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AIHW Dental Statistics  
 and Research Unit  
 Research Report No. 39

**Oral health and access to  
 dental care by cardholder  
 and insurance groups**



THE UNIVERSITY  
 OF ADELAIDE  
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**T**his report investigates the impact of possession of government concession and dental insurance on the dental visiting patterns and self-reported oral health status of Australian adults. Data are presented on usual frequency of dental visits, usual reason for visiting a dentist, affordability of dental care, self-reported dental health status, toothache experience and dental treatment received.

**Data collection**

Data presented in this publication were sourced from the National Dental Telephone Interview Survey 2004–06. Dentate adults (i.e. adults with some natural teeth) aged 18 years or more were classified into four groups according to whether they had dental insurance cover and whether they were a government concession cardholder. Adults were classified as cardholders if they held either a Pensioner Concession Card or Commonwealth Health Care Card at the time of the survey. Sample sizes for each group were: insured cardholders (965), insured non-cardholders (4,998), uninsured cardholders (2,354) and uninsured non-cardholders (3,996). Data were weighted to account for a person’s probability of selection and to ensure that survey estimates were consistent with the 2005 age by sex distribution of the Australian population. Differences in survey estimates are described as statistically significant if the 95% confidence intervals for each estimate do not overlap.

**Cardholder and insurance status profile**

| <b>Table 1: Composition of cardholder and insurance groups</b> |                                   |                                       |                                     |   |
|--|-----------------------------------|---------------------------------------|-------------------------------------|---|
|  | <b>Insured<br/>cardholder (%)</b> | <b>Insured<br/>non-cardholder (%)</b> | <b>Uninsured<br/>cardholder (%)</b> | <b>Uninsured<br/>non-cardholder (%)</b> |
| <b>Age</b>   |                                   |                                       |                                     |   |
| 18–34 years  | 16.9                              | 29.2                                  | 26.1                                | 43.7                                    |
| 35–54 years  | 16.3                              | 48.7                                  | 26.9                                | 39.6                                    |
| 55–74 years  | 48.6                              | 20.1                                  | 32.9                                | 13.0                                    |
| 75+ years  | 18.1                              | 2.0                                   | 14.2                                | 3.7                                     |
| <b>Sex</b>   |                                   |                                       |                                     |   |
| Male   | 40.8                              | 48.6                                  | 44.6                                | 55.2                                    |
| Female   | 59.2                              | 51.4                                  | 55.4                                | 44.8                                    |
| <b>Work status</b>   |                                   |                                       |                                     |   |
| Employed full-time   | 8.3                               | 58.1                                  | 7.8                                 | 57.4                                    |
| Employed part-time   | 16.6                              | 23.3                                  | 18.3                                | 22.7                                    |
| Unemployed   | 7.5                               | 2.0                                   | 18.4                                | 2.6                                     |
| Retired  | 56.8                              | 8.4                                   | 38.7                                | 7.9                                     |
| Home duties  | 8.3                               | 6.8                                   | 12.5                                | 6.9                                     |
| Other  | 2.4                               | 1.4                                   | 4.3                                 | 2.5                                     |
| <b>Highest level of education</b>                              |                                   |                                       |                                     |   |
| Year 11 or less  | 29.0                              | 13.1                                  | 38.1                                | 19.1                                    |
| Year 12/Certificate/Diploma                                    | 25.3                              | 28.6                                  | 26.5                                | 29.6                                    |
| Trade/Apprenticeship/Teachers College or Nursing               | 20.0                              | 14.9                                  | 15.5                                | 19.1                                    |
| University degree or higher                                    | 20.9                              | 39.8                                  | 13.2                                | 28.4                                    |
| Other  | 4.9                               | 3.6                                   | 6.8                                 | 3.8                                     |

Insured cardholders had the oldest age profile, with 67% of persons in this group aged 55 years or more (Table 1). Both insured and uninsured cardholder groups had significantly older age profiles than the non-cardholder groups. Uninsured non-cardholders had the youngest age profile, with 44% of persons in this group aged 18–34 years.

Both cardholder groups comprised a higher percentage of females than males, particularly the insured cardholder group, which was 59% female.

