.2        | 26.2        | <b>36.3</b> |
| 30,000–<40,000               | 45.0        | 38.7        | 32.8        | 21.4        | <b>33.7</b> |
| 40,000–<60,000               | 22.2        | 28.4        | 20.3        | 4.7         | <b>21.4</b> |
| 60,000–<80,000               | 24.0        | 17.6        | 14.3        | 4.5         | <b>16.4</b> |
| 80,000–<100,000              | 12.0        | 16.2        | 9.3         | 6.6         | <b>13.0</b> |
| 100,000+                     | 20.7        | 6.3         | 2.4         | 5.3         | <b>6.9</b>  |
| <b>All persons</b>           | <b>24.9</b> | <b>17.7</b> | <b>17.6</b> | <b>19.7</b> | <b>18.9</b> |

*Notes*

1. The item 'Difficulty paying a \$150 dental bill' was only collected for adults aged 18 and over.
2. 95% confidence intervals for these estimates are available in Table B.5.3.

Source: National Dental Telephone Interview Survey, NDTIS 2010.

## 6 Private health insurance

In Australia, the dental insurance system is based on individuals or families purchasing insurance that covers all or part of the cost of visiting a private dentist. This section reports the proportion of Australian adults who were covered by dental insurance at the time of the survey.

Over half (53.8%) of all persons over the age of 5 reported having some level of dental insurance. Adults aged 45–64 had significantly higher rates of dental insurance and those aged 65 and over had significantly lower rates of insurance than other age groups (Table 6.1).

**Table 6.1: Percentage of persons with dental insurance by age, persons aged 5 and over, 2010**

| Insurance status | Age (years) |       |       |       |      | All persons |
|------------------|-------------|-------|-------|-------|------|-------------|
|                  | 5–14        | 15–24 | 25–44 | 45–64 | 65+  |             |
| Insured          | 53.2        | 51.8  | 54.6  | 60.5  | 42.5 | <b>53.8</b> |
| Uninsured        | 46.8        | 48.2  | 45.4  | 39.5  | 57.5 | <b>46.2</b> |

*Note:* 95% confidence intervals for these estimates are available in Table B.6.1.

*Source:* National Dental Telephone Interview Survey, 2010.

The majority of dentate adults (55.7%) aged 15 and over reported having dental insurance, with rates of insurance ranging from 47.3% in the 65 and over age group to 62.9% for those aged 45–64. In contrast, edentulous adults had much lower rates of dental insurance, with 18.7% of adults aged 45–64 and 24.4% aged 65 and over having some level of dental insurance (Table 6.2).

**Table 6.2: Percentage of persons with dental insurance by dentate status, persons aged 15 and over, 2010**

| Age (years)  | Dentate status |             | All persons |
|--------------|----------------|-------------|-------------|
|              | Dentate        | Edentulous  |             |
| 15–24        | 51.8           | ..          | <b>51.8</b> |
| 25–44        | 54.6           | ..          | <b>54.6</b> |
| 45–64        | 62.9           | 18.7        | <b>60.5</b> |
| 65+          | 47.3           | 24.4        | <b>42.5</b> |
| <b>Total</b> | <b>55.7</b>    | <b>22.3</b> | <b>53.9</b> |

.. Not applicable.

*Note:* 95% confidence intervals for these estimates are available in Table B.6.2.

*Source:* National Dental Telephone Interview Survey, 2010.

Adult dentate males and females in *Major cities* had higher rates of dental insurance than those in *Inner regional* and *Outer regional* areas (Table 6.3).

Approximately three-quarters (76.3%) of dentate adults in the \$100,000 and over per year annual household income group had some level of dental insurance, compared to less than one-third of adults in the bottom three income groups (from 27.3% in the \$12,000–<\$20,000 income group to 29.8% in the \$20,000–<\$30,000 income group).

**Table 6.3: Percentage of persons with dental insurance by sex, remoteness area and annual household income, dentate persons aged 15 and over, 2010**

|                                     | Remoteness area |                |                |                        | All persons |
|-------------------------------------|-----------------|----------------|----------------|------------------------|-------------|
|                                     | Major cities    | Inner regional | Outer regional | Remote/<br>Very remote |             |
| <b>Sex</b>                          |                 |                |                |                        |             |
| Male                                | 58.9            | 46.4           | 43.5           | 55.5                   | <b>55.0</b> |
| Female                              | 59.5            | 47.7           | 49.3           | 55.1                   | <b>56.3</b> |
| <b>Annual household income (\$)</b> |                 |                |                |                        |             |
| <12,000                             | 29.3            | 27.8           | 31.9           | —                      | <b>29.3</b> |
| 12,000–<20,000                      | 31.0            | 21.8           | 16.2           | 50.8                   | <b>27.3</b> |
| 20,000–<30,000                      | 31.0            | 27.8           | 28.5           | 28.2                   | <b>29.8</b> |
| 30,000–<40,000                      | 39.1            | 41.0           | 32.1           | 31.6                   | <b>38.9</b> |
| 40,000–<60,000                      | 45.7            | 41.0           | 36.8           | 31.2                   | <b>43.5</b> |
| 60,000–<80,000                      | 58.8            | 38.9           | 48.5           | 45.9                   | <b>53.5</b> |
| 80,000–<100,000                     | 67.4            | 60.7           | 50.1           | 77.2                   | <b>64.6</b> |
| 100,000+                            | 78.0            | 70.1           | 70.3           | 76.4                   | <b>76.3</b> |
| <b>All persons</b>                  | <b>59.2</b>     | <b>47.0</b>    | <b>46.3</b>    | <b>55.3</b>            | <b>55.7</b> |

— Nil or rounded to zero

Note: 95% confidence intervals for these estimates are available in Table B.6.3.

Source: National Dental Telephone Interview Survey, NDTIS 2010.

## 7 Utilisation of private health insurance

In 2010, the majority of adults with health insurance reported that their insurance paid some (78.7%) or all (7.8%) of the dental costs of their last visit. Only 9.4% of insured adults paid all their own dental expenses (Table 7.1).

**Table 7.1: Percentage of persons with dental insurance who reported that health insurance paid all or some of the cost of their care by source of payment, persons aged 18 and over, 2010**

|          | <b>Paid all own expenses</b> | <b>Insurance paid some/patient paid some</b> | <b>Insurance paid all/patient paid none</b> | <b>Govt paid some/patient or insurance paid some</b> | <b>Govt paid all/patient paid none</b> | <b>Other payment option</b> |
|----------|------------------------------|----------------------------------------------|---------------------------------------------|------------------------------------------------------|----------------------------------------|-----------------------------|
| Per cent | 9.4                          | 78.7                                         | 7.8                                         | 1.8                                                  | 1.8                                    | 0.5                         |

*Note:* 95% confidence intervals for these estimates are available in Table B.7.1.

*Source:* National Dental Telephone Interview Survey, 2010.

Almost one-fifth (17.3%) of insured adults who were required to pay all their own dental expenses indicated that dental care caused a large financial burden. This compared to 1.3% of those where insurance paid all expenses and 8.4% for those who co-contributed along with the insurance to the cost of their dental care (Table 7.2).

**Table 7.2: Percentage of persons who reported that dental care caused a large financial burden by source of payment, insured persons aged 18 and over, 2010**

|          | <b>Paid all own expenses</b> | <b>Insurance paid some/patient paid some</b> | <b>Insurance paid all/patient paid none</b> | <b>Govt paid some/patient or insurance paid some</b> | <b>Govt paid all/patient paid none</b> | <b>Other payment option</b> | <b>All insured persons</b> |
|----------|------------------------------|----------------------------------------------|---------------------------------------------|------------------------------------------------------|----------------------------------------|-----------------------------|----------------------------|
| Per cent | 17.3                         | 8.4                                          | 1.3                                         | 18.0                                                 | 2.5                                    | 19.8                        | 8.6                        |

*Note:* 95% confidence intervals for these estimates are available in Table B.7.2.

*Source:* National Dental Telephone Interview Survey, 2010.

## 8 Expenditure

Total expenditure on dental services in Australia was \$5,375 million in 2005–06, increasing to \$7,690 million in 2009–10. Total expenditure increased by 13.3% from 2008–09 to 2009–10, compared with 11.2% from 2007–08 to 2008–09 (Table 8.1).

Recurrent expenditure on dental services from all sources of funds increased every year from 2005–06 to 2009–10, except state and local government which decreased by \$12 million from 2008–09 to 2009–10. Federal government direct outlay had the greatest percentage increase in expenditure from 2005–06 to 2009–10, although coming off a low base. The increase was around 690%, representing continuing increases in recurrent expenditure for dental services. In dollar terms, the increase was less than that for individual spending (\$665 million for federal government direct outlay and \$1,099 million for individuals).

**Table 8.1: Total expenditure (\$ million) on dental services, current prices, by source of funds, 2005–06 to 2009–10**

| Year    | Source of funds            |                      |                              |                        |             | Other | Total        |
|---------|----------------------------|----------------------|------------------------------|------------------------|-------------|-------|--------------|
|         | Federal govt direct outlay | State and local govt | Federal govt premium rebates | Health insurance funds | Individuals |       |              |
| 2005–06 | 96                         | 526                  | 348                          | 795                    | 3,599       | 10    | <b>5,375</b> |
| 2006–07 | 114                        | 532                  | 369                          | 865                    | 3,860       | 10    | <b>5,749</b> |
| 2007–08 | 222                        | 580                  | 423                          | 927                    | 3,944       | 10    | <b>6,106</b> |
| 2008–09 | 539                        | 640                  | 426                          | 1,034                  | 4,129       | 22    | <b>6,790</b> |
| 2009–10 | 761                        | 628                  | 495                          | 1,076                  | 4,698       | 32    | <b>7,690</b> |

*Note:* Column/row totals may not sum to total because of rounding of estimates.

*Source:* Health Expenditure Australia 2008–09, AIHW 2010; Health Expenditure Australia 2009–10, AIHW 2011b.

In 2009–10 individuals were the largest source of funds for total dental expenditure, paying directly out-of-pocket 61.1% of dental costs, followed by a further 14.0% via health insurance funds. Federal government premium rebates accounted for 6.4% of dental expenditure. Other government contributions to dental expenditure accounted for 18.1% of total expenditure – 9.9% from federal government direct outlay and 8.2% from state and local government (Table 8.2).

**Table 8.2: Contribution of government and private funding sources to total dental expenditure, 2005–06 to 2009–10 (per cent)**

| Year    | Source of funds            |                      |                              |                        |             |       | Total |
|---------|----------------------------|----------------------|------------------------------|------------------------|-------------|-------|-------|
|         | Federal govt direct outlay | State and local govt | Federal govt premium rebates | Health insurance funds | Individuals | Other |       |
| 2005–06 | 1.8                        | 9.8                  | 6.5                          | 14.8                   | 67.0        | 0.2   | 100.0 |
| 2006–07 | 2.0                        | 9.3                  | 6.4                          | 15.0                   | 67.1        | 0.2   | 100.0 |
| 2007–08 | 3.6                        | 9.5                  | 6.9                          | 15.2                   | 64.6        | 0.2   | 100.0 |
| 2008–09 | 7.9                        | 9.2                  | 6.3                          | 15.4                   | 61.5        | 0.3   | 100.0 |
| 2009–10 | 9.9                        | 8.2                  | 6.4                          | 14.0                   | 61.1        | 0.4   | 100.0 |

*Note:* Column/row totals may not sum to total because of rounding of estimates.

*Source:* Health Expenditure Australia 2008–09, AIHW 2010; Health Expenditure Australia 2009–10, AIHW 2011b.

State and local government contributions to dental services as a percentage of overall recurrent health expenditure decreased between 2005–06 and 2009–10, from 2.6% to 2.2%. Dollar-value expenditure increased from \$526 million in 2005–06 to \$640 million in 2008–09, followed by a decrease to \$628 million in 2009–10, an overall increase of 19.4%. In comparison, overall health expenditure increased by 45.5% (Table 8.3).

**Table 8.3: State and local government expenditure on dental health in current dollars and as a percentage of total recurrent health expenditure, 2005–06 to 2009–10**

| State and local govt expenditure       | 2005–06 | 2006–07 | 2007–08 | 2008–09 | 2009–10 |
|----------------------------------------|---------|---------|---------|---------|---------|
| Dental health expenditure (\$ million) | 526     | 532     | 580     | 640     | 628     |
| Total health expenditure (\$ million)  | 19,963  | 22,357  | 24,369  | 25,798  | 29,056  |
| Per cent of health expenditure         | 2.6     | 2.4     | 2.4     | 2.4     | 2.2     |

*Source:* Health Expenditure Australia 2008–09, AIHW 2010; Health Expenditure Australia 2009–10, AIHW 2011b.

## 9 Dental labour force

### 9.1 Size and distribution of practising labour force

In 2006, the number of practicing dental practitioners per 100,000 population was 50.3 dentists, 5.7 dental therapists, 3.3 dental hygienists, 1.8 oral health therapists and 4.4 dental prosthetists (Table 9.1).

**Table 9.1: Practising dental practitioners per 100,000 population, 2006**

|                    | Dentists | Dental therapists | Dental hygienists | Oral health therapists | Prosthetists |
|--------------------|----------|-------------------|-------------------|------------------------|--------------|
| Rate (per 100,000) | 50.3     | 5.7               | 3.3               | 1.8                    | 4.4          |

Source: AIHW Dental Statistics and Research Unit (DSRU) Dental Labour Force Collection, 2006.

Across jurisdictions, the number of dentists per 100,000 population ranged from 35.1 in Tasmania to 65.4 in the Australian Capital Territory (Table 9.2).

The number of dental therapists per 100,000 population ranged from 3.3 in New South Wales to 13.9 in Western Australia.

