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Northern Territory

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Abbreviations

AAP	American Academy of Periodontology
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
ARCPOH	Australian Research Centre for Population Oral Health
CAL	clinical attachment loss
CATI	computer-assisted telephone interview
CDC	US Centers for Disease Control and Prevention
CEJ	cemento-enamel junction
DMFT	number of decayed, missing and filled permanent teeth
DSRU	Dental Statistics and Research Unit
IRSAD	Index of Relative Socioeconomic Advantage/Disadvantage
NCHS	US National Center for Health Statistics
NHANES	US National Health and Nutrition Examination Survey
NHMRC	National Health and Medical Research Council
NOHSA	National Oral Health Survey of Australia
NSAOH	National Survey of Adult Oral Health
SEIFA	Socioeconomic Indices for Areas

Place abbreviations

ACT	Australian Capital Territory
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
SA	South Australia
Tas	Tasmania
UK	United Kingdom
US	United States
Vic	Victoria
WA	Western Australia

Symbols

$	Australian dollars
%	per cent
. .	not applicable
–	nil
>	greater than
<	less than
≥	greater than or equal to
≤	less than or equal to
<0	estimate is less than zero

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Overview of results

This report describes levels of oral health in the adult population of the Northern Territory (NT) at the beginning of the twenty-first century. The findings are from the 2004–06 National Survey of Adult Oral Health (NSAOH). In NT, 1,082 people were interviewed and 517 people were dentally examined for the survey. This report presents percentages and means for 30 oral health indicators in tables that compare three age groups and classify people according to five sociodemographic characteristics: sex, residential locality, socioeconomic status of residential postcode, government health card status, and dental insurance status.

Oral health status

- 2.4% of people had no natural teeth and among dentate people, an average of 3.4 teeth per person were missing. These and two other indicators of tooth loss were more frequent among government health cardholders compared with non-cardholders.
- 34.9% of people had untreated dental decay and an average of 10.7 teeth per person were decayed, missing or filled. There was relatively little variation among sociodemographic groups in indicators of dental decay experience.
- 18.0% of people had inflamed gums and one-quarter had moderate or severe gum disease. Two indicators of gum disease occurred more frequently outside Darwin than in the capital city.

Oral health care

- 49.1% of people had visited a dentist within the preceding 12 months, and 39.6% said they usually did so. These and two other measures of dental attendance varied according to government health card status and dental insurance status.
- 73.4% of people had a dentist that they usually attended, although 34.4% said that they avoided or delayed dental care due to its cost. Barriers to dental care were most strongly associated with a lack of dental insurance.

Oral health perceptions

- 17.7% of people said they had avoided some foods due to dental problems, and 19.9% had experienced toothache, in the preceding 12 months. Perceptions of poor oral health were more likely among females than males and among government health cardholders than non-cardholders.
- 36.0% of people felt they needed an extraction or filling, although only 3.9% said they needed dentures. There was little variation in perceived dental treatment needs among sociodemographic groups.

Age-standardised analysis revealed that government health cardholders had poorer outcomes for 14 of the 29 indicators reported, while the uninsured had poorer outcomes for 12 of the 30 indicators.

1 Introduction

This report presents findings from the NT component of the 2004–06 National Survey of Adult Oral Health (NSAOH). Information was collected using interviews and standardised dental examinations that were conducted among a random sample of NT residents aged 15 years or more. Three major themes are reported in 30 tables describing oral health status, oral health care and perceptions of oral health. Statistics summarising those themes are tabulated for the NT adult population and for three age groups that are further classified according to: sex, residential locality, socioeconomic status of the area in which they live, government health cardholder status and dental insurance.

The 2004–06 NSAOH took place 17 years after the first oral examination survey of Australians conducted in the six states and the Australian Capital Territory (Barnard 1993). State/territory reports from that 1987–88 National Oral Health Survey of Australia (NOHSA) highlighted variations among age groups, between the sexes and between people living in or outside capital cities. The major findings reported from the survey were:

- children's dental decay rates were low by historical standards and when compared internationally
- nearly one-half (48%) of adults had made a dental visit within the preceding year, the majority of them to a private dental practice (88%)
- however, 44% of adults were found to need one or more dental fillings
- the percentage of Australians with complete tooth loss had reduced compared with earlier interview surveys, although 50% of people aged 65 years or more had no natural teeth and
- one of the four national oral health targets had been achieved, and it was expected that the remaining three targets would be achieved by 2000.

However, the first survey did not collect information about government health cardholder status or socioeconomic status, and results were not contrasted between insured and uninsured.

In the 17-year period since the NOHSA, there has been substantial growth in public sector dental care and dental insurance. Increasingly, national and state/territory health goals call for reductions in socioeconomic inequalities in health, including oral health. For those reasons, this report includes a focus on the relationship between oral health and indicators of socioeconomic status and access to dental care, as well as the traditional demographic markers of age, sex and residential location.

Purpose and organisation of this report

The purpose of this report is to provide a descriptive 'snapshot' of oral health in the adult population of the NT. The findings are intended to provide up-to-date evidence that can contribute to the development of oral health policies and programs in NT.

This introductory chapter outlines the motives for undertaking the survey. Chapter 2 reviews the survey's methods and describes the population distribution of sociodemographic and dental access characteristics presented in later tables. Statistical findings regarding oral health status are tabulated and described in Chapter 3, followed by statistical findings regarding oral health care (Chapter 4) and perceptions of oral health (Chapter 5). The Appendix contains additional tables of oral health statistics for conventional 10-year age groups. These are narrower than the age ranges reported in the chapters, and are presented to permit comparisons with surveys conducted at other places and other times.

The national report of the survey's findings (Slade et al. 2007) provides additional details about the survey, including participation rates and analysis of potential biases due to non-participation. The national report also presents qualitative findings from 'oral histories' conducted with a small number of survey participants to document historical influences on the nation's oral health. Further appendix material is available at:

<http://www.arcpoh.adelaide.edu.au/project/distribution/NSAOH.html>.

Background to the survey

Up-to-date information about population oral health is important because oral diseases have broad implications for the health of the public. Dental problems are ranked among the most frequently reported illness episodes by Australians (AIHW 2000), and provision of dental care accounts for 6.6% of recurrent health expenditure in 2005–06 (AIHW 2007). In the United States the Surgeon General characterised oral disease as a 'silent epidemic' (Surgeon General 2000).

In the 17 years following the 1987–88 NOHSA, no state-wide oral examination surveys of adults have been conducted. Instead, published oral examination surveys were restricted to special groups of the adult population and often they were conducted within selected locations in states. They included studies of oral health in:

- military recruits (Dawson & Smales 1994; Hopcraft & Morgan 2003a,b, 2005, 2006; Morgan et al. 1992)
- adults in Melbourne (Wright et al. 1994)
- community-dwelling elderly people (Bergman et al. 1991; Chalmers, Carter & Spencer 2002; Slade et al. 1993; Slade & Spencer 1995, 1997; Thomson et al. 1995)
- elderly people living in nursing homes or hostels (Chalmers, Carter, Fuss et al. 2002; Chalmers, Hodge et al. 2002; Chalmers et al. 2005; Saub & Evans 2001)
- Aboriginals and Torres Strait Islanders (Endean et al. 2004; Smith et al. 2007)
- immigrants (Marino et al. 2001, 2007) or refugees (Kingsford Smith & Szuster 2000)
- prisoners (Osborn et al. 2003)
- patients receiving dental care in public dental services (Brennan et al. 2000, 2001, 2007; Brennan & Spencer 2004) and
- patients with selected medical conditions (Coates et al. 1996, 2000).

By the late 1990s, several collaborative efforts among federal and state/territory stakeholders attempted to secure support for a second national oral health survey, although none were funded. Renewed impetus for a national survey began with the work of the National Advisory Committee on Oral Health (AHMAC 2001). The committee formulated a National Oral Health Plan for the period 2004–13 comprising seven action areas:

- promotion of oral health across the population
- children and adolescents
- older people
- people with low income and social disadvantage
- people with special needs
- Aboriginal and Torres Strait Islander people and
- workforce development.

One of four short-term goals listed for the plan's first action area was the conduct of a national survey of adult oral health. Fulfilment of that goal became possible in 2003 when researchers at the Australian Research Centre for Population Oral Health (ARCPOH) in The University of Adelaide sought project grant funding from the National Health and Medical Research Council (NHMRC). The proposal was for funding to support a collaborative project that pooled resources already committed or promised from the following sources: funding from the Australian Government Department of Health and Ageing to the Dental Statistics and Research Unit (DSRU) within ARCPOH to undertake a telephone interview survey; commitment of staff from oral health sections within state and territory health departments to conduct oral epidemiological examinations; and core funding from the Australian Institute of Health and Welfare (AIHW) to DSRU. Following peer review, the NHMRC awarded a project grant to ARCPOH in November 2003.

Aspects of oral health and dental care relevant to the National Oral Health Plan

The National Oral Health Plan outlined nine population indicators that were informative in developing the plan and that are cited as key performance indicators to evaluate the outcomes of the plan. This survey reports findings that relate to six of those key performance indicators:

- The percentage of the dentate population reporting a social impact (for example toothache, difficulty chewing, concerned about appearance) because of problems with teeth, mouth or gums in the last 12 months, by age group, living circumstance, government health cardholder status, Indigenous identity and special needs.
- The percentage of the population with untreated decay, by age group, living circumstance, government health cardholder status and Indigenous identity.
- The proportion of the dentate population with a maximum periodontal pocketing of 3.5 mm and 5.5 mm, by age group.
- The mean number of missing teeth and proportion of existing teeth with untreated decay, by age group, living circumstance, government health cardholder status and card status, and Indigenous identity.
- The percentage of the dentate population who visited a dental practitioner in the last 2 years, by age group, living circumstance, government health cardholder status and Indigenous identity.
- The percentage of the dentate population whose reason for visiting a dental practitioner in the last 12 months was for a check-up, by age group, living circumstance, government health cardholder status and Indigenous identity.

2 Methods

Full details of the survey's methods have been described in Chapter 2 of the national report (Slade et al. 2007). The following summary highlights the main methodological features of the survey.

Study population and sampling

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

- 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 geographic 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' in each postcode.
- A systematic sample of households listed in the 'electronic white pages' was selected for each sampled postcode. Thirty households per metropolitan stratum and 40 households per ex-metropolitan stratum were selected.
- One person aged 15 years or more was randomly selected per household. In households with only one person aged 15 years or more, that person was selected. In other households telephone interviewers asked for the name of the person aged ≥15 years who most recently had had a birthday and the name of the person aged ≥15 years who would next have a birthday. A computer algorithm then selected one of those two people at random.

Sampled postcodes

In NT the following postcodes were sampled: 0800, 0810, 0812, 0813, 0820, 0822, 0828, 0830, 0832, 0835, 0836, 0837, 0850, 0860, 0870, 0880.

Computer-assisted telephone interview

Self-reported information about oral health and characteristics associated with it was obtained though telephone interviews. Interviewers read questions from a computer screen and recorded answers directly onto the computer. They were conducted from a dedicated computer-assisted telephone interview (CATI) suite at University of Adelaide research offices. The methods were based on those advocated by Dillman (2000), including the mailing of a letter to households prior to telephoning, a protocol for contacting each household and standardised procedures for asking questions and recording answers. Interviews were conducted by 29 interviewers, each of whom was trained in the survey methods. Every effort was made to interview the target person although, in certain circumstances, the questions were answered by another adult in the form of a proxy interview.

The interview consisted of 79 questions, several with multiple response categories. A copy of the questions used is included in an Appendix available online:

<http://www.arcpoh.adelaide.edu.au/project/distribution/NSAOH.html>.

Oral epidemiological examination

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 or all 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 subjects with no medical contraindications to periodontal probing—signs of gum disease. During data collection, replicate examinations were conducted for approximately five study participants per examiner to evaluate the consistency of their findings when judged against the principal survey examiner.

There were 30 examiners nationwide (Table 1). Prior to their work on the survey, they undertook a 2-day training and calibration session at The University of Adelaide. Separate training sessions were held for the examination teams from each state and territory. Prior to the scheduled training session, each examiner was sent a 50-page manual and a DVD detailing the survey protocol, including the criteria and coding for the examination.

Table 1: Distribution of examiners and examinations among states and territories

State	No. of examiners	No. of people examined	No. of examinations per examiner		
			Minimum	Maximum	Mean
NSW	11	1,113	32	164	101
Vic	3	1,181	267	585	394
Qld	3	824	217	305	275
SA	2	629	241	388	315
WA	3	470	134	196	157
Tas	3	385	49	186	128
ACT	2	386	125	261	193
NT	3	517	154	203	172
All states	**30**	**5,505**	**32**	**585**	**184**

Scope of examination

Survey participants were examined in a supine position in standard dental chairs with illumination provided by the chair's overhead dental light. Examiners used an intra-oral mirror that additionally had its own battery-powered light source. A periodontal probe with 2-mm markings was used to record distances, for example when assessing periodontal destruction (described further below); however, sharp explorers were not used and no radiographs were taken. Full details of the examination protocol are provided online:

<http://www.arcpoh.adelaide.edu.au/project/distribution/NSAOH.html>.

The following overview summarises criteria used to assess the main oral health variables reported in this volume.

Tooth loss

For people aged less than 45 years, examiners distinguished between missing teeth that had been extracted due to decay or periodontal disease and teeth that were absent for any other reason (that is, congenitally missing; unerupted; or extracted for orthodontics, trauma or impaction). For people aged 45 years or more, no such distinction was made, so that an extracted or otherwise absent tooth was recorded as missing. Dental implants, root fragments and deciduous teeth were coded separately and not counted as missing or absent teeth.

Replacement teeth

All lost teeth were further classified as replaced or not replaced by a fixed bridge or a removable denture that was worn to the examination.

Decay experience of coronal tooth surfaces

All teeth present were subdivided into five tooth surfaces: mesial, buccal, distal, lingual, and either occlusal (for premolars or molars) or incisal (for incisors and canines). Each coronal surface was assessed and categorised using visual criteria (no explorer was used) and one of the following codes was assigned:

- decay: cavitation of enamel or dentinal involvement or both are present
- recurrent caries: visible caries that is contiguous with a restoration
- filled unsatisfactorily: a filling placed for any reason in a surface that requires replacement but that has none of the above conditions
- filling to treat decay: a filling placed to treat decay in a surface that had none of the above conditions
- filling placed for reasons other than decay: in a surface that has none of the above conditions (incisors and canines only)
- fissure sealant: where none of the above conditions were found
- sound: when none of the above conditions was found.

Decay experience of tooth root surfaces

All teeth present were subdivided into four root surfaces: medial, buccal, distal and lingual. Each root surface was assessed visually and, if necessary, using a ball-ended periodontal probe. One of the following codes was assigned:

- decay: a discrete, well-defined or discoloured lesion on the root surface that is soft to exploration using the periodontal probe
- recurrent caries: detectable caries that is contiguous with a restoration
- filled unsatisfactorily: a filling placed for any reason in a surface that has unacceptable defects but meeting none of the above conditions
- filled root surface: one or more permanent restorations placed for any reason but none of the above conditions
- wear of 2 mm or more: recorded only on buccal surfaces with none of the above conditions
- sound root surface: when none of the above conditions was found
- no visible root surface.

Periodontal tissue destruction

The assessment of periodontal tissue destruction was based on methods used in the US National Health and Nutrition Examination Survey (NHANES 2005). Assessments were made of probing pocket depth and gingival recession, both recorded in millimetres using a periodontal probe that had 2-mm markings. Measurements were made at the mesio-buccal, mid-buccal and disto-buccal aspects of all teeth present, except for third molars. All fractional millimetre measurements were rounded down to the lowest whole millimetre before calling the number. For recession, the cemento-enamel junction (CEJ) was identified or its position was estimated (for example, if a filling obscured its position), and the distance from the CEJ to the free gingival margin was recorded in millimetres. When the CEJ was subgingival, the number called was negative; otherwise it was positive. For probing pocket depth, the distance from the free gingival margin to the bottom of the periodontal crevice/pocket was called.

Examiners did not make a direct measurement of clinical attachment loss; instead, it was computed during data analysis.

Gingival inflammation around six index teeth

The Loe and Silness (1963) gingival index was used to assess inflammation of the marginal gingival tissues around six index teeth (if present)—the most anterior molar in each dental quadrant (up to four teeth), the right maxillary central incisor and the left mandibular central incisor. Pressure was applied to the free gingival margin on the buccal aspect of the tooth by swiping with the side of a periodontal probe that was held at approximately 90 degrees to the long axis of the tooth. One of the following codes was assigned:

- severe inflammation: marked redness and oedema, ulceration or tendency to spontaneous bleeding
- moderate inflammation: redness, oedema, glazing or bleeding after applying pressure with the probe
- mild inflammation: slight change in colour or slight oedema but no bleeding after applying pressure with the probe
- none of the above.

Data recording for examinations

Each code called by an examiner was recorded directly onto a laptop computer by state/territory staff who had experience in clinical dental procedures. They were trained in use of the software during the 2-day training session for examination teams held at The University of Adelaide.

Assessment of inter-examiner reliability

In order to measure inter-examiner reliability, the principal survey examiner attended examination sessions for all but one examiner to conduct masked replicate examinations of survey participants. The remaining examiner withdrew from the survey after completing 32 examinations. Replicate examination entailed assessments of tooth presence, periodontal assessment of teeth in one jaw, and assessment of caries experience in both crowns and roots of teeth. The observed levels of agreement for most oral health indicators were equivalent to benchmarks reported for national oral health surveys conducted in the United Kingdom and the United States.

Period of data collection

Data collection began in July 2004 and was completed in September 2006 (Table 2). Interviews were timed to begin approximately 1 month prior to the planned start of examinations in each jurisdiction.

Table 2: Periods of data collection in states and territories

	Dates of interviews		Dates of examinations	
State/territory	Beginning	End	Beginning	End
ACT	July 2004	October 2004	July 2004	October 2004
SA	September 2004	December 2004	September 2004	May 2005
WA	October 2004	March 2005	November 2004	May 2005
Vic	January 2005	September 2005	February 2005	September 2005
NSW	May 2005	November 2005	June 2005	July 2006
NT	August 2005	October 2005	September 2005	March 2006
Tas	January 2006	May 2006	March 2006	September 2006
Qld	March 2006	September 2006	June 2006	September 2006
Australia	July 2004	September 2006	July 2004	September 2006

Ethical conduct of research

This project was reviewed and approved by The University of Adelaide's Human Research Ethics Committee. Interviewed subjects provided verbal consent prior to answering questions. All examined subjects provided signed, informed consent prior to the examination.

Target sample size

Sample size requirements were calculated for a range of key outcome variables to be reported nationally. One outcome, the capacity to detect a 25% or greater reduction in national age-specific estimates of mean number of decayed teeth since 1987–88, was nominated as the critical threshold that should be detectable with standard statistical power of 80%. Another outcome was a capacity to detect a 10% or greater reduction in national age-specific mean DMFT. This identified a need for 7,500 examinations and 13,560 interviews, assuming a 65% participation rate in the examination. The sample size within each state and territory was planned to be approximately proportional to the population of the jurisdiction.

Participation in the survey

National participation rates were lower than intended, both in the interview, where 49.0% of sampled people participated, and the examination, where 43.7% of those eligible took part. Interview participation rates varied from 43.9% in NSW to 61.8% in SA. Examination rates varied from 33.2% in NSW to 57.5% in SA (Table 3).

Table 3: Number and percentage of people sampled, interviewed and examined[(a)]

	No. of people sampled	No. of people interviewed	Per cent of sampled people interviewed	No. of people eligible for exam	No. of people examined	Per cent of eligible people examined
Australia	**28,812**	**14,123**	**49.0**	**12,606**	**5,505**	**43.7**
State/territory						
NSW	8,270	3,630	43.9	3,310	1,099	33.2
Vic	6,013	2,667	44.4	2,360	1,181	50.0
Qld	4,219	2,052	48.6	1,841	824	44.8
SA	2,159	1,335	61.8	1,093	629	57.5
WA	2,365	1,290	54.5	1,109	470	42.4
Tas	1,745	1,042	59.7	873	385	44.1
ACT	1,892	1,025	54.2	981	400	40.8
NT	2,149	1,082	50.3	1,039	517	49.8

(a) Unweighted data.

Data analysis

The aim of the data analysis was to generate summary statistics describing oral health for the NT population. With the exception of data regarding participation rates, results in this report have been weighted to compensate for individuals' different probabilities of selection and survey participation rates. For the telephone interview survey, weights were adjusted to ensure survey estimates were consistent with the 2005 Australian Bureau of Statistics Estimated Residential Population data. For the oral examination survey, which was restricted to dentate people aged 15 years or more; estimates of the dentate population were derived from the telephone interview survey and used to derive examination weights. This means that results can be generalised to the NT population.

Tables 35 and 36 contain age-standardised estimates for each indicator presented in preceding tables. Age standardisation is a statistical procedure that aims to remove any effects of age that might account for differences in each oral health indicator between the two comparison groups: health cardholders versus non-health cardholders (Table 35) and insured versus non-insured people (Table 36). For these tables, percentages and means were standardised using the direct method. The reference population was the 2005 Australian Estimated Residential Population classified into 14 five-year age categories within the range 15–84 years and a fifteenth category aged 85 years of more.

Presentation of results

Oral health measures are tabulated for each of three age groups representing the survey participant's age reported in the telephone interview, plus an 'all ages' summary. The three age groups are: 15–34 years, 35–54 years and ≥55 years. The tables report estimates for mutually exclusive subgroups of people created for each of six characteristics based on responses to the telephone interview questions. The subgroups and unweighted number of respondents are listed in the Appendix to this volume and the six characteristics are described below:

Sex was classified as 'Male' or 'Female' recorded during the interview.

Residential location was classified as 'Capital city' or 'Other places' based on the sampling postcode used in selection of households.

Postcode socioeconomic status was used to classify individuals according to the Index of Relative Socioeconomic Advantage/Disadvantage (IRSAD) of the postcode in which they lived. The IRSAD is an aggregate measure of a postcode's socioeconomic status based on characteristics of its residents recorded in the 2001 Population Census. A postcode that has a relatively high proportion of people with high incomes or a skilled labour force is assigned a relatively higher value on this index. Conversely, a low score on the index indicates that an area has a higher proportion of individuals with low incomes and more people who work in unskilled occupations. Postcodes were classified into three groups of ascending socioeconomic status, each group comprising approximately one-third of the NT population. This type of analysis is said to be 'ecological' because it is not based on individuals' own socioeconomic status, but on the socioeconomic status of the area in which they live. Hence, care should be taken in the interpretation of results—because Socioeconomic Indices for Areas (SEIFA) scores refer to areas, not individuals, results are not interpretable at the level of the individual.