Among cardholders, those with insurance were predominantly retirees (57%), followed by part-time workers (17%). Uninsured cardholders were also likely to be retired (39%) but were more likely to be unemployed (18%) than were insured cardholders (8%). The work profile of both non-cardholder groups was almost identical, with nearly 60% employed full-time and 23% employed part-time. Only 8% of adults in both non-cardholder groups were retired.

Insured non-cardholders were the most qualified group, with 40% obtaining university degrees, significantly higher than the other groups. Both cardholder groups were significantly more likely to comprise adults whose highest qualification level was Year 11 or less, particularly the uninsured cardholder group (38%).

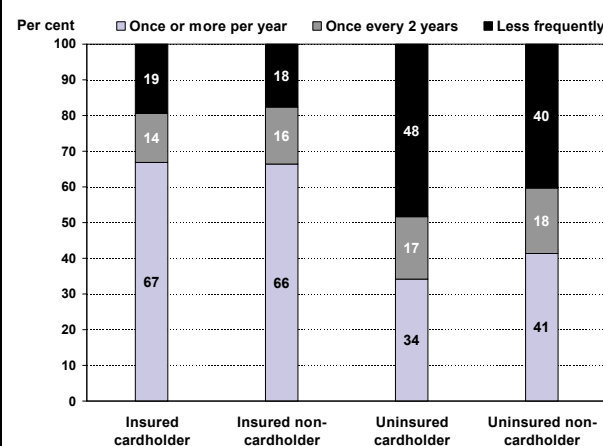
## Access to dental services

### Usual frequency of dental visits

Dentate adults were asked how often they usually visit the dentist. Responses were classified as ‘once or more a year’, ‘once every two years’ or ‘less frequently than once every two years’.

Dental visiting patterns were very similar among both insured groups, with approximately two in three insured adults usually visiting a dentist every year irrespective of their cardholder status (Figure 1). This was significantly higher than the prevalence for uninsured non-cardholders (41%) and uninsured cardholders (34%). Infrequent visiting was most prevalent among uninsured cardholders, with nearly half (48%) visiting less often than every two years.

**Figure 1: Usual frequency of dental visits – dentate adults aged 18+ years**



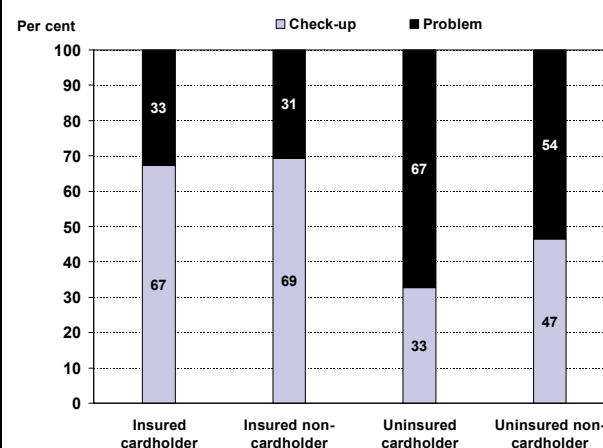
Source: National Dental Telephone Interview Survey 2004–06.

### Usual reason for dental visit

Uninsured adults were significantly more likely to usually visit a dentist for a problem than insured adults (Figure 2). Uninsured cardholders fared worst, with two in three (67%) usually visiting for a problem compared with one in two (54%) uninsured non-cardholders.

The prevalence of problem-oriented visiting was similar among both insured groups, with approximately one in three usually visiting a dentist for a problem.

**Figure 2: Usual reason for dental visit – dentate adults aged 18+ years**

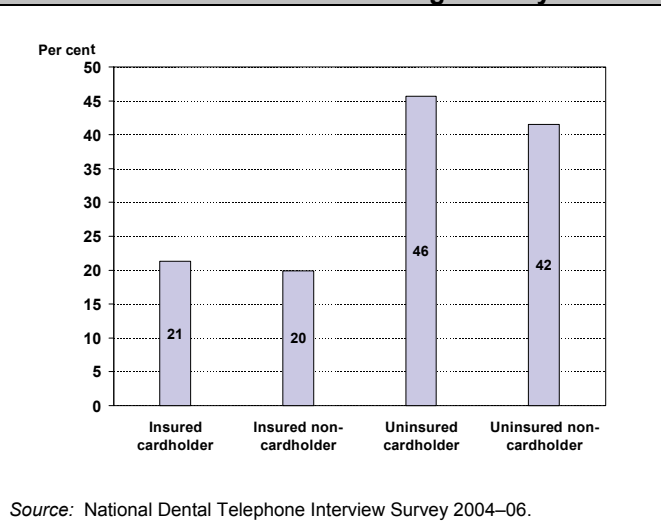


Source: National Dental Telephone Interview Survey 2004–06.