**Table 9.2: Dental practitioners per 100,000 population by practitioner type, states and territories, 2006**

| Practitioner type      | NSW  | Vic  | Qld  | WA   | SA   | Tas  | ACT  | NT   | Australia   |
|------------------------|------|------|------|------|------|------|------|------|-------------|
| Dentists               | 52.2 | 47.8 | 49.6 | 52.0 | 52.7 | 35.1 | 65.4 | 37.3 | <b>50.3</b> |
| Dental therapists      | 3.3  | 3.8  | 6.0  | 13.9 | 7.7  | 11.4 | 5.7  | 11.0 | <b>5.7</b>  |
| Dental hygienists      | 2.2  | 2.3  | 1.8  | 6.6  | 9.8  | 1.0  | 11.3 | —    | <b>3.3</b>  |
| Oral health therapists | 0.6  | 0.8  | 5.6  | 1.8  | 1.7  | —    | —    | —    | <b>1.8</b>  |
| Prosthetists           | 5.0  | 5.0  | 3.5  | 4.2  | 2.0  | 9.0  | 4.2  | —    | <b>4.4</b>  |

— Nil or rounded to zero.

Source: AIHW DSRU Dental Labour Force Collection, 2006.

Across remoteness areas, *Major cities* had the highest number per 100,000 population of practising dentists (59.5), dental hygienists (4.1) and oral health therapists (2.0). *Remote/Very remote* regions had the lowest rates of all practitioners – dentists (17.9), dental therapists (4.3), oral health therapists (0.6) and prosthetists (0.9) (Table 9.3).

The number of practising dental therapists per 100,000 population was highest in *Outer regional* areas (7.5) and lowest in *Remote/Very remote* regions (4.3).

The number of practising prosthetists per 100,000 population was highest in *Inner regional* areas (5.9) and lowest in *Remote/Very remote* regions (0.9).

**Table 9.3: Dental practitioners per 100,000 population by practitioner type and remoteness area, 2006**

| Practitioner type      | Remoteness area |                |                |                        | All regions |
|------------------------|-----------------|----------------|----------------|------------------------|-------------|
|                        | Major cities    | Inner regional | Outer regional | Remote/<br>Very remote |             |
| Dentists               | 59.5            | 33.0           | 27.5           | 17.9                   | <b>50.3</b> |
| Dental therapists      | 5.1             | 6.7            | 7.5            | 4.3                    | <b>5.7</b>  |
| Dental hygienists      | 4.1             | 1.5            | 1.2            | —                      | <b>3.3</b>  |
| Oral health therapists | 2.0             | 1.4            | 1.8            | 0.6                    | <b>1.8</b>  |
| Prosthetists           | 4.4             | 5.9            | 2.8            | 0.9                    | <b>4.4</b>  |

— Nil or rounded to zero.

Source: AIHW DSRU Dental Labour Force Collection, 2006.

Approximately 83.0% of dentists practised in the private sector as their main practice, ranging from 97.2% in the Australian Capital Territory to 46.2% in the Northern Territory (Table 9.4).

**Table 9.4: Number of dentists practising in the public and private sectors, states and territories, 2006**

|                     | NSW          | Vic          | Qld          | WA           | SA         | Tas        | ACT        | NT        | Total         |
|---------------------|--------------|--------------|--------------|--------------|------------|------------|------------|-----------|---------------|
| Private             | 2,998        | 2,063        | 1,621        | 899          | 657        | 155        | 212        | 36        | <b>8,639</b>  |
| Public              | 501          | 356          | 401          | 166          | 165        | 17         | 7          | 36        | <b>1,647</b>  |
| Other practice type | 63           | 30           | 7            | 6            | 5          | —          | —          | 7         | <b>118</b>    |
| <b>Total</b>        | <b>3,561</b> | <b>2,449</b> | <b>2,028</b> | <b>1,071</b> | <b>826</b> | <b>172</b> | <b>218</b> | <b>78</b> | <b>10,404</b> |

Note: Column/row totals may not sum to total because of rounding of estimates.

— Nil or rounded to zero.

Source: AIHW DSRU Dental Labour Force Collection, 2006.

## 9.2 Characteristics of practising dentists

In 2006 there were 10,404 practising dentists in Australia of whom 78.1% worked solely in private practice and 8.6% worked in both private and public practice (Table 9.5).

Female dentists accounted for 29.0% of practising dentists and 44.2% of dentists working solely in the public sector. They were younger than their male colleagues (an average age of 38.9 compared to 47.6), worked shorter hours (34.1 hours compared to 40.2 hours), and were more likely to work part-time (42.4% compared to 21.0%).

**Table 9.5: Practice characteristics of dentists by sector, 2006**

|         | Sector                                      |         |                    | Total  |
|---------|---------------------------------------------|---------|--------------------|--------|
|         | Public                                      | Private | Public and private |        |
|         | Number practising                           |         |                    |        |
| Persons | 1,386                                       | 8,126   | 895                | 10,404 |
|         | Per cent practising                         |         |                    |        |
| Female  | 44.2                                        | 25.5    | 37.1               | 29.0   |
|         | Average age (years)                         |         |                    |        |
| Male    | 48.0                                        | 47.6    | 46.7               | 47.6   |
| Female  | 39.7                                        | 38.9    | 37.7               | 38.9   |
| Persons | 44.2                                        | 45.4    | 43.4               | 45.1   |
|         | Average total hours usually worked per week |         |                    |        |
| Male    | 35.9                                        | 40.6    | 42.0               | 40.2   |
| Female  | 33.9                                        | 33.5    | 37.9               | 34.1   |
| Persons | 35.0                                        | 38.8    | 40.5               | 38.5   |
|         | Per cent part-time                          |         |                    |        |
| Male    | 28.8                                        | 20.1    | 19.8               | 21.0   |
| Female  | 39.2                                        | 44.7    | 34.1               | 42.4   |
| Persons | 33.4                                        | 26.4    | 25.1               | 27.2   |

Notes:

1. Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.
2. Column/row totals may not sum to total because of rounding of estimates.

Source: AIHW DSRU Dental Labour Force Collection, 2006.

General practice dentists accounted for 84.1% of all practising dentists, ranging from 78.1% in South Australia to 89.5% in Tasmania (Table 9.6). Specialists/restricted practice dentists accounted for 12.1% of all practising dentists.

**Table 9.6: Number of practising dentists by area of main practice, states and territories, 2006**

| Area of main practice | NSW          | Vic          | Qld          | WA           | SA         | Tas        | ACT        | NT        | Total         |
|-----------------------|--------------|--------------|--------------|--------------|------------|------------|------------|-----------|---------------|
| General practice      | 3,071        | 2,023        | 1,715        | 888          | 645        | 154        | 185        | 67        | <b>8,747</b>  |
| Registered specialist | 362          | 308          | 223          | 121          | 95         | 16         | 31         | 4         | <b>1,161</b>  |
| Restricted practice   | —            | 26           | 21           | 21           | 17         | 2          | 2          | 4         | <b>93</b>     |
| Administration        | 22           | 17           | 23           | 7            | 8          | —          | —          | —         | <b>77</b>     |
| Teaching/education    | 52           | 41           | 31           | 24           | 42         | —          | —          | —         | <b>191</b>    |
| Research              | 12           | 11           | 1            | —            | 8          | —          | —          | —         | <b>31</b>     |
| Other                 | 42           | 23           | 14           | 9            | 11         | —          | —          | 4         | <b>102</b>    |
| <b>Total</b>          | <b>3,561</b> | <b>2,449</b> | <b>2,028</b> | <b>1,071</b> | <b>826</b> | <b>172</b> | <b>218</b> | <b>78</b> | <b>10,404</b> |

*Note:* Column/row totals may not sum to total because of rounding of estimates.

— Nil or rounded to zero.

*Source:* AIHW DSRU Dental Labour Force Collection, 2006.

Practising dentists predominantly worked in a solo practice (27.8%), solo practice with an assistant (15.0%), as an assistant (15.1%) or as an associate (14.1%) (Table 9.7).

**Table 9.7: Number of practising dentists by type of main practice, states and territories, 2006**

| Type of main practice          | NSW          | Vic          | Qld          | WA           | SA         | Tas        | ACT        | NT        | Total         |
|--------------------------------|--------------|--------------|--------------|--------------|------------|------------|------------|-----------|---------------|
| <b>Private</b>                 |              |              |              |              |            |            |            |           |               |
| Solo                           | 1,157        | 594          | 504          | 305          | 199        | 51         | 68         | 15        | <b>2,892</b>  |
| Solo with assistant            | 512          | 400          | 323          | 169          | 88         | 34         | 31         | 6         | <b>1,563</b>  |
| Partnership                    | 282          | 197          | 186          | 96           | 85         | 3          | 40         | 2         | <b>891</b>    |
| Associateship                  | 469          | 341          | 254          | 190          | 134        | 27         | 33         | 13        | <b>1,462</b>  |
| Assistant                      | 470          | 470          | 312          | 114          | 120        | 39         | 39         | —         | <b>1,566</b>  |
| Locum                          | 47           | 35           | 39           | 21           | 4          | —          | —          | —         | <b>147</b>    |
| Industry                       | 59           | 25           | 3            | 4            | 27         | —          | —          | —         | <b>118</b>    |
| <i>Total private</i>           | <i>2,998</i> | <i>2,063</i> | <i>1,621</i> | <i>899</i>   | <i>657</i> | <i>155</i> | <i>212</i> | <i>36</i> | <b>8,639</b>  |
| <b>Public</b>                  |              |              |              |              |            |            |            |           |               |
| Dental hospital                | 217          | 91           | 155          | 34           | 33         | 5          | —          | —         | <b>534</b>    |
| Mainly school dental           | 2            | 21           | 46           | 28           | 21         | —          | —          | 11        | <b>130</b>    |
| Mainly general dental          | 128          | 146          | 89           | 62           | 53         | 13         | 3          | 9         | <b>502</b>    |
| Defence forces                 | 34           | 14           | 23           | 6            | 4          | —          | 3          | 9         | <b>94</b>     |
| Other public                   | 92           | 37           | 57           | 10           | 11         | —          | —          | 6         | <b>213</b>    |
| Tertiary education institution | 28           | 46           | 32           | 26           | 43         | —          | —          | —         | <b>175</b>    |
| <i>Total public</i>            | <i>501</i>   | <i>356</i>   | <i>401</i>   | <i>166</i>   | <i>165</i> | <i>17</i>  | <i>7</i>   | <i>36</i> | <b>1,647</b>  |
| <b>Other practice type</b>     | <b>63</b>    | <b>30</b>    | <b>7</b>     | <b>6</b>     | <b>5</b>   | <b>—</b>   | <b>—</b>   | <b>7</b>  | <b>118</b>    |
| <b>Total</b>                   | <b>3,561</b> | <b>2,449</b> | <b>2,028</b> | <b>1,071</b> | <b>826</b> | <b>172</b> | <b>218</b> | <b>78</b> | <b>10,404</b> |

*Note:* Column/row totals may not sum to total because of rounding of estimates.

— Nil or rounded to zero.

*Source:* AIHW DSRU Dental Labour Force Collection, 2006.

## 9.3 Dental specialists

More than four in five specialists (82.2%) were male, of whom the majority (90.8%) were practising specialists or in restricted practice (89.1% for females). The remaining specialists were either in teaching/education roles (3.9% of males, 3.6% of females) or other roles which include administration and research (Table 9.8).

Over two-fifths (38.5%) of all practising specialists practised in orthodontics, 15.3% practised in oral/maxillofacial surgery, 12.3% in prosthodontics and 11.3% in periodontics.

**Table 9.8: Dental specialists: number of practising dentists in specialist/restricted practice by speciality and sex, 2006**

|                                | Area of practice      |                     |                     |       | Total |
|--------------------------------|-----------------------|---------------------|---------------------|-------|-------|
|                                | Practising specialist | Restricted practice | Teaching/ education | Other |       |
| Sex                            |                       |                     |                     |       |       |
| Males                          | 961                   | 73                  | 44                  | 60    | 1,139 |
| Females                        | 200                   | 20                  | 9                   | 18    | 247   |
| Specialty                      |                       |                     |                     |       |       |
| Orthodontics                   | 505                   | 15                  | 8                   | 4     | 533   |
| Periodontics                   | 131                   | 8                   | 9                   | 4     | 153   |
| Prosthodontics                 | 133                   | 14                  | 9                   | 15    | 171   |
| Oral pathology                 | 8                     | 0                   | 1                   | 1     | 11    |
| Oral and maxillofacial surgery | 173                   | 15                  | 8                   | 17    | 212   |
| Endodontics                    | 105                   | 9                   | 1                   | 6     | 121   |
| Paediatric dentistry           | 73                    | 21                  | 6                   | 4     | 103   |
| Dento-maxillofacial radiology  | 8                     | 0                   | 0                   | 0     | 8     |
| Other speciality               | 24                    | 11                  | 9                   | 29    | 73    |
| Total                          | 1,161                 | 93                  | 52                  | 79    | 1,386 |

*Note:* Column/row totals may not sum to total because of rounding of estimates.

*Source:* AIHW DSRU Dental Labour Force Collection, 2006.

## 9.4 Labour force projections

The labour force projections presented here are based on a set of scenarios relating to the capacity to supply dental services and the demand for dental services. For the supply side of the projections, three scenarios are provided; a 'low', 'medium' and 'high' supply. The 'low' scenario assumes the decline in the number of visits supplied per dentist observed between 1983–84 and 2003–04 will continue at the same rate. The 'medium' projection assumes the decline in the number of visits will decline at half the rate previously observed; and the 'high' scenario assumes that there will be no further decline in the number of services provided.

For demand, a similar set of scenarios were used for per capita demand (PCD); a 'low', 'medium' and 'high' scenario. The 'low' scenario assumes that there will be no growth in the PCD for dental visits. The 'medium' scenario assumes that the growth in PCD will continue at half the rate observed between 1995 and 2005. Finally, the 'high' demand scenario assumes that the observed rate of increase in PCD will continue beyond 2005. Projection work relies on assumptions of labour force capacity and demand for dental care which may change over the projection period. The assumptions of the model should be taken into consideration when using these figures (see Teusner, Chrisopoulos & Spencer, 2008).

Based on the medium supply projection, capacity to supply dental visits is projected to increase from approximately 29 million in 2005 to almost 37 million in 2020 (Table 9.9).

Using the medium PCD model, demand for dental visits is projected to increase to 39 million in 2020, or a shortfall of approximately 2 million visits, or approximately 800–900 dentists.