Government health card status identified whether or not people were covered either by a pensioner concession card or health care card. Both cards are issued according to a means test administered by Centrelink, an agency of the Australian Government's Family Assistance Office. People with either card and their dependents are eligible for public-sector dental care in most states and territories.

Place of last dental visit further disaggregated health cardholders according to the location of their last dental visit. The latter was established during the interview by asking people 'Where did you make your last dental visit?'. Health cardholders who responded 'Government dental clinic' or 'School dental service' were classified as 'Cardholder/Public'. Otherwise, eligible people were classified as 'Cardholder/Non-public' if they reported any of the other locations: Private dental practice (including specialist); Dental technician; Clinic operated by health insurance fund; Armed Services/Defence Force clinic; Other site. People who were not health cardholders were classified as 'Non-cardholder/Non-public' regardless of their reported visit location.

Dental insurance coverage was based on responses to the question 'Do you have private insurance cover for dental expenses?'. People were classified as insured if they responded 'yes' and uninsured if they responded 'no'.

Criteria for determining statistical significance

As with any survey where data are collected from only some of the people in the population, proportions and means in this report are estimates of the true population values. The estimates have some degree of uncertainty, which is expressed in this report using 95% confidence intervals (95% CIs). The 95% CI signifies the likely lower and upper limits of the range of values within which the true population percentage would fall. In this context 'likely' means that there is a 95% probability that the true population value lies between those two values.

In this report 95% CIs are used additionally as a guideline to identify differences between population subgroups that are statistically significant. Specifically, when there is no overlap between 95% CIs for two groups, the difference between the groups is deemed to be statistically significant. This criterion for judging statistical significance is more conservative than the alternative method of calculating P-values. In fact, when 95% CIs do not overlap, it means that a test of statistical significance for the difference between the groups would have a P-value of less than 0.05 (the conventional threshold used in many reports), and it could be as small as less than 0.005. The 'conservative' nature of the criterion used in this report comes about because 95% CIs that overlap to a small degree could, nevertheless, be found to differ to a statistically significant degree (at $P<0.05$) using a hypothesis test.

Data files were managed and summary variables computed using SAS software version 9.1.[1] Means and their associated 95% CIs were generated using SUDAAN software release 9.0.0.[2] The SUDAAN procedures used sampling weights to generate population estimates and calculated 95% CIs that allowed for the complex sampling design used in this survey. To do so, 'with replacement' sampling was specified with two levels of stratification (state and section of state). The subject's sampling postcode was specified as the primary sampling unit, which was used by SUDAAN as the clustering variable.

[1] SAS Institute Inc. 100 SAS Campus Drive, Cary, NC 27513–2414, USA.

[2] Research Triangle Institute. PO Box 12194, Research Triangle Park, NC 27709–2194, USA.

Distribution of sociodemographic and dental access characteristics

Slightly less than one-half of the NT population included in the survey was female, and the percentage dropped to 43.6% in the oldest age group (Table 4). Just over one-half lived in the capital city, a proportion that was higher in the oldest age group. By design, people of all ages were approximately evenly distributed among tertiles of postcode socioeconomic status. However, older people were more less than younger people to live in areas with lower socioeconomic status. Approximately 15% of the population were government health cardholders, although the percentage was noticeably greater for people aged 55 years or more. Government health cardholders were as likely to have attended either a public dental clinic or another dental care provider for their last dental visit. However, in the oldest age group, there was a tendency towards visiting non-public providers of dental care. Nearly one-half of the NT population had dental insurance; a figure that was lower in the youngest age group and higher in the oldest age group.

Table 4: Percentage of people with selected sociodemographic and dental access characteristics in the NT population and three age groups

		Age group (years)		
	All ages	15–34	35–54	>=55
Sex				
Males	53.1	52.4	52.5	56.4
Females	46.9	47.6	47.5	43.6
Residential location				
Capital city	56.5	53.8	57.8	60.8
Other places	43.5	46.2	42.2	39.2
Postcode socioeconomic status				
Lowest	31.3	31.7	35.0	20.8
Middle	31.8	30.4	30.0	40.8
Highest	36.8	37.9	35.1	38.4
Government health card				
Health care card or pensioner concession card	15.2	15.0	8.0	34.2
Neither card	84.8	85.0	92.0	65.8
Place of last dental visit				
Cardholder/Public	7.6	8.7	4.5	12.5
Cardholder/Non-public	7.6	6.3	3.5	21.7
Non-cardholder/Non-public	84.8	85.0	92.0	65.8
Dental insurance				
Insured	46.1	36.9	52.9	53.8
Uninsured	53.9	63.1	47.1	46.2

3 Oral health status

Complete tooth loss

In NSAOH, complete tooth loss was assessed in the interview by asking people 'Do you have any of your own natural teeth?'. People who answered 'no' were classified as edentulous. In NT, edentulous people represented 2.4% of the population aged 15 years of more (Table 5), which was significantly lower than the national estimate of 6.4% (Slade et al. 2007).

Key findings

- The prevalence of edentulism was strongly associated with age, being negligible among 15–34-year-olds but affecting 12.1% of NT adults aged 55 years or more.
- Prevalence of complete tooth loss did not vary to a statistically significant degree between males and females.
- Similarly, there was no statistically significant difference in prevalence of complete tooth loss between Darwin and the rest of the territory.
- There was no statistically significant association between socioeconomic status of postcodes in which people lived and their prevalence of complete tooth loss.
- Among all ages, people who had a government health card were more than six times as likely to be edentulous (8.8%) than people who did not have a government health card (1.3%). Within age groups, government health cardholder status was statistically significantly associated with edentulism among 35–54-year-olds and people aged 55 years or more.
- Within the population of government health cardholders, there was no clear pattern of variation in prevalence of edentulism according to place of most recent dental visit.
- There was no statistically significant difference in prevalence of complete tooth loss between people with dental insurance and the uninsured.

Discussion

As emphasised in the national report, variation among age groups in prevalence of edentulism can be attributed primarily to the differing historical experiences of generations born in different time periods during the 20th century, rather than to the effects of ageing. Because edentulism prevalence was so strongly dependent upon age group, comparisons between population groups were observed most clearly for the oldest age group. Among 15–34-year-olds, prevalence estimates were all zero and therefore did not reveal any differences between population groups.

In summary, complete tooth loss in NT was a condition observed infrequently below the age of 55 years, while among people aged 55 years of more, it was mostly associated only with government health cardholder status.

Table 5: Percentage of adults with complete tooth loss

		Population: all people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**2.4**	**0.0**	**0.9**	**12.1**
	95% CI[(a)]	*1.8–3.3*	—	*0.3–3.3*	*9.7–15.0*
Sex					
Males	% of people	2.2	0.0	1.2	10.1
	95% CI	*1.3–3.9*	—	*0.2–5.4*	*6.3–15.8*
Females	% of people	2.6	0.0	0.7	14.6
	95% CI	*1.8–3.9*	—	*0.2–2.0*	*10.4–20.0*
Residential location					
Capital city	% of people	2.6	0.0	1.3	11.5
	95% CI	*1.6–4.3*	—	*0.3–6.0*	*8.2–16.0*
Other places	% of people	2.2	0.0	0.4	12.9
	95% CI	*1.6–3.0*	—	*0.1–1.1*	*10.2–16.3*
Postcode socioeconomic status					
Lowest	% of people	2.6	0.0	2.2	13.1
	95% CI	*1.5–4.5*	—	*0.6–7.1*	*7.1–23.0*
Middle	% of people	1.6	0.0	0.0	8.9
	95% CI	*0.6–4.1*	—	—	*5.6–13.8*
Highest	% of people	2.9	0.0	0.5	14.0
	95% CI	*1.9–4.5*	—	*0.3–0.9*	*11.1–17.4*
Government health card					
Health care card or pensioner concession card	% of people	8.8	0.0	9.3	19.5
	95% CI	*5.1–14.8*	—	*2.4–30.3*	*11.5–31.0*
Neither card	% of people	1.3	0.0	0.1	8.7
	95% CI	*0.8–1.9*	—	*0.0–0.5*	*6.2–12.3*
Place of last dental visit					
Cardholder/Public	% of people	7.9	0.0	14.3	16.6
	95% CI	*2.8–20.4*	—	*3.1–46.6*	*4.9–43.3*
Cardholder/Non-public	% of people	9.7	0.0	1.9	21.2
	95% CI	*6.0–15.2*	—	*0.4–9.5*	*15.1–28.9*
Non-cardholder/Non-public	% of people	1.3	0.0	0.1	8.7
	95% CI	*0.8–1.9*	—	*0.0–0.5*	*6.2–12.3*
Dental insurance					
Insured	% of people	2.8	0.0	0.2	12.7
	95% CI	*1.6–4.8*	—	*0.0–0.9*	*9.3–17.0*
Uninsured	% of people	2.2	0.0	1.8	11.4
	95% CI	*1.3–3.9*	—	*0.4–7.5*	*7.6–16.7*

(a) 95% CI = 95% confidence interval for estimated percentage.

Inadequate natural dentition among dentate people

Adults who have approximately 20 teeth or more usually have satisfactory chewing function (Elias & Sheiham 1998), diet and nutritional status (Sheiham et al. 2002), whereas people with fewer teeth are more likely to suffer impaired quality of oral health (McGrath & Bedi 2002). In NSAOH, people were asked during the interview to report either the number of remaining teeth or the number of missing teeth in their upper jaw and lower jaw. Responses were used to classify people as having an inadequate natural dentition if they reported having fewer than 21 natural teeth, the same threshold that has been reported for the UK population. In NT, 5.4% of dentate adults had fewer than 21 teeth (Table 6), which was significantly less than the national figure of 11.4% (Slade et al. 2007).

Key findings

- The prevalence of an inadequate natural dentition was strongly associated with age, occurring in less than 1% of people aged 15–34 years but affecting approximately one-quarter of dentate people aged 55 years or more.
- Differences in prevalence between males and females were small and statistically non-significant, both for the population as a whole and within the three age groups.
- Likewise, prevalence of an inadequate natural dentition did not differ consistently or to a statistically significant between Darwin and the rest of the territory.
- Among 35–54-year-olds and people aged 55 years or more, there was a two-fold greater prevalence of an inadequate natural dentition seen in people living in postcodes with low socioeconomic status compared with those in postcodes of high socioeconomic status. However, the differences were not statistically significant.
- Large and statistically significant differences in prevalence were associated with government health cardholder status: within all ages combined and people aged 55 years or more, cardholders were two to three times as likely as non-cardholders to have an inadequate natural dentition.
- Within the population of government health cardholders, there were only small differences in prevalence according to place of last dental visit.
- Dental insurance was not associated with statistically significant variation in prevalence of an inadequate natural dentition, although there was a tendency for prevalence to be higher among the uninsured compared with the insured.

Discussion

A threshold of fewer than 21 teeth is used here as an indicator of likely impairment in oral function, nutrition and quality of life, rather than a cardinal sign of those problems. As observed for complete tooth loss, there was a pronounced age-gradient in prevalence of an inadequate natural dentition. Because of this age-association, valid comparisons between other sociodemographic groups should be made only within age groups. As observed for complete tooth loss, those comparisons revealed that prevalence was associated only with government health cardholder status.

Table 6: Percentage of people with fewer than 21 teeth

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**5.4**	**0.3**	**3.8**	**24.3**
	95% CI[(a)]	*4.0–7.2*	*0.1–0.6*	*2.4–6.1*	*17.7–32.2*
Sex					
Males	% of people	5.1	0.4	4.9	18.2
	95% CI	*3.4–7.6*	*0.1–1.4*	*2.3–10.1*	*10.2–30.4*
Females	% of people	5.7	0.2	2.7	32.1
	95% CI	*4.4–7.3*	*0.0–1.3*	*1.6–4.4*	*23.9–41.5*
Residential location					
Capital city	% of people	5.7	0.0	4.2	24.4
	95% CI	*4.6–7.2*	—	*2.1–8.1*	*19.2–30.4*
Other places	% of people	4.9	0.6	3.4	24.1
	95% CI	*2.7–8.8*	*0.4–0.8*	*2.1–5.4*	*11.5–43.6*
Postcode socioeconomic status					
Lowest	% of people	6.7	0.3	5.9	36.0
	95% CI	*4.1–10.9*	*0.0–1.5*	*3.6–9.6*	*23.0–51.5*
Middle	% of people	5.0	0.0	2.7	23.0
	95% CI	*4.2–6.0*	—	*1.1–6.8*	*20.6–25.7*
Highest	% of people	4.6	0.5	2.7	19.4
	95% CI	*3.2–6.5*	*0.3–0.8*	*1.6–4.5*	*14.2–25.8*
Government health card					
Health care card or pensioner concession card	% of people	14.1	0.5	5.4	41.7
	95% CI	*10.9–17.9*	*0.1–3.0*	*2.3–12.3*	*27.7–57.1*
Neither card	% of people	3.8	0.2	3.7	16.2
	95% CI	*2.5–5.6*	*0.1–0.9*	*2.1–6.4*	*9.1–27.2*
Place of last dental visit					
Cardholder/Public	% of people	11.6	0.8	5.1	43.3
	95% CI	*7.7–17.1*	*0.2–4.0*	*1.4–16.7*	*33.0–54.2*
Cardholder/Non-public	% of people	16.7	0.0	5.8	40.6
	95% CI	*9.1–28.9*	—	*1.3–22.7*	*21.6–62.9*
Non-cardholder/Non-public	% of people	3.8	0.2	3.7	16.2
	95% CI	*2.5–5.6*	*0.1–0.9*	*2.1–6.4*	*9.1–27.2*
Dental insurance					
Insured	% of people	4.8	0.0	3.2	17.0
	95% CI	*3.0–7.7*	—	*1.5–6.6*	*11.6–24.3*
Uninsured	% of people	6.1	0.4	4.6	33.6
	95% CI	*4.4–8.4*	*0.2–1.0*	*3.0–7.2*	*23.7–45.2*

(a) 95% CI = 95% confidence interval for estimated percentage.

Denture wearing by dentate people

Removable dentures, also called 'false teeth', are worn to replace missing teeth, with the objective to improve function (for example eating), appearance or both. Whereas virtually all edentulous people wear dentures, the decision of dentate people to wear dentures is influenced by numerous factors in addition to the number and location of missing teeth. In NSAOH, removable denture wearing was assessed during the interview by asking two similar questions, 'Do you have a denture or false teeth for your upper (lower) jaw?'. There were 7.3% of dentate adults in NT who reported wearing one or two dentures (Table 7), a figure that was significantly lower then the national estimate of 14.9% (Slade et al. 2007).

Key findings

- The frequency of denture wearing was strongly associated with age, ranging from 0.8% among 15–34-year-olds to 27.2% among people aged 55 years or more.
- There were small and statistically non-significant differences between the sexes in the percentage of denture wearers.
- Likewise, frequency of denture wearing did not differ between Darwin and the rest of the territory.
- Frequency of denture wearing did not differ consistently or to a statistically significant degree according to the socioeconomic status of postcodes in which people lived.
- Government health cardholders were more likely to wear dentures than people who were not government health cardholders although the difference was statistically significant only for all ages combined.
- Among government health cardholders, there was no consistent or statistically significant variation according to place of last dental visit.
- Denture wearing tended to be more frequent among people without dental insurance than the insured although none of the differences were statistically significant.

Discussion

The percentage of dentate adults in NT who wore dentures (7.3%) slightly exceeded the percentage with fewer than 21 natural teeth (5.4%), illustrating that the decision to wear dentures is dictated by factors other than the number of missing teeth. However, there was a general lack of association between sociodemographic characteristics and frequency of denture wearing. In fact, within age groups, where sociodemographic comparisons are most valid, there was an absence of statistically significant variation between government health cardholders and non-government health cardholders. In contrast, that characteristic was associated with a more than two-fold variation in prevalence of an inadequate natural dentition, and the difference was statistically significant.

Table 7: Percentage of dentate people who wear denture(s)

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**7.3**	**0.8**	**7.0**	**27.2**
	95% CI[(a)]	*6.2–8.8*	*0.2–2.9*	*4.3–11.1*	*19.5–36.6*
Sex					
Males	% of people	7.5	1.3	8.1	22.8
	95% CI	*5.4–10.4*	*0.3–5.9*	*4.8–13.3*	*13.2–36.6*
Females	% of people	7.1	0.3	5.7	32.9
	95% CI	*6.4–8.0*	*0.1–0.9*	*3.2–10.1*	*26.9–39.5*
Residential location					
Capital city	% of people	7.7	1.3	5.5	29.7
	95% CI	*6.0–9.9*	*0.3–5.9*	*2.5–11.9*	*23.6–36.7*
Other places	% of people	6.9	0.3	8.9	23.3
	95% CI	*5.5–8.5*	*0.1–0.9*	*6.5–12.2*	*11.5–41.7*
Postcode socioeconomic status					
Lowest	% of people	8.8	1.5	9.4	35.5
	95% CI	*7.0–11.1*	*0.2–8.7*	*6.3–13.6*	*25.4–47.1*
Middle	% of people	5.8	1.0	2.9	24.9
	95% CI	*4.4–7.7*	*0.1–8.1*	*0.9–8.8*	*18.9–32.0*
Highest	% of people	7.4	0.2	8.1	24.9
	95% CI	*5.6–9.7*	*0.1–0.3*	*4.2–14.8*	*13.7–41.0*
Government health card					
Health care card or pensioner concession card	% of people	12.1	0.5	8.6	32.7
	95% CI	*8.0–17.8*	*0.1–3.0*	*2.7–24.4*	*20.2–48.3*
Neither card	% of people	6.6	0.9	6.8	25.3
	95% CI	*5.7–7.6*	*0.2–3.8*	*4.1–11.2*	*17.3–35.3*
Place of last dental visit					
Cardholder/Public	% of people	8.5	0.0	0.0	36.9
	95% CI	*5.6–12.7*	—	—	*28.4–46.4*
Cardholder/Non-public	% of people	16.0	1.2	19.8	29.9
	95% CI	*7.2–31.9*	*0.2–6.2*	*6.0–48.8*	*13.5–53.7*
Non-cardholder/Non-public	% of people	6.6	0.9	6.8	25.3
	95% CI	*5.7–7.6*	*0.2–3.8*	*4.1–11.2*	*17.3–35.3*
Dental insurance					
Insured	% of people	6.9	0.2	6.1	19.9
	95% CI	*5.3–8.9*	*0.0–2.0*	*3.4–10.6*	*14.0–27.5*
Uninsured	% of people	8.1	1.2	8.0	36.7
	95% CI	*6.5–10.0*	*0.3–4.5*	*5.2–12.1*	*23.8–51.8*

(a) 95% CI = 95% confidence interval for estimated percentage.

Average number of teeth per person missing due to pathology

During NSAOH examinations of people aged less than 45 years, dentists counted the number of teeth judged to be missing due to decay or gum disease; for older age groups, dentists counted the number of teeth missing for any reason. The distinction according to age was made because often it is very difficult to judge in older people whether teeth have been extracted because of decay, gum disease or other causes (for example orthodontic reasons), or whether the teeth never developed or remain unerupted. Instead, the convention is to assume that teeth not present among people aged 45 years or more are missing due to pathology. In NT, dentate people had an average of 3.4 teeth per person missing due to pathology (Table 8), a figure that was significantly less than the national average of 4.5 (Slade et al. 2007).

Key findings

- The average number of missing teeth per person was strongly associated with age, ranging from 1.2 among 15–34-year-olds to 10.1 among people aged 55 years or more.
- There was little or no difference between males and females, and the differences were inconsistent between age groups.
- Similarly, there was no statistically significant difference in average levels of tooth loss between those living in Darwin and the rest of the territory.
- Among 35–54-year-olds and people aged 55 years or more, there was a tendency for average levels of tooth loss to be greater in postcodes with low socioeconomic status than in postcodes with high socioeconomic status although the differences were not statistically significant.
- Average levels of tooth loss were higher among government health cardholders compared with non-government health cardholders, and the differences were statistically significant among all ages combined.
- Among government health cardholders, there tended to be lower average levels of tooth loss for people whose last dental visit was in the public sector compared with the private sector, at least among the two older age groups, although the tendency was not statistically significant.
- Average levels of tooth loss due to pathology did not differ to a statistically significant degree between people with dental insurance and the uninsured.

Discussion

As seen in the preceding tables describing other aspects of tooth loss, the average number of teeth missing due to pathology was strongly associated with age. Consequently, it is prudent to limit inferences about sociodemographic variation to comparisons within age groups. Also consistent with those previous tables, there was a general lack of variation in most of the sociodemographic comparisons that were made.