### Avoided or delayed dental care due to cost

Respondents were asked whether they had avoided or delayed dental care within the previous 12 months due to cost.

**Figure 3: Avoided or delayed dental care due to cost – dentate adults aged 18+ years**



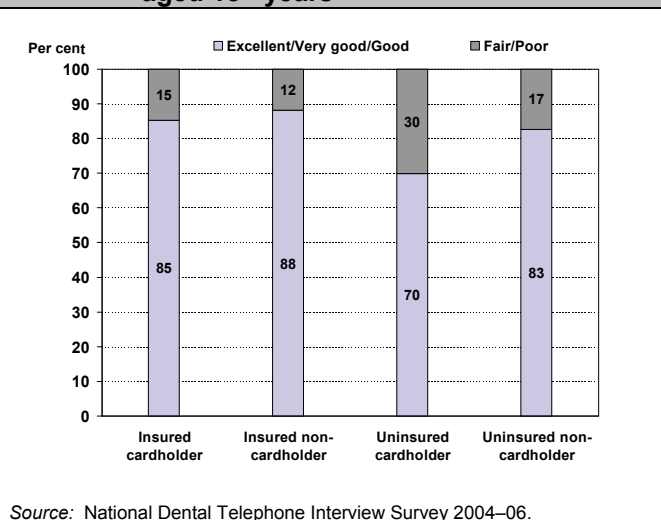
Uninsured adults were twice as likely as insured adults to report that they had avoided or delayed dental care due to cost (Figure 3). The percentage for uninsured cardholders (46%) was highest but was similar to the percentage for uninsured non-cardholders (42%).

### Oral health status

#### Self-reported dental health status

Respondents were asked to rate their dental health using a five-point scale ranging from 'excellent' to 'poor'. Response categories have been combined in Figure 4.

**Figure 4: Dental health rating – dentate adults aged 18+ years**

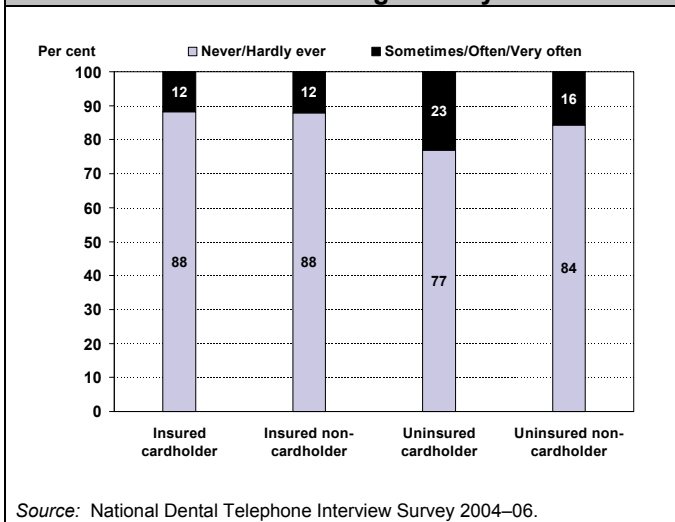


Uninsured cardholders were significantly more likely to rate their dental health as 'fair or poor' (30%) than other groups. Uninsured non-cardholders ranked second, with 17% rating their dental health as 'fair or poor', slightly higher than both insured groups.

#### Toothache experience

Respondents were asked how often they had experienced toothache in the previous 12 months using a five-point scale ranging from 'never' to 'very often'. Response categories have been combined in Figure 5.