**Table 9.9: Projected capacity of the dental labour force to supply dental visits and projected demand for dental visits, 2005, 2010, 2015 and 2020**

| Supply/demand scenario | Year                     |       |       |       |
|------------------------|--------------------------|-------|-------|-------|
|                        | 2005                     | 2010  | 2015  | 2020  |
| <b>Supply</b>          | <b>Visits (millions)</b> |       |       |       |
| Low                    | 29.17                    | 30.59 | 31.89 | 33.03 |
| Medium                 | 29.17                    | 31.54 | 34.00 | 36.58 |
| High                   | 29.17                    | 32.48 | 36.11 | 40.14 |
| <b>Demand</b>          |                          |       |       |       |
| Low                    | 28.21                    | 30.04 | 31.78 | 33.60 |
| Medium                 | 28.21                    | 31.53 | 35.03 | 38.80 |
| High                   | 28.21                    | 33.03 | 38.27 | 44.10 |

*Note:* Total aggregate supply includes projected dental visits supplied by dental therapists, dental hygienists and dental prosthetists.

*Source:* AIHW Dental Statistics and Research Unit 2008a,b.

# Appendix A: Data collections used in this report

The data presented in this report are sourced from the following sources:

- Child Dental Health Survey (e.g. Armfield et al. 2003)
- National Survey of Adult Oral health (e.g. Slade et al. 2007)
- National Dental Telephone Interview Survey (e.g. Harford et al. 2011)
- Dental Labour Force Collection (e.g. Balasubranian & Teusner 2011)
- National Hospital Morbidity Database (e.g. AIHW 2011a)

Information on other data sources can be found at <[www.aihw.gov.au](http://www.aihw.gov.au)>.

## Child Dental Health Survey

### Purpose

The Child Dental Health Survey (CDHS) provides time-series data on the oral health status of Australian school students attending school dental services (SDS). The aims of the survey are to:

- examine the time-series of statistics, providing annual estimates of children's oral health status
- examine temporal changes in oral health status among children
- examine the distribution of oral health status by geographic location and demographic factors
- identify high-risk groups according to geographic location and demographic status.

### Data collection

Data for this report have been derived from the annual CDHS conducted in 2005 and 2006. CDHS is an ongoing national surveillance program which monitors the dental health of children enrolled in school and community dental services operated by the health departments or authorities of Australia's six state and two territory governments. In all jurisdictions, children from both public and private schools are eligible for SDS care. The care typically provided includes dental examinations, preventive services and restorative treatment as required. However, there are some variations among state and territory programs with respect to priority age groups and the nature of services. For example, in some states, caries risk assessment is used to determine recall interval and preventive treatment, while other states do not use caries risk assessment. Consequently, there are variations in the extent of enrolments in each SDS, with some jurisdictions serving more than 80% of primary school children and others serving smaller proportions.

In the 2005–06 collection, results from Victoria were excluded due to lack of access to the data. New South Wales was excluded from the data collection in these 2 years due to a lack of representativeness of the sample. Children are only seen in the New South Wales public dental service if they have been identified as having treatment needs such as having decay,

meaning that the oral health of these children does not represent the oral health of the entire child population of New South Wales, many of whom do not have treatment needs.

## **Sampling procedure and weighting**

The target population for the CDHS is children attending school dental services operated by each of the states and territories. Data are collected from a random sample of children attending these services for some states. Data from South Australia is collected in full enumeration. Results for New South Wales and Victoria are not reported here.

# **National Survey of Adult Oral Health**

## **Purpose**

The purpose of this collection was to provide a descriptive ‘snapshot’ of oral health in the adult population of Australia. The findings were intended to provide up-to-date evidence that could contribute to the development of oral health policies and programs in Australia.

## **Data collection**

Information was collected using interviews and standardised dental examinations that were conducted among a sample of residents aged 15 years or older.

Self-reported information about oral health and characteristics associated with it was obtained through telephone interviews.

Information about clinical oral status was collected during standardised dental examinations conducted by dentists who undertook training in the survey procedures. Examinations were limited to people who reported having some of their own natural teeth at the time of the interview. Examining dentists followed a standardised protocol to record levels of tooth loss, dental decay experience, tooth wear and – for participants with no medical contraindications to periodontal probing – signs of gum disease.

## **Sampling procedure and weighting**

A three-stage stratified clustered sampling design was used to select people from the target population of Australian residents aged 15 years or older:

- Postcodes were sampled at random from capital city and non-capital city strata in six states and the Northern Territory, and from a single stratum in the Australian Capital Territory. Postcodes represented the geographical clustering in the design and were selected with probability proportional to size, where size was defined as the number of households listed in the ‘electronic white pages’ (EWP) in each postcode.
- A systematic sample of households listed in the EWP was selected for each sampled postcode. Thirty households per metropolitan postcode and 40 households per non-metropolitan postcode were selected.

- One person aged 15 or older was randomly selected per household. In households with only one person aged 15 or older, that person was selected. In other households, telephone interviewers asked for the name of the person aged 15 or older who most recently had had a birthday and the name of the person aged 15 or older who would have the next birthday.

Data were weighted to compensate for individuals' different probabilities of selection and survey participation rates. For the telephone interview survey, weights were adjusted to ensure that survey estimates were consistent with the 2005 Australian Bureau of Statistics (ABS) estimated resident population (ERP) data. For the oral examination survey, which was restricted to dentate people aged 15 and over, estimates of the dentate population were derived from the telephone interview survey and used to derive examination weights.

## 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.

### Data collection

Data were collected from a random sample of persons across Australia via telephone interview. The AIHW Dental Statistics and Research Unit (DSRU) was responsible for the selection and management of the data collection phase. Experienced interviewers conducted telephone interviews using computer-assisted telephone interview software. Data collected included measures of self-reported oral health status, use of and access to dental services, social impact of oral health, financial burden of dental care, and dental insurance.

### Sampling procedure and weighting

The 2010 NDTIS involved a random sample of Australian residents aged 5 and over in all states and territories. The sample was selected using a two-stage stratified design. The first stage of selection involved selecting an initial sample of people aged 18 and over from the Commonwealth electoral roll by the Australian Electoral Commission (AEC). Electoral roll records do not contain telephone numbers, so the records were matched against the Sensis® *MacroMatch* database (which uses the same source data as other Sensis® products such as EWP and White Pages Online) to append a residential telephone number. Records from the AEC sample that matched to EWP by surname and address and returned a telephone number (either landline or mobile number) formed the basis of the 2010 NDTIS sampling frame. Households listed on this frame were stratified by state and region (metropolitan/non-metropolitan) and a systematic sample of households was selected from within each stratum. Once telephone contact was made with a selected household, the second stage of selection involved randomly selecting one person aged 5 or over from the household.

Data were weighted to account for a person's probability of selection, which was based on the stratum they were assigned to and the number of persons resident in their household who were eligible for selection. Data were further adjusted to reflect the age by sex ERP estimates produced by the ABS.

## **Dental Labour Force Collection**

### **Purpose**

The main purpose of the Dental Labour Force Collection is to provide national labour force statistics on registered dentists, dental therapists, dental hygienists and dental prosthetists. Monitoring the dental labour force over time enables appropriate planning and informed decision-making by all involved in the dental profession. In addition, survey data have enabled the projection of growth in the Australian dental labour force and modelling of the future capacity of the dental labour force to supply dental visits.

### **Data collection**

The data collected were part of a national data set agreed by the Australian Health Minister's Advisory Council to facilitate appropriate health planning and administration. A questionnaire was included with the annual re-registration form sent to dental practitioners by each state and territory dental board.

Data collected from participants included practising status, hours worked, area and type of practice, specialty area and geographical location. Dental boards provided demographic characteristics, place and year of initial qualification, and year of first registration.

### **Sampling procedure and weighting**

All dental practitioners registered with state and territory dental boards in 2006 received a mailed-out questionnaire or access to an online questionnaire. Data were weighted to adjust for non-response using dental board registration figures.

## **National Hospital Morbidity Database**

The National Hospital Morbidity Database (NHMD) is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals. The database contains data relating to admitted patients in almost all hospitals, including public acute hospitals, public psychiatric hospitals, private acute hospitals, private psychiatric hospitals and private free-standing day hospital facilities. Public sector hospitals that are not included are those not within the jurisdiction of a state or territory health authority (for example, hospitals operated by the Department of Defence or correctional authorities and hospitals located in offshore territories).

The data supplied are based on the National Minimum Data Set for Admitted Patient Care and include demographic, administrative and length of stay data, as well as data on the diagnoses of the patients, the procedures they underwent in hospital and external causes of injury and poisoning.

Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.

Data on diagnoses are recorded uniformly using the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) 6th edition (NCCH 2008).

Detailed information relating to the NHMD can be found in the report *Australian hospitals statistics 2009–10* (AIHW 2011a).

## Appendix B: Confidence intervals for estimates

**Table B.2.1: Deciduous and permanent dentition: percentage of children with dmft + DMFT > 0 by age, children attending a school dental service, 2006 (95% confidence intervals)**

|                 | Age (years)  |              |              |              |              |              |              |              |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                 | 5            | 6            | 7            | 8            | 9            | 10           | 11           | 12           |
| dmft + DMFT > 0 | (39.8, 42.2) | (62.2, 63.4) | (60.7, 62.6) | (66.1, 68.0) | (61.0, 62.9) | (57.9, 60.0) | (61.7, 63.6) | (53.1, 54.9) |

Source: Child Dental Health Survey, 2006.

**Table B.2.2: Deciduous dentition: average dmft by age, children attending a school dental service, 2006 (95% confidence intervals)**

| Age (years) | Decayed teeth (d) | Missing teeth (m) | Filled teeth (f) | dmft         |
|-------------|-------------------|-------------------|------------------|--------------|
|             | 95% CI            | 95% CI            | 95% CI           | 95% CI       |
| 4           | (1.20, 1.31)      | (0.03, 0.05)      | (0.60, 0.70)     | (1.85, 2.03) |
| 5           | (1.00, 1.09)      | (0.09, 0.13)      | (0.46, 0.53)     | (1.58, 1.71) |
| 6           | (1.60, 1.70)      | (0.03, 0.04)      | (0.76, 0.82)     | (2.41, 2.53) |
| 7           | (0.86, 0.93)      | (0.05, 0.07)      | (1.40, 1.50)     | (2.35, 2.46) |
| 8           | (0.82, 0.88)      | (0.05, 0.07)      | (1.21, 1.29)     | (2.10, 2.20) |
| 9           | (0.50, 0.54)      | (0.10, 0.14)      | (1.18, 1.25)     | (1.80, 1.91) |
| 10          | (0.39, 0.43)      | (0.01, 0.02)      | (0.78, 0.84)     | (1.20, 1.28) |

Source: Child Dental Health Survey, 2006.

**Table B.2.3: Deciduous dentition: percentage of children with dmft > 0 by age, children attending a school dental service, 2006 (95% confidence intervals)**

|          | Age (years)  |              |              |              |              |              |              |
|----------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|          | 4            | 5            | 6            | 7            | 8            | 9            | 10           |
| dmft > 0 | (39.6, 42.8) | (39.2, 41.6) | (60.6, 62.2) | (56.5, 58.5) | (60.5, 62.5) | (53.7, 55.6) | (43.6, 45.8) |

**Table B.2.4: Permanent dentition: average DMFT by age, children attending a school dental service, 2006 (95% confidence intervals)**

|                    | <b>Decayed (D)</b> | <b>Missing (M)</b> | <b>Filled (F)</b> | <b>DMFT</b>         |
|--------------------|--------------------|--------------------|-------------------|---------------------|
| <b>Age (years)</b> | <b>95% CI</b>      | <b>95% CI</b>      | <b>95% CI</b>     | <b>95% CI</b>       |
| 5                  | (0.01, 0.02)       | —                  | (0.00, 0.02)      | <b>(0.02, 0.04)</b> |
| 6                  | (0.08, 0.10)       | —                  | (0.05, 0.06)      | <b>(0.14, 0.16)</b> |
| 7                  | (0.32, 0.35)       | —                  | (0.12, 0.15)      | <b>(0.45, 0.49)</b> |
| 8                  | (0.23, 0.26)       | (0.00, 0.01)       | (0.12, 0.14)      | <b>(0.36, 0.39)</b> |
| 9                  | (0.20, 0.23)       | (0.01, 0.01)       | (0.25, 0.29)      | <b>(0.47, 0.52)</b> |
| 10                 | (0.22, 0.24)       | (0.05, 0.06)       | (0.29, 0.33)      | <b>(0.57, 0.62)</b> |
| 11                 | (0.42, 0.46)       | (0.06, 0.08)       | (0.66, 0.72)      | <b>(1.16, 1.24)</b> |
| 12                 | (0.56, 0.61)       | (0.05, 0.07)       | (0.58, 0.63)      | <b>(1.20, 1.28)</b> |
| 13                 | (0.50, 0.56)       | (0.05, 0.09)       | (0.60, 0.66)      | <b>(1.18, 1.28)</b> |
| 14                 | (0.55, 0.62)       | (0.06, 0.09)       | (1.02, 1.11)      | <b>(1.66, 1.80)</b> |
| 15                 | (0.71, 0.81)       | (0.08, 0.13)       | (1.09, 1.19)      | <b>(1.93, 2.09)</b> |

— Nil or rounded to zero.