Table 8: Average number of teeth per person missing due to pathology

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**mean**	**3.4**	**1.2**	**3.3**	**10.1**
	95% CI[(a)]	*2.8–4.0*	*0.6–1.8*	*2.5–4.0*	*7.7–12.5*
Sex					
Males	mean	3.4	1.0	3.1	10.3
	95% CI	*2.6–4.2*	*0.4–1.7*	*2.1–4.2*	*6.8–13.8*
Females	mean	3.4	1.4	3.4	9.8
	95% CI	*2.7–4.0*	*0.7–2.1*	*2.7–4.1*	*8.0–11.7*
Residential location					
Capital city	mean	3.2	0.7	2.7	10.7
	95% CI	*2.4–3.9*	*0.4–1.0*	*2.4–3.0*	*8.3–13.0*
Other places	mean	3.7	1.8	4.0	9.2
	95% CI	*2.9–4.5*	*1.1–2.4*	*2.9–5.1*	*5.2–13.3*
Postcode socioeconomic status					
Lowest	mean	2.7	0.8	2.7	11.2
	95% CI	*1.5–4.0*	*0.1–1.5*	*2.1–3.3*	*7.9–14.5*
Middle	mean	3.6	0.7	2.8	11.4
	95% CI	*2.5–4.7*	*0.6–0.8*	*2.5–3.2*	*7.7–15.1*
Highest	mean	3.8	1.9	4.2	8.1
	95% CI	*3.6–3.9*	*1.8–2.0*	*3.1–5.2*	*6.2–10.0*
Government health card					
Health care card or pensioner concession card	mean	6.7	2.1	5.0	13.4
	95% CI	*5.0–8.3*	*1.2–3.0*	*2.6–7.5*	*9.8–17.0*
Neither card	mean	2.8	1.0	3.1	8.4
	95% CI	*2.2–3.4*	*0.4–1.7*	*2.2–4.0*	*6.0–10.7*
Place of last dental visit					
Cardholder/Public	mean	4.2	1.3	3.9	10.3
	95% CI	*2.6–5.8*	*0.5–2.2*	*2.0–5.7*	*8.2–12.3*
Cardholder/Non-public	mean	9.1	3.2	6.5	15.2
	95% CI	*5.1–13.2*	*1.6–4.8*	*2.4–10.7*	*10.7–19.7*
Non-cardholder/Non-public	mean	2.8	1.0	3.1	8.4
	95% CI	*2.2–3.4*	*0.4–1.7*	*2.2–4.0*	*6.0–10.7*
Dental insurance					
Insured	mean	3.5	0.8	3.3	9.1
	95% CI	*2.5–4.5*	*0.1–1.6*	*2.4–4.1*	*7.2–11.1*
Uninsured	mean	3.4	1.3	3.3	11.2
	95% CI	*2.7–4.0*	*0.8–1.9*	*2.3–4.2*	*7.6–14.8*

(a) 95% CI = 95% confidence interval for estimated mean.

Prevalence of untreated coronal decay

The prevalence of untreated coronal dental decay is reported in Table 9 as the percentage of dentate people who have at least one or more decayed surfaces on the crowns of their teeth. Untreated coronal decay reflects both the prevalence of dental decay in the population and access to dental care for treatment. The prevalence of untreated coronal decay in NT was 34.9% (Table 9), which is higher than the national estimate of 25.5% (Slade et al. 2007).

Key findings

- The prevalence of untreated coronal decay was not associated with age.
- The highest prevalence was seen among 15–34-year-olds (40.2%) and the lowest among those residing in low socioeconomic postcodes (31.0%).
- Among people of all ages, prevalence of untreated coronal decay was not significantly associated with any of the sociodemographic variables examined, as indicated by the overlapping of 95% CIs in each case.
- While not reaching statistical significance, a number of trends may be discerned in the results in relation to sociodemographic factors. In particular, more non-urban people appeared to have untreated coronal decay than people living in Darwin (37.1% verses 33.2%).

Discussion

Prevalence was not significantly associated with age or any other sociodemographic variable. Among all age groups, the prevalence of untreated decay was about one-third. The lack of association with sociodemographic disadvantage may be due to insufficient sample size to pick up smaller differences.

In summary, more than one-third of all adults in NT had untreated coronal decay but this was not associated with sociodemographic factors.

Table 9: Percentage of people with untreated coronal decay

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**34.9**	**40.2**	**29.4**	**33.7**
	95% CI[(a)]	*30.9–39.0*	*32.1–48.9*	*24.7–34.6*	*28.1–39.9*
Sex					
Males	% of people	37.2	44.2	30.5	34.3
	95% CI	*30.5–44.4*	*31.9–57.3*	*21.4–41.5*	*25.9–43.9*
Females	% of people	32.3	35.8	28.1	33.0
	95% CI	*28.6–36.2*	*28.8–43.5*	*21.8–35.5*	*22.8–45.0*
Residential location					
Capital city	% of people	33.2	37.4	28.3	34.2
	95% CI	*27.1–39.9*	*25.2–51.4*	*20.7–37.5*	*26.3–43.2*
Other places	% of people	37.1	43.5	30.9	33.0
	95% CI	*33.0–41.4*	*33.9–53.6*	*26.7–35.3*	*24.6–42.5*
Postcode socioeconomic status					
Lowest	% of people	31.0	34.0	25.6	41.4
	95% CI	*24.1–38.9*	*19.6–52.1*	*16.8–37.0*	*28.8–55.3*
Middle	% of people	38.0	47.8	33.0	26.3
	95% CI	*34.3–41.8*	*39.7–55.9*	*26.5–40.2*	*21.3–32.1*
Highest	% of people	35.5	39.3	30.1	37.4
	95% CI	*30.9–40.4*	*28.9–50.8*	*27.5–32.8*	*36.3–38.6*
Government health card					
Health care card or pensioner concession card	% of people	35.3	28.6	58.4	29.6
	95% CI	*30.9–40.0*	*16.7–44.4*	*34.4–79.0*	*17.6–45.2*
Neither card	% of people	35.0	42.8	26.9	35.9
	95% CI	*30.3–40.0*	*34.6–51.3*	*22.4–31.9*	*30.0–42.2*
Place of last dental visit					
Cardholder/Public	% of people	37.0	21.5	63.8	42.4
	95% CI	*31.2–43.1*	*8.3–45.2*	*39.2–82.9*	*25.0–61.9*
Cardholder/Non-public	% of people	33.7	38.3	51.5	22.2
	95% CI	*22.9–46.4*	*14.9–68.7*	*17.9–83.7*	*8.2–47.7*
Non-cardholder/Non-public	% of people	35.0	42.8	26.9	35.9
	95% CI	*30.3–40.0*	*34.6–51.3*	*22.4–31.9*	*30.0–42.2*
Dental insurance					
Insured	% of people	35.1	48.3	26.1	33.6
	95% CI	*28.9–41.9*	*37.5–59.4*	*18.9–34.9*	*23.7–45.1*
Uninsured	% of people	36.4	39.5	33.1	33.8
	95% CI	*32.3–40.7*	*30.8–48.9*	*26.1–40.9*	*22.3–47.5*

(a) 95% CI = 95% confidence interval for estimated percentage.

Percentage of people with untreated root decay

The prevalence of untreated root decay is reported as the percentage of people who had at least one natural tooth and one or more surfaces of the roots of their teeth decayed. Decay of the root surface requires that it be exposed in the mouth, usually by recession of the gums. The prevalence of untreated root decay in NT was 6.0% (Table 10), which is slightly lower than for the Australian population figure (6.7%) (Slade et al. 2007).

Key findings

- Prevalence of untreated root decay was strongly associated with age. There was a 64-fold relative difference between prevalence in those aged 55 years or more and those aged 15–34 years (19.3% versus 0.3%). Prevalence among those aged 35–54 years was more than 2.5 times that of those in the youngest age group (7.4% versus 0.3%).
- Among people of all ages, the highest prevalence was seen in government health cardholders who last visited a public clinic (9.1%), and the lowest was reported in females (3.2%).
- Significantly more males had untreated root decay than females (8.6% versus 3.2%).

Discussion

The association of root decay with gum recession more commonly seen in older people explains the strong relationship of untreated root decay with age.

Table 10: Percentage of people with untreated root decay

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**6.0**	**0.3**	**7.4**	**19.3**
	95% CI[(a)]	*4.1–8.8*	*0.1–1.1*	*3.5–15.1*	*13.9–26.2*
Sex					
Males	% of people	8.6	0.0	12.0	23.5
	95% CI	*5.0–14.5*	—	*4.6–27.8*	*14.9–35.0*
Females	% of people	3.2	0.5	2.3	13.9
	95% CI	*2.3–4.3*	*0.1–2.4*	*0.8–6.7*	*9.0–20.8*
Residential location					
Capital city	% of people	5.8	0.0	8.0	15.3
	95% CI	*3.0–10.8*	—	*3.1–18.8*	*10.6–21.4*
Other places	% of people	6.4	0.5	6.6	25.6
	95% CI	*4.3–9.4*	*0.3–1.2*	*2.0–19.5*	*20.5–31.5*
Postcode socioeconomic status					
Lowest	% of people	4.2	0.0	5.0	19.1
	95% CI	*1.8–9.6*	—	*1.0–22.6*	*9.5–34.7*
Middle	% of people	8.4	0.0	13.9	15.9
	95% CI	*5.0–13.6*	—	*8.0–22.9*	*10.7–22.9*
Highest	% of people	5.6	0.7	4.2	23.0
	95% CI	*5.0–6.2*	*0.5–1.0*	*3.7–4.7*	*15.0–33.7*
Government health card					
Health care card or pensioner concession card	% of people	8.9	0.0	5.4	22.3
	95% CI	*5.5–14.1*	—	*1.3–19.9*	*12.6–36.2*
Neither card	% of people	5.6	0.3	7.6	17.8
	95% CI	*3.7–8.4*	*0.1–1.2*	*3.2–16.9*	*9.9–29.9*
Place of last dental visit					
Cardholder/Public	% of people	9.1	0.0	0.0	36.0
	95% CI	*3.9–20.0*	—	—	*25.6–47.9*
Cardholder/Non-public	% of people	8.7	0.0	12.4	14.4
	95% CI	*5.1–14.4*	—	*4.0–32.3*	*4.1–39.9*
Non-cardholder/Non-public	% of people	5.6	0.3	7.6	17.8
	95% CI	*3.7–8.4*	*0.1–1.2*	*3.2–16.9*	*9.9–29.9*
Dental insurance					
Insured	% of people	5.7	0.0	5.3	17.3
	95% CI	*3.6–8.9*	—	*1.8–14.3*	*11.5–25.3*
Uninsured	% of people	6.5	0.4	9.8	20.5
	95% CI	*4.0–10.3*	*0.1–1.6*	*3.8–22.8*	*13.8–29.4*

(a) 95% CI = 95% confidence interval for estimated percentage.

Percentage of people with one or more filled teeth

Fillings for treatment of tooth decay leave permanent marks on the teeth and are one measure of people's lifetime experience of decay. Filled teeth also indicate patterns of dental treatment and access to dental care. The prevalence of filled teeth in NT was 83.7% (Table 11), which is close to the Australian population figure (83.9%) (Slade et al. 2007).

Key findings

- Prevalence of filled teeth was significantly associated with age; among those aged 35–54 years, it was about 1.4 times that of those in the 15–34 years age group (96.9% versus 68.5%).
- Among people of all ages, the highest prevalence was seen among insured people (91.4%) and the lowest among government health cardholders who last attended a public clinic (76.0%).
- Prevalence of filled teeth was not significantly associated with any of the sociodemographic variables examined, as indicated by overlapping of the 95% CIs.
- While not reaching statistical significance, a number of trends may be discerned in the results in relation to sociodemographic factors. More people living in areas with the highest socioeconomic status appeared to have filled teeth than those in the lowest socioeconomic status areas (88.9% versus 81.0%). More people with private dental insurance had filled teeth than did uninsured people (91.4% versus 81.0%).

Discussion

The percentage of people with filled teeth relates to lifetime experience of dental decay, and hence is associated with age. Prevalence also reflects access to timely dental care, and type of care used to treat caries being a restoration rather than an extraction. The lack of significant findings may be related to the sample size being insufficient to detect small differences.

Table 11: Percentage of people with one or more filled teeth

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**83.7**	**68.5**	**96.9**	**93.5**
	95% CI[(a)]	*79.1–87.5*	*60.2–75.8*	*94.7–98.2*	*73.3–98.7*
Sex					
Males	% of people	80.9	62.5	97.6	90.1
	95% CI	*72.9–87.0*	*50.0–73.4*	*91.7–99.4*	*55.7–98.5*
Females	% of people	86.9	75.2	96.0	97.9
	95% CI	*80.1–91.6*	*61.9–85.0*	*92.2–98.0*	*95.4–99.1*
Residential location					
Capital city	% of people	81.7	63.6	97.0	90.4
	95% CI	*74.4–87.3*	*54.2–72.1*	*93.8–98.6*	*57.5–98.5*
Other places	% of people	86.3	74.3	96.6	98.4
	95% CI	*83.7–88.6*	*67.3–80.2*	*92.6–98.5*	*96.6–99.3*
Postcode socioeconomic status					
Lowest	% of people	81.0	62.8	94.9	100.0
	95% CI	*73.7–86.6*	*47.4–76.0*	*91.7–97.0*	—
Middle	% of people	80.5	63.2	96.9	86.3
	95% CI	*71.6–87.1*	*59.2–67.1*	*95.9–97.7*	*40.0–98.3*
Highest	% of people	88.9	77.6	98.7	97.7
	95% CI	*85.1–91.8*	*74.4–80.5*	*97.4–99.4*	*97.6–97.9*
Government health card					
Health care card or pensioner concession card	% of people	76.7	62.0	95.8	83.6
	95% CI	*53.9–90.3*	*35.5–82.9*	*75.8–99.4*	*41.4–97.4*
Neither card	% of people	84.9	69.3	97.0	98.7
	95% CI	*80.3–88.6*	*60.3–77.0*	*94.9–98.2*	*96.1–99.6*
Place of last dental visit					
Cardholder/Public	% of people	76.0	53.6	100.0	98.1
	95% CI	*52.4–90.1*	*23.2–81.5*	—	*92.1–99.6*
Cardholder/Non-public	% of people	77.4	73.5	90.3	75.3
	95% CI	*48.9–92.5*	*40.6–91.8*	*60.8–98.2*	*27.9–96.0*
Non-cardholder/Non-public	% of people	84.9	69.3	97.0	98.7
	95% CI	*80.3–88.6*	*60.3–77.0*	*94.9–98.2*	*96.1–99.6*
Dental insurance					
Insured	% of people	91.4	77.2	98.9	98.7
	95% CI	*83.4–95.7*	*62.4–87.3*	*96.8–99.6*	*96.9–99.5*
Uninsured	% of people	81.0	69.5	94.6	87.4
	95% CI	*72.0–87.6*	*58.0–78.9*	*88.5–97.6*	*52.4–97.8*

(a) 95% CI = 95% confidence interval for estimated percentage.

Average number of decayed, missing and filled teeth per person

The number of decayed, missing because of pathology, and filled teeth (DMFT) reflects a person's lifetime experience of dental caries. In this survey all missing teeth in people aged 45 years or more were counted as missing due to pathology, while for people aged less than 45 years, the count only included teeth where the examiner judged that dental decay or gum disease was the likely reason for the extraction. The average DMFT number in NT was 10.7 teeth (Table 12), which is lower than that for the Australian population (12.8 teeth) (Slade et al. 2007).

Key findings

- The average number of affected teeth was strongly associated with age, being highest in people aged 55 years or more (22.1 teeth). This was 1.7 times that of the 35–44-year-olds (12.7 teeth) and four times that of the 15–34 years age group (5.0 teeth).
- Among people of all ages, the highest average was seen in government health cardholders who last attended a non-public clinic (15.6 teeth) and the lowest among non-government health cardholders and uninsured people (each 9.7 teeth).
- The average DMFT was associated with place of last dental visit, with government health cardholders who last visited a non-public practitioner having significantly higher scores than non-government health cardholders whose last visit was at a non-public clinic (15.6 versus 10.3 teeth).

Discussion

The average number of teeth with caries experience over a lifetime is a cumulative score, and hence is strongly associated with age. Disease experience is related to disadvantage, as evidenced by associations with government health cardholder status and place of last dental visit.

Table 12: Average number of decayed, missing or filled teeth per person

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**mean**	**10.7**	**5.0**	**12.7**	**22.1**
	95% CI[(a)]	*9.7–11.7*	*3.9–6.0*	*11.7–13.7*	*20.8–23.3*
Sex					
Males	mean	10.3	4.5	12.0	21.6
	95% CI	*9.1–11.4*	*3.2–5.7*	*10.5–13.5*	*19.6–23.5*
Females	mean	11.2	5.5	13.5	22.7
	95% CI	*9.9–12.5*	*4.3–6.7*	*12.2–14.8*	*21.4–24.0*
Residential location					
Capital city	mean	10.6	4.1	12.4	22.3
	95% CI	*8.9–12.2*	*3.2–5.1*	*11.0–13.9*	*21.4–23.2*
Other places	mean	10.9	5.9	13.1	21.7
	95% CI	*9.9–11.8*	*5.1–6.7*	*12.2–14.0*	*19.4–24.0*
Postcode socioeconomic status					
Lowest	mean	10.0	4.6	12.5	23.0
	95% CI	*8.0–12.1*	*3.2–6.0*	*10.4–14.6*	*20.5–25.5*
Middle	mean	10.8	3.9	12.3	22.9
	95% CI	*8.6–12.9*	*3.2–4.6*	*10.5–14.0*	*22.1–23.6*
Highest	mean	11.2	6.1	13.3	20.7
	95% CI	*10.7–11.7*	*5.6–6.6*	*12.8–13.8*	*20.5–20.9*
Government health card					
Health care card or pensioner concession card	mean	13.2	5.3	14.9	22.2
	95% CI	*11.0–15.5*	*3.1–7.5*	*11.2–18.6*	*20.3–24.2*
Neither card	mean	10.3	4.9	12.5	22.0
	95% CI	*9.1–11.5*	*3.8–6.0*	*11.4–13.6*	*20.1–23.8*
Place of last dental visit					
Cardholder/Public	mean	10.9	4.1	14.9	20.6
	95% CI	*6.7–15.1*	*0.8–7.4*	*10.6–19.2*	*18.4–22.8*
Cardholder/Non-public	mean	15.6	6.9	14.8	23.2
	95% CI	*11.8–19.4*	*6.1–7.8*	*8.1–21.5*	*21.3–25.1*
Non-cardholder/Non-public	mean	10.3	4.9	12.5	22.0
	95% CI	*9.1–11.5*	*3.8–6.0*	*11.4–13.6*	*20.1–23.8*
Dental insurance					
Insured	mean	12.3	5.6	13.4	22.3
	95% CI	*10.0–14.6*	*4.0–7.1*	*11.9–14.8*	*20.7–24.0*
Uninsured	mean	9.7	4.9	12.0	21.7
	95% CI	*8.6–10.8*	*3.7–6.1*	*10.9–13.1*	*19.6–23.8*

(a) 95% CI = 95% confidence interval for estimated mean.

Prevalence of moderate or severe periodontitis

A case definition of periodontitis has been developed jointly by the US Centers for Disease Control and Prevention (CDC) and the American Academy of Periodontology (AAP) to describe prevalence of moderate and severe periodontitis. The CDC/AAP defines moderate periodontitis as the presence of either two sites between adjacent teeth where the gum has lost its attachment to the tooth for 4 mm or more, or at least two such sites that have pockets of 5 mm or more. Severe periodontitis has been defined as having at least two sites between adjacent teeth where the gum has lost its attachment to the tooth for 6 mm or more, and there is at least one pocket of 5 mm or greater depth. Table 13 reports estimates of combined moderate or severe periodontitis. In NT, a total of 26.4% of the dentate population had moderate or severe periodontitis (Table 13), which was higher, but not significantly, than the national estimate of 22.9% (Slade et al. 2007).

Key findings

- The prevalence of moderate or severe periodontitis was strongly associated with age, being 10.0% in 15–34-year-old adults but affecting 62.7% of those aged 55 years or more. The difference between these two age groups was statistically significant.
- Residents in places other than the capital city were more likely to have periodontitis compared with capital city residents. The difference was more than two-fold.
- The prevalence of periodontitis was higher in the areas with lowest postcode socioeconomic status.
- People who had a government health card and those without private insurance tended to have higher prevalence of periodontitis compared with their counterparts. However, the differences were not statistically significant.

Discussion

Components of periodontal disease measurement reflect both concurrent disease state and historical accumulation of the disease. Therefore, a strong association with age was fully expected. Because periodontitis was more prevalent in the older population, comparisons between the population groups were observed most clearly in those age groups.

The postcode socioeconomic status was measured by the Index of Socioeconomic Advantage/Disadvantage, with one value for a postcode. The small number of postcodes in NT might make area-based estimates vulnerable to extreme values; hence, the direction of estimates might have been confounded.

In summary, moderate or severe periodontitis affected one-quarter of the NT adult population, with the highest proportion of those affected being in the older age group. The disease was most likely to be observed in the residents of regional areas. There was also a trend of higher likelihood of the disease in people in higher socioeconomic positions.

Table 13: Percentage of people with moderate or severe periodontitis

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**26.4**	**10.0**	**32.2**	**62.7**
	95% CI[(a)]	*17.7–37.3*	*3.2–27.4*	*21.4–45.3*	*50.7–73.3*
Sex					
Males	% of people	30.7	15.0	35.3	67.5
	95% CI	*19.5–44.7*	*4.3–40.7*	*24.4–48.0*	*52.1–79.9*
Females	% of people	21.3	4.3	28.6	56.8
	95% CI	*15.5–28.6*	*1.7–10.4*	*17.0–43.9*	*47.7–65.5*
Residential location					
Capital city	% of people	17.8	0.0	23.6	54.3
	95% CI	*12.3–25.0*	—	*16.1–33.4*	*41.1–66.9*
Other places	% of people	36.9	21.3	43.4	73.9
	95% CI	*29.4–45.1*	*14.2–30.7*	*28.1–60.0*	*65.8–80.6*
Postcode socioeconomic status					
Lowest	% of people	17.9	4.2	23.3	59.4
	95% CI	*10.3–29.3*	*0.6–23.3*	*11.2–42.3*	*33.5–81.0*
Middle	% of people	21.2	0.0	28.3	59.1
	95% CI	*15.2–28.8*	—	*21.1–36.8*	*38.1–77.3*
Highest	% of people	37.3	22.0	44.0	67.3
	95% CI	*30.3–44.9*	*15.1–31.0*	*32.1–56.8*	*57.1–76.2*
Government health card					
Health care card or pensioner concession card	% of people	35.8	7.2	42.6	69.5
	95% CI	*25.8–47.1*	*1.3–31.8*	*21.9–66.4*	*50.1–83.8*
Neither card	% of people	24.8	10.7	31.3	58.8
	95% CI	*15.5–37.3*	*3.6–27.9*	*20.5–44.5*	*39.8–75.5*
Place of last dental visit					
Cardholder/Public	% of people	27.5	12.0	60.8	29.8
	95% CI	*13.6–47.8*	*2.1–47.2*	*32.0–83.6*	*15.1–50.3*
Cardholder/Non-public	% of people	43.8	0.0	21.5	88.5
	95% CI	*25.2–64.3*	—	*2.6–74.0*	*68.4–96.5*
Non-cardholder/Non-public	% of people	24.8	10.7	31.3	58.8
	95% CI	*15.5–37.3*	*3.6–27.9*	*20.5–44.5*	*39.8–75.5*
Dental insurance					
Insured	% of people	23.2	5.7	23.8	58.2
	95% CI	*14.5–34.9*	*1.8–16.4*	*13.4–38.6*	*39.4–74.9*
Uninsured	% of people	30.3	13.6	41.2	67.1
	95% CI	*19.9–43.1*	*3.8–38.7*	*26.7–57.4*	*50.6–80.2*

(a) 95% CI = 95% confidence interval for estimated percentage.

