



Commonwealth Dental Health Program Evaluation Report 1994–1996

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AIHW Dental Statistics and Research Unit The University of Adelaide The AIHW Dental Statistics and Research Unit (DSRU) is a collaborative unit of the Australian Institute of Health and Welfare established in 1988 at The University of Adelaide. The DSRU was funded to improve the range and quality of dental statistics and research on the dental workforce, dental health status, dental practices and use of dental services.

Suggested citation

Brennan DS, Carter KD, Stewart JF, Spencer AJ (1997). *Commonwealth Dental Health Program Evaluation Report 1994–1996*. AIHW Dental Statistics and Research Unit, The University of Adelaide, Adelaide.

Acknowledgements

The data presented in this report were collected under a grant to AIHW from the Commonwealth Department of Health and Family Services.

The project was planned in conjunction with the Dental Health Branch, Health and Family Services and the Evaluation Project Steering Committee for the Commonwealth Dental Health Program. The data were collected in collaboration with the dental authorities in the participating States and Territories of Australia. The support of those dental authorities and their staff was crucial to the successful collection of data for this project.

The assistance provided by Mrs Lorna Lucas in the preparation of this report is acknowledged and much appreciated.

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ISBN 0863964362

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Symbols used

The following symbols are used in the tables of this report:

- nil or rounded to zero
- .. not applicable
- n.a. data not available

Abbreviations

- ADPS Adult Dental Programs Survey
- AIHW Australian Institute of Health and Welfare
- CDHP Commonwealth Dental Health Program
- CPITN Community Periodontal Index of Treatment Need
- DMFT Decayed, Missing, and Filled Teeth
- DSRU Dental Statistics and Research Unit
- **DSS Dental Satisfaction Survey**
- **EDS Emergency Dental Scheme**
- GDS General Dental Scheme
- MIS Management Information System
- NDTIS National Dental Telephone Interview Survey
- OMR Optical Mark Read

Explanatory notes

Card status

This variable is the combination of card-holder status (whether a card-holder or non–card-holder) at the time of the interview, with the place of last visit (public-funded or private at own expense). It is therefore possible, for example, that some card-holders whose last dental visit was private at their own expense, may not have been a card-holder at the time of that dental visit. The relevant cards are the Pensioner Concession Card, the Health Benefits Card, the Health Care Card or the Commonwealth Seniors Health Card.

Eligibility

Persons who are eligible for public-funded dental care are those persons who are covered by a Pensioner Concession Card, a Health Benefits Card, a Health Care Card, or a Commonwealth Seniors Health Card.

Reason for visit

The self-reported reason for a visit (problem or check-up) does not directly link with a classification by providers of whether a visit was for emergency or general dental care. The National Dental Telephone Interview Survey and the Dental Satisfaction Survey collect self-reported reasons for a dental visit as either a problem or a check-up, whereas the Adult Dental Programs Surveys collect provider classified reason for dental visit as either emergency or general dental care. Emergency care includes dental problems involving relief of pain, while general dental care includes both check-ups and dental problems which do not involve relief of pain.

Year of survey

The National Dental Telephone Interview Surveys (NDTIS) were conducted in the first quarter of 1994, 1995, and 1996, and questionnaires for the Dental Satisfaction Survey (DSS) were sent shortly after the telephone interview. Many questions in the NDTIS correspond to the period 12 months prior to the telephone interview. The data in the tables for the NDTIS and DSS are all labelled with the year of survey. Therefore, items such as the number of persons whose last dental visit was public-funded in the previous 12 months labelled under 1994 will correspond with visits mostly made in 1993. However, items such as dentate status which reflect current status will correspond with the year in which the survey took place.

Aboriginality

The term Aboriginal is used in this document to refer to persons of Aboriginal, Torres Strait Islander, and South Sea Islander origin.

Preface

This Report provides findings from the Evaluation Project for the Commonwealth Dental Health Program (CDHP). At the initiation of the CDHP a series of data collections were put in place that would generate a series of population and patient indicators of access and availability, barriers, use of services, health status and appropriateness of care. Baseline estimates for these indicators were published in the *Commonwealth Dental Health Program Baseline Evaluation Report 1994*. In the following 24 months these indicators were updated.

The purpose of this Report is to document the change in the indicators over the 24 month period. The approach is primarily descriptive in nature, providing percentages and means broken down by key explanatory variables, such as age, card status, and location. No formal analysis (i.e. inferential statistical testing of specific hypotheses) has been conducted on what worked or did not work in the CDHP and why. Such analyses will be conducted in the ensuing months. Therefore this Report offers only a first glance at what can be learnt from the Evaluation Project for the CDHP. While some interpretive comments are offered, these are more illustrative of possible areas for investigation than definite conclusions about what can be learnt. Such comments are made in good faith, but warrant further attention. It is the aim of further analytic work to provide more focussed information for future policy on public-funded dental care.