**Table B.2.5: Permanent dentition: percentage of children with DMFT > 0 by age, children attending a school dental service, 2006 (95% confidence intervals)**

|                    | <b>DMFT &gt; 0</b> |
|--------------------|--------------------|
| <b>Age (years)</b> | <b>95% CI</b>      |
| 5                  | (1.1, 1.7)         |
| 6                  | (9.4, 10.4)        |
| 7                  | (20.8, 22.4)       |
| 8                  | (20.9, 22.7)       |
| 9                  | (26.0, 27.8)       |
| 10                 | (28.8, 30.8)       |
| 11                 | (45.9, 48.0)       |
| 12                 | (46.7, 48.5)       |
| 13                 | (49.6, 52.3)       |
| 14                 | (52.2, 54.9)       |
| 15                 | (56.4, 59.6)       |

**Table B.2.6: Average DMFT by age, dentate persons aged 15 and over, 2004–2006 (95% confidence intervals)**

| Age (years)        |               | Decayed (D)         | Missing (M)         | Filled (F)          | DMFT                  |
|--------------------|---------------|---------------------|---------------------|---------------------|-----------------------|
| 15–24              | 95% CI        | (0.42, 0.82)        | (0.37, 0.82)        | (1.42, 2.50)        | <b>(2.43, 3.91)</b>   |
| 25–44              | 95% CI        | (0.60, 0.87)        | (1.35, 1.74)        | (5.70, 6.40)        | <b>(7.89, 8.78)</b>   |
| 45–64              | 95% CI        | (0.41, 0.60)        | (6.91, 7.64)        | (11.71, 12.42)      | <b>(19.50, 20.18)</b> |
| 65+                | 95% CI        | (0.35, 0.53)        | (12.25, 13.45)      | (9.87, 10.94)       | <b>(23.32, 24.08)</b> |
| <b>All persons</b> | <b>95% CI</b> | <b>(0.54, 0.68)</b> | <b>(4.31, 4.80)</b> | <b>(7.40, 7.99)</b> | <b>(12.41, 13.30)</b> |

**Table B.2.7: Average DMFT by sex, remoteness area and dental insurance status, dentate persons aged 15 and over, 2004–2006 (95% confidence intervals)**

|                                     |        | Decayed (D)  | Missing (M)   | Filled (F)   | DMFT                  |
|-------------------------------------|--------|--------------|---------------|--------------|-----------------------|
| <b>Sex</b>                          |        |              |               |              |                       |
| Male                                | 95% CI | (0.60, 0.81) | (4.14, 4.80)  | (6.80, 7.69) | <b>(11.76, 13.08)</b> |
| Female                              | 95% CI | (0.43, 0.59) | (4.32, 4.95)  | (7.77, 8.52) | <b>(12.72, 13.86)</b> |
| <b>Remoteness area</b>              |        |              |               |              |                       |
| Major cities                        | 95% CI | (0.47, 0.62) | (3.87, 4.45)  | (7.25, 7.97) | <b>(11.77, 12.85)</b> |
| Inner regional                      | 95% CI | (0.57, 0.99) | (5.30, 6.31)  | (7.54, 8.80) | <b>(13.91, 15.60)</b> |
| Outer regional                      | 95% CI | (0.48, 0.88) | (4.10, 5.86)  | (6.58, 8.22) | <b>(11.63, 14.49)</b> |
| Remote/Very remote                  | 95% CI | (0.69, 1.25) | (2.37, 4.99)  | (5.75, 7.08) | <b>(9.55, 12.58)</b>  |
| <b>Dental insurance status</b>      |        |              |               |              |                       |
| Insured                             | 95% CI | (0.31, 0.45) | (3.85, 4.49)  | (8.54, 9.45) | <b>(12.91, 14.18)</b> |
| Uninsured                           | 95% CI | (0.69, 0.93) | (4.68, 5.40)  | (6.45, 7.13) | <b>(12.08, 13.21)</b> |
| <b>Annual household income (\$)</b> |        |              |               |              |                       |
| <12,000                             | 95% CI | (0.52, 1.60) | (9.72, 12.32) | (6.70, 8.63) | <b>(18.33, 21.15)</b> |
| 12,000–<20,000                      | 95% CI | (0.67, 1.10) | (8.65, 10.52) | (7.33, 8.64) | <b>(17.37, 19.53)</b> |
| 20,000–<30,000                      | 95% CI | (0.40, 0.70) | (6.38, 8.03)  | (7.57, 9.14) | <b>(14.83, 17.40)</b> |
| 30,000–<40,000                      | 95% CI | (0.53, 1.05) | (4.47, 5.88)  | (7.72, 9.19) | <b>(13.36, 15.47)</b> |
| 40,000–<60,000                      | 95% CI | (0.55, 0.80) | (3.55, 4.40)  | (7.61, 8.84) | <b>(12.01, 13.74)</b> |
| 60,000–<80,000                      | 95% CI | (0.36, 0.65) | (2.46, 3.19)  | (6.86, 8.27) | <b>(9.93, 11.84)</b>  |
| 80,000–<100,000                     | 95% CI | (0.27, 0.55) | (2.48, 3.66)  | (7.27, 8.95) | <b>(10.42, 12.76)</b> |
| 100,000+                            | 95% CI | (0.23, 0.62) | (2.28, 3.01)  | (7.00, 8.55) | <b>(9.88, 11.80)</b>  |

**Table B.2.8: Percentage of persons with untreated decay by age, dentate persons aged 15 and over, 2004–2006 (95% confidence intervals)**

|                      |        | Age (years)  |              |              |              | All persons         |
|----------------------|--------|--------------|--------------|--------------|--------------|---------------------|
|                      |        | 15–24        | 25–44        | 45–64        | 65+          |                     |
| With untreated decay | 95% CI | (18.8, 30.0) | (25.3, 31.6) | (21.4, 26.3) | (18.6, 24.9) | <b>(23.6, 27.3)</b> |

**Table B.2.9: Percentage of persons with untreated decay by sex, remoteness area and dental insurance status, dentate persons aged 15 and over, 2004–2006 (95% confidence intervals)**

|                      |        | Sex          |              | Remoteness area |                |                |                        | Dental insurance status |              |
|----------------------|--------|--------------|--------------|-----------------|----------------|----------------|------------------------|-------------------------|--------------|
|                      |        | Male         | Female       | Major cities    | Inner regional | Outer regional | Remote/<br>Very remote | Insured                 | Uninsured    |
| With untreated decay | 95% CI | (25.4, 31.0) | (20.4, 24.9) | (21.3, 25.8)    | (25.4, 34.2)   | (25.0, 35.7)   | (33.2, 42.0)           | (16.8, 22.0)            | (28.5, 33.8) |

**Table B.2.10: Percentage of persons with untreated decay by income group, dentate persons aged 15 and over, 2004–2006 (95% confidence intervals)**

|                      |        | Annual household income (\$) |                    |                    |                    |                    |                    |                     |
|----------------------|--------|------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
|                      |        | <12,000                      | 12,000–<br><20,000 | 20,000–<br><30,000 | 30,000–<br><40,000 | 40,000–<br><60,000 | 60,000–<br><80,000 | 80,000–<br>100,000+ |
| With untreated decay | 95% CI | (28.1, 42.6)                 | (30.1, 40.2)       | (18.8, 28.5)       | (23.1, 34.7)       | (26.8, 35.1)       | (18.2, 26.5)       | (15.8, 28.7)        |
|                      |        | (11.6, 21.3)                 |                    |                    |                    |                    |                    |                     |

**Table B.2.11: Prevalence of deep periodontal pocket, clinical attachment loss and periodontal disease by age, dentate persons aged 15 and over, 2004–2006 (95% confidence intervals)**

|                       |        | Age (years) |              |              |              | All persons  |
|-----------------------|--------|-------------|--------------|--------------|--------------|--------------|
|                       |        | 15–24       | 25–44        | 45–64        | 65+          |              |
| Deep pocket 4+ mm     | 95% CI | (4.4, 12.3) | (17.2, 23.2) | (22.5, 28.3) | (18.4, 27.0) | (17.8, 21.7) |
| Attachment loss 4+ mm | 95% CI | (5.9, 15.0) | (28.0, 34.9) | (62.1, 68.3) | (73.4, 81.4) | (40.1, 44.9) |
| Periodontal disease   | 95% CI | (0.7, 4.7)  | (12.7, 17.9) | (32.3, 28.4) | (49.1, 57.8) | (21.2, 24.6) |

**Table B.2.12: Prevalence of deep periodontal pocket, clinical attachment loss and periodontal disease by sex, remoteness area and dental insurance status, dentate persons aged 15 and over, 2004–2006 (95% confidence intervals)**

|                       |        | Sex          |              | Remoteness area |                |                |                        | Dental insurance status |              |
|-----------------------|--------|--------------|--------------|-----------------|----------------|----------------|------------------------|-------------------------|--------------|
|                       |        | Male         | Female       | Major cities    | Inner regional | Outer regional | Remote/<br>Very remote | Insured                 | Uninsured    |
| Deep pocket 4+ mm     | 95% CI | (19.8, 25.8) | (14.8, 18.5) | (17.8, 22.3)    | (11.6, 19.0)   | (18.7, 33.7)   | (38.8, 52.9)           | (15.9, 20.8)            | (19.1, 24.4) |
| Attachment loss 4+ mm | 95% CI | (42.7, 50.5) | (35.7, 40.8) | (38.1, 43.5)    | (39.2, 51.0)   | (41.0, 56.6)   | (43.9, 67.1)           | (38.7, 45.4)            | (41.1, 47.1) |
| Periodontal disease   | 95% CI | (24.0, 29.5) | (17.1, 20.9) | (20.1, 24.1)    | (19.5, 26.5)   | (21.6, 35.4)   | (27.7, 45.0)           | (17.2, 21.6)            | (24.6, 29.4) |

**Table B.2.13: Prevalence of deep periodontal pocket, clinical attachment loss and periodontal disease by annual household income, dentate persons aged 15 and over, 2004–2006 (95% confidence intervals)**

|                       |        | Annual household income (\$) |                    |                    |                    |                    |                    |                     |              |
|-----------------------|--------|------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------|
|                       |        | <12,000                      | 12,000–<br><20,000 | 20,000–<br><30,000 | 30,000–<br><40,000 | 40,000–<br><60,000 | 60,000–<br><80,000 | 80,000–<br><100,000 | 100,000+     |
| Deep pocket 4+ mm     | 95% CI | (15.0, 26.3)                 | (20.0, 31.6)       | (19.0, 29.6)       | (16.8, 26.4)       | (16.8, 24.2)       | (17.1, 26.5)       | (9.6, 18.0)         | (14.8, 24.4) |
| Attachment loss 4+ mm | 95% CI | (52.9, 69.0)                 | (57.1, 69.3)       | (46.7, 59.8)       | (38.9, 50.4)       | (39.5, 48.4)       | (33.4, 44.8)       | (26.3, 38.4)        | (32.8, 44.6) |
| Periodontal disease   | 95% CI | (34.3, 50.3)                 | (34.9, 47.1)       | (26.2, 37.5)       | (21.8, 31.8)       | (21.0, 28.6)       | (15.8, 23.7)       | (10.7, 19.7)        | (10.6, 18.0) |

**Table B.2.14: Percentage of edentulous persons by age and sex, persons aged 15 and over, 2010 (95% confidence intervals)**

|                   |        | Sex          |              | All persons  |
|-------------------|--------|--------------|--------------|--------------|
| Age group (years) |        | Male         | Female       |              |
| 15–24             | 95% CI | —            | —            | —            |
| 25–44             | 95% CI | (0.0, 0.2)   | (0.0, 0.6)   | (0.0, 0.3)   |
| 45–64             | 95% CI | (3.4, 6.5)   | (4.5, 7.7)   | (4.4, 6.6)   |
| 65+               | 95% CI | (12.3, 20.7) | (20.3, 29.6) | (17.9, 24.3) |
| All persons       | 95% CI | (3.2, 4.9)   | (5.3, 7.4)   | (4.5, 5.9)   |

— Nil or rounded to zero.

**Table B.2.15: Percentage of persons wearing dentures by age, dentate adults aged 15 and over, 2010 (95% confidence intervals)**

|               |        | Age (years) |            |              |              | All persons  |
|---------------|--------|-------------|------------|--------------|--------------|--------------|
|               |        | 15–24       | 25–44      | 45–64        | 65+          |              |
| With dentures | 95% CI | (0.1, 1.6)  | (1.6, 3.3) | (14.4, 18.0) | (43.2, 51.6) | (12.2, 14.3) |

**Table B.2.16: Average number of missing teeth by age and sex, dentate persons aged 15 and over, 2010 (95% confidence intervals)**

|                   |        | Sex          |              | All persons  |
|-------------------|--------|--------------|--------------|--------------|
| Age group (years) |        | Male         | Female       |              |
| 15–24             | 95% CI | (1.5, 2.2)   | (2.2, 2.9)   | (2, 2.5)     |
| 25–44             | 95% CI | (2.6, 3.1)   | (3.4, 3.9)   | (3.1, 3.5)   |
| 45–64             | 95% CI | (5.1, 6.1)   | (5.9, 6.7)   | (5.7, 6.3)   |
| 65+               | 95% CI | (10.1, 12.5) | (11.5, 13.4) | (11.1, 12.7) |
| All persons       | 95% CI | (4.5, 5.1)   | (5.4, 6.0)   | (5.1, 5.5)   |