Prevalence of deep pocket depth

Deep periodontal pockets have been defined as 4 mm or more. The depth of the pocket, measured in millimetres using a periodontal probe, is an indication of the severity of the destructive process. In NT, a total of 32.7% of the dentate adult population had at least one site with periodontal pocket depth of 4 mm or more (Table 14), which was significantly higher than the national estimate of 19.8% (Slade et al. 2007).

Key findings

- There was a tendency for the prevalence of deep periodontal pocket to increase with age, with the oldest age group having the highest prevalence of the condition. However, the differences between age groups were not statistically significant.
- Males tended to have higher prevalence of deep periodontal pocket but the difference was not statistically significant.
- People who lived outside the capital city had significantly higher prevalence of deep periodontal pocket, with the difference being more than two-fold. This trend remained significant for both the youngest and oldest age groups.
- Prevalence was significantly higher in postcodes with the highest socioeconomic status compared with those with middle socioeconomic status. This trend remained significant for the middle-aged group.
- The prevalence of deep periodontal pockets was higher among peoples who did not have private dental insurance. However, the difference was not statistically significant.

Discussion

The depth of periodontal pockets reflects a more current activity of periodontal inflammation. This activity may be more dependent on oral hygiene status, which was found to not vary widely between groups.

The postcode socioeconomic status was measured by the Index of Socioeconomic Advantage/Disadvantage, with one value for a postcode. The small number of postcodes in NT might make area-based estimates vulnerable to extreme values; hence, the direction of estimates might have been confounded.

In summary, there was a tendency of higher prevalence of deep periodontal pocket among people who were in higher socioeconomic positions.

Table 14: Percentage of people with 4+ mm periodontal pocket depth

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**32.7**	**24.0**	**39.0**	**42.9**
	95% CI[(a)]	*22.7–44.5*	*13.6–38.9*	*26.4–53.2*	*34.1–52.1*
Sex					
Males	% of people	36.1	28.1	44.4	38.4
	95% CI	*24.1–50.2*	*14.5–47.5*	*29.8–59.9*	*27.6–50.4*
Females	% of people	28.7	19.3	32.7	48.3
	95% CI	*19.7–39.7*	*10.2–33.5*	*21.0–46.9*	*32.5–64.5*
Residential location					
Capital city	% of people	21.4	10.4	28.6	33.7
	95% CI	*15.0–29.4*	*3.9–24.8*	*20.9–37.9*	*23.2–46.0*
Other places	% of people	46.6	39.4	52.5	55.2
	95% CI	*40.6–52.6*	*33.4–45.7*	*36.8–67.7*	*48.1–62.2*
Postcode socioeconomic status					
Lowest	% of people	24.4	15.9	29.8	40.3
	95% CI	*14.1–39.0*	*6.3–34.9*	*17.9–45.3*	*18.3–67.0*
Middle	% of people	25.4	16.7	29.8	37.7
	95% CI	*19.8–32.0*	*6.6–36.4*	*24.2–36.1*	*24.7–52.8*
Highest	% of people	45.2	35.9	55.3	48.7
	95% CI	*35.4–55.4*	*24.2–49.6*	*43.2–66.7*	*41.5–56.0*
Government health card					
Health care card or pensioner concession card	% of people	29.4	7.2	44.7	49.1
	95% CI	*18.2–43.9*	*1.3–31.8*	*22.8–68.9*	*28.0–70.6*
Neither card	% of people	33.5	27.3	38.5	39.4
	95% CI	*22.3–46.9*	*15.6–43.3*	*25.5–53.3*	*25.9–54.7*
Place of last dental visit					
Cardholder/Public	% of people	30.1	12.0	64.6	37.2
	95% CI	*17.7–46.3*	*2.1–47.2*	*37.2–84.9*	*25.5–50.8*
Cardholder/Non-public	% of people	28.7	0.0	21.5	54.8
	95% CI	*14.9–48.1*	—	*2.6–74.0*	*24.5–82.0*
Non-cardholder/Non-public	% of people	33.5	27.3	38.5	39.4
	95% CI	*22.3–46.9*	*15.6–43.3*	*25.5–53.3*	*25.9–54.7*
Dental insurance					
Insured	% of people	27.2	13.6	32.3	41.7
	95% CI	*17.9–39.1*	*8.0–22.3*	*18.2–50.6*	*30.4–53.8*
Uninsured	% of people	36.9	28.6	46.1	44.3
	95% CI	*23.0–53.5*	*11.7–54.7*	*29.1–64.1*	*30.9–58.5*

(a) 95% CI = 95% confidence interval for estimated percentage.

Prevalence of 4+ mm clinical attachment loss

Clinical attachment loss (CAL) is the loss of supporting periodontal structure around the tooth. Attachment may be lost through gum recession or the development of periodontal pockets from the inflammatory disease periodontitis. In NSAOH, CAL was measured using a combination of gum recession and periodontal probing depth on three sites per tooth. In NT, a total of 47.2% of dentate adults had at least one site with 4 mm or more CAL (Table 15), which was higher, but not significantly, than the national estimate of 42.5% (Slade et al. 2007).

Key findings

- The prevalence of 4+ mm CAL was strongly associated with age in NT, being 21.1% in 15–34-year-old adults but affecting 62.4% of middle-aged adults and 88.6% of those aged 55 years or more. The differences between the three age groups were statistically significant.
- There was a tendency that males had higher prevalence of CAL of 4+ mm compared with females. However, the difference was not statistically significant.
- There was a tendency that people who lived in the regional areas had a higher prevalence of the condition than those in the capital city. However, the difference was not statistically significant.

Discussion

Clinical attachment loss reflects an accumulation of activity of periodontal inflammation as well as a physiological process in the gums. Therefore, a strong age effect was observed. This condition was almost universal in certain groups of the oldest population.

In summary, clinical attachment loss was highly prevalent in this population, and was more likely to occur in the older population.

Table 15: Percentage of people with 4+ mm clinical attachment loss

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**47.2**	**21.1**	**62.4**	**88.6**
	95% CI[(a)]	*37.0–57.7*	*11.5–35.5*	*46.9–75.7*	*76.4–94.9*
Sex					
Males	% of people	54.0	25.3	73.0	91.7
	95% CI	*39.8–67.5*	*11.6–46.4*	*52.6–86.8*	*74.6–97.7*
Females	% of people	39.3	16.2	50.0	84.7
	95% CI	*32.1–47.0*	*9.4–26.6*	*36.7–63.3*	*74.8–91.2*
Residential location					
Capital city	% of people	40.4	12.6	55.3	81.7
	95% CI	*32.6–48.8*	*5.5–26.4*	*50.1–60.4*	*69.4–89.7*
Other places	% of people	55.5	30.6	71.7	97.8
	95% CI	*44.1–66.4*	*21.1–42.1*	*41.5–90.0*	*95.4–99.0*
Postcode socioeconomic status					
Lowest	% of people	40.0	14.7	56.0	86.7
	95% CI	*30.3–50.4*	*4.5–38.3*	*41.3–69.7*	*66.7–95.5*
Middle	% of people	41.8	13.6	55.4	82.9
	95% CI	*31.3–53.1*	*4.5–34.5*	*53.6–57.3*	*62.2–93.4*
Highest	% of people	57.4	31.7	74.2	94.5
	95% CI	*48.5–65.9*	*23.9–40.6*	*47.3–90.2*	*86.4–97.9*
Government health card					
Health care card or pensioner concession card	% of people	48.9	8.1	58.5	97.2
	95% CI	*35.7–62.4*	*1.4–35.0*	*29.8–82.4*	*85.9–99.5*
Neither card	% of people	47.2	23.6	62.8	83.7
	95% CI	*35.9–58.8*	*13.0–39.0*	*47.8–75.6*	*68.8–92.3*
Place of last dental visit					
Cardholder/Public	% of people	47.2	12.0	78.3	100.0
	95% CI	*27.3–68.2*	*2.1–47.2*	*50.0–92.9*	—
Cardholder/Non-public	% of people	50.6	2.2	35.4	95.9
	95% CI	*29.4–71.5*	*0.3–14.1*	*6.8–80.6*	*79.4–99.3*
Non-cardholder/Non-public	% of people	47.2	23.6	62.8	83.7
	95% CI	*35.9–58.8*	*13.0–39.0*	*47.8–75.6*	*68.8–92.3*
Dental insurance					
Insured	% of people	48.3	17.8	58.9	82.4
	95% CI	*35.6–61.1*	*8.4–33.8*	*42.0–74.0*	*67.7–91.2*
Uninsured	% of people	48.8	25.2	66.1	95.4
	95% CI	*37.4–60.4*	*12.0–45.2*	*50.2–79.1*	*88.3–98.2*

(a) 95% CI = 95% confidence interval for estimated percentage.

Prevalence of gingival inflammation

The gingival index is a measure of gingivitis, or inflammation of the gums. Gingivitis occurs as a response to the bacteria in plaque accumulation near the gum line. In NSAOH, gingivitis was assessed on six index teeth. A gingival index score of 2 or more indicated bleeding on probing or spontaneous bleeding, and was classified as indicating gingival inflammation (gingivitis). In NT, a total of 18.0% of the dentate adult population had at least one site with a gingival score of 2 or more (Table 16), which was lower, but not significantly, than the national estimate of 19.7% (Slade et al. 2007).

Key findings

- There was a similar rate of gingival inflammation in all age groups.
- Males were more likely to have gingival inflammation compared with females. However, the difference did not reach statistical significance.
- There was a tendency that people living in regional areas were more likely to have gingival inflammation than those in the capital city. However, the differences were not statistically significant.

Discussion

Gingival inflammation is a condition observed in people of all ages at a similar rate. There was a tendency that people with lower socioeconomic status had higher prevalence of gingival inflammation. However, some differences were small and relatively low numbers of people in each population group made the confidence interval wide, overlapping between most groups.

Table 16: Percentage of people with gingival inflammation

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**18.0**	**17.1**	**19.4**	**16.6**
	95% CI[(a)]	*13.9–22.9*	*10.1–27.5*	*14.0–26.3*	*12.2–22.3*
Sex					
Males	% of people	21.3	22.0	21.5	18.2
	95% CI	*17.1–26.1*	*10.9–39.4*	*14.5–30.7*	*10.6–29.4*
Females	% of people	14.1	11.4	17.0	14.7
	95% CI	*8.3–22.9*	*6.0–20.8*	*10.1–27.2*	*6.7–29.5*
Residential location					
Capital city	% of people	14.6	17.2	12.6	12.9
	95% CI	*9.1–22.7*	*6.7–37.4*	*6.6–22.6*	*8.4–19.4*
Other places	% of people	22.0	17.0	28.4	21.7
	95% CI	*14.6–31.7*	*10.8–25.7*	*18.3–41.3*	*17.1–27.1*
Postcode socioeconomic status					
Lowest	% of people	16.9	16.0	18.3	14.8
	95% CI	*8.7–30.4*	*8.9–27.3*	*7.1–39.7*	*4.9–37.0*
Middle	% of people	18.9	24.0	15.9	12.8
	95% CI	*11.2–29.9*	*8.0–53.3*	*11.2–22.0*	*7.3–21.4*
Highest	% of people	18.1	12.9	23.3	21.1
	95% CI	*17.3–18.9*	*11.1–15.0*	*20.4–26.6*	*18.3–24.1*
Government health card					
Health care card or pensioner concession card	% of people	22.8	13.6	37.2	26.1
	95% CI	*11.3–40.6*	*3.2–42.6*	*18.5–60.7*	*10.5–51.6*
Neither card	% of people	17.2	17.9	17.8	11.1
	95% CI	*13.2–22.1*	*10.5–28.9*	*13.2–23.6*	*5.9–20.1*
Place of last dental visit					
Cardholder/Public	% of people	22.3	17.1	41.0	15.7
	95% CI	*13.2–35.1*	*5.4–42.8*	*15.5–72.5*	*2.7–55.8*
Cardholder/Non-public	% of people	23.2	8.9	32.7	31.6
	95% CI	*7.6–52.5*	*0.8–52.6*	*10.1–67.7*	*13.0–59.0*
Non-cardholder/Non-public	% of people	17.2	17.9	17.8	11.1
	95% CI	*13.2–22.1*	*10.5–28.9*	*13.2–23.6*	*5.9–20.1*
Dental insurance					
Insured	% of people	17.9	20.4	17.8	12.9
	95% CI	*10.0–30.1*	*5.3–54.0*	*10.0–29.9*	*8.5–19.0*
Uninsured	% of people	18.9	17.0	21.1	20.4
	95% CI	*14.4–24.5*	*11.6–24.1*	*15.7–27.8*	*10.6–35.8*

(a) 95% CI = 95% confidence interval for estimated percentage.

4 Oral health care

Dental attendance within the preceding 12 months

Time since last visiting a dentist is a key indicator of access to dental care. In NSAOH, the time since last dental visit was assessed in the interview by asking, 'How long ago did you last see a dental professional about your teeth, dentures or gums?'. Five responses were possible including 'Less than 12 months.' In NT, 49.1% of people aged 15 years or more had visited a dentist within the last 12 months (Table 17), which was significantly lower than the national estimate of 59.4% (Slade et al. 2007).

Key findings

- There was little variation across age groups in the percentage of NT residents reporting they had visited a dentist within the last 12 months.
- Females reported a higher percentage than males (53.3% versus 45.4%) although this difference was not statistically significant. Similar differences between females and males were evident in each age group.
- A similar percentage of Darwin residents reported a visit as those living in the rest of NT (51.9% versus 45.4%). Significant differences by residential location were observed for adults aged 15–34 years, with 52.7% of Darwin residents visiting a dentist within the last 12 months compared with only 38.2% of residents living outside the metropolitan area.
- Socioeconomic area had little impact on whether a person visited a dentist frequently, with those living in low socioeconomic postcodes almost as likely to have visited in the last 12 months as people living in high socioeconomic postcodes (44.0% versus 50.1%). However, significant differences between the lowest and highest groups were observed in the 35–54 years age group (44.0% versus 57.6%).
- Across all ages, government health cardholders were almost as likely to have visited a dentist within the last 12 months as those who did not have a government health card (46.6% versus 49.7%). Within age groups, large differences were observed for adults aged 35–54 years (33.8% versus 52.9%) although they were not statistically significant.
- Among people who had a government health card, those who attended a public practice at their last dental visit were nearly as likely to have visited a dentist within the last 12 months as those who attended a private practice (45.8% versus 47.4%). Within age groups, large differences were observed by place of last visit but no consistent pattern emerged.
- Insured adults reported a higher percentage than those without dental insurance (54.8% versus 45.2%) although this difference was not statistically significant. The largest difference between insurance groups occurred in the 55 years or more age group (59.9% versus 42.0%) but this difference was also not significant.

Discussion

Nearly one out of two NT residents aged 15 years and over visited a dentist within the preceding 12 months. Overall, gender, age, residential location and socioeconomic status had little impact on whether a person had made a recent dental visit.

Table 17: Percentage of people visiting dentist within last 12 months

		Population: all people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**49.1**	**46.0**	**51.2**	**52.1**
	95% CI[(a)]	*44.8–53.4*	*37.6–54.5*	*45.3–57.1*	*45.2–59.0*
Sex					
Males	% of people	45.4	41.4	48.0	49.0
	95% CI	*39.7–51.1*	*32.1–51.4*	*39.8–56.2*	*40.0–58.1*
Females	% of people	53.3	50.9	54.8	55.9
	95% CI	*47.9–58.6*	*41.2–60.6*	*49.2–60.3*	*46.1–65.3*
Residential location					
Capital city	% of people	51.9	52.7	49.6	55.3
	95% CI	*46.0–57.7*	*46.1–59.1*	*41.7–57.5*	*44.9–65.2*
Other places	% of people	45.4	38.2	53.4	47.3
	95% CI	*43.1–47.7*	*31.9–44.9*	*45.8–60.9*	*40.1–54.7*
Postcode socioeconomic status					
Lowest	% of people	44.0	43.5	44.0	45.4
	95% CI	*37.3–50.9*	*36.0–51.4*	*36.4–51.9*	*34.6–56.6*
Middle	% of people	53.0	54.2	52.4	51.6
	95% CI	*48.3–57.7*	*48.2–60.0*	*42.0–62.6*	*41.2–62.0*
Highest	% of people	50.1	41.6	57.6	55.8
	95% CI	*41.7–58.5*	*29.0–55.4*	*55.9–59.2*	*44.0–66.9*
Government health card					
Health care card or pensioner concession card	% of people	46.6	51.7	33.8	48.5
	95% CI	*34.7–58.8*	*27.4–75.2*	*17.3–55.6*	*42.3–54.7*
Neither card	% of people	49.7	45.0	52.9	54.4
	95% CI	*44.4–55.0*	*35.0–55.3*	*48.2–57.6*	*45.0–63.4*
Place of last dental visit					
Cardholder/Public	% of people	45.8	43.0	40.4	56.5
	95% CI	*29.8–62.7*	*19.4–70.3*	*17.8–67.9*	*34.3–76.3*
Cardholder/Non-public	% of people	47.4	63.8	24.0	43.5
	95% CI	*37.7–57.3*	*36.6–84.3*	*10.0–47.5*	*31.6–56.1*
Non-cardholder/Non-public	% of people	49.7	45.0	52.9	54.4
	95% CI	*44.4–55.0*	*35.0–55.3*	*48.2–57.6*	*45.0–63.4*
Dental insurance					
Insured	% of people	54.8	51.1	54.9	59.9
	95% CI	*48.1–61.3*	*44.6–57.6*	*47.3–62.3*	*46.0–72.5*
Uninsured	% of people	45.2	45.0	46.9	42.0
	95% CI	*37.9–52.8*	*32.0–58.8*	*41.0–52.8*	*35.7–48.5*

(a) 95% CI = 95% confidence interval for estimated percentage.

Attendance at private dental practice

While most Australians obtain dental care at private dental practices, alternatives exist in the public sector for targeted population groups. The two largest public programs are school dental services targeted to children; and adult public programs provided through dental hospitals, community health centres and regional facilities and targeted to adults holding a government concession card. In NSOAH, people were asked 'Where did you make your last dental visit?' and seven responses were offered. People who reported having visited a general dental practice, a specialist dental practice or a dental clinic associated with a health insurance fund were classified as having attended a private dental practice. In NT, 75.2% of people aged 15 years or more attended a private practice at their last dental visit (Table 17), which was significantly lower than the national estimate of 83.1% (Slade et al. 2007).

Key findings

- Adults aged 15–34 years were least likely to have visited a private practice at their last dental visit (61.4%), significantly lower than that reported for older adults.
- The percentage was higher among females than males (80.1% versus 70.9%) although this difference was not statistically significant. The percentage was lowest for males aged 15–34 years (51.4%), significantly lower than other population groups.
- People living outside the metropolitan area were almost as likely to have visited a private dentist at their last visit as those living in Darwin (74.2% versus 76.0%). Within age groups, differences by residential location were also small.
- Residents living in low socioeconomic postcodes were nearly as likely to have visited a private practice as those living in postcodes of high socioeconomic status (72.5% versus 76.5%). Within age groups, the largest difference between the lowest and highest socioeconomic areas was observed for adults aged 35–54 years (83.1% versus 94.2%).
- Despite having a government health card, 44.4% of cardholders reported they visited a private practice at their last dental visit. Among government health cardholders, the percentage was greater for those aged 55 years or more (59.9%) although this was not significantly different from younger people who had a government health card (36%).
- Insurance status was strongly associated with visiting a private practice, with the insured recording a much higher percentage than those without dental insurance (89.6% versus 64.4%). Significant differences between insurance groups were also evident within each age group.

Discussion

Three out of four NT residents aged 15 years or over visited a private practice at their last dental visit. Overall, differences between population groups were small, with only dental insurance being associated with private visiting. Within age groups, young males were less likely to have visited a private dental practice than other population groups. Despite having a government health card, 44% of cardholders attended a private practice at their last dental visit.

Table 18: Percentage of people who attended a private dental practice at last dental visit

		Population: all people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**75.2**	**61.4**	**87.3**	**81.9**
	95% CI[(a)]	*71.5–78.7*	*54.6–67.8*	*80.9–91.8*	*76.9–86.0*
Sex					
Males	% of people	70.9	51.4	85.4	85.4
	95% CI	*64.3–76.8*	*42.3–60.5*	*75.1–91.9*	*76.2–91.5*
Females	% of people	80.1	72.4	89.5	77.6
	95% CI	*76.3–83.4*	*63.5–79.8*	*84.5–93.0*	*73.0–81.6*
Residential location					
Capital city	% of people	76.0	63.8	85.3	82.1
	95% CI	*72.1–79.6*	*56.8–70.3*	*81.4–88.6*	*74.4–87.9*
Other places	% of people	74.2	58.6	90.1	81.5
	95% CI	*66.8–80.4*	*47.2–69.2*	*76.2–96.3*	*75.8–86.1*
Postcode socioeconomic status					
Lowest	% of people	72.5	56.0	83.1	87.6
	95% CI	*62.3–80.7*	*38.7–71.9*	*72.9–90.0*	*77.6–93.5*
Middle	% of people	76.4	67.1	84.3	81.3
	95% CI	*71.1–80.9*	*58.0–75.0*	*82.2–86.2*	*67.4–90.1*
Highest	% of people	76.5	61.1	94.2	79.5
	95% CI	*75.1–77.9*	*59.0–63.2*	*93.5–94.9*	*76.2–82.5*
Government health card					
Health care card or pensioner concession card	% of people	44.4	36.1	36.7	59.9
	95% CI	*39.0–49.9*	*23.2–51.4*	*27.0–47.6*	*46.7–71.9*
Neither card	% of people	81.2	66.5	92.3	92.2
	95% CI	*77.9–84.1*	*60.6–71.9*	*86.1–95.9*	*84.1–96.3*
Dental insurance					
Insured	% of people	89.6	75.8	96.7	93.6
	95% CI	*84.5–93.1*	*64.1–84.5*	*92.5–98.6*	*87.5–96.9*
Uninsured	% of people	64.4	55.5	76.4	66.6
	95% CI	*59.2–69.2*	*49.0–61.8*	*65.6–84.6*	*56.0–75.7*

(a) 95% CI = 95% confidence interval for estimated percentage.