Executive Summary

Research within the adult community has highlighted manifest inequalities in oral health status and access to basic dental care in the Australian adult population. The Commonwealth Dental Health Program (CDHP) was introduced in January 1994 with the aim to reduce geographic and financial barriers which prevented adult card-holders and their adult dependants from receiving timely and appropriate dental care. The three principal objectives identified were to move the dental care received by adult card-holders from:

- emergency to general dental care;
- extraction to restoration; and
- treatment to prevention.

The Program injected additional funds into public-funded dental care provided by States and Territories. Care was provided under two separate schemes:

- the Emergency Dental Scheme (EDS); and
- the General Dental Scheme (GDS).

The EDS was implemented in January 1994. In July 1994, the GDS was implemented with funding equal to the EDS, both schemes receiving \$30 million per annum. In July 1995 funding was increased for the GDS to \$70 million, while the EDS continued to receive \$30 million per annum. The timing of the implementation of the Program and the phasing in of full funding, set ceilings to what could be expected in outcomes from the Program over the short time that it operated.

The AIHW Dental Statistics and Research Unit (DSRU) has conducted a set of surveys designed to collect information to evaluate the Program. These surveys aimed to assess the Program's effectiveness in altering the profile of oral health and access to dental care of the eligible card-holder population relative to the broader community. These surveys included information: from the whole community via annual national telephone interview surveys (NDTIS) with an associated postal survey of satisfaction (DSS) with care received, from eligible card-holders who actually received public-funded care, and about public-funded services provided to card-holders during their courses of care (ADPS).

This report summarises key findings from the above surveys. The tables presented have been selected with specific regard to the terms of reference for the evaluation of the CDHP, as set out in the *Commonwealth Dental Health Program Baseline Evaluation Report 1994*.

Who benefited?

Eligible card-holders were the beneficiaries of the CDHP. This includes:

• 200,000 additional persons who received public-funded dental care in any year (under the full-funding in 1995/96); and

 the baseline number of 616,000 persons who had received public-funded dental care prior to the CDHP, but who benefited from shifts in the mix of services provided with the additional resources available.

What were the benefits?

In the 24 months following the introduction of the CDHP eligible card-holders who received public-funded dental care

- had a decreased perceived need for extractions (12.7 to 9.3 per cent in 1994 and 1996 respectively) or fillings (25.8 to 17.1 per cent);
- reported less frequent experience of toothaches (23.3 to 19.8 per cent);
- visited more frequently for dental care (the percentage who made a dental visit in the previous 12 months increased from 58.6 to 67.4 per cent);
- waited a shorter time for a check-up (those waiting for less than one month increased from 47.5 to 61.5 per cent; those waiting for 12 or more months decreased from 21.1 to 11.3 per cent);
- received fewer extractions (especially among those last visiting for a problem, 43.8 to 36.5 per cent) and more fillings (among those last visiting for a check-up, 21.7 to 53.5 per cent); and
- were more satisfied with the dental care they received, both public-funded care in public clinics and at private dentists (satisfaction scores for those receiving public-funded care increased from 3.69 in 1994 to 3.93 in 1996; measured on a scale of 1 to 5).

Limitations to gains achieved by the Program

- despite the intention behind the CDHP of moving care away from emergency dental care toward general dental care, there was only a small shift in public-funded care away from problem and emergency care, even in the one year with full-year funding of the CDHP;
- problem-oriented visiting and emergency dental care are both associated with higher rates of tooth extraction and lower rates of fillings for decayed teeth:

Despite gains made during the CDHP, holders of government health concession cards (both those receiving public-funded care and those paying for private care) remained:

- more likely to visit for a problem;
- more likely to have an extraction;
- more likely to perceive the need for an extraction; and
- more likely to experience toothache.

Implications for future public-funded dental care

Improvement in access to dental care for eligible adults faces two core tasks:

- altering the nature of care provided; and
- increasing the number of card-holders who are able to access public-funded care in any year.

General dental care is associated with more comprehensive (and initially costly) care. Given limited resources, and the aim of including those card-holders most in need, strategies may include:

- specific targeting using criteria such as duration of hardship, permanent disability and severity of unmet dental needs;
- different waiting times for different care;
- creation of recall systems to create a continuity of general dental care; and
- introduction of more restrictive criteria on emergency dental care.

What was the reaction of providers?

- The majority of private dentists, when offered the opportunity, participated in providing care under the Program
- Concerns emerged from private dentists about the restricted scope of benefits, fees paid for items of care, and administrative arrangements such as the separation of emergency and general dental care.
- Most of these concerns could be addressed by policy changes leading to restrictions on emergency care and emphasis on more comprehensive, but highly targeted general dental care.