**Table B.2.17: Average number of missing teeth by annual household income, dental insurance status and region, dentate persons aged 15 and over, 2010 (95% confidence intervals)**

|                        |        | Annual household income (\$) |                |                |                |                |                |                 |            | All persons |
|------------------------|--------|------------------------------|----------------|----------------|----------------|----------------|----------------|-----------------|------------|-------------|
|                        |        | <12,000                      | 12,000–<20,000 | 20,000–<30,000 | 30,000–<40,000 | 40,000–<60,000 | 60,000–<80,000 | 80,000–<100,000 | 100,000+   |             |
| Insurance status       |        |                              |                |                |                |                |                |                 |            |             |
| Insured                |        |                              |                |                |                |                |                |                 |            |             |
| Major cities           | 95% CI | (4.0, 8.0)                   | (5.2, 9.2)     | (6.7, 10.7)    | (4.7, 8.1)     | (3.9, 5.3)     | (4.2, 5.6)     | (3.3, 4.6)      | (3.2, 3.8) | (4.2, 4.6)  |
| Inner regional         | 95% CI | (0.3, 3.5)                   | (6.1, 12.8)    | (8.3, 15.2)    | (3.6, 9.7)     | (4.3, 7.9)     | (3.5, 5.8)     | (2.9, 4.3)      | (3.7, 5.0) | (5.0, 6.2)  |
| Outer regional         | 95% CI | (0.3, 14.0)                  | (7.5, 16.5)    | (6.3, 9.8)     | (4.2, 11.7)    | (4.0, 15.0)    | (3.3, 5.7)     | (3.1, 6.0)      | (3.2, 4.7) | (4.8, 6.6)  |
| Remote/<br>Very remote | 95% CI | ..                           | (6.5, 8.5)     | (3.9, 30.2)    | (3.2, 4.3)     | (2.5, 15.0)    | (3.6, 5.9)     | (2.4, 3.8)      | (2.5, 5.0) | (3.4, 6.7)  |
| All insured            | 95% CI | (3.4, 6.8)                   | (6.3, 9.7)     | (8.0, 11.4)    | (5.1, 8.0)     | (4.6, 6.1)     | (4.2, 5.4)     | (3.4, 4.4)      | (3.4, 3.9) | (4.5, 4.9)  |
| Uninsured              |        |                              |                |                |                |                |                |                 |            |             |
| Major cities           | 95% CI | (5.6, 12.1)                  | (6.7, 10.5)    | (8.2, 11.8)    | (5.1, 9.2)     | (4.8, 7.2)     | (3, 4.8)       | (2.1, 4.5)      | (3, 4.3)   | (5.3, 6.3)  |
| Inner regional         | 95% CI | (9.3, 20.6)                  | (8.0, 13.6)    | (9.3, 13.9)    | (3.2, 8.9)     | (4.1, 6.1)     | (2.9, 4.5)     | (2.7, 5.0)      | (2.0, 3.8) | (5.9, 7.4)  |
| Outer regional         | 95% CI | (4.5, 22.8)                  | (5.7, 12.5)    | (7.4, 16.0)    | (5.2, 10.5)    | (2.3, 7.0)     | (3.3, 6.4)     | (3.1, 7.5)      | (3.1, 5.0) | (5.6, 7.7)  |
| Remote/<br>Very remote | 95% CI | ..                           | (7.6, 16.5)    | (1.1, 18.6)    | (3.1, 6.3)     | (0.4, 20.3)    | (3.0, 21.1)    | (0.0, 5.9)      | (2.9, 4.8) | (4.5, 13.0) |
| All uninsured          |        | (8.1, 14.0)                  | (7.9, 10.8)    | (9.3, 12.0)    | (5.4, 8.4)     | (4.9, 6.7)     | (3.3, 4.7)     | (2.8, 4.5)      | (3.0, 4.0) | (5.8, 6.6)  |
| All persons            |        |                              |                |                |                |                |                |                 |            |             |
| Major cities           | 95% CI | (5.7, 10.3)                  | (6.7, 9.6)     | (8.2, 11.0)    | (5.4, 8.2)     | (4.6, 6.1)     | (3.9, 5.1)     | (3.2, 4.3)      | (3.3, 3.8) | (4.7, 5.2)  |
| Inner regional         | 95% CI | (6.5, 16.3)                  | (8.2, 12.8)    | (9.7, 13.6)    | (4.1, 8.4)     | (4.5, 6.5)     | (3.4, 4.7)     | (3.1, 4.3)      | (3.4, 4.5) | (5.7, 6.6)  |
| Outer regional         | 95% CI | (4.7, 18.5)                  | (6.7, 12.5)    | (7.5, 13.8)    | (5.7, 10.0)    | (3.7, 8.9)     | (3.7, 5.6)     | (3.6, 6.2)      | (3.4, 4.6) | (5.5, 6.9)  |
| Remote/<br>Very remote | 95% CI | ..                           | (6.7, 12.7)    | (4.6, 19.7)    | (3.2, 6.1)     | (2.9, 16.8)    | (2.3, 13.7)    | (2.2, 3.9)      | (2.8, 4.7) | (4.5, 8.9)  |
| All regions            | 95% CI | (6.6, 11.0)                  | (7.8, 10.1)    | (9.2, 11.4)    | (5.6, 7.8)     | (5.0, 6.2)     | (4.0, 4.9)     | (3.4, 4.3)      | (3.4, 3.8) | (5.1, 5.6)  |

.. Not applicable.

**Table B.2.18: Percentage of persons who experienced toothache in previous 12 months by age, dentate persons aged 15 and over, 2010 (95% confidence intervals)**

|                      |        | Age (years)  |              |              |             | All persons         |
|----------------------|--------|--------------|--------------|--------------|-------------|---------------------|
|                      |        | 15–24        | 25–44        | 45–64        | 65+         |                     |
| Toothache experience | 95% CI | (13.3, 19.5) | (14.7, 19.6) | (12.2, 15.5) | (7.2, 12.9) | <b>(13.8, 16.3)</b> |

**Table B.2.19: Percentage of persons uncomfortable about their dental appearance in previous 12 months by age and dentate status, persons aged 15 and over, 2010 (95% confidence intervals)**

|                   |               | Dentate status      |                     | All persons         |
|-------------------|---------------|---------------------|---------------------|---------------------|
| Age group (years) |               | Dentate             | Edentulous          |                     |
| 15–24             | 95% CI        | (14.1, 23.2)        | —                   | <b>(14.1, 23.2)</b> |
| 25–44             | 95% CI        | (22.2, 28.3)        | (31.1, 100.0)       | <b>(22.3, 28.3)</b> |
| 45–64             | 95% CI        | (26.4, 31.1)        | (19.0, 40.2)        | <b>(26.5, 31.1)</b> |
| 65+               | 95% CI        | (20.1, 28.0)        | (5.9, 16.6)         | <b>(18.0, 24.7)</b> |
| <b>Total</b>      | <b>95% CI</b> | <b>(23.7, 27.0)</b> | <b>(12.7, 23.2)</b> | <b>(23.4, 26.6)</b> |

**Table B.2.20: Percentage of persons who avoided certain foods in previous 12 months by age and dentate status, persons aged 15 and over, 2010 (95% confidence intervals)**

|              |               | Dentate status      |                     | All persons         |
|--------------|---------------|---------------------|---------------------|---------------------|
| Age (years)  |               | Dentate             | Edentulous          |                     |
| 15–24        | 95% CI        | (9.8, 14.5)         | —                   | <b>(9.8, 14.5)</b>  |
| 25–44        | 95% CI        | (12.7, 17.4)        | (31.1, 100.0)       | <b>(12.8, 17.5)</b> |
| 45–64        | 95% CI        | (17.8, 21.6)        | (30.0, 51.0)        | <b>(18.9, 22.8)</b> |
| 65+          | 95% CI        | (15.7, 23.0)        | (17.4, 32.6)        | <b>(17.3, 23.8)</b> |
| <b>Total</b> | <b>95% CI</b> | <b>(15.3, 17.8)</b> | <b>(24.4, 36.8)</b> | <b>(16.0, 18.5)</b> |

— Nil or rounded to zero.

**Table B.4.1: Time since last dental visit by age and sex, dentate persons aged 5 and over, 2010 (95% confidence intervals)**

|                    |               | Time since last visit |                     |                    |                        |
|--------------------|---------------|-----------------------|---------------------|--------------------|------------------------|
|                    |               | <12 months            | 1–<2 years          | 2–<5 years         | 5+ years (incl. never) |
| <b>Sex</b>         |               |                       |                     |                    |                        |
| Male               | 95% CI        | (58.4, 62.8)          | (17.0, 20.3)        | (9.8, 13.0)        | (8.2, 10.9)            |
| Female             | 95% CI        | (65.4, 69.4)          | (14.8, 18)          | (8.7, 11.2)        | (5.4, 7.5)             |
| <b>Age (years)</b> |               |                       |                     |                    |                        |
| 5–14               | 95% CI        | (75.4, 80.4)          | (11.1, 15.4)        | (1.8, 3.6)         | (5.0, 8.0)             |
| 15–24              | 95% CI        | (59.9, 67.7)          | (15.0, 21.0)        | (10.1, 16.2)       | (3.7, 7.9)             |
| 25–44              | 95% CI        | (54.0, 60.3)          | (18.0, 23.1)        | (11.1, 15.6)       | (7.5, 11.3)            |
| 45–64              | 95% CI        | (61.2, 66.0)          | (16.5, 20.4)        | (9.2, 12.5)        | (6.0, 8.7)             |
| 65+                | 95% CI        | (62.8, 70.8)          | (9.8, 15.2)         | (7.5, 12.6)        | (8.5, 14.4)            |
| <b>All persons</b> | <b>95% CI</b> | <b>(62.5, 65.5)</b>   | <b>(16.3, 18.7)</b> | <b>(9.6, 11.7)</b> | <b>(7.1, 8.8)</b>      |

**Table B.4.2: Time since last dental visit by annual household income, dentate persons aged 18 and over, 2010 (95% confidence intervals)**

| Annual household income (\$) |               | Time since last visit |                     |                    |                        |
|------------------------------|---------------|-----------------------|---------------------|--------------------|------------------------|
|                              |               | <12 months            | 1–<2 years          | 2–<5 years         | 5+ years (incl. never) |
| <12,000                      | 95% CI        | (35.5, 64.1)          | (8.3, 27.9)         | (6.2, 28.3)        | (9.6, 38.5)            |
| 12,000–<20,000               | 95% CI        | (48.8, 62.1)          | (10.7, 19.5)        | (8.4, 16.8)        | (13.0, 24.0)           |
| 20,000–<30,000               | 95% CI        | (50.6, 61.9)          | (12.5, 20.4)        | (12.4, 22.2)       | (8.0, 14.6)            |
| 30,000–<40,000               | 95% CI        | (46.6, 60.6)          | (16.6, 28.3)        | (10.3, 19.7)       | (5.8, 16.7)            |
| 40,000–<60,000               | 95% CI        | (52.7, 61.7)          | (15.2, 21.7)        | (10.7, 17.2)       | (8.0, 14.7)            |
| 60,000–<80,000               | 95% CI        | (57.5, 66.7)          | (16.9, 25.4)        | (8.5, 14.5)        | (4.2, 8.0)             |
| 80,000–<100,000              | 95% CI        | (56.9, 66.4)          | (16.9, 25.4)        | (8.4, 14.5)        | (4.3, 9.1)             |
| 100,000+                     | 95% CI        | (63.8, 69.7)          | (15.3, 19.9)        | (8.4, 12.9)        | (4.1, 6.7)             |
| <b>All persons</b>           | <b>95% CI</b> | <b>(62.5, 65.5)</b>   | <b>(16.3, 18.7)</b> | <b>(9.6, 11.7)</b> | <b>(7.1, 8.8)</b>      |

**Table B.4.3: Time since last dental visit by remoteness area, dentate persons aged 18 and over, 2010 (95% confidence intervals)**

| Remoteness area    |               | Time since last visit |                     |                    |                        |
|--------------------|---------------|-----------------------|---------------------|--------------------|------------------------|
|                    |               | <12 months            | 1–<2 years          | 2–<5 years         | 5+ years (incl. never) |
| Major cities       | 95% CI        | (61.6, 65.8)          | (16.1, 19.4)        | (9.5, 12.3)        | (6.6, 9.1)             |
| Inner regional     | 95% CI        | (53.5, 60.0)          | (16.5, 21.6)        | (12.0, 17.1)       | (8.2, 12.2)            |
| Outer regional     | 95% CI        | (52.6, 62.1)          | (16.4, 24.0)        | (11.8, 20.1)       | (5.3, 9.6)             |
| Remote/Very remote | 95% CI        | (46.2, 67.3)          | (14.5, 33.4)        | (6.1, 23.0)        | (4.5, 14.5)            |
| <b>All persons</b> | <b>95% CI</b> | <b>(62.5, 65.5)</b>   | <b>(16.3, 18.7)</b> | <b>(9.6, 11.7)</b> | <b>(7.1, 8.8)</b>      |

**Table B.4.4: Time since last dental visit by dental insurance status, dentate persons aged 18 and over, 2010 (95% confidence intervals)**

| Insurance status   |               | Time since last visit |                     |                    |                        |
|--------------------|---------------|-----------------------|---------------------|--------------------|------------------------|
|                    |               | <12 months            | 1–<2 years          | 2–<5 years         | 5+ years (incl. never) |
| Insured            | 95% CI        | (69.7, 73.9)          | (14.6, 18.1)        | (6.6, 9.2)         | (3.2, 5.2)             |
| Uninsured          | 95% CI        | (47.0, 52.1)          | (18.7, 22.8)        | (14.7, 18.7)       | (11.5, 15.1)           |
| <b>All persons</b> | <b>95% CI</b> | <b>(62.5, 65.5)</b>   | <b>(16.3, 18.7)</b> | <b>(9.6, 11.7)</b> | <b>(7.1, 8.8)</b>      |

**Table B.4.5: Reason for last dental visit by age group, dentate persons aged 5 and over, 2010 (95% confidence intervals)**

| Age (years)        |               | Reason for last visit |                     |
|--------------------|---------------|-----------------------|---------------------|
|                    |               | Check-up              | Problem             |
| 5–14               | 95% CI        | (80.8, 85.4)          | (14.6, 19.2)        |
| 15–24              | 95% CI        | (77.0, 83.2)          | (16.8, 23.0)        |
| 25–44              | 95% CI        | (57.6, 64.5)          | (35.5, 42.4)        |
| 45–64              | 95% CI        | (50.8, 56.1)          | (43.9, 49.2)        |
| 65+                | 95% CI        | (51.3, 60.6)          | (39.4, 48.7)        |
| <b>All persons</b> | <b>95% CI</b> | <b>(63.6, 66.7)</b>   | <b>(33.3, 36.4)</b> |

**Table B.4.6: Reason for last dental visit by household income, dentate persons aged 5 and over, 2010 (95% confidence intervals)**

| Annual household income (\$) |               | Reason for last visit |                     |
|------------------------------|---------------|-----------------------|---------------------|
|                              |               | Check-up              | Problem             |
| <12,000                      | 95% CI        | (48.9, 75.0)          | (25.0, 51.1)        |
| 12,000–<20,000               | 95% CI        | (45.6, 60.3)          | (39.7, 54.4)        |
| 20,000–<30,000               | 95% CI        | (45.8, 57.5)          | (42.5, 54.2)        |
| 30,000–<40,000               | 95% CI        | (44.0, 57.8)          | (42.2, 56.0)        |
| 40,000–<60,000               | 95% CI        | (57.4, 66.2)          | (33.8, 42.6)        |
| 60,000–<80,000               | 95% CI        | (56.9, 65.3)          | (34.7, 43.1)        |
| 80,000–<100,000              | 95% CI        | (67.8, 75.5)          | (24.5, 32.2)        |
| 100,000+                     | 95% CI        | (69.7, 74.7)          | (25.3, 30.3)        |
| <b>All persons</b>           | <b>95% CI</b> | <b>(63.6, 66.7)</b>   | <b>(33.3, 36.4)</b> |