Payments by patients for dental care

While the place of last dental visit was dominated by private practice, some visits made to private dentists are paid for by public funds. In order to identify such visits, NSAOH participants who held a government health card and who had visited a dentist within the last 5 years were asked 'Did the government or an insurance fund pay any part of the expense for your last dental visit?'. A number of response options were available including 'Paid all own expenses', 'Insurance paid some—patient paid some', 'Insurance paid all', 'Government paid some—patient paid some' and 'Government paid all'. People who reported one of the first three payment mechanisms were classified as having paid for their care, together with people who were non-government health cardholders and had visited within the last 5 years. In NT, 91.1% of people aged 15 years or more who had seen a dentist within the preceding 5 years paid for that visit (Table 19). This estimate was not significantly different from the national estimate of 91.4% (Slade et al. 2007).

Key findings

- There was little variation across age groups in the percentage of NT residents reporting they had paid for their last dental visit.
- Males and females who had seen a dentist within the preceding 5 years were almost as likely to have paid for their last dental visit (92.8% versus 89.3%). The largest variation between sexes occurred in the 55 years or more age group (92.2% versus 83.4%) although this difference was not significant.
- A higher percentage of adults living outside the metropolitan area paid for their last dental visit than Darwin residents (93.1% versus 89.5%) but this difference was not significant. However, among people aged 35–54 years, those living outside Darwin were more likely to have paid for their last visit than Darwin residents (98.6% versus 91.6%).
- Socioeconomic area had little impact, with adults living in low socioeconomic postcodes being almost as likely to have paid for their last visit as people living in high socioeconomic postcodes (91.9% versus 93.3). Similar results were evident within each age group.
- Despite being government health cardholders, 42.4% of cardholders who visited a dentist within the preceding 5 years paid for their last dental visit. The percentage was highest for health cardholders aged 55 years (57.1%).
- Nearly 100% of insured NT residents paid for their last dental visit compared with 84.8% of uninsured people. Within the uninsured population, the percentage was lowest for those aged 55 years or more (74.5%).

Discussion

The majority of adults who had a government health card paid for their own dental care.

Table 19: Percentage of people who paid for their last dental visit

		Population: people who visited dentist within last 5 years Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**91.1**	**88.9**	**94.6**	**88.1**
	95% CI[(a)]	*88.7–93.0*	*84.2–92.3*	*91.4–96.7*	*80.3–93.1*
Sex					
Males	% of people	92.8	90.8	95.0	92.2
	95% CI	*88.6–95.5*	*82.7–95.4*	*89.4–97.7*	*77.8–97.5*
Females	% of people	89.3	87.0	94.2	83.4
	95% CI	*84.3–92.8*	*76.2–93.4*	*90.8–96.4*	*78.0–87.6*
Residential location					
Capital city	% of people	89.5	88.1	91.6	88.1
	95% CI	*87.2–91.4*	*85.0–90.7*	*87.4–94.5*	*75.1–94.8*
Other places	% of people	93.1	89.8	98.6	88.0
	95% CI	*89.4–95.5*	*79.6–95.2*	*97.4–99.3*	*81.6–92.5*
Postcode socioeconomic status					
Lowest	% of people	91.9	88.4	94.3	93.9
	95% CI	*85.9–95.5*	*72.5–95.7*	*88.5–97.3*	*89.4–96.6*
Middle	% of people	87.4	85.3	92.4	82.4
	95% CI	*85.8–89.0*	*83.7–86.8*	*84.4–96.5*	*63.3–92.7*
Highest	% of people	93.3	91.9	96.8	89.8
	95% CI	*92.9–93.7*	*91.2–92.6*	*92.1–98.8*	*79.3–95.3*
Government health card					
Health care card or pensioner concession card	% of people	42.4	35.8	35.4	57.1
	95% CI	*35.5–49.6*	*25.2–48.1*	*24.9–47.5*	*42.8–70.2*
Neither card	% of people	100.0	100.0	100.0	100.0
	95% CI	—	—	—	—
Place of last dental visit					
Cardholder/Public	% of people	3.7	4.7	5.3	0.0
	95% CI	*1.0–12.2*	*0.7–25.6*	*0.8–27.8*	–
Cardholder/Non-public	% of people	86.5	76.4	82.5	100.0
	95% CI	*63.2–96.0*	*41.0–93.8*	*58.4–94.1*	—
Non-cardholder/Non-public	% of people	100.0	100.0	100.0	100.0
	95% CI	—	—	—	—
Dental insurance					
Insured	% of people	97.8	94.5	99.9	97.5
	95% CI	*95.0–99.0*	*85.6–98.0*	*98.9–100.0*	*91.3–99.3*
Uninsured	% of people	84.8	85.7	87.7	74.5
	95% CI	*79.0–89.3*	*76.3–91.8*	*80.3–92.6*	*63.9–82.8*

(a) 95% CI = 95% confidence interval for estimated percentage.

Government-subsidised dental care in private sector

In some states and territories, public-sector dental programs provide care to people eligible for their services by referring them to private practitioner dentists. The cost of such care is then subsidised by the state or territory dental program. In NT, 0.8% of the adult population received territory-subsidised dental care in the private sector (Table 20). This statistic was not reported nationally.

- The provision of territory-subsidised dental care in the private sector was limited to people aged less than 35 years.
- Among people with a government health card, 5.1% received territory-subsidised dental care in the private sector, and this figure was 10.8% for those who were less than 35 years old.
- People with dental insurance did not receive state-subsidised dental care in private practice.

Discussion

Due to the small percentage of people who received territory-subsidised dental care in the private sector and the small numbers of people sampled in NT, it is unwise to draw any firm conclusions from these findings.

Table 20: Percentage of people who received government-subsidised dental care in private sector

		Population: people who visited dentist within last 5 years Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**0.8**	**1.9**	**0.0**	**0.0**
	95% CI[(a)]	*0.4–1.5*	*1.0–3.4*	—	—
Sex					
Males	% of people	0.6	1.4	0.0	0.0
	95% CI	*0.1–2.4*	*0.3–5.5*	—	—
Females	% of people	1.0	2.3	0.0	0.0
	95% CI	*0.4–2.7*	*0.8–6.2*	—	—
Residential location					
Capital city	% of people	0.9	2.2	0.0	0.0
	95% CI	*0.4–2.2*	*0.9–5.4*	—	—
Other places	% of people	0.7	1.5	0.0	0.0
	95% CI	*0.3–1.6*	*0.6–3.4*	—	—
Postcode socioeconomic status					
Lowest	% of people	0.7	1.7	0.0	0.0
	95% CI	*0.2–3.2*	*0.4–6.7*	—	—
Middle	% of people	0.9	2.2	0.0	0.0
	95% CI	*0.3–2.8*	*0.6–7.4*	—	—
Highest	% of people	0.7	1.7	0.0	0.0
	95% CI	*0.4–1.4*	*0.9–2.9*	—	—
Government health card					
Health care card or pensioner concession card	% of people	5.1	10.8	0.0	0.0
	95% CI	*2.3–10.8*	*4.6–23.2*	—	—
Neither card	% of people	0.0	0.0	0.0	0.0
	95% CI	—	—	—	—
Dental insurance					
Insured	% of people	0.0	0.0	0.0	0.0
	95% CI	—	—	—	—
Uninsured	% of people	1.0	2.0	0.0	0.0
	95% CI	*0.4–2.8*	*0.7–5.3*	—	—

(a) 95% CI = 95% confidence interval for estimated percentage.

People's usual pattern of dental visits

While time since last visiting a dentist provides a snapshot of dental visiting behaviour, people's usual dental attendance pattern reflects longer term behaviours and intentions. In NSAOH, people who were dentate were asked 'How often on average do you seek care from a dental professional?' and four categories of response were offered. In NT, 39.6% of people aged 15 years or more usually visit a dentist at least once a year (Table 21), which was significantly lower than the national estimate of 53.1% (Slade et al. 2007).

Key findings

- The percentage of people usually visiting a dentist one or more times a year was lower for 15–34 year-olds (35.0%) than any other age group although the difference was not statistically significantly.
- The percentage was slightly higher for females than males, both across all ages (43.3% versus 36.3%) and within each age group.
- A similar proportion of Darwin residents usually visited a dentist at least once a year as other NT residents (42.4% versus 36.0%). Within age groups, the largest difference by residential location was observed for adults aged 15–34 years (39.7% versus 29.7%) although this difference was not statistically significant.
- Socioeconomic status had little impact, with a similar proportion of adults reporting they usually visit a dentist at least once a year irrespective of the socioeconomic status of their residential area.
- Over all ages, residents who were government health cardholders were equally likely to usually visit a dentist regularly as those who did not have a government health card (40.4% versus 39.3%). Within age groups, the largest difference by government health cardholder status occurred for 35–54-year-olds (29.8% versus 42.5%) although this difference was not significant.
- Among government health cardholders, adults who visited a public practice at their last dental visit were just as likely to frequently visit as those who visited a private practice (40.1% versus 40.7%). However, within age groups, large differences were observed for cardholders aged 15–34 years, with those visiting a public practice reporting a higher percentage than those who visited a private practice (49.2% versus 30.4%). Conversely, in the oldest age group, cardholders who visited a public practice were less likely to make regular visits than private attendees (28.4% versus 58.3%).
- A higher percentage of insured adults usually visited at least once a year than those without insurance (44.9% versus 35.0%) although this difference was not significant. Larger differences between insurance groups were evident in the 55 years or more age group (55.3% versus 37.9%) but were also not significant.

Discussion

One out of four NT residents aged 15 years and over usually visit a dentist at least once a year. Across all ages, the percentage who visited regularly was similar among all population groups, with the largest difference observed between insured and uninsured people. Larger differences were observed within age groups but these were not statistically significant.

Table 21: Percentage of people who usually visit a dental professional at least once a year

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**39.6**	**35.0**	**41.5**	**47.9**
	95% CI[(a)]	*34.3–45.1*	*26.1–45.0*	*36.1–47.1*	*42.5–53.3*
Sex					
Males	% of people	36.3	30.3	39.7	44.3
	95% CI	*29.5–43.8*	*19.0–44.6*	*29.4–51.0*	*35.6–53.3*
Females	% of people	43.3	40.2	43.4	52.6
	95% CI	*37.0–49.7*	*31.1–50.1*	*37.7–49.3*	*40.9–64.1*
Residential location					
Capital city	% of people	42.4	39.7	42.8	48.2
	95% CI	*35.6–49.4*	*29.4–50.9*	*34.9–51.1*	*39.8–56.7*
Other places	% of people	36.0	29.7	39.7	47.4
	95% CI	*31.4–40.9*	*21.0–40.1*	*32.8–46.9*	*44.2–50.7*
Postcode socioeconomic status					
Lowest	% of people	34.1	32.9	32.9	43.8
	95% CI	*27.2–41.8*	*25.5–41.3*	*24.7–42.4*	*31.8–56.5*
Middle	% of people	44.5	39.3	48.9	47.5
	95% CI	*40.9–48.2*	*30.4–49.0*	*40.6–57.2*	*39.3–55.9*
Highest	% of people	40.0	33.3	43.7	50.2
	95% CI	*29.6–51.4*	*18.0–53.1*	*42.4–45.0*	*42.5–57.9*
Government health card					
Health care card or pensioner concession card	% of people	40.4	41.3	29.8	46.9
	95% CI	*34.6–46.6*	*31.0–52.6*	*17.4–46.1*	*34.8–59.5*
Neither card	% of people	39.3	33.5	42.5	48.3
	95% CI	*33.3–45.7*	*23.0–46.0*	*37.4–47.8*	*42.7–53.9*
Place of last dental visit					
Cardholder/Public	% of people	40.1	49.2	30.6	28.4
	95% CI	*29.6–51.6*	*24.1–74.7*	*14.0–54.5*	*12.2–53.1*
Cardholder/Non-public	% of people	40.7	30.4	28.7	58.3
	95% CI	*33.4–48.5*	*14.0–54.0*	*16.0–46.1*	*43.4–71.8*
Non-cardholder/Non-public	% of people	39.3	33.5	42.5	48.3
	95% CI	*33.3–45.7*	*23.0–46.0*	*37.4–47.8*	*42.7–53.9*
Dental insurance					
Insured	% of people	44.9	38.2	45.2	55.3
	95% CI	*38.0–52.0*	*31.7–45.1*	*35.3–55.4*	*44.8–65.5*
Uninsured	% of people	35.0	32.9	37.1	37.9
	95% CI	*28.1–42.6*	*21.2–47.2*	*32.3–42.1*	*30.0–46.6*

(a) 95% CI = 95% confidence interval for estimated percentage.

Usual attendance at the same dentist

In NSAOH, usual source of care was assessed in the interview by asking people 'Is there a dentist you usually go to for dental care?'. People who answered 'yes, have a usual source of care' were classified as having a dentist they usually attend. In NT, 73.4% of the dentate population aged 15 years or more who visited a dentist within the last 5 years reported having a dentist they usually attend (Table 21), which was lower, but not significantly, than the national estimate of 78.6% (Slade et al. 2007).

Key findings

- A significantly lower percentage of adults in the youngest age group, 15–34 years, reported having a dentist they usually attend (63.3%) compared with those aged 35–54 years (78.2%) and 55 years or more (88.1%).
- For all ages combined and across age groups, there was little variation among groups classified by sex. A higher percentage of females than males reported having a dentist they usually attend, with the exception of those aged 55 years or more, where fewer females reported having a usual source of care than males. However, observed differences were not statistically significant.
- For all ages combined and across age groups, there was little variation among groups classified by residential location. Percentages tended to be higher for residents living in the capital city compared with other places.
- For all ages combined and across all age groups, there was little variation among groups classified by postcode socioeconomic status. Note that 95% CIs were large in these groups, with the consequence that observed differences were not statistically significant.
- Among those aged 35–54 years, the percentage of adults who reported having a dentist they usually attend was significantly lower for people who had a government health card than for those who did not (53.2% versus 80.4%).
- Within the population of government health cardholders, people aged 55 years or more whose last dental visit was to the public sector were significantly less likely to report having a dentist they usually attend than those who attended elsewhere (71.9% versus 95.4%). Note that, because 95% CIs were large in the younger age groups, observed differences were not statistically significant.
- For all ages combined and across all age groups, there was little variation among groups classified by dental insurance status. However, 95% CIs were large in these groups, with the consequence that observed differences were not statistically significant.

Discussion

In summary, almost three-quarters of NT adults reported that they usually visit the same dentist. This type of visiting was more frequent among the older adults.

Choice of an individual dentist is not usually possible within most public dental clinics.

Table 22: Percentage of people who have a dentist they usually attend

		Population: dentate people who visited dentist within last 5 years Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**73.4**	**63.3**	**78.2**	**88.1**
	95% CI[(a)]	*68.0–78.1*	*54.6–71.3*	*73.7–82.2*	*80.9–92.8*
Sex					
Males	% of people	70.3	57.0	76.2	89.1
	95% CI	*63.3–76.5*	*45.0–68.2*	*68.9–82.2*	*81.5–93.8*
Females	% of people	76.5	69.5	80.4	87.0
	95% CI	*70.9–81.3*	*62.5–75.8*	*74.9–84.9*	*75.3–93.6*
Residential location					
Capital city	% of people	74.5	63.3	79.2	89.4
	95% CI	*66.8–80.8*	*48.5–75.9*	*73.9–83.6*	*80.6–94.5*
Other places	% of people	72.0	63.4	77.0	86.0
	95% CI	*65.6–77.5*	*54.6–71.4*	*69.1–83.3*	*70.7–94.0*
Postcode socioeconomic status					
Lowest	% of people	73.6	69.6	75.8	79.4
	95% CI	*64.9–80.9*	*59.7–77.9*	*65.0–84.1*	*57.8–91.6*
Middle	% of people	77.3	66.0	82.7	92.6
	95% CI	*66.2–85.6*	*45.0–82.2*	*75.9–87.9*	*84.8–96.6*
Highest	% of people	70.1	57.2	76.8	88.6
	95% CI	*69.7–70.4*	*50.3–63.8*	*74.6–78.9*	*80.1–93.8*
Government health card					
Health care card or pensioner concession card	% of people	68.9	65.8	53.2	84.9
	95% CI	*54.7–80.2*	*44.7–82.0*	*39.1–66.8*	*72.1–92.4*
Neither card	% of people	74.1	62.6	80.4	89.3
	95% CI	*68.9–78.7*	*54.0–70.5*	*75.1–84.7*	*81.2–94.2*
Place of last dental visit					
Cardholder/Public	% of people	59.3	59.1	46.0	71.9
	95% CI	*39.7–76.3*	*30.3–82.8*	*23.3–70.5*	*53.6–85.0*
Cardholder/Non-public	% of people	79.9	74.4	63.7	95.4
	95% CI	*62.9–90.3*	*46.3–90.7*	*45.1–78.8*	*86.8–98.5*
Non-cardholder/Non-public	% of people	74.1	62.6	80.4	89.3
	95% CI	*68.9–78.7*	*54.0–70.5*	*75.1–84.7*	*81.2–94.2*
Dental insurance					
Insured	% of people	81.3	71.3	83.1	91.8
	95% CI	*73.9–87.0*	*57.8–81.9*	*76.6–88.0*	*82.4–96.4*
Uninsured	% of people	68.0	61.9	71.6	82.7
	95% CI	*60.1–75.0*	*49.1–73.3*	*63.9–78.3*	*73.9–88.9*

(a) 95% CI = 95% confidence interval for estimated percentage.

Usual dental attendance for a check-up

In NSAOH, dentate people were asked 'Is your usual reason for visiting a dental professional for check-ups or when you have a dental problem?'. In NT, 44.6% of the adult dentate population reported usually visiting a dentist for a check-up (Table 23), which was significantly lower than the national estimate of 56.2% (Slade et al. 2007).

Key findings

- Across age groups, there was little variation in the percentage of adults usually visiting a dentist for a check-up. The percentage was slightly higher in the oldest age group, 55 years or more (49.3%), compared with those aged 15–34 years (43.4%) and 35–54 years (44.1%). However, differences between age groups were not statistically significant.
- For all ages combined and across age groups, the percentage was higher among females than males; however, observed differences were not statistically significant.
- For people of all ages and across age groups, there was little variation in the percentage of adults reporting usually visiting for a check-up among groups classified by residential location. There was a tendency for the percentage to be lower among those living in the capital city than those living outside the capital city. Observed differences, however, were not statistically significant.
- For all ages combined and across all age groups, there was little variation among groups classified by postcode socioeconomic status.
- The percentage of adults reporting usually visiting for a check-up was significantly lower for adults who had a government health card than for those who did not (39.1% versus 44.2%). However, this difference was not statistically significant. There were no statistically significant age-specific differences observed.
- Within the population of government health cardholders, people aged 55 years or more whose last dental visit was to the public sector were 2.4 times less likely to report usually visiting a dentist for a check-up than those who attended elsewhere (21.6% versus 52.6%). Note that 95% CIs were large in the younger age groups, so the differences observed in these groups were not statistically significant.
- The percentage was significantly higher among adults with dental insurance than for those without dental insurance (53.6% versus 36.5%). This pattern was consistent across all age groups, with statistically significant differences observed in the 35–54 years (52.0% versus 34.6%) and 55 years or more (61.1% versus 33.9%) age groups.

Discussion

In summary, just under half of the adult population usually visit the dentist for a check-up, with this percentage being slightly higher for adults aged 55 years or more. Having dental insurance showed the strongest association, with check-up visiting more frequent among those with dental insurance.

Table 23: Percentage of people who usually visit a dentist for a check up

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**44.6**	**43.4**	**44.1**	**49.3**
	95% CI[(a)]	*41.0–48.2*	*37.9–49.2*	*39.7–48.5*	*46.2–52.4*
Sex					
Males	% of people	42.3	40.9	41.2	48.9
	95% CI	*37.0–47.8*	*34.0–48.2*	*31.8–51.3*	*43.4–54.4*
Females	% of people	47.2	46.3	47.3	49.8
	95% CI	*42.3–52.1*	*37.0–55.8*	*41.0–53.6*	*40.3–59.3*
Residential location					
Capital city	% of people	43.7	43.7	41.4	49.2
	95% CI	*38.6–48.9*	*36.3–51.5*	*34.8–48.3*	*44.7–53.6*
Other places	% of people	45.8	43.1	47.7	49.5
	95% CI	*40.3–51.4*	*35.1–51.5*	*43.4–52.1*	*45.5–53.4*
Postcode socioeconomic status					
Lowest	% of people	42.7	42.4	40.1	54.6
	95% CI	*34.0–51.8*	*32.0–53.5*	*29.3–52.0*	*47.8–61.3*
Middle	% of people	44.2	43.1	44.4	46.4
	95% CI	*39.0–49.5*	*34.7–51.9*	*39.1–49.9*	*43.2–49.5*
Highest	% of people	46.5	44.5	47.8	48.8
	95% CI	*41.7–51.3*	*35.6–53.9*	*47.1–48.4*	*44.2–53.6*
Government health card					
Health care card or pensioner concession card	% of people	39.1	45.4	24.2	40.3
	95% CI	*34.9–43.4*	*39.7–51.2*	*10.9–45.6*	*30.9–50.4*
Neither card	% of people	45.5	42.9	45.8	53.0
	95% CI	*41.4–49.6*	*35.7–50.3*	*41.7–50.1*	*48.5–57.5*
Place of last dental visit					
Cardholder/Public	% of people	32.8	47.6	11.2	21.6
	95% CI	*20.7–47.7*	*26.0–70.1*	*1.7–48.0*	*16.2–28.0*
Cardholder/Non-public	% of people	46.0	42.3	41.2	52.6
	95% CI	*35.7–56.7*	*17.9–71.0*	*19.9–66.4*	*37.9–66.9*
Non-cardholder/Non-public	% of people	45.5	42.9	45.8	53.0
	95% CI	*41.4–49.6*	*35.7–50.3*	*41.7–50.1*	*48.5–57.5*
Dental insurance					
Insured	% of people	53.6	51.3	52.0	61.1
	95% CI	*49.2–57.9*	*42.7–59.9*	*46.2–57.8*	*52.4–69.1*
Uninsured	% of people	36.5	38.3	34.6	33.9
	95% CI	*30.8–42.5*	*31.8–45.3*	*27.6–42.3*	*26.7–42.1*

(a) 95% CI = 95% confidence interval for estimated percentage.