**Figure 5: Toothache experience in the last year – dentate adults aged 18+ years**



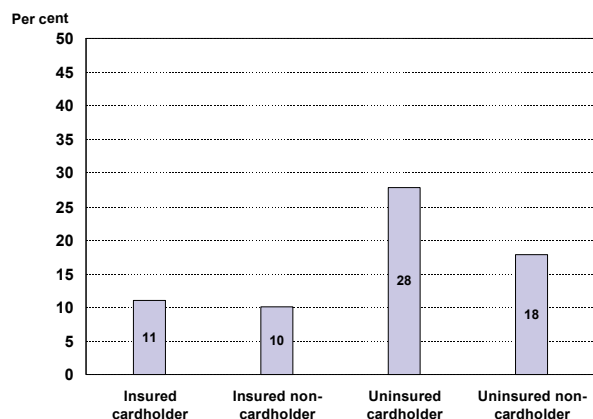
Uninsured cardholders were significantly more likely to report that they had experienced toothache than other groups. Nearly one in four (23%) uninsured cardholders had experienced toothache either 'sometimes, often or very often' within the previous 12 months. Toothache experience was lowest among the insured groups (12%).

### Dental treatment received

#### Received an extraction in previous 12 months

Of those adults who made a dental visit within the previous 12 months, 15% reported that they had received an extraction.

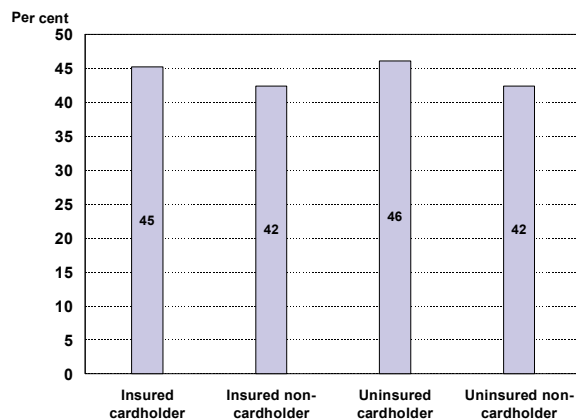
Uninsured cardholders had the highest extraction rate with nearly three in ten (28%) receiving an extraction (Figure 6). In comparison, only one in ten insured visitors received an extraction irrespective of their cardholder status. This was significantly lower than the prevalence for both uninsured groups.

**Figure 6: Received an extraction – dentate adults who visited in previous 12 months**

Source: National Dental Telephone Interview Survey 2004–06.

### Received a filling in previous 12 months

Of those adults who made a dental visit within the previous 12 months, 43% reported that they had received a filling. In contrast to extraction rates, the percentage of adults who received a filling was very similar across cardholder and insurance groups (Figure 7).

**Figure 7: Received a filling – dentate adults who visited in previous 12 months**

Source: National Dental Telephone Interview Survey 2004–06.

## Summary

Among Australian adults, more favourable patterns of dental attendance and better oral health were reported by those with dental insurance compared to the uninsured. Possession of a government concession card was associated with poorer outcomes for most indicators, but only among those without private dental insurance. Among the insured, the dental visiting patterns and oral health ratings of cardholders were very similar to those of

non-cardholders. Compared with non-cardholders, cardholders had an older age profile and lower socioeconomic status—differences that at first appearance might account for lower rates of dental attendance and poorer oral health. Yet, those same sociodemographic differences between concession card groups were observed for insured adults, where there were few, if any, differences in oral health indicators. The implication is that dental insurance diminishes differences between cardholders and non-cardholders in their dental attendance and oral health for reasons other than sociodemographic factors. Detailed findings include:

- Uninsured adults were significantly more likely than insured adults to visit the dentist infrequently and to usually visit for a problem. Uninsured cardholders fared worst with almost one in two visiting a dentist less often than once every two years, and two in three usually visiting for a problem.
- Both uninsured groups were twice as likely to report that they had avoided or delayed dental care due to cost compared to those with dental insurance.
- Uninsured cardholders were significantly more likely than the other groups to rate their dental health as 'poor or fair', to have experienced toothache and to have received an extraction within the previous 12 months.
- Extractions were also more prevalent among uninsured non-cardholders than both insured groups.

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*The AIHW Dental Statistics and Research Unit (DSRU) is a collaborating unit of the Australian Institute of Health and Welfare established in 1988 at The University of Adelaide, located in the Australian Research Centre for Population Oral Health (ARCPOH), School of Dentistry, The University of Adelaide. DSRU aims to improve the oral health of Australians through the collection, analysis and reporting of information on oral health and access to dental care, the practice of dentistry and the dental labour force in Australia.*

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