**Table B.4.7: Reason for last dental visit by remoteness area, dentate persons aged 5 and over, 2010 (95% confidence intervals)**

| Remoteness         |               | Reason for last visit |                     |
|--------------------|---------------|-----------------------|---------------------|
|                    |               | Check-up              | Problem             |
| Major cities       | 95% CI        | (64.8, 68.7)          | (31.3, 35.2)        |
| Inner regional     | 95% CI        | (59.2, 65.3)          | (34.7, 40.8)        |
| Outer regional     | 95% CI        | (53.6, 62.5)          | (37.5, 46.4)        |
| Remote/Very remote | 95% CI        | (51.4, 71.5)          | (28.5, 48.6)        |
| <b>All persons</b> | <b>95% CI</b> | <b>(63.6, 66.7)</b>   | <b>(33.3, 36.4)</b> |

**Table B.4.8: Reason for last dental visit by dental insurance status, dentate persons aged 5 and over, 2010 (95% confidence intervals)**

| Insurance status   |               | Reason for last visit |                     |
|--------------------|---------------|-----------------------|---------------------|
|                    |               | Check-up              | Problem             |
| Insured            | 95% CI        | (68.4, 72.1)          | (27.9, 31.6)        |
| Uninsured          | 95% CI        | (54.5, 59.6)          | (40.4, 45.5)        |
| <b>All persons</b> | <b>95% CI</b> | <b>(63.6, 66.7)</b>   | <b>(33.3, 36.4)</b> |

**Table B.4.9: Type of practice visited at last dental visit by age, dentate persons aged 5 and over who visited in last 12 months, 2010 (95% confidence intervals)**

| Age (years)        |               | Type of practice visited at last dental visit |                   |                   |                   |
|--------------------|---------------|-----------------------------------------------|-------------------|-------------------|-------------------|
|                    |               | Private                                       | Public            | SDS               | Other             |
| 5–14               | 95% CI        | (65.2, 71.1)                                  | (7.0, 10.7)       | (20.3, 25.6)      | (0.1, 0.7)        |
| 15–24              | 95% CI        | (85.0, 90.1)                                  | (4.2, 8.0)        | (3.8, 6.9)        | (0.6, 2.7)        |
| 25–44              | 95% CI        | (92.7, 96.0)                                  | (2.8, 5.6)        | ..                | (0.8, 2.6)        |
| 45–64              | 95% CI        | (94.0, 96.4)                                  | (2.9, 5.0)        | ..                | (0.4, 1.8)        |
| 65+                | 95% CI        | (83.7, 91.2)                                  | (8.4, 15.9)       | ..                | (0.2, 1.4)        |
| <b>All persons</b> | <b>95% CI</b> | <b>(87.3, 89.3)</b>                           | <b>(5.2, 6.8)</b> | <b>(4.2, 5.4)</b> | <b>(0.6, 1.4)</b> |

.. Not applicable.

Source: National Dental Telephone Interview Survey, NDTIS 2010.

**Table B.4.10: Type of practice visited at last dental visit by household, dentate persons aged 5 and over who visited in last 12 months, 2010 (95% confidence intervals)**

| Annual household income (\$) |               | Type of practice visited at last dental visit |                   |                   |                   |
|------------------------------|---------------|-----------------------------------------------|-------------------|-------------------|-------------------|
|                              |               | Private                                       | Public            | SDS               | Other             |
| <12,000                      | 95% CI        | (69.7, 92.3)                                  | (5.0, 25.7)       | (1.1, 14.9)       | —                 |
| 12,000–<20,000               | 95% CI        | (56.2, 72.5)                                  | (21.1, 36.8)      | (3.6, 12.1)       | (0.0, 2.0)        |
| 20,000–<30,000               | 95% CI        | (71.7, 82.6)                                  | (12.4, 22.5)      | (2.7, 7.3)        | (0.3, 3.5)        |
| 30,000–<40,000               | 95% CI        | (73.9, 85.0)                                  | (10.2, 20.1)      | (2.7, 7.6)        | (0.2, 3.8)        |
| 40,000–<60,000               | 95% CI        | (85.6, 91.0)                                  | (3.2, 6.6)        | (4.6, 8.7)        | (0.1, 1.4)        |
| 60,000–<80,000               | 95% CI        | (84.5, 90.0)                                  | (2.6, 5.9)        | (5.4, 9.2)        | (0.6, 3.6)        |
| 80,000–<100,000              | 95% CI        | (87.2, 91.9)                                  | (2.2, 5.0)        | (4.5, 8.0)        | (0.4, 2.1)        |
| 100,000+                     | 95% CI        | (93.0, 95.2)                                  | (0.9, 2.0)        | (2.8, 4.2)        | (0.6, 2.1)        |
| <b>All persons</b>           | <b>95% CI</b> | <b>(87.3, 89.3)</b>                           | <b>(5.2, 6.8)</b> | <b>(4.2, 5.4)</b> | <b>(0.6, 1.4)</b> |

**Table B.4.11: Type of practice visited at last dental visit by remoteness area, dentate persons aged 5 and over who visited in last 12 months, 2010 (95% confidence intervals)**

| Remoteness area    |               | Type of practice visited at last dental visit |                   |                   |                   |
|--------------------|---------------|-----------------------------------------------|-------------------|-------------------|-------------------|
|                    |               | Private                                       | Public            | SDS               | Other             |
| Major cities       | 95% CI        | (89.6, 91.9)                                  | (4.2, 6.1)        | (2.7, 3.9)        | (0.5, 1.4)        |
| Inner regional     | 95% CI        | (81.1, 86.3)                                  | (6.4, 10.7)       | (5.3, 8.4)        | (0.6, 2.5)        |
| Outer regional     | 95% CI        | (75.9, 83.5)                                  | (6.4, 11.5)       | (7.8, 13.6)       | (0.6, 2.1)        |
| Remote/Very remote | 95% CI        | (61.0, 80.0)                                  | (3.5, 11.0)       | (13.5, 31.5)      | (0.5, 2.7)        |
| <b>All persons</b> | <b>95% CI</b> | <b>(87.3, 89.3)</b>                           | <b>(5.2, 6.8)</b> | <b>(4.2, 5.4)</b> | <b>(0.6, 1.4)</b> |

**Table B.4.12: Type of practice visited at last dental visit by dental insurance status, dentate persons aged 5 and over who visited in last 12 months, 2010 (95% confidence intervals)**

| Insurance status   |               | Type of practice visited at last dental visit |                   |                   |                   |
|--------------------|---------------|-----------------------------------------------|-------------------|-------------------|-------------------|
|                    |               | Private                                       | Public            | SDS               | Other             |
| Insured            | 95% CI        | (94.1, 95.6)                                  | (1.3, 2.3)        | (2.3, 3.3)        | (0.3, 1.1)        |
| Uninsured          | 95% CI        | (74.3, 79)                                    | (11.6, 15.5)      | (7, 9.7)          | (1, 2.5)          |
| <b>All persons</b> | <b>95% CI</b> | <b>(87.3, 89.3)</b>                           | <b>(5.2, 6.8)</b> | <b>(4.2, 5.4)</b> | <b>(0.6, 1.4)</b> |

**Table B.4.13: Dental visiting pattern by age and sex, all dentate adults aged 18 and over, 2010 (95% confidence intervals)**

|                    |               | Dental visiting pattern |                     |                     |
|--------------------|---------------|-------------------------|---------------------|---------------------|
|                    |               | Favourable              | Intermediate        | Unfavourable        |
| <b>Sex</b>         |               |                         |                     |                     |
| Male               | 95% CI        | (42.6, 47.9)            | (33.1, 38.3)        | (17.0, 21.4)        |
| Female             | 95% CI        | (51.0, 55.9)            | (28.7, 33.2)        | (14.0, 17.6)        |
| <b>Age (years)</b> |               |                         |                     |                     |
| 18–24              | 95% CI        | (43.0, 53.5)            | (34.5, 44.8)        | (9.0, 16.5)         |
| 25–44              | 95% CI        | (43.1, 49.7)            | (31.5, 37.9)        | (16.5, 21.7)        |
| 45–64              | 95% CI        | (48.0, 53.1)            | (29.5, 34.3)        | (15.6, 19.8)        |
| 65+                | 95% CI        | (52.1, 61.0)            | (22.5, 30.4)        | (13.9, 20.9)        |
| <b>All persons</b> | <b>95% CI</b> | <b>(47.6, 51.3)</b>     | <b>(31.5, 35.0)</b> | <b>(16.0, 18.8)</b> |

**Table B.4.14: Dental visiting pattern by household income, dentate adults aged 18 and over, 2010 (95% confidence intervals)**

| Annual household income (\$) |               | Dental visiting pattern |                     |                     |
|------------------------------|---------------|-------------------------|---------------------|---------------------|
|                              |               | Favourable              | Intermediate        | Unfavourable        |
| <12,000                      | 95% CI        | (22.7, 50.2)            | (24.2, 53.3)        | (15.0, 44.0)        |
| 12,000–<20,000               | 95% CI        | (30.7, 45.3)            | (26.6, 40.7)        | (22.6, 36.3)        |
| 20,000–<30,000               | 95% CI        | (32.9, 45.2)            | (28.6, 40.4)        | (21.5, 33.0)        |
| 30,000–<40,000               | 95% CI        | (29.6, 44.6)            | (35.2, 49.9)        | (15.6, 27.3)        |
| 40,000–<60,000               | 95% CI        | (40.1, 49.6)            | (29.5, 38.7)        | (17.1, 26.0)        |
| 60,000–<80,000               | 95% CI        | (43.2, 53.2)            | (31.2, 40.9)        | (12.8, 19.6)        |
| 80,000–<100,000              | 95% CI        | (46.6, 57.1)            | (28.2, 38.5)        | (11.7, 19.0)        |
| 100,000+                     | 95% CI        | (55.8, 62.4)            | (26.4, 32.7)        | (9.4, 13.7)         |
| <b>All persons</b>           | <b>95% CI</b> | <b>(47.6, 51.3)</b>     | <b>(31.5, 35.0)</b> | <b>(16.0, 18.8)</b> |

**Table B.4.15: Dental visiting pattern by remoteness area, dentate adults aged 18 and over, 2010 (95% confidence intervals)**

| Remoteness area    |               | Dental visiting pattern |                     |                     |
|--------------------|---------------|-------------------------|---------------------|---------------------|
|                    |               | Favourable              | Intermediate        | Unfavourable        |
| Major cities       | 95% CI        | (50.3, 54.9)            | (30.2, 34.6)        | (13.4, 16.7)        |
| Inner regional     | 95% CI        | (40.7, 47.7)            | (30.2, 36.8)        | (19.3, 25.9)        |
| Outer regional     | 95% CI        | (31.8, 41.3)            | (33.3, 43.2)        | (20.8, 30.8)        |
| Remote/Very remote | 95% CI        | (24.5, 44.9)            | (35.1, 58.5)        | (12.6, 28.6)        |
| <b>All persons</b> | <b>95% CI</b> | <b>(47.6, 51.3)</b>     | <b>(31.5, 35.0)</b> | <b>(16.0, 18.8)</b> |

**Table B.4.16: Dental visiting pattern by dental insurance status, dentate adults aged 18 and over, 2010 (95% confidence intervals)**

| Insurance status |               | Dental visiting pattern |                     |                     |
|------------------|---------------|-------------------------|---------------------|---------------------|
|                  |               | Favourable              | Intermediate        | Unfavourable        |
| Insured          | 95% CI        | (60.5, 65.1)            | (25.8, 30.1)        | (8.0, 10.7)         |
| Uninsured        | 95% CI        | (28.6, 33.7)            | (37.5, 43.1)        | (26.0, 31.4)        |
| <b>Total</b>     | <b>95% CI</b> | <b>(47.6, 51.3)</b>     | <b>(31.5, 35.0)</b> | <b>(16.0, 18.8)</b> |

**Table B.4.17: Dental services received in last 12 months by age and sex, dentate persons aged 5 and over who visited in previous 12 months, 2010 (95% confidence intervals)**

|                    |               | Number of visits   | Extraction(s)      | Filling(s)         | Scale and clean    |
|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|
| <b>Sex</b>         |               |                    |                    |                    |                    |
| Male               | 95% CI        | (2.19,2.40)        | (0.21,0.31)        | (0.64,0.82)        | (0.82,0.97)        |
| Female             | 95% CI        | (2.30,2.48)        | (0.19,0.27)        | (0.60,0.73)        | (0.94,1.02)        |
| <b>Age (years)</b> |               |                    |                    |                    |                    |
| 5–14               | 95% CI        | (2.17, 2.44)       | (0.16, 0.25)       | (0.37, 0.50)       | (0.66, 0.80)       |
| 15–24              | 95% CI        | (2.43, 2.83)       | (0.19, 0.32)       | (0.38, 0.56)       | (0.83, 1.01)       |
| 25–44              | 95% CI        | (2.00, 2.27)       | (0.18, 0.32)       | (0.65, 0.95)       | (0.82, 1.03)       |
| 45–64              | 95% CI        | (2.22, 2.43)       | (0.16, 0.26)       | (0.76, 0.93)       | (1.00, 1.09)       |
| 65+                | 95% CI        | (2.33, 2.77)       | (0.21, 0.52)       | (0.68, 0.92)       | (0.98, 1.15)       |
| <b>All persons</b> | <b>95% CI</b> | <b>(2.28,2.41)</b> | <b>(0.21,0.28)</b> | <b>(0.64,0.75)</b> | <b>(0.90,0.98)</b> |