Dental care avoided or delayed due to cost

In NSAOH, cost as a barrier to receipt of dental care was assessed with the question 'During the last 12 months, have you avoided or delayed visiting a dental professional because of the cost?'. People who answered 'yes' were classified as having delayed or avoided dental care due to cost. In NT, they represented 34.4% of the population aged 15 years or more (Table 24), which was significantly higher than the national estimate of 30.0% (Slade et al. 2007).

Key findings

- There was some variation across age groups, with 36.1% of adults aged 15–34 years reporting that they had avoided or delayed care due to cost compared with 24.0% of those aged 55 years or more.
- For all ages combined, a significantly greater percentage of females reported that they had avoided or delayed care due to cost compared with males (40.7% versus 28.8%). This difference was mainly attributable to those aged 15–34 years (47.0% versus 26.1%).
- Adults aged 55 years or more living in the capital city were significantly less likely than those living in other places to report that they had avoided or delayed care due to cost (19.2% versus 31.2%).
- For all ages combined, there was little variation among groups classified by postcode socioeconomic status. Among 15–34-year-olds, those living in postcodes with middle socioeconomic status were significantly more likely to report having avoided or delayed care due to cost than those living in postcodes with high socioeconomic status (41.8% versus 32.9%).
- Among those aged 35–54 years, the percentage was higher for adults who held a government health card than for those who did not (58.7% versus 34.9%).
- Within the population of government health cardholders, people aged 15–34 years whose last dental visit was to the public sector were less likely to report that they had avoided or delayed care due to cost than those who attended elsewhere (23.0% versus 69.0%). Note that, because 95% CIs were large in the older age groups, the differences observed were not statistically significant.
- For all ages combined and across all age groups, there was little variation among groups classified by dental insurance status. Although not statistically significant, the largest difference occurred in the 55 years or more age group, with those uninsured more likely than the insured to avoid or delay care due to cost (31.5% versus 18.2%).

Discussion

Adults aged 55 years or more were less likely to report they had avoided or delayed dental care due to cost compared to their younger counterparts. Among males however, the age related pattern was less apparent and males were less likely than females to report dental care due to cost.

Table 24: Percentage of people who avoided or delayed dental care

		Population: all people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**34.4**	**36.1**	**37.1**	**24.0**
	95% CI[(a)]	*32.2–36.7*	*31.6–40.9*	*33.6–40.6*	*17.3–32.2*
Sex					
Males	% of people	28.8	26.1	34.6	22.5
	95% CI	*25.0–33.0*	*19.0–34.9*	*28.1–41.7*	*13.1–36.0*
Females	% of people	40.7	47.0	39.8	25.7
	95% CI	*38.1–43.4*	*41.5–52.7*	*36.3–43.5*	*20.0–32.3*
Residential location					
Capital city	% of people	35.2	38.8	38.9	19.2
	95% CI	*32.3–38.3*	*34.7–43.0*	*33.6–44.5*	*13.5–26.7*
Other places	% of people	33.3	33.0	34.5	31.2
	95% CI	*30.4–36.3*	*27.1–39.4*	*32.9–36.2*	*26.8–36.0*
Postcode socioeconomic status					
Lowest	% of people	36.0	34.6	39.9	26.8
	95% CI	*31.3–41.0*	*25.2–45.3*	*32.3–47.9*	*20.8–33.9*
Middle	% of people	34.9	41.8	35.9	16.7
	95% CI	*30.6–39.3*	*38.8–44.8*	*34.5–37.2*	*9.3–28.1*
Highest	% of people	32.7	32.9	35.2	27.9
	95% CI	*31.3–34.2*	*29.8–36.1*	*31.6–39.1*	*20.4–37.0*
Government health card					
Health care card or pensioner concession card	% of people	39.5	42.2	58.7	23.7
	95% CI	*31.7–47.9*	*26.0–60.3*	*41.5–73.9*	*12.5–40.1*
Neither card	% of people	33.7	35.4	34.9	24.3
	95% CI	*30.8–36.7*	*30.5–40.7*	*30.8–39.3*	*18.9–30.8*
Place of last dental visit					
Cardholder/Public	% of people	32.4	23.0	63.5	18.7
	95% CI	*23.0–43.5*	*10.5–43.2*	*40.4–81.7*	*9.5–33.4*
Cardholder/Non-public	% of people	47.2	69.0	51.5	26.8
	95% CI	*33.2–61.6*	*44.2–86.2*	*28.5–73.8*	*10.5–53.2*
Non-cardholder/Non-public	% of people	33.7	35.4	34.9	24.3
	95% CI	*30.8–36.7*	*30.5–40.7*	*30.8–39.3*	*18.9–30.8*
Dental insurance					
Insured	% of people	30.9	39.0	31.3	18.2
	95% CI	*25.9–36.4*	*34.6–43.7*	*23.9–39.8*	*12.5–25.7*
Uninsured	% of people	38.8	37.5	43.8	31.5
	95% CI	*35.3–42.4*	*32.7–42.5*	*37.1–50.7*	*22.7–41.9*

(a) 95% CI = 95% confidence interval for estimated percentage.

Recommended dental treatment foregone due to cost

In NSAOH, treatment foregone due to cost was assessed with the question 'Has the cost prevented you from having any dental treatment that was recommended during the last 2 years?'. People who answered 'yes' were classified as having foregone dental treatment due to cost. In NT, they represented 25.7% of the population aged 15 years or more (Table 25**)**, which was higher, but not significantly, than the national estimate of 20.6% (Slade et al. 2007).

Key findings

- Across age groups, there was little variation in the percentage of adults reporting that they had forgone recommended treatment due to cost. The percentage was higher in adults aged 15–34 years (28.7%) compared with those aged 35–54 years (26.6%) and 55 years or more (16.8%). However, differences between age groups were not statistically significant.
- For all ages combined and across all age groups, there was little variation among groups classified by sex, residential location, government health cardholder status and place of last dental visit. Large 95% CIs in some of these groups resulted in differences not being statistically significant.
- The percentage reporting that they had forgone recommended treatment due to cost was significantly higher for adults living in middle socioeconomic postcodes (29.2%) than for those in high socioeconomic postcodes (21.9%). Statistically significant differences were observed in the 15–34 years (36.4% versus 21.8%) and 55 years or more (21.6% versus 10.3%) age groups.
- For all ages combined, the percentage was significantly higher among adults with no dental insurance than for those with dental insurance (32.6% versus 19.7%). This pattern was consistent across all age groups although differences within age groups were not statistically significant.

Discussion

Just over one-quarter of NT residents aged 15 years or more reported that they had forgone recommended dental care due to cost. Overall, age, sex, residential location and place of last dental visit showed no significant association. Statistically significant differences in the reported percentage were observed in both the youngest and oldest age groups between people living in middle and high socioeconomic postcodes, with a higher percentage reported among those living in postcodes with middle socioeconomic status. The uninsured population was more likely to forgo recommended dental treatment due to cost than those insured.

Table 25: Percentage of people who reported that cost had prevented recommended dental treatment

		Population: people who visited dentist within last 2 years Age (years)			
		All ages	15–34	35–54	≥55
All people	**Per cent of people**	**25.7**	**28.7**	**26.6**	**16.8**
	95% CI[(a)]	*21.3–30.7*	*21.6–37.2*	*21.5–32.4*	*11.6–23.7*
Sex					
Males	% of people	20.5	22.7	21.4	14.0
	95% CI	*15.8–26.2*	*12.5–37.6*	*16.2–27.8*	*5.7–30.6*
Females	% of people	30.9	34.3	31.9	20.0
	95% CI	*25.3–37.2*	*24.8–45.2*	*23.1–42.1*	*14.1–27.5*
Residential location					
Capital city	% of people	27.7	32.6	25.8	21.8
	95% CI	*25.3–30.3*	*28.1–37.5*	*18.1–35.3*	*16.3–28.5*
Other places	% of people	23.1	23.9	27.7	9.1
	95% CI	*15.9–32.2*	*13.7–38.1*	*22.0–34.3*	*4.7–17.1*
Postcode socioeconomic status					
Lowest	% of people	27.1	29.7	26.3	22.7
	95% CI	*18.8–37.4*	*16.0–48.4*	*18.5–36.0*	*14.5–33.7*
Middle	% of people	29.2	36.4	25.4	21.6
	95% CI	*26.1–32.5*	*33.0–39.9*	*15.2–39.3*	*20.1–23.3*
Highest	% of people	21.9	21.8	27.9	10.3
	95% CI	*18.3–25.9*	*18.6–25.4*	*21.4–35.4*	*6.7–15.4*
Government health card					
Health care card or pensioner concession card	% of people	28.1	41.2	20.5	14.1
	95% CI	*18.8–39.9*	*24.8–59.7*	*6.7–48.1*	*6.6–27.4*
Neither card	% of people	25.4	26.4	27.1	17.8
	95% CI	*21.1–30.2*	*19.8–34.4*	*21.7–33.2*	*10.5–28.5*
Place of last dental visit					
Cardholder/Public	% of people	25.0	27.7	23.1	22.0
	95% CI	*13.1–42.5*	*8.7–60.6*	*8.6–49.0*	*10.8–39.5*
Cardholder/Non-public	% of people	31.9	57.3	15.7	7.1
	95% CI	*14.8–55.7*	*23.9–85.1*	*3.2–50.9*	*1.5–27.8*
Non-cardholder/Non-public	% of people	25.4	26.4	27.1	17.8
	95% CI	*21.1–30.2*	*19.8–34.4*	*21.7–33.2*	*10.5–28.5*
Dental insurance					
Insured	% of people	19.7	27.6	19.9	10.0
	95% CI	*15.0–25.5*	*22.0–33.9*	*13.1–29.1*	*4.5–20.6*
Uninsured	% of people	32.6	31.8	35.9	27.3
	95% CI	*26.0–40.0*	*22.6–42.7*	*24.4–49.3*	*18.3–38.7*

(a) 95% CI = 95% confidence interval for estimated percentage.

Difficulty paying a $100 dental bill

In NSAOH, difficulty paying for dental care was assessed with the question 'At most times of the year, how much difficulty would you have paying a $100 dental bill? Would you say none, hardly any, a little, a lot of difficulty, don't know?'. People who answered 'a lot' were classified as having difficulty paying a $100 dental bill. They represented 20.3% of the NT population aged 15 years or more (Table 26), which was higher, but not significantly, than the national estimate of 18.2% (Slade et al. 2007).

Key findings

- Although a higher percentage of adults aged 15–34 years reported that they would have difficulty paying a $100 dental bill (24.6%) compared with those aged 35–54 years (17.1%) and 55 years or more (16.8%), differences between age groups were not statistically significant.
- Among those aged 55 years or more, a significantly greater percentage of females reported that they would have difficulty paying a $100 dental bill compared with males (24.3% versus 10.7%).
- For all ages combined and among those aged 15–34 years, the percentage was significantly higher for residents in the capital city than for those in other places (25.0% versus 14.2% and 33.2% versus 14.4%, respectively).
- For all ages combined, the percentage was significantly higher for people living in postcodes with middle socioeconomic than in postcodes with high socioeconomic status (28.5% versus 15.7%). Statistically significant differences were observed among those aged 15–34 years (40.8% versus 17.5%) and 55 years or more (26.1% versus 13.9%). In the youngest age group, the percentage was significantly higher for adults living in middle socioeconomic postcodes (40.8%) than for those in low socioeconomic postcodes (17.5%).
- For all ages combined, the percentage was almost three-fold greater among government health cardholders compared with non-government health cardholders (44.5% versus 15.4%). The relative difference was largest in the 55 years or more age group (38.0% versus 6.0%), followed by those aged 35–54 years (49.4% versus 13.9%).
- For all ages combined, among those who had a government health card, adults who visited a public practice at their last dental visit were more likely to report difficulty paying a $100 dental bill than those who visited a private practice (48.8% versus 39.9%) although this difference was not statistically significant. Due to large 95% CIs, there were no statistically significant age-specific differences observed.
- For all ages combined, adults with no dental insurance were 1.8 times more likely to report that they had would have difficulty paying a $100 dental bill than those with dental insurance (25.6% versus 14.4%). The relative difference was largest in the 55 years or more age group (27.1% versus 8.9%), followed by those aged 35–54 years (24.5% versus 10.8%).

Discussion

Government health cardholder status and dental insurance status were the most strongly associated characteristics with having a lot of difficulty paying a $100 dental bill, while sex, residential location and postcode socioeconomic status had a moderate association.

Table 26: Percentage of people who would have a lot of difficulty paying a $100 dental bill

		Population: all people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**20.3**	**24.6**	**17.1**	**16.8**
	95% CI[(a)]	*16.2–25.1*	*16.8–34.4*	*13.3–21.7*	*12.2–22.6*
Sex					
Males	% of people	17.2	24.6	12.0	10.7
	95% CI	*13.1–22.3*	*15.4–36.8*	*6.5–21.3*	*5.8–18.9*
Females	% of people	23.7	24.6	22.6	24.3
	95% CI	*18.9–29.4*	*16.7–34.7*	*19.4–26.1*	*19.3–30.0*
Residential location					
Capital city	% of people	25.0	33.2	18.6	20.2
	95% CI	*19.7–31.1*	*22.4–46.2*	*13.0–26.0*	*13.4–29.2*
Other places	% of people	14.2	14.4	14.9	11.6
	95% CI	*11.7–17.1*	*11.0–18.7*	*11.6–19.0*	*6.9–18.8*
Postcode socioeconomic status					
Lowest	% of people	17.9	17.5	20.8	8.5
	95% CI	*12.7–24.7*	*11.3–26.1*	*13.2–31.1*	*3.9–17.7*
Middle	% of people	28.5	40.8	15.7	26.1
	95% CI	*21.1–37.4*	*26.8–56.5*	*11.6–21.0*	*15.9–39.8*
Highest	% of people	15.7	17.5	14.4	13.9
	95% CI	*15.3–16.1*	*14.7–20.6*	*12.5–16.5*	*12.6–15.4*
Government health card					
Health care card or pensioner concession card	% of people	44.5	47.1	49.4	38.0
	95% CI	*29.3–60.8*	*22.8–73.0*	*31.2–67.7*	*27.0–50.5*
Neither card	% of people	15.4	19.8	13.9	6.0
	95% CI	*13.5–17.4*	*15.0–25.8*	*10.9–17.5*	*3.7–9.5*
Place of last dental visit					
Cardholder/Public	% of people	48.8	47.2	52.3	48.3
	95% CI	*32.7–65.2*	*24.1–71.5*	*27.8–75.8*	*33.9–62.9*
Cardholder/Non-public	% of people	39.9	47.1	45.0	31.7
	95% CI	*24.5–57.6*	*17.3–79.1*	*23.3–68.7*	*18.7–48.3*
Non-cardholder/Non-public	% of people	15.4	19.8	13.9	6.0
	95% CI	*13.5–17.4*	*15.0–25.8*	*10.9–17.5*	*3.7–9.5*
Dental insurance					
Insured	% of people	14.4	23.7	10.8	8.9
	95% CI	*11.1–18.3*	*16.6–32.5*	*7.0–16.2*	*6.2–12.5*
Uninsured	% of people	25.6	25.9	24.5	27.1
	95% CI	*19.4–32.9*	*16.2–38.7*	*16.9–34.2*	*19.2–36.8*

(a) 95% CI = 95% confidence interval for estimated percentage.

Percentage of people avoiding foods due to dental problems

Avoiding food due to dental problems is a sign of poor oral health and may reflect an inability to eat properly. This reduces enjoyment of food and could affect the ability to maintain a healthy nutritional status.

In NSAOH, avoiding food was assessed in the interview by asking people 'How often have you had to avoid eating some foods because of problems with your teeth, mouth or dentures during the last 12 months? Was it: very often, often, sometimes, hardly ever, never during the last 12 months, don't know?'. People who answered 'very often', 'often' or 'sometimes' were classified as having avoided certain foods. They represented 17.7% of the NT population aged 15 years or more (Table 27), which was similar to the national estimate of 17.4% (Slade et al. 2007). The difference was not statistically significant.

Key findings

- Females were more likely (24.1%) than males (12.0%) to report that they avoided some food. The gap between females and males increased with age.
- The percentage who avoiding food was more than twice as high in people who had a government health card (34.3%) than among non-government health cardholders (14.7%).
- Those who last visited a public dental clinic were more than twice as likely (39.5%) than non-government health cardholders (14.7%) to avoid foods.

Discussion

Residents of NT are equally as likely as the rest of the Australian population to avoid some foods because of problems with their teeth, mouth or gums. Avoiding some foods because of dental problems was associated with being female, being a government health cardholder and having last visited a public clinic. While there were large differences in the point estimates for some other comparisons, small numbers in the sample have resulted in wide confidence intervals, and no conclusions about differences can be drawn.

Table 27: Percentage of people avoiding foods due to dental problems

		Population: all people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**17.7**	**18.0**	**17.4**	**17.8**
	95% CI[(a)]	*15.2–20.5*	*13.3–23.8*	*14.5–20.7*	*12.0–25.6*
Sex					
Males	% of people	12.0	12.8	12.0	10.3
	95% CI	*7.8–18.1*	*4.6–30.6*	*7.9–17.8*	*5.4–18.8*
Females	% of people	24.1	23.7	23.4	27.0
	95% CI	*22.2–26.1*	*17.5–31.2*	*21.2–25.7*	*19.5–36.0*
Residential location					
Capital city	% of people	18.0	18.5	16.5	20.2
	95% CI	*14.0–22.9*	*10.8–29.9*	*12.7–21.2*	*11.6–32.9*
Other places	% of people	17.3	17.3	18.6	14.1
	95% CI	*15.5–19.3*	*15.6–19.1*	*15.3–22.5*	*10.1–19.4*
Postcode socioeconomic status					
Lowest	% of people	17.0	13.5	18.7	22.7
	95% CI	*13.9–20.5*	*8.2–21.3*	*14.0–24.6*	*16.6–30.3*
Middle	% of people	20.3	22.5	17.3	21.7
	95% CI	*15.6–26.0*	*12.8–36.4*	*12.1–24.0*	*11.9–36.2*
Highest	% of people	16.2	17.9	16.2	12.5
	95% CI	*13.0–20.0*	*16.7–19.2*	*11.7–21.8*	*6.8–21.7*
Government health card					
Health care card or pensioner concession card	% of people	34.3	38.3	34.3	29.3
	95% CI	*20.4–51.6*	*15.0–68.6*	*19.5–52.9*	*22.0–37.9*
Neither card	% of people	14.7	14.3	15.7	12.5
	95% CI	*12.7–16.9*	*11.2–18.1*	*12.4–19.7*	*6.9–21.8*
Place of last dental visit					
Cardholder/Public	% of people	39.5	32.6	44.2	47.9
	95% CI	*22.0–60.1*	*11.5–64.1*	*24.3–66.1*	*33.0–63.1*
Cardholder/Non-public	% of people	28.8	46.3	19.5	17.8
	95% CI	*18.1–42.3*	*19.7–75.2*	*5.8–48.8*	*11.6–26.2*
Non-cardholder/Non-public	% of people	14.7	14.3	15.7	12.5
	95% CI	*12.7–16.9*	*11.2–18.1*	*12.4–19.7*	*6.9–21.8*
Dental insurance					
Insured	% of people	15.2	19.2	14.4	11.1
	95% CI	*12.5–18.3*	*13.7–26.4*	*10.8–18.9*	*6.1–19.5*
Uninsured	% of people	20.7	18.9	20.9	26.5
	95% CI	*15.7–26.7*	*11.4–29.8*	*15.7–27.4*	*17.5–38.0*

(a) 95% CI = 95% confidence interval for estimated percentage.

5 Oral health perceptions

Percentage of people rating their oral health fair or poor

Self-reported global measures of oral health reflect an individual's own experience of their oral health. Single-item, self-rated oral health measures are associated with functional impairment and discomfort as well as clinical measures of dental health. They are used widely in research and provide a summary measure of oral symptoms and functioning (Benyamini et al. 2004).

In NSAOH, self-rated oral health was assessed in the interview by asking people 'And how would you rate your own DENTAL health. Would you say that it is: excellent, very good, good, fair, poor, don't know?'. People who answered 'fair' or 'poor' were classified as having fair or poor self-rated oral health. They represented 17.2% of the NT population aged 15 years or more (Table 28), which is slightly higher than the national estimate of 16.4% (Slade et al. 2007). The difference was not statistically significant.

Key findings

- The percentage who reported fair or poor oral health was highest among people who lived in the middle socioeconomic postcode (21.5%) and lowest in the highest socioeconomic postcode (15.3%).
- The percentage reporting fair or poor health was more than twice as high in people who were government health cardholders (33.0%) compared with non-government health cardholders (14.4%).
- There was no difference between those who had a government health card and those who visited a private dentist. Government health cardholders who visited a private dentist were twice a likely to report fair or poor oral health (30.9%) than non-government health cardholders (14.4%). While the difference between those who visited a public dentist (35.0%) and non-government health cardholders was also large, it was not statistically significant due to wide confidence intervals around the first of these two estimates.

Discussion

Reporting fair or poor oral health was associated with living in a middle socioeconomic postcode and being a government health cardholder. While there were large differences in the point estimates for some other comparisons, small numbers in the sample have resulted in wide confidence intervals, and no conclusions about differences can therefore be drawn.

Table 28: Percentage of people rating their oral health fair or poor

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**17.2**	**17.1**	**16.4**	**19.8**
	95% CI[(a)]	*14.4–20.4*	*12.6–22.7*	*13.3–19.9*	*15.9–24.4*
Sex					
Males	% of people	18.9	19.9	17.7	19.1
	95% CI	*14.4–24.3*	*11.3–32.6*	*11.5–26.3*	*11.8–29.4*
Females	% of people	15.3	14.0	14.9	20.7
	95% CI	*12.5–18.7*	*8.6–21.9*	*10.5–20.7*	*16.2–26.1*
Residential location					
Capital city	% of people	19.7	21.2	17.5	21.5
	95% CI	*15.5–24.7*	*14.4–30.1*	*12.8–23.4*	*17.5–26.1*
Other places	% of people	13.9	12.3	14.8	17.1
	95% CI	*10.0–19.0*	*6.8–21.0*	*10.9–19.8*	*11.5–24.8*
Postcode socioeconomic status					
Lowest	% of people	15.2	13.8	15.0	21.8
	95% CI	*9.5–23.6*	*8.2–22.3*	*8.7–24.8*	*11.8–36.6*
Middle	% of people	21.5	25.0	17.0	23.1
	95% CI	*19.6–23.6*	*18.6–32.6*	*12.5–22.6*	*20.7–25.8*
Highest	% of people	15.3	13.6	17.1	16.2
	95% CI	*13.8–16.9*	*9.4–19.2*	*16.3–18.0*	*14.4–18.2*
Government health card					
Health care card or pensioner concession card	% of people	33.0	30.5	47.8	26.1
	95% CI	*19.0–50.8*	*8.3–68.0*	*26.6–69.8*	*19.1–34.7*
Neither card	% of people	14.4	14.7	13.6	16.3
	95% CI	*11.5–17.9*	*9.9–21.3*	*10.3–17.6*	*11.2–23.1*
Place of last dental visit					
Cardholder/Public	% of people	35.0	27.4	58.5	27.6
	95% CI	*17.8–57.1*	*7.2–64.7*	*32.4–80.6*	*18.2–39.5*
Cardholder/Non-public	% of people	30.9	34.7	33.8	25.2
	95% CI	*19.4–45.4*	*8.8–74.6*	*14.7–60.3*	*15.5–38.3*
Non-cardholder/Non-public	% of people	14.4	14.7	13.6	16.3
	95% CI	*11.5–17.9*	*9.9–21.3*	*10.3–17.6*	*11.2–23.1*
Dental insurance					
Insured	% of people	13.0	16.7	10.3	14.0
	95% CI	*9.8–17.2*	*9.3–28.0*	*7.9–13.3*	*10.7–18.3*
Uninsured	% of people	20.8	17.5	23.6	27.2
	95% CI	*16.4–26.1*	*10.8–27.0*	*18.4–29.8*	*19.5–36.7*

(a) 95% CI = 95% confidence interval for estimated percentage.

Percentage of people experiencing toothache

Toothache is caused when the nerve root of a tooth is irritated. It is most commonly caused by infection, decay, injury or loss of a tooth. However, pain sometimes originates from other areas, most commonly the jaw joint and ear pain, and radiates to the jaw, thus appearing to be tooth pain.

In NSAOH, experience of toothache was assessed in the interview by asking dentate people 'During the last 12 months how often have you had toothache? Was it: very often, often, sometimes, hardly ever, never during the last 12 months, don't know?'. People who answered 'very often', 'often' or 'sometimes' were classified as having experienced toothache. They represented 19.9% of the dentate NT population aged 15 years or more (Table 29), which was higher than the national estimate of 15.1% (Slade et al. 2007). The difference was statistically significant.

Key findings

- The percentage that experienced orofacial pain was lowest among those living in the lowest socioeconomic postcode (14.7%) and highest in the middle socioeconomic postcode (25.0%).
- Government health cardholders in the 35–54 years age group (30.9%) were more likely to experience toothache that non-government health cardholders of the same age (19.2%).
- People aged 55 years or more who had visited a public dentist were more than twice as likely (22.6%) to experience toothache as non-government health cardholders (6.0%) of the same age.
- Experience of toothache was higher in people who were uninsured (25.2%), than in non-government health cardholders (14.8%).

Discussion

Residents of NT were more likely than the rest of the Australian population to experience toothache. Experience of toothache was associated with living in postcodes with middle socioeconomic status and being uninsured. It was also associated with having a government health card in the 35–54 years age group and with having visited a pubic dentist in the 55 years or more age group. While there were large differences in the point estimates for some other comparisons, small numbers in the sample have resulted in wide confidence intervals, and no conclusions about differences can therefore be drawn.

Table 29: Percentage of people experiencing toothache

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**19.9**	**23.7**	**20.2**	**8.3**
	95% CI[(a)]	*16.8–23.6*	*17.3–31.7*	*15.4–26.1*	*6.1–11.2*
Sex					
Males	% of people	16.3	18.5	19.1	3.6
	95% CI	*11.9–22.0*	*8.5–35.8*	*12.8–27.6*	*1.5–8.4*
Females	% of people	24.0	29.5	21.4	14.3
	95% CI	*20.8–27.6*	*24.6–34.9*	*17.0–26.5*	*11.1–18.2*
Residential location					
Capital city	% of people	18.9	23.3	18.1	9.7
	95% CI	*14.0–24.9*	*12.8–38.5*	*11.0–28.3*	*5.9–15.5*
Other places	% of people	21.3	24.3	23.1	6.1
	95% CI	*18.5–24.4*	*20.3–28.8*	*20.6–25.8*	*3.5–10.4*
Postcode socioeconomic status					
Lowest	% of people	14.7	16.6	14.7	7.4
	95% CI	*11.8–18.2*	*11.0–24.3*	*10.5–20.0*	*3.6–14.7*
Middle	% of people	25.0	32.2	23.0	11.1
	95% CI	*20.6–30.0*	*18.0–50.6*	*12.2–39.0*	*5.5–21.2*
Highest	% of people	20.1	22.7	23.4	6.5
	95% CI	16.0–24.9	17.9–28.3	21.3–25.5	4.7–8.9
Government health card					
Health care card or pensioner concession card	% of people	30.6	41.1	30.9	14.1
	95% CI	*18.6–46.1*	*17.2–70.2*	*16.0–51.0*	*8.6–22.2*
Neither card	% of people	17.9	20.0	19.2	6.0
	95% CI	*14.7–21.5*	*15.5–25.4*	*14.8–24.7*	*4.0–8.8*
Place of last dental visit					
Cardholder/Public	% of people	33.7	36.2	39.1	22.6
	95% CI	*20.9–49.4*	*13.8–66.7*	*17.2–66.5*	*14.4–33.6*
Cardholder/Non-public	% of people	27.3	48.1	20.2	8.5
	95% CI	*14.9–44.5*	*21.4–76.0*	*10.2–36.1*	*2.1–28.4*
Non-cardholder/Non-public	% of people	17.9	20.0	19.2	6.0
	95% CI	*14.7–21.5*	*15.5–25.4*	*14.8–24.7*	*4.0–8.8*
Dental insurance					
Insured	% of people	14.8	18.2	17.1	3.6
	95% CI	*11.3–19.3*	*11.9–26.7*	*12.3–23.4*	*1.7–7.3*
Uninsured	% of people	25.2	28.7	23.9	14.4
	95% CI	*20.8–30.2*	*19.8–39.8*	*17.8–31.2*	*9.6–20.9*

(a) 95% CI = 95% confidence interval for estimated percentage.

Percentage of people experiencing orofacial pain

Orofacial pain can be debilitating and indicates temporomandibular joint dysfunction.

In NSAOH, orofacial pain was assessed in the interview by asking people 'During the last month, have you had pain in the face, jaw, temple, in front of the ear or in the ear?'. People who answered 'yes' were classified as having orofacial pain. They represented 22.3% of the NT population aged 15 years or more (Table 30), which was slightly higher than the national estimate of 22.6 (Slade et al. 2007). The difference was not statistically significant.

Key findings

- Females were more likely to report that they experience orofacial pain (27.3%) than males (17.8%).
- The percentage that experienced orofacial pain was highest among those living in the middle socioeconomic postcodes (27.4%) and lowest in the lowest socioeconomic postcode (18.7%).
- Experience of orofacial pain was higher in people who had a government health card (34.0%) than among non-government health cardholders (20.2%).
- In the 35–54 years age group, those who had visited a public dentist (46.4%) were more than twice as likely as non-cardholders (18.1%) to experience orofacial pain.

Discussion

Residents of NT were equally as likely as the rest of the Australian population to experience orofacial pain. Experience of orofacial pain was associated with being female, living in a postcode with middle socioeconomic status and having a government health card. It was also associated with visiting a public dentist in the 35–54 years age group. While there were large differences in the point estimates for some other comparisons, small numbers in the sample have resulted in wide confidence intervals, and no conclusions about differences can therefore be drawn.

Table 30: Percentage of people experiencing orofacial pain

		Population: all people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**22.3**	**24.9**	**20.0**	**20.8**
	95% CI[(a)]	*19.4–25.4*	*19.4–31.2*	*16.8–23.7*	*13.0–31.6*
Sex					
Males	% of people	17.8	19.2	16.7	16.7
	95% CI	*13.4–23.2*	*12.7–28.0*	*13.3–20.7*	*7.0–34.8*
Females	% of people	27.3	31.1	23.7	25.9
	95% CI	*23.4–31.6*	*22.6–41.1*	*17.4–31.4*	*18.9–34.4*
Residential location					
Capital city	% of people	23.2	28.3	19.2	20.7
	95% CI	*19.0–28.1*	*20.9–37.1*	*15.0–24.2*	*10.3–37.3*
Other places	% of people	21.0	20.8	21.1	21.0
	95% CI	*17.4–25.1*	*17.2–25.0*	*17.6–25.1*	*12.1–34.0*
Postcode socioeconomic status					
Lowest	% of people	18.7	21.9	17.9	10.6
	95% CI	*15.3–22.6*	*14.0–32.5*	*13.0–24.1*	*6.2–17.5*
Middle	% of people	27.4	34.8	20.6	24.4
	95% CI	*25.6–29.3*	*27.8–42.5*	*15.4–27.1*	*10.0–48.2*
Highest	% of people	21.0	19.6	21.6	23.3
	95% CI	*16.7–26.1*	*16.7–22.7*	*18.4–25.2*	*12.5–39.2*
Government health card					
Health care card or pensioner concession card	% of people	34.0	36.4	39.1	27.7
	95% CI	*26.6–42.3*	*24.6–50.1*	*25.2–55.0*	*16.0–43.5*
Neither card	% of people	20.2	22.9	18.1	17.8
	95% CI	*17.6–23.0*	*18.1–28.6*	*13.7–23.5*	*10.6–28.3*
Place of last dental visit					
Cardholder/Public	% of people	32.4	24.2	46.4	34.0
	95% CI	*22.4–44.4*	*11.3–44.4*	*29.1–64.7*	*14.0–62.0*
Cardholder/Non-public	% of people	35.7	53.4	28.3	23.8
	95% CI	*21.7–52.6*	*28.1–77.1*	*8.1–63.9*	*12.1–41.6*
Non-cardholder/Non-public	% of people	20.2	22.9	18.1	17.8
	95% CI	*17.6–23.0*	*18.1–28.6*	*13.7–23.5*	*10.6–28.3*
Dental insurance					
Insured	% of people	20.0	22.8	17.6	21.4
	95% CI	*16.7–23.7*	*16.7–30.3*	*14.3–21.4*	*14.4–30.7*
Uninsured	% of people	24.4	26.6	22.8	20.2
	95% CI	*20.7–28.6*	*19.4–35.3*	*18.9–27.4*	*10.0–36.5*

(a) 95% CI = 95% confidence interval for estimated percentage.

Perceived need for dentures

In NSAOH, people were asked at the time of the interview 'Currently, which of the following dental treatments do you think you need to have?'. The possible responses varied for dentate and edentulous people. All people were asked if they felt they needed dentures. In NT, 3.9% of people thought they needed dentures (Table 31), which was significantly lower than the national estimate of 7.2% (Slade et al. 2007).

Key findings

- The percentage of adults who thought they needed dentures was strongly age-related, increasing significantly from 0.2% among adults aged 15–34 years to 3.7% in the 35–54 years age group and 13.6% in the 55 years or more age group.
- There were no significant differences in the perceived need for dentures by sex, residential location in the capital city or other places, postcode socioeconomic status or dental insurance.
- The need for a denture was more than five times higher among those adults who had a government health card (12.5%) compared with those who did not (2.3%).
- Those adults who had a government health card and who last visited a private dentist had the highest percentage (18.3%). The percentage was significantly lower among government health cardholders who last visited a public dental clinic (7.2%), and significantly lower again than both these subgroups among non-government health cardholders who last visited a private dentist (2.3%).
- The age-relatedness of the need for dentures was evident within subgroups of adults formed by socioeconomic characteristics. For instance, among adults who were uninsured, the percentage was significantly higher in the 35–54 years (5.4%) and the 55 years or more (20.6%) age groups than the 15–34 years (0.4%) age group.
- Some significant differences were seen in percentage across subgroups defined by socioeconomic characteristics within an individual age group. For instance, among people aged 55 years or more, the percentage reporting a need for dentures was higher among cardholders (22.9%) than non-cardholders (9.4%).

Discussion

The percentage of people who reported a need for dentures was low. It was related to the observed pattern for complete tooth loss and numbers of missing teeth. However, the level of need for dentures was considerably lower than the percentage of people with either complete tooth loss or reasonable numbers of missing teeth. The relationship between perceived need for dentures and professional judgements of the need for dentures is complex, but people generally express a lower need than is assessed by dentists.

Table 31: Percentage of people who need dentures

		Population: all people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**3.9**	**0.2**	**3.7**	**13.6**
	95% CI[(a)]	*3.0–5.0*	*0.0–1.5*	*2.4–5.8*	*10.6–17.3*
Sex					
Males	% of people	3.4	0.0	3.8	10.6
	95% CI	*2.3–5.0*	—	*2.5–5.9*	*6.2–17.7*
Females	% of people	4.4	0.5	3.6	17.3
	95% CI	*3.2–6.1*	*0.1–3.0*	*1.9–6.8*	*12.5–23.3*
Residential location					
Capital city	% of people	4.0	0.4	3.3	13.6
	95% CI	*2.6–6.0*	*0.1–2.4*	*1.9–5.6*	*9.3–19.6*
Other places	% of people	3.8	0.0	4.3	13.6
	95% CI	*2.9–4.8*	—	*2.4–7.6*	*10.7–17.1*
Postcode socioeconomic status					
Lowest	% of people	4.3	0.0	3.7	21.1
	95% CI	*3.1–5.9*	—	*2.5–5.5*	*14.7–29.3*
Middle	% of people	3.6	0.7	3.0	11.4
	95% CI	*1.6–7.9*	*0.2–3.5*	*1.2–7.3*	*7.6–16.8*
Highest	% of people	3.8	0.0	4.3	11.6
	95% CI	*3.3–4.4*	—	*2.3–8.0*	*9.9–13.4*
Government health card					
Health care card or pensioner concession card	% of people	12.5	1.4	18.0	22.9
	95% CI	*8.7–17.7*	*0.2–8.2*	*11.2–27.6*	*15.5–32.4*
Neither card	% of people	2.3	0.0	2.3	9.4
	95% CI	*1.6–3.3*	—	*1.0–5.1*	*5.9–14.7*
Place of last dental visit					
Cardholder/Public	% of people	7.2	0.0	13.2	14.6
	95% CI	*4.2–11.8*	—	*5.9–27.1*	*9.5–22.0*
Cardholder/Non-public	% of people	18.3	3.4	25.1	28.0
	95% CI	*11.8–27.2*	*0.7–15.8*	*10.8–48.1*	*17.6–41.4*
Non-cardholder/Non-public	% of people	2.3	0.0	2.3	9.4
	95% CI	*1.6–3.3*	—	*1.0–5.1*	*5.9–14.7*
Dental insurance					
Insured	% of people	2.8	0.0	2.2	8.1
	95% CI	*1.7–4.5*	—	*1.0–5.0*	*5.8–11.3*
Uninsured	% of people	5.0	0.4	5.4	20.6
	95% CI	*3.6–6.7*	*0.1–2.4*	*3.5–8.4*	*13.9–29.3*

(a) 95% CI = 95% confidence interval for estimated percentage.

Perceived need for dental extraction or filling

Dentate adults were asked about other dental services, including extractions or fillings, that they might need. The responses to the options 'Any extractions' or 'Any fillings' have been combined so that the response indicates a perceived dental problem for which one or other of these two aspects of routine dental care was thought to be required, most likely as a sequelae for dental caries. Which of these two dental services were provided would be determined by a process of negotiation between patient and provider that would be influenced by the specific circumstances. In NT, 36.0% of dentate adults perceived a need for an extraction or filling (Table 32), which was a little higher, but not significantly, than the national estimate of 32.9% (Slade et al. 2007).

Key findings

- The percentage of dentate adults who thought they needed extractions or fillings was very similar across age groups, being highest among 15–34-year-olds (36.1%) and lowest among those aged 55 years or more (35.9%).
- There were no significant differences by any socioeconomic characteristic or gender.
- The lack of an age-related pattern of need for an extraction or filling was seen within all subgroups of adults formed by socioeconomic characteristics.
- One significant difference was seen in the percentage across subgroups defined by place of last visit within the 55 years or more age group. The percentage reporting need for extractions or fillings was significantly higher among government health cardholders who last visited a public dental clinic (59.3%) than non-government health cardholders who last visited a private dentist (29.7%).

Discussion

Just over one-third of dentate adults perceived a need for an extraction or filling. This percentage was not significantly different across the three age groups, and showed no socioeconomic characteristic variations.

Table 32: Percentage of people who need an extraction or filling

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**36.0**	**36.1**	**35.9**	**36.0**
	95% CI[(a)]	*32.7–39.5*	*30.0–42.7*	*30.7–41.5*	*29.1–43.4*
Sex					
Males	% of people	33.1	28.3	37.5	35.7
	95% CI	*27.5–39.3*	*20.4–37.7*	*27.5–48.8*	*27.6–44.7*
Females	% of people	39.3	44.8	34.2	36.3
	95% CI	*35.1–43.6*	*34.9–55.1*	*29.1–39.6*	*28.7–44.6*
Residential location					
Capital city	% of people	35.1	34.9	36.0	33.3
	95% CI	*30.5–39.9*	*25.8–45.1*	*28.4–44.3*	*25.0–42.9*
Other places	% of people	37.3	37.6	35.9	39.9
	95% CI	*31.9–42.9*	*29.5–46.6*	*29.7–42.6*	*31.9–48.5*
Postcode socioeconomic status					
Lowest	% of people	39.7	37.3	42.9	35.9
	95% CI	*32.1–47.9*	*25.5–50.9*	*33.8–52.6*	*24.9–48.6*
Middle	% of people	35.5	34.3	35.8	38.0
	95% CI	29.9–41.6	19.9–52.2	29.1–43.2	34.2–41.9
Highest	% of people	33.5	36.7	29.0	34.4
	95% CI	*29.2–38.0*	*34.6–38.8*	*22.5–36.5*	*21.9–49.6*
Government health card					
Health care card or pensioner concession card	% of people	43.0	34.3	52.8	49.7
	95% CI	*29.9–57.2*	*15.8–59.2*	*35.2–69.8*	*42.2–57.1*
Neither card	% of people	34.5	36.1	34.4	29.7
	95% CI	*31.3–37.9*	*30.6–42.0*	*29.7–39.4*	*22.1–38.5*
Place of last dental visit					
Cardholder/Public	% of people	45.1	31.5	61.3	59.3
	95% CI	*33.6–57.1*	*17.4–50.0*	*34.0–83.0*	*46.2–71.2*
Cardholder/Non-public	% of people	40.8	38.3	41.8	43.1
	95% CI	*25.0–58.7*	*12.8–72.4*	*23.9–62.2*	*27.0–60.7*
Non-cardholder/Non-public	% of people	34.5	36.1	34.4	29.7
	95% CI	*31.3–37.9*	*30.6–42.0*	*29.7–39.4*	*22.1–38.5*
Dental insurance					
Insured	% of people	33.5	39.5	32.2	26.8
	95% CI	*28.1–39.4*	*32.1–47.5*	*26.8–38.1*	*15.4–42.5*
Uninsured	% of people	39.4	36.9	40.3	47.3
	95% CI	*35.0–43.9*	*29.1–45.4*	*32.6–48.5*	*35.1–59.9*

(a) 95% CI = 95% confidence interval for estimated percentage.

Perceived need for a dental check-up

Dentate adults were asked about their perceived need for a check-up. This is regarded as an indicator of compliance with the recommendation of dentists to visit regularly when asymptomatic so as to detect disease earlier and receive prompt treatment for any dental problems. A check-up also provides an opportunity for preventive services to be received. In NT, 62.8% of dentate adults perceived a need for a check-up (Table 33), which was very similar to the national estimate of 59.6% (Slade et al. 2007).

Key findings

- The percentage of dentate adults who thought they needed a check-up was similar across the three age groups. The percentage was highest in the youngest age group (64.1%), and a little lower in the 35–54 years (62.0%) and 55 years or more (60.8%) age groups.
- There were no significant differences among dentate adults by sex, residential location, government health cardholder status, place of last dental visit or dental insurance.
- The percentage of dentate adults who thought they needed a check-up was significantly higher among adults who lived in either the highest or lowest socioeconomic status postcodes (63.4% and 67.2%) compared with the middle socioeconomic status postcodes (57.5%).
- The lack of an age-related pattern was repeated within most subgroups of adults formed by all of the socioeconomic characteristics. Only among the subgroup of dentate adults who lived in the highest socioeconomic status postcodes was a significant decrease across age groups seen.

Discussion

Just over than 6 out of 10 dentate adults perceived a need for a check-up. The percentage decreased a little from the 15–34 years age group to the 55 years or more age group but this was not significant. The percentage showed little variation by socioeconomic characteristics, which might reflect a confounding of perceived need for a check-up by time since last dental visit.