**Table B.4.18: Dental services received in previous 12 months by annual household income, dentate persons aged 5 and over who visited in previous 12 months, 2010 (95% confidence intervals)**

| Annual household income (\$) |               | Number of visits   | Extraction(s)      | Filling(s)         | Scale and clean    |
|------------------------------|---------------|--------------------|--------------------|--------------------|--------------------|
| <12,000                      | 95% CI        | (1.54, 2.48)       | (0.03, 0.28)       | (0.31, 1.52)       | (0.49, 1.03)       |
| 12,000–<20,000               | 95% CI        | (2.27, 3.18)       | (0.21, 0.50)       | (0.58, 0.95)       | (0.77, 1.05)       |
| 20,000–<30,000               | 95% CI        | (2.18, 2.65)       | (0.17, 0.46)       | (0.68, 1.06)       | (0.68, 0.93)       |
| 30,000–<40,000               | 95% CI        | (2.29, 2.93)       | (0.13, 0.56)       | (0.74, 1.32)       | (0.77, 1.00)       |
| 40,000–<60,000               | 95% CI        | (2.21, 2.62)       | (0.15, 0.32)       | (0.74, 1.24)       | (0.60, 1.02)       |
| 60,000–<80,000               | 95% CI        | (2.06, 2.44)       | (0.15, 0.26)       | (0.54, 0.78)       | (0.79, 0.98)       |
| 80,000–<100,000              | 95% CI        | (1.97, 2.25)       | (0.11, 0.23)       | (0.46, 0.65)       | (0.85, 0.98)       |
| 100,000+                     | 95% CI        | (2.26, 2.48)       | (0.18, 0.29)       | (0.49, 0.64)       | (1.01, 1.11)       |
| <b>All persons</b>           | <b>95% CI</b> | <b>(2.28,2.41)</b> | <b>(0.21,0.28)</b> | <b>(0.64,0.75)</b> | <b>(0.90,0.98)</b> |

**Table B.4.19: Dental services received in previous 12 months by remoteness area, dentate persons aged 5 and over who visited in previous 12 months, 2010 (95% confidence intervals)**

| Remoteness area    |               | Number of visits   | Extraction(s)      | Filling(s)         | Scale and clean    |
|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|
| Major cities       | 95% CI        | (2.28, 2.45)       | (0.18, 0.25)       | (0.60, 0.73)       | (0.96, 1.06)       |
| Inner regional     | 95% CI        | (2.13, 2.40)       | (0.21, 0.33)       | (0.63, 0.90)       | (0.74, 0.85)       |
| Outer regional     | 95% CI        | (2.14, 2.54)       | (0.24, 0.56)       | (0.66, 1.03)       | (0.68, 0.84)       |
| Remote/Very remote | 95% CI        | (1.94, 2.83)       | (0.09, 1.39)       | (0.34, 0.72)       | (0.14, 0.93)       |
| <b>All persons</b> | <b>95% CI</b> | <b>(2.28,2.41)</b> | <b>(0.21,0.28)</b> | <b>(0.64,0.75)</b> | <b>(0.90,0.98)</b> |

**Table B.4.20: Dental services received in previous 12 months by dental insurance status, dentate persons aged 5 and over who visited in previous 12 months, 2010 (95% confidence intervals)**

| Insurance status   |               | Number of visits   | Extraction(s)      | Filling(s)         | Scale and clean    |
|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|
| Insured            | 95% CI        | (2.29, 2.45)       | (0.17, 0.25)       | (0.56, 0.69)       | (1.06, 1.13)       |
| Uninsured          | 95% CI        | (2.20, 2.44)       | (0.26, 0.37)       | (0.73, 0.93)       | (0.59, 0.77)       |
| <b>All persons</b> | <b>95% CI</b> | <b>(2.28,2.41)</b> | <b>(0.21,0.28)</b> | <b>(0.64,0.75)</b> | <b>(0.90,0.98)</b> |

**Table B.4.21: Percentage of children with fissure-sealed teeth by DMFT status and age, children attending a school dental service, 2006 (95% confidence intervals)**

|          |        | Age (years) |             |              |              |              |              |              |              |              |              |
|----------|--------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|          |        | 6           | 7           | 8            | 9            | 10           | 11           | 12           | 13           | 14           | 15           |
| DMFT = 0 | 95% CI | (0.9, 6.1)  | (5.9, 9.3)  | (11.1, 24.7) | (12.4, 21.6) | (16.3, 23.1) | (15.5, 22.2) | (9.0, 22.4)  | (15.2, 33.2) | (7.8, 47.7)  | (10.9, 20.7) |
| DMFT > 0 | 95%CI  | (9.2, 63.3) | (6.6, 43.5) | (15.6, 26.9) | (18.0, 40.8) | (21.2, 35.1) | (20.0, 42.5) | (24.4, 53.0) | (32.1, 55.4) | (19.8, 45.1) | (21.5, 35.0) |

**Table B.4.22: Average number of fissure-sealed teeth by age, children attending a school dental service, 2006 (95% confidence intervals)**

|        |  | Age (years)  |              |              |              |              |              |              |              |              |              |
|--------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|        |  | 6            | 7            | 8            | 9            | 10           | 11           | 12           | 13           | 14           | 15           |
| 95% CI |  | (0.15, 0.17) | (0.27, 0.31) | (0.54, 0.60) | (0.55, 0.61) | (0.55, 0.61) | (0.57, 0.63) | (0.54, 0.60) | (0.85, 0.92) | (1.03, 1.14) | (0.63, 0.72) |

**Table B.5.1: Percentage of persons who avoided or delayed visiting a dentist due to cost, by age and household income, dentate persons aged 5 and over, 2010 (95% confidence intervals)**

| Annual household income (\$) |               | Age (years)         |                     |                     |                     |                     | All persons         |
|------------------------------|---------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                              |               | 5–14                | 15–24               | 25–44               | 45–64               | 65+                 |                     |
| <12,000                      | 95% CI        | (3.3, 55.0)         | (40.9, 100.0)       | (0.5, 42.4)         | (33.1, 75.8)        | (6.1, 53.9)         | <b>(27.3, 53.4)</b> |
| 12,000–<20,000               | 95% CI        | (13.7, 49.1)        | (24.9, 74.7)        | (26.3, 63.7)        | (44.8, 66.9)        | (18.3, 35.4)        | <b>(32.8, 45.2)</b> |
| 20,000–<30,000               | 95% CI        | (18.2, 43.0)        | (14.1, 50.0)        | (52.0, 82.1)        | (39.1, 57.4)        | (20.4, 35.2)        | <b>(34.1, 44.6)</b> |
| 30,000–<40,000               | 95% CI        | (6.9, 23.8)         | (11.6, 36.6)        | (32.3, 66.2)        | (40.4, 59.8)        | (10.3, 35.4)        | <b>(30.3, 43)</b>   |
| 40,000–<60,000               | 95% CI        | (12.9, 25.1)        | (21.9, 40.8)        | (49.5, 66.7)        | (30.4, 42.2)        | (3.4, 14.0)         | <b>(33.0, 41.1)</b> |
| 60,000–<80,000               | 95% CI        | (7.5, 17.7)         | (24.7, 47.1)        | (36.7, 52.9)        | (28.3, 40.7)        | (3.4, 25.5)         | <b>(29.8, 38.2)</b> |
| 80,000–<100,000              | 95% CI        | (6.7, 15.7)         | (12.5, 31.4)        | (26.5, 41.4)        | (18.4, 32.4)        | (0.0, 11.5)         | <b>(21.0, 28.6)</b> |
| 100,000+                     | 95% CI        | (4.7, 9.4)          | (12.7, 25.8)        | (19.5, 28.1)        | (10.3, 15.9)        | (0.0, 9.0)          | <b>(15.0, 19.4)</b> |
| <b>All persons</b>           | <b>95% CI</b> | <b>(11.8, 16.0)</b> | <b>(22.5, 29.8)</b> | <b>(33.9, 40.1)</b> | <b>(27.7, 32.3)</b> | <b>(16.4, 23.3)</b> | <b>(26.7, 29.6)</b> |

**Table B.5.2: Percentage of persons stating cost prevented recommended dental treatment, by age and household income, dentate persons aged 5 and over, 2010 (95% confidence intervals)**

| Annual household income (\$) |               | Age (years)       |                     |                     |                     |                     | All persons         |
|------------------------------|---------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                              |               | 5–14              | 15–24               | 25–44               | 45–64               | 65+                 |                     |
| <12,000                      | 95% CI        | (0.0, 3.2)        | (46.6, 100.0)       | (6.2, 75.6)         | (52.3, 96.9)        | (0.0, 29.2)         | <b>(24.0, 57.5)</b> |
| 12,000–<20,000               | 95% CI        | (0.0, 7.8)        | (0.4, 27.7)         | (19.8, 78.2)        | (31.4, 65.3)        | (12.7, 36.8)        | <b>(21.2, 38.4)</b> |
| 20,000–<30,000               | 95% CI        | (5.5, 31.4)       | (5.1, 47.9)         | (38.1, 85.3)        | (16.1, 34.6)        | (9.6, 27.3)         | <b>(19.7, 31.5)</b> |
| 30,000–<40,000               | 95% CI        | (0.5, 11.1)       | (0.0, 17.0)         | (8.3, 51.7)         | (22.6, 44.8)        | (8.5, 39.4)         | <b>(16.1, 29.5)</b> |
| 40,000–<60,000               | 95% CI        | (3.3, 13.5)       | (13.7, 35.0)        | (21.0, 46.2)        | (20.9, 35.0)        | (2.6, 14.6)         | <b>(18.1, 27.2)</b> |
| 60,000–<80,000               | 95% CI        | (2.1, 9.8)        | (5.8, 19.2)         | (16.7, 34.0)        | (20.1, 33.9)        | (3.1, 28.7)         | <b>(15.7, 23.3)</b> |
| 80,000–<100,000              | 95% CI        | (0.8, 5.4)        | (5.2, 19.7)         | (18.2, 38.6)        | (16.5, 33.5)        | —                   | <b>(13.7, 22.4)</b> |
| 100,000+                     | 95% CI        | (1.6, 5.4)        | (4.7, 14.6)         | (12.8, 22.7)        | (12.0, 20.0)        | (0.0, 10.8)         | <b>(10.8, 15.4)</b> |
| <b>All persons</b>           | <b>95% CI</b> | <b>(3.8, 6.8)</b> | <b>(10.5, 16.4)</b> | <b>(20.9, 28.2)</b> | <b>(21.5, 26.9)</b> | <b>(11.4, 19.6)</b> | <b>(16.8, 19.8)</b> |

— Nil or rounded to zero.

**Table B.5.3: Percentage of persons who would have a lot of difficulty paying a \$150 dental bill, by age and household income, dentate persons aged 18 and over, 2010 (95% confidence intervals)**

| Annual household income (\$) |               | Age (years)         |                     |                     |                     | All persons         |
|------------------------------|---------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                              |               | 18–24               | 25–44               | 45–64               | 65+                 |                     |
| <12,000                      | 95% CI        | (0.0, 87.3)         | (0.3, 57.5)         | (25.9, 67.9)        | (7.7, 58.0)         | <b>(22.2, 51.0)</b> |
| 12,000–<20,000               | 95% CI        | (22.6, 95.2)        | (33.5, 71.4)        | (48.4, 69.8)        | (23.5, 42.3)        | <b>(38.2, 52.1)</b> |
| 20,000–<30,000               | 95% CI        | (37.3, 90.2)        | (21.9, 52.4)        | (37.9, 56.4)        | (19.1, 33.4)        | <b>(30.6, 42)</b>   |
| 30,000–<40,000               | 95% CI        | (22.1, 67.8)        | (21.5, 55.9)        | (23.7, 42.0)        | (8.6, 34.2)         | <b>(26.2, 41.2)</b> |
| 40,000–<60,000               | 95% CI        | (11.4, 33)          | (20.6, 36.3)        | (15.2, 25.5)        | (1.2, 8.2)          | <b>(17.5, 25.3)</b> |
| 60,000–<80,000               | 95% CI        | (12.3, 35.6)        | (12.1, 23.1)        | (9.4, 19.1)         | (0.0, 12.3)         | <b>(13.0, 19.8)</b> |
| 80,000–<100,000              | 95% CI        | (3.9, 20.2)         | (9.6, 22.7)         | (5.2, 13.3)         | (0.0, 19.2)         | <b>(9.2, 16.8)</b>  |
| 100,000+                     | 95% CI        | (13.8, 27.6)        | (3.8, 8.7)          | (1.2, 3.5)          | (0.0, 15.2)         | <b>(5.3, 8.5)</b>   |
| <b>All persons</b>           | <b>95% CI</b> | <b>(20.5, 29.4)</b> | <b>(15.2, 20.1)</b> | <b>(15.7, 19.6)</b> | <b>(16.3, 23.2)</b> | <b>(17.5, 20.4)</b> |

**Table B.6.1: Percentage of persons with dental insurance by age, persons aged 5 and over, 2010 (95% confidence intervals)**

| Insurance status |        | Age (years)  |              |              |              |              | All persons         |
|------------------|--------|--------------|--------------|--------------|--------------|--------------|---------------------|
|                  |        | 5–14         | 15–24        | 25–44        | 45–64        | 65+          |                     |
| Insured          | 95% CI | (50.4, 56.1) | (47.9, 55.6) | (51.4, 57.7) | (58.1, 62.8) | (38.8, 46.3) | <b>(52.4, 55.3)</b> |
| Uninsured        | 95% CI | (43.9, 49.6) | (44.4, 52.1) | (42.3, 48.6) | (37.2, 41.9) | (53.7, 61.2) | <b>(44.7, 47.6)</b> |

**Table B.6.2: Percentage of persons with dental insurance by dentate status, persons aged 15 and over, 2010 (95% confidence intervals)**

| Age (years)  |               | Dentate status      |                     | All persons         |
|--------------|---------------|---------------------|---------------------|---------------------|
|              |               | Dentate             | Edentulous          |                     |
| 15–24        | 95% CI        | (47.9, 55.6)        | ..                  | <b>(47.9, 55.6)</b> |
| 25–44        | 95% CI        | (51.5, 57.8)        | ..                  | <b>(51.4, 57.7)</b> |
| 45–64        | 95% CI        | (60.5, 65.3)        | (11.5, 25.8)        | <b>(58.1, 62.8)</b> |
| 65+          | 95% CI        | (43.1, 51.5)        | (17.1, 31.7)        | <b>(38.7, 46.2)</b> |
| <b>Total</b> | <b>95% CI</b> | <b>(54.0, 57.3)</b> | <b>(16.9, 27.7)</b> | <b>(52.3, 55.5)</b> |

.. Not applicable.