Table 33: Percentage of people perceiving a need for a check up

		Population: dentate people Age (years)			
		All ages	**15–34**	**35–54**	**≥55**
All people	**Per cent of people**	**62.8**	**64.1**	**62.0**	**60.8**
	95% CI[(a)]	*59.8–65.7*	*58.3–69.6*	*56.0–67.7*	*55.9–65.4*
Sex					
Males	% of people	61.2	58.6	61.9	66.5
	95% CI	*55.5–66.6*	*47.2–69.1*	*55.5–67.9*	*58.2–74.0*
Females	% of people	64.5	70.2	62.1	53.3
	95% CI	*60.1–68.7*	*62.3–77.1*	*55.4–68.4*	*45.0–61.4*
Residential location					
Capital city	% of people	60.2	60.3	59.1	62.6
	95% CI	*56.6–63.7*	*52.4–67.8*	*50.2–67.4*	*57.8–67.2*
Other places	% of people	66.1	68.6	66.0	57.9
	95% CI	*60.9–70.9*	*63.2–73.5*	*57.8–73.4*	*51.7–63.9*
Postcode socioeconomic status					
Lowest	% of people	67.2	65.7	68.9	66.0
	95% CI	*60.5–73.2*	*57.3–73.2*	*62.4–74.7*	*52.7–77.1*
Middle	% of people	57.5	56.4	55.7	64.2
	95% CI	*55.5–59.4*	*44.8–67.4*	*42.4–68.2*	*61.5–66.9*
Highest	% of people	63.4	68.8	60.5	55.4
	95% CI	*61.0–65.7*	*68.0–69.6*	*57.3–63.6*	*50.5–60.3*
Government health card					
Health care card or pensioner concession card	% of people	58.6	51.4	78.2	55.5
	95% CI	*39.6–75.4*	*24.5–77.4*	*65.5–87.2*	*42.9–67.5*
Neither card	% of people	63.4	66.5	60.5	62.5
	95% CI	*59.6–67.1*	*63.0–69.9*	*53.9–66.8*	*55.9–68.6*
Place of last dental visit					
Cardholder/Public	% of people	62.9	54.8	81.0	62.6
	95% CI	*38.5–82.1*	*28.1–79.1*	*52.6–94.2*	*46.5–76.3*
Cardholder/Non-public	% of people	53.9	46.5	74.7	50.9
	95% CI	*35.4–71.3*	*16.0–79.9*	*61.6–84.5*	*32.2–69.4*
Non-cardholder/Non-public	% of people	63.4	66.5	60.5	62.5
	95% CI	*59.6–67.1*	*63.0–69.9*	*53.9–66.8*	*55.9–68.6*
Dental insurance					
Insured	% of people	62.5	66.0	62.2	57.7
	95% CI	*57.5–67.3*	*59.9–71.5*	*52.6–71.0*	*47.4–67.3*
Uninsured	% of people	64.2	65.8	61.7	64.5
	95% CI	*57.1–70.8*	*55.9–74.6*	*56.6–66.6*	*52.7–74.7*

(a) 95% CI = 95% confidence interval for estimated percentage.

Perceived urgency of dental treatment needs

Dentate adults who perceived a need for an extraction or filling were asked about the urgency of needed dental treatment. Dental problems vary from truly urgent problems like dental trauma, swelling in or around the jaws, or bleeding (usually as a complication of dental treatment) through situations where treatment is highly desirable in a short period of time (usually associated with pain) to problems that can reasonably wait to be treated. In NSAOH, dentate adults who perceived a need for an extraction or filling were asked 'How soon do you think you need this dental treatment?' at the time of the interview. The possible responses included a wide range of time periods. These have been collapsed to perceiving a need for treatment either within 3 months or longer than 3 months. In NT, 66.2% of dentate adults needing an extraction or filling perceived a need for dental treatment within 3 months (Table 34), which was a little higher, but not significantly, than the national estimate of 69.3% (Slade et al. 2007).

Key findings

- The percentage of dentate adults needing an extraction or filling who thought they needed treatment within 3 months showed no significant difference by age group. It varied from 62.6% to 70.1% across the three age groups.
- There were no significant differences among subgroups formed by most social characteristics, with the exception of postcode socioeconomic status. The perceived need for treatment within 3 months varied from highest percentage among those dentate adults living in postcodes of middle socioeconomic status (72.4%) to lowest percentage among those living in postcodes of lowest socioeconomic status (57.8%).

Discussion

Over 6 out of 10 dentate adults who needed an extraction or filling perceived a need for dental treatment within 3 months. The percentage who perceived a need for more urgent treatment was not significantly different across the three age groups, and showed little significant variation by socioeconomic characteristics. This might reflect a confounding of perceived need for dental treatment within 3 months by time since last dental visit.

Table 34: Percentage of people perceiving a need for treatment within 3 months

		Population: dentate people who need an extraction or filling			
		Age (years)			
		All ages	15–34	35–54	≥55
All people	**Per cent of people**	**66.2**	**70.1**	**62.6**	**63.5**
	95% CI[(a)]	*59.6–72.2*	*61.2–77.8*	*54.1–70.4*	*50.9–74.5*
Sex					
Males	% of people	63.1	69.1	57.9	63.1
	95% CI	*51.6–73.3*	*53.9–81.0*	*43.1–71.5*	*46.2–77.4*
Females	% of people	68.9	70.9	67.8	64.0
	95% CI	*64.9–72.7*	*63.2–77.5*	*60.8–74.1*	*52.8–73.8*
Residential location					
Capital city	% of people	64.4	70.6	61.2	55.0
	95% CI	*55.3–72.5*	*57.0–81.3*	*48.0–73.0*	*40.1–69.1*
Other places	% of people	68.5	69.6	64.5	74.8
	95% CI	*59.6–76.2*	*57.5–79.5*	*57.7–70.9*	*67.3–81.0*
Postcode socioeconomic status					
Lowest	% of people	57.8	55.9	57.1	71.6
	95% CI	*47.8–67.2*	*50.4–61.2*	*40.8–71.9*	*40.2–90.4*
Middle	% of people	72.4	82.8	66.3	59.7
	95% CI	*69.0–75.6*	*77.9–86.8*	*59.4–72.5*	*57.0–62.5*
Highest	% of people	68.9	72.4	66.9	63.1
	95% CI	*61.9–75.1*	*65.3–78.4*	*65.5–68.3*	*36.8–83.4*
Government health card					
Health care card or pensioner concession card	% of people	70.8	86.5	54.3	65.3
	95% CI	*55.0–82.8*	*63.2–96.0*	*21.7–83.6*	*54.8–74.4*
Neither card	% of people	66.3	69.0	63.7	64.9
	95% CI	*59.8–72.2*	*61.4–75.7*	*57.2–69.8*	*45.1–80.7*
Place of last dental visit					
Cardholder/Public	% of people	65.4	86.1	45.8	61.1
	95% CI	*44.9–81.5*	*48.1–97.6*	*16.6–78.3*	*36.4–81.2*
Cardholder/Non-public	% of people	77.5	86.9	72.7	69.5
	95% CI	*62.9–87.5*	*62.8–96.3*	*22.7–96.0*	*49.7–83.9*
Non-cardholder/Non-public	% of people	66.3	69.0	63.7	64.9
	95% CI	*59.8–72.2*	*61.4–75.7*	*57.2–69.8*	*45.1–80.7*
Dental insurance					
Insured	% of people	61.9	57.2	65.0	64.3
	95% CI	*52.9–70.2*	*40.1–72.7*	*57.4–72.0*	*50.4–76.2*
Uninsured	% of people	69.2	77.3	60.0	63.1
	95% CI	*60.0–77.0*	*66.3–85.4*	*47.8–71.0*	*41.5–80.5*

(a) 95%CI = 95% confidence interval for estimated percentage.

Age-standardised comparison between government health cardholders and non-health cardholders

Findings from 29 of the preceding tables are summarised in Table 35, to compare oral health indicators between people with a government health card and non-cardholders. Percentages and means for the two groups are age-standardised, a statistical procedure that aims to remove any effects of age that might account for differences between the two groups in each oral health indicator. As noted in Table 4, smaller percentages of people in the two younger age groups had a health care card or pensioner concession card than in the oldest age group. Age standardisation seeks to compensate for that difference in age distribution, so that differences in any single indicator between the two groups are not confounded by age.

- For 14 indicators reported in Table 35, health cardholders had significantly poorer oral health status, oral health care and perceived oral health.
- For measures relating to tooth loss, the magnitude of difference in age-adjusted estimates between the two groups was noticeably smaller than the difference between the same two groups noted in preceding tables where there was no adjustment for age. For example, health cardholders had a statistically non-significant 3.9-fold greater prevalence of complete tooth loss when the comparison was adjusted for age (Table 35), whereas prevalence differed by a factor of 6.4 when all ages were contrasted in Table 5 (8.8% for health cardholders compared with 1.3% for non-cardholders). This degree of attenuation indicates that age was an important confounder of the relationship between health card status and complete tooth loss.
- In contrast, the relative differences between the two groups were amplified in the age-standardised results compared with the unstandardised results for two indicators: gingival inflammation and perceived need for filling or extraction.
- However, for most other indicators, the relative differences in age-standardised results between the two groups were similar in magnitude to preceding tables. This is because there was only a weak association between age and indicators such as dental attendance, with the consequence that there was little confounding of the difference between the two groups by age.

In summary, the findings in Table 35 confirm that health cardholders are disadvantaged with respect to several indicators of oral health status, oral health care and perceived oral health, and that the disadvantage is not due to the older age profile of health cardholders compared to non-cardholders. Exceptions occurred for some indicators including tooth loss, where adjustment by age produced attenuated differences between the two groups.

Table 35: Age-standardised comparison of health cardholders and non-health cardholders

	Cardholders	Non-cardholders
Variable	**Estimate (95%CI)**	**Estimate (95%CI)**
% of people with complete tooth loss	8.0 (3.1–12.8)	2.1 (1.3–2.8)
% of people with fewer than 21 teeth	16.0 (11.1–20.8)	6.1 (3.4–8.9)
% of dentate people who wear denture(s)	13.7 (8.8–18.6)	10.2 (7.5–13.0)
Average number of missing teeth per person	6.4 (5.7–7.2)	3.8 (3.4–4.1)
% of people with untreated coronal decay	39.4 (32.7–46.1)	34.0 (29.9–38.2)
% of people with untreated root decay	9.2 (6.2–12.2)	7.4 (5.3–9.4)
% of people with one or more filled teeth	84.3 (77.2–91.5)	89.2 (87.6–90.8)
Average number of DMF teeth per person	14.0 (12.6–15.3)	12.4 (11.9–12.8)
% of people with moderate or severe periodontitis	36.6 (26.9–46.4)	30.1 (18.8–41.4)
% of people with 4+ mm periodontal pocket depth	36.7 (26.5–47.0)	33.9 (20.8–47.0)
% of people with 4+ mm clinical attachment loss	56.6 (45.0–68.1)	54.6 (44.5–64.7)
% of people with gingival inflammation	27.5 (19.7–35.2)	14.9 (11.4–18.3)
% of people visiting dentist within last 12 months	42.5 (35.5–49.4)	52.2 (46.8–57.6)
% of people who attended a private dental practice at last dental visit	41.2 (35.1–47.3)	82.0 (78.1–85.9)
% of people who paid for their last dental visit	38.7 (32.6–44.8)	100.0 (100.0–100.0)
% of people who usually visit a dental professional at least once a year	38.6 (31.2–45.9)	44.3 (39.4–49.2)
% of people who have a dentist they usually attend	64.5 (55.3–73.8)	77.1 (73.1–81.2)
% of people who usually visit a dentist for a check up	34.7 (28.4–41.0)	47.3 (44.3–50.3)
% of people who avoided or delayed dental care	41.5 (33.5–49.5)	32.2 (29.0–35.5)
% of people who reported that cost had prevented recommended dental treatment	27.2 (13.0–41.5)	23.2 (19.1–27.3)
% of people who would have a lot of difficulty paying a $100 dental bill	44.1 (35.0–53.3)	13.4 (11.7–15.0)
% of people avoiding foods due to dental problems	33.6 (24.4–42.9)	13.6 (11.1–16.1)
% of people rating their oral health fair or poor	32.6 (21.7–43.6)	13.4 (10.4–16.3)
% of people experiencing toothache	24.8 (18.3–31.2)	15.1 (12.0–18.2)
% of people experiencing orofacial pain	31.8 (24.6–39.0)	18.8 (15.4–22.2)
% of people who need dentures	14.9 (11.6–18.3)	3.0 (1.6–4.4)
% of people who need an extraction or filling	45.0 (39.6–50.3)	33.2 (29.7–36.6)
% of people perceiving a need for a check up	64.6 (55.6–73.6)	62.3 (58.2–66.3)
% of people perceiving a need for treatment within 3 months	79.2 (69.5–89.0)	65.9 (59.6–72.1)

Age-standardised comparison between the dentally insured and the uninsured

Age standardisation has been used in Table 36 to make comparisons between dentally insured and uninsured people in each of the 30 oral health indicators presented in Tables 5–34. These comparisons are based on the same principles noted for Table 35. That is, age standardisation aims to compare insured and uninsured people after adjusting for potential differences in the age distribution between the two groups.

- The results in Table 36 show statistically significantly poorer outcomes for uninsured people in 12 of the 30 indicators.
- For most of those indicators, statistically significant differences were also observed in the preceding tables. However, three indicators that differed significantly between the two groups in Table 36 did not differ significantly in the preceding tables: fewer than 21 teeth, denture wearing and perceived need for dentures.
- Conversely, 18 indicators did not differ to a statistically significantly degree between insured and uninsured people in Table 36 and most of them were similarly non-significant when contrasted between the two groups in previous tables that did not use age standardisation.

In summary, the findings in Table 36 confirm generally poorer oral health outcomes for uninsured people compared to insured people. For three indicators, age standardisation revealed significant differences between the two groups that were not apparent in preceding tables of unstandardised results.

Table 36: Age-standardised comparison of the dentally insured and the uninsured

	Insured	Uninsured
Variable	**Estimate (95%CI)**	**Estimate (95%CI)**
% of people with complete tooth loss	5.0 (2.7–7.2)	3.8 (1.8–5.8)
% of people with fewer than 21 teeth	5.6 (3.6–7.7)	13.0 (9.6–16.3)
% of dentate people who wear denture(s)	7.5 (5.8–9.3)	14.4 (11.1–17.6)
Average number of missing teeth per person	4.6 (4.1–5.0)	5.0 (4.6–5.4)
% of people with untreated coronal decay	38.6 (30.9–46.3)	33.7 (29.6–37.8)
% of people with untreated root decay	5.9 (3.8–8.0)	9.7 (6.6–12.8)
% of people with one or more filled teeth	93.1 (91.1–95.2)	86.0 (80.6–91.3)
Average number of DMF teeth per person	13.4 (12.4–14.3)	12.8 (12.2–13.4)
% of people with moderate or severe periodontitis	30.8 (24.8–36.9)	37.4 (28.9–45.9)
% of people with 4+ mm periodontal pocket depth	32.5 (25.5–39.4)	40.6 (28.9–52.4)
% of people with 4+ mm clinical attachment loss	52.1 (45.1–59.1)	60.9 (49.9–71.9)
% of people with gingival inflammation	18.6 (13.5–23.7)	21.0 (16.2–25.8)
% of people visiting dentist within last 12 months	55.2 (48.5–61.9)	45.2 (39.8–50.6)
% of people who attended a private dental practice at last dental visit	87.7 (83.0–92.4)	64.5 (59.2–69.9)
% of people who paid for their last dental visit	96.8 (94.2–99.4)	82.5 (78.2–86.9)
% of people who received government-subsidised dental care in private sector	0.0 (0.0–0.0)	1.0 (<0–2.2)
% of people who usually visit a dental professional at least once a year	48.6 (43.6–53.6)	36.8 (30.8–42.8)
% of people who have a dentist they usually attend	82.3 (75.6–89.0)	71.6 (65.8–77.5)
% of people who usually visit a dentist for a check up	56.3 (52.6–60.0)	36.7 (30.6–42.9)
% of people who avoided or delayed dental care	30.8 (27.8–33.9)	36.8 (33.9–39.7)
% of people who reported that cost had prevented recommended dental treatment	22.3 (18.1–26.4)	30.3 (24.5–36.2)
% of people who would have a lot of difficulty paying a $100 dental bill	15.4 (11.8–19.0)	25.0 (19.6–30.5)
% of people avoiding foods due to dental problems	15.2 (11.3–19.0)	22.9 (18.7–27.1)
% of people rating their oral health fair or poor	12.7 (8.8–16.5)	21.8 (17.4–26.3)
% of people experiencing toothache	13.4 (9.3–17.6)	21.5 (18.0–24.9)
% of people experiencing orofacial pain	19.7 (16.3–23.2)	23.4 (19.4–27.4)
% of people who need dentures	3.4 (1.3–5.4)	9.0 (6.5–11.5)
% of people who need an extraction or filling	32.4 (26.6–38.2)	40.1 (35.6–44.5)
% of people perceiving a need for a check up	60.9 (56.6–65.2)	63.5 (58.9–68.2)
% of people perceiving a need for treatment within 3 months	60.1 (51.9–68.4)	73.7 (69.1–78.4)

Appendix

Sample counts

Table A.1 Table counts of interviewed people

	Age group (years)			
	All ages	**15–34**	**35–54**	**≥55**
All people	**1,082**	**296**	**517**	**269**
Sex				
Males	418	111	194	113
Females	664	185	323	156
Residential location				
Capital city	543	152	260	131
Other places	539	144	257	138
Postcode socioeconomic status				
Lowest	352	103	179	70
Middle	278	77	131	70
Highest	452	116	207	129
Government health card				
Blank but applicable	4	3	—	1
Health care card or pensioner concession card	166	41	47	78
Neither card	912	252	470	190
Place of last dental visit				
Cardholder/Public	82	26	25	31
Cardholder/Non-public	84	15	22	47
Dental insurance				
Blank but applicable	13	11	—	2
Insured	534	108	283	143
Uninsured	535	177	234	124

Table A.2 Table counts of examined people

	Age group (years)			
	All ages	**15–34**	**35–54**	**≥55**
All people	**517**	**136**	**254**	**127**
Sex				
Males	198	45	93	60
Females	319	91	161	67
Residential location				
Capital city	241	58	114	69
Other places	276	78	140	58
Postcode socioeconomic status				
Lowest	145	46	77	22
Middle	140	30	66	44
Highest	232	60	111	61
Government health card				
Blank but applicable	1	1	—	0
Health care card or pensioner concession card	78	21	22	35
Neither card	438	114	232	92
Place of last dental visit				
Cardholder/Public	39	12	11	16
Cardholder/Non-public	39	9	11	19
Dental insurance				
Blank but applicable	7	5	—	2
Insured	259	50	142	67
Uninsured	251	81	112	58

Glossary

95% confidence interval Defines the uncertainty around an estimated value—there is a 95% probability that the true value falls within the range of the upper and lower limits

Attachment loss The distance in millimetres measured from the edge of the enamel of a tooth to the gum tissue that is adherent to its root.

Calibration A procedure to promote standardisation between examiners performing the oral examinations.

Canine One of four 'eye teeth' positioned next to the incisors and used for tearing food.

Capital city The administrative seat of government of each of Australia's six states and two territories—each capital city also represents the most populous location of its respective state or territory.

Cemento-enamel junction Point on a tooth surface where the tooth crown joins the tooth root.

Census The Census of Population and Housing conducted every 5 years by the Australian Bureau of Statistics.

Complete tooth loss Loss of all natural teeth (also referred to as edentulism).

Coronal Pertaining to the crown of a tooth.

Crown The portion of tooth covered by white enamel that usually is visible in the mouth.

Dental attendance Behaviour related to the use of dental services.

Dental caries The process in which tooth structure is destroyed by acid produced by bacteria in the mouth—see dental decay.

Dental caries experience The cumulative effect of the caries process through a person's lifetime, manifesting as teeth that are decayed, missing or filled.

Dental decay Cavity resulting from dental caries.

Dental insurance Dental care is not covered under Australia's universal public health insurance vehicle, Medicare, and consequently people seeking cover can elect to carry private dental insurance.

Dentate Having one or more natural teeth.

Dentition The set of teeth—a complete dentition comprises 32 adult teeth.

Denture A removable dental prosthesis that substitutes for missing natural teeth and adjacent tissues.

DMFT An index of dental caries experience measured by counting the number of decayed (D), missing (M) and filled (F) teeth (T).

Edentulous A state of complete loss of all natural teeth.

Enamel Hard white mineralised tissue covering the crown of a tooth.

Epidemiology The study of the distribution and causes of health and disease in populations.

Examination protocol Methods and guidelines for conducting standardised oral examinations in a survey.

Extraction Removal of a natural tooth.

Generation A group of people born during a defined period of time (also referred to as a birth cohort).

Gingiva Gum tissue.

Gingivitis Redness, swelling or bleeding of the gums caused by inflammation.

Health care card A concession card issued by the Australian Government that entitles the holder to services including public dental care.

Incisor One of eight front teeth used during eating for cutting food.

Index of Relative Socioeconomic Advantage/Disadvantage (IRSAD) One of four indices measuring area-level disadvantage derived by the Australian Bureau of Statistics—the IRSAD is derived from attributes such as low income, low educational attainment, high unemployment and jobs in relatively unskilled occupations.

Indigenous identity A person who states that they are of Aboriginal and/or Torres Strait Islander descent is an Indigenous Australian.

Mean The arithmetic average of a set of values.

Molar One of 12 back teeth used in grinding food.

Natural teeth Refers to a person's own teeth as opposed to artificial teeth.

Orofacial pain Pain located in the face, jaw, temple, in front of the ear or in the ear.

Participation rate The proportion of people from whom survey information is collected from among the total number of people selected as intended study participants.

Periodontal disease Disease of the gums and other tissues that attach to and anchor teeth to the jaws.

Periodontal pocket A space below the gum line that exists between the root of a tooth and the gum surrounding that tooth.

Periodontitis Disease of the gums caused by bacteria, characterised by swelling and bleeding of the gums and loss of tissue that attaches the tooth to the jaw.

Permanent teeth Adult teeth (secondary teeth).

Plaque A film composed of bacteria and food debris that adheres to the tooth surface.

Prevalence The proportion of people with a defined disease within a defined population.

Probing pocket depth The measured depth of the periodontal pocket.

Recorder A person, usually a dental assistant, who recorded the results of an oral examination onto a laptop computer.

Relative difference The difference between two values calculated as a ratio of one value divided by another.

Restoration A filling to repair a tooth damaged by decay or injury.

Root That part of the tooth below the crown which is anchored to the jaw.

Root surface The surface of the root of a tooth.

Socioeconomic Indices for Areas (SEIFA) A set of four indices derived by the Australian Bureau of Statistics from population census data to measure aspects of socioeconomic position for geographic areas.

Socioeconomic position Descriptive term for a position in society and usually measured by attributes such as income, education, occupation or characteristics of residential area.

State/territory Geographic regions of Australia—the nation has six states and two territories.

Statistical significance An indication from a statistical test that an observed association is unlikely (usually less than 5% probability) to be due to chance created when a random sample of people is selected from a population.

Trend The general direction in which change over time is observed.

Weights Numbers applied to groups of study participants to correct for differences in probability of selection and in participation.

Wisdom tooth One of four molars, each positioned at the back of the mouth.

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