**Table B.6.3: Percentage of persons with dental insurance by sex, remoteness area and annual household income, dentate persons aged 15 and over, 2010 (95% confidence intervals)**

|                              |        | Remoteness area |                |                |                        |              |
|------------------------------|--------|-----------------|----------------|----------------|------------------------|--------------|
|                              |        | Major cities    | Inner regional | Outer regional | Remote/<br>Very remote | All persons  |
| Sex                          |        |                 |                |                |                        |              |
| Male                         | 95% CI | (55.8, 61.9)    | (41.5, 51.3)   | (37.0, 50.0)   | (40.3, 70.7)           | (52.6, 57.5) |
| Female                       | 95% CI | (56.7, 62.4)    | (43.6, 51.8)   | (42.7, 56.0)   | (40.1, 70.0)           | (54.1, 58.6) |
| Annual household income (\$) |        |                 |                |                |                        |              |
| <12,000                      | 95% CI | (13.6, 44.9)    | (6.9, 48.8)    | (4.1, 59.7)    | —                      | (17.6, 41.0) |
| 12,000—<20,000               | 95% CI | (22.7, 39.2)    | (13.6, 30.0)   | (5.5, 27.0)    | (2.7, 99.0)            | (21.4, 33.2) |
| 20,000—<30,000               | 95% CI | (24.2, 37.8)    | (19.9, 35.7)   | (14.9, 42.1)   | (0.6, 55.7)            | (24.9, 34.7) |
| 30,000—<40,000               | 95% CI | (29.1, 49.1)    | (29.3, 52.7)   | (18.7, 45.4)   | (0.0, 69.1)            | (31.8, 46.0) |
| 40,000—<60,000               | 95% CI | (39.8, 51.5)    | (33.1, 48.8)   | (24.9, 48.8)   | (6.8, 55.6)            | (39.1, 47.9) |
| 60,000—<80,000               | 95% CI | (53.1, 64.4)    | (31.0, 46.8)   | (36.9, 60.1)   | (21.4, 70.4)           | (49.0, 58.1) |
| 80,000—<100,000              | 95% CI | (61.7, 73.1)    | (51.5, 69.8)   | (37.4, 62.9)   | (57.8, 96.6)           | (60.0, 69.2) |
| 100,000+                     | 95% CI | (75.0, 81.0)    | (63.7, 76.6)   | (58.9, 81.7)   | (64.1, 88.7)           | (73.6, 78.9) |
| All persons                  | 95% CI | (57.1, 61.3)    | (43.8, 50.2)   | (41.7, 51.0)   | (44.6, 66.0)           | (54.0, 57.3) |

— Nil or rounded to zero.

**Table B.7.1: Percentage of persons with dental insurance who reported that health insurance paid all or some of the cost of their care by source of payment, persons aged 18 and over, 2010 (95% confidence intervals)**

|        | Paid all own expenses | Insurance paid some/patient paid some | Insurance paid all/patient paid none | Govt paid some/patient or insurance paid some | Govt paid all/patient paid none | Other payment option |
|--------|-----------------------|---------------------------------------|--------------------------------------|-----------------------------------------------|---------------------------------|----------------------|
| 95% CI | (8.1, 11.0)           | (76.6, 80.7)                          | (6.5, 9.3)                           | (1.3, 2.5)                                    | (1.2, 2.6)                      | (0.2, 1.0)           |

**Table B.7.2: Percentage of persons who reported that dental care caused a large financial burden by source of payment, insured persons aged 18 and over, 2010 (95% confidence intervals)**

|        | Paid all own expenses | Insurance paid some/ patient paid some | Insurance paid all/ patient paid none | Govt paid some/ patient or insurance paid some | Govt paid all/ patient paid none | Other payment option | All insured persons |
|--------|-----------------------|----------------------------------------|---------------------------------------|------------------------------------------------|----------------------------------|----------------------|---------------------|
| 95% CI | (9.1, 25.5)           | (6.9, 9.9)                             | (0.0, 2.8)                            | (3.7, 32.3)                                    | (0.0, 6.1)                       | (0.0, 46.2)          | (7.2, 10.0)         |

# Glossary

**Affordability of dental care:** Affordability difficulties encountered in purchasing dental services refer to those respondents who:

- have avoided or delayed visiting because of cost
- report that cost had prevented recommended dental treatment.

**Calculus:** A calcified deposit that forms on the teeth above or below the gum line.

**Care type:** The care type defines the overall nature of a clinical service provided to an admitted patient during an episode of care (admitted care), or the type of service provided by the hospital for boarders or posthumous organ procurement (other care).

**Caries:** Bacterial disease that causes the demineralisation and decay of teeth and can involve inflammation of the central dental pulp.

**Current prices:** The term 'current prices' refers to expenditures reported for a particular year, unadjusted for inflation. Changes in current price expenditures reflect changes in both price and volume.

**Decay:** Decay of the teeth caused by caries, and progressing to cavities in the enamel or cementum and the dentine.

**Deciduous dentition:** Primary (baby) teeth.

**Dental appearance:** Self-reported perception of dental appearance related to frequency of feeling uncomfortable with their dental appearance ('never' or 'hardly ever' compared with 'very often', 'often' or 'sometimes').

**Dental disease:** Dental decay or cavity resulting from dental caries.

**Dental hygienist:** Registered health practitioner who educates the community in the principles of preventive dentistry and motivates individuals to take responsibility for their own oral health; performs a restricted range of clinical services and works under the direction of a dentist, who is responsible for patient diagnosis and prescribes the treatment to be carried out by the hygienist.

**Dental prosthetist:** Registered health practitioner who is responsible for construction and fitting of dentures and sporting mouthguards; maintains, repairs and relines dentures either by direct consultation with a patient or by referral from a dentist.

**Dental therapist:** Registered health practitioner who undertakes promotion of oral health and dental health education; performs a restricted range of clinical services, predominantly on school-aged children.

**Dentate:** Having at least one natural tooth.

**Dentist:** Registered health practitioner who provides a range of preventive, diagnostic and restorative dental services.

**Dentition:** The set of teeth. A complete dentition comprises 32 adult teeth.

**dmft:** Deciduous decayed, missing (due to decay) and filled teeth.

**DMFT:** Permanent decayed, missing (due to decay) and filled teeth.

**Edentulism/edentulous:** Complete tooth loss; loss of all natural teeth.

**Endodontics:** The study, treatment and prevention of diseases of the pulp of teeth; a major part of treatment is root canal treatment.

**Favourable pattern of dental visiting:** Dental behaviour related to making regular dental visits for a check-up; deemed favourable because timely dental care may be less invasive.

**Fissure sealant:** A special varnish that seals pits and fissures in teeth to prevent cavities from developing.

**Food avoidance:** People who reported avoiding some foods 'very often', 'often' or 'sometimes' in the previous 12 months.

**Frequent visiting pattern:** Making a dental visit usually two or more times per year.

**Gingivitis:** Inflammation of the gums.

**Gum treatment:** Treatment for disease of the gums and other tissues that attach teeth to the jaws, also referred to as periodontal treatment.

**Hardship:** Hardship encountered in purchasing dental services refers to those respondents who reported that they:

- had a large financial burden caused by dental visits, or
- would have a lot of difficulty in paying a \$150 dental bill.

**Infrequent visiting pattern:** Usually making dental visits more than 2 years apart.

**Insurance status:** Dental care is not covered under Medicare, therefore people seeking cover can elect to carry private dental insurance.

**Malocclusion:** Imperfect alignment of teeth.

**Oral health:** Health of the mouth, tongue and oral cavity; the absence of active disease in the mouth.

**Orthodontics:** The branch of dentistry that is concerned with the growth and development of the face and jaws and the treatment of irregularities of the teeth.

**Periodontics:** The branch of dentistry that is concerned with the tissues that support and attach the teeth and the treatment and prevention of periodontal disease.

**Periodontitis:** Inflammation of the gums and deeper tissues in the tooth socket.

**Permanent dentition:** Adult teeth.

**Prevalence:** The proportion of people with a defined disease or characteristic within a defined population.

**Preventive services:** Refers to measures taken to prevent dental diseases; may include fluoride treatment, scale and clean services, dental sealants etc.

**Principal diagnosis:** The diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care.

**Private dental services:** Dental care provided by private practitioners to adults and children, usually self-funded by the recipient.

**Prosthodontics:** The branch of dentistry that is concerned with the provision of dentures, bridges and implant-retained prostheses.

**Public dental services:** State- or territory-funded dental care available to adults with low income or other forms of social disadvantage.

**Remoteness area:** Based on the Accessibility/Remoteness Index of Australia (ARIA), where the remoteness index value of a point is based on the physical road distance to the nearest town or service. These categories are: Major cities, Inner regional, Outer regional, Remote and Very remote. This report combines Remote and Very remote areas into one category 'Remote'.

**Separation:** A completed episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation).

**Separation rate:** The total number of completed episodes of care for admitted patients divided by the total number of persons in the population under study. Often presented as a rate per 1,000 or 10,000 members of a population.

**Unfavourable pattern of dental visiting:** Dental behaviour related to making irregular dental visits, usually in response to a dental problem; deemed unfavourable because problems that could have been treated in an effective and efficient manner may have deteriorated so that restorative treatments will be more extensive or may no longer be a viable option.

# References

- Armfield JM, Roberts-Thomson KF & Spencer 2003. The Child Dental Health Survey, Australia 1999: trends across the 1990s. Dental statistics and research series. Cat. no. DEN 95. Adelaide: The University of Adelaide.
- AHMAC (Australian Health Ministers' Advisory Council) 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.
- AIHW (Australian Institute of Health and Welfare) 2011a. Australian hospital statistics 2009–10. Health services series no. 40. Cat. no. HSE 107. Canberra: AIHW.
- AIHW 2011b. Health expenditure Australia 2009–10. Health and welfare expenditure series no. 46. Cat. no. HWE 55. Canberra: AIHW.
- AIHW Dental Statistics and Research Unit 2008a. Dentist labour force projections, 2005–2020. DSRU research report no. 43. Cat. no. DEN 189. Adelaide: AIHW.
- AIHW Dental Statistics and Research Unit 2008b. Projected demand for dental care to 2020. DSRU research report no. 42. Cat. no. DEN 190. Adelaide: AIHW.
- Balasubramanian M & Teusner DN 2011. Dentists, specialists and allied practitioners: the Australian dental labour force, 2006. Dental statistics and research series no. 53. Cat. no. DEN 202. Canberra: AIHW.
- Ellershaw AC & Spencer AJ 2011. Dental attendance patterns and oral health status. Dental statistics and research series no. 57. Cat. no. DEN 208. Canberra: AIHW.
- Harford JE, Ellershaw AC & Spencer AJ 2011. Trends in access to dental care among Australian adults 1994–2008. Dental statistics and research series no. 55. Cat. No. DEN 204. Canberra: AIHW.
- NCCH (National Centre for Classification in Health) 2008. The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), Australian Classification of Health Interventions (ACHI) and Australian Coding Standards (ACS), 6th edn. Sydney: University of Sydney.
- Page RC & Eke PI 2007. Case definitions for use in population-based surveillance of periodontitis. *Journal of Periodontology* 78:1387–99.
- Palmer JD, Anderson RJ & Downer MC 1984. Guidelines for prevalence estimates of dental caries. *Community Dental Health* 1:55–66.
- Roberts-Thomson KF & Do L 2007. Oral health status. In: Slade GD, Spencer AJ & Roberts-Thomson KF (eds). *Australia's dental generations: the National Survey of Adult Oral Health 2004–06*. Dental statistics and research series no. 34. Cat. no. DEN 165. Canberra: AIHW, 81–142.
- Slade GD, Spencer AJ & Roberts-Thomson KF (eds) 2007. *Australia's dental generations: the National Survey of Adult Oral Health 2004–06*. Dental statistics and research series no. 34. Cat. no. DEN 165. Canberra: AIHW.
- Teusner DN, Chrisopoulos S & Spencer AJ 2008. Projected demand and supply for dental visits in Australia: analysis of the impact of the changes in key inputs. *Dental Statistics and Research Series* no. 38. Cat. No. DEN 171. Canberra: AIHW.

UK (United Kingdom) Department of Health 1994. An oral health strategy for England. London: Department of Health.

WHO (World Health Organization) 1997. Oral health surveys – basic methods, 4th edn. Geneva: WHO.

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## Related publications

ABS (Australian Bureau of Statistics) 2008. Australian Standard Geographic Classification. Cat. no. 1216.0. Canberra: Commonwealth of Australia.

AIHW (Australian Institute of Health and Welfare) 2009. A picture of Australia's children 2009. Cat. no. PHE 112. Canberra: AIHW.

AIHW 2010. Australia's hospitals 2008–09 at a glance. Cat. no. HSE 89. Canberra: AIHW.

AIHW Dental Statistics and Research Unit 2008. Dental practice activity by geographic location. DSRU research report no. 40. Cat. no. DEN 187. Adelaide: AIHW.

ARCPOH (Australian Research Centre for Population Oral Health), Chrisopoulos S & Teusner DN 2008. Dentist labour force projections 2005–2020: the impact of new regional dental schools. Australian Dental Journal (Data Watch) 53(3):292–6.

Armfield JM & Spencer AJ 2008. Quarter of a century of change: caries experience in Australian children, 1977–2002. Australian Dental Journal 53(2):151–9.

Armfield JM, Spencer AJ & Brennan DS 2009. Dental health of Australia's teenagers and pre-teen children: the Child Dental Health Survey, Australia 2003–04. Dental statistics and research series no. 52. Cat. no. DEN 199. Canberra: AIHW.

Spencer AJ, Teusner DN, Carter KD & Brennan DS 2003. The dental labour force in Australia: the position and policy directions. Canberra: AIHW.

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