Secondary benefits identified under the CDHP include:

- the development of a dental policy focus in the Commonwealth Department of Health and Family Services;
- monitoring and evaluation of adult access to dental care; and
- a number of smaller ancillary activities supported such as the Remote and Aboriginal Dental Care Demonstration Projects and Rural Dental Projects under the National Oral Health Advisory Committee and the Quality Assurance Program.

Overview

Together these findings indicate that the CDHP increased the number of eligible card-holders who received public-funded dental care in any year, reduced their waiting time, increased their satisfaction with care, and moved the provision of services in the direction of less extractions and more fillings. However, during the 24 months since implementation, a substantial shift from emergency to general dental care was not achieved, which will have limited the movement away from extractions and added to provider dissatisfaction.

Despite improved public-funded dental care for more card-holders, card-holders are still disadvantaged in terms of their oral health and access to dental care. Future initiatives to improve access to care and the oral health of disadvantaged Australian adults could benefit from more restricted targeting of eligibility, and altered procedures for the provision of care so as to give more emphasis to general dental care.

1 Introduction

1.1 Background

The Commonwealth Dental Health Program was a response to the documentation of social inequalities in oral health status and access to dental care among Australian adults (National Health Strategy, 1992). While oral diseases and their consequences are widespread, there is evidence that they are not equally distributed through the community. Those most in need are the least likely to use dental services regularly or receive basic dental care to maintain an acceptable, functional natural dentition. This arises from both an apparent inability by many adults to purchase recommended private dental care and rationing of dental care in the public sector where demand has reportedly grown rapidly to exceed available resources.

The burden of disease and focus of dental health policy was recognised several years ago to have shifted from children to adults. However, no commensurate information was available to guide decision-making, or to evaluate whether targets of improved oral health and access to dental care, especially for card-holders were being achieved. This need for improved national data led to the development of *A research database on dental care in Australia* in 1993 (AIHW Dental Statistics and Research Unit, 1993).

The research database extended the documentation on the problem of access to dental care and oral health among adult card-holders and analysed a number of key issues for policy development. These issues included the desirability of moving dental care for adult card-holders from:

- emergency to basic dental care;
- extraction to restoration; and
- treatment to prevention (Spencer, 1993a).

A conclusion to the discussion paper *Policy directions on dental care for Australian adults* stated that there was a reasonable expectation that a combination of increased availability, improved affordability and reduced hardship in accessing dental care, and more appropriate guidelines and performance targets in public dental services, and subsidised dental care in private dental practices, would alter the situation and lead to improved access and better oral health for more Australians (Spencer, 1993b).

The Commonwealth Dental Health Program, which commenced at the beginning of 1994 had the overall objective of improving the dental health of financially disadvantaged people in Australia. The specific aims of the Program were:

- to reduce barriers, including economic, geographical and attitudinal barriers, to dental care for eligible adults;
- to ensure equitable access of eligible persons to appropriate dental services;

- to improve the availability of effective and efficient dental interventions for eligible persons, with an emphasis on prevention and early management of dental problems; and
- to achieve high standards of program management, service delivery, monitoring, evaluation and accountability.

An Evaluation Project was initiated to assess the impact of the Program in terms of effectiveness and appropriateness. In particular:

- whether the Program met its aims effectively; and
- the impact of the Program on the dental health of eligible adults and the comparison of the dental health of eligible persons with that of the general community.

The AIHW Dental Statistics and Research Unit (DSRU) has conducted the Evaluation Project, examining and analysing the effectiveness of the Program in terms of the:

- availability, access and use of dental services as a result of the Program;
- dental health of eligible adults who received treatment under the Program, compared with the general population, and the nature of dental care needs among adults;
- attitudinal, economic and geographic barriers to dental care; and
- appropriateness of dental care received by eligible adults under the Program.

In addition, the Evaluation Project has:

- identified areas where the delivery of the Program could be enhanced; and
- recommended ways in which the Program can be made more effective.

The DSRU conducted four surveys as part of the Evaluation Project. Two surveys captured information among persons receiving public-funded dental care; one of attitudes and satisfaction with dental care, and one on the impact of the Program within the broader population. The surveys comprised:

- The cross-sectional Adult Dental Programs Survey of public-funded dental visits to provide information about dental care throughout the public-funded sector.
- A Prospective Adult Dental Programs Survey to obtain details of the oral health status and services received throughout a course of care, of persons receiving public-funded dental care.
- A survey of Dental Satisfaction with care and attitudes and health behaviours to integrate with a telephone interview survey of the population.

• The National Dental Telephone Interview Survey to capture information about dental care among users and non-users of dental services, covering both 'eligible' card-holders and other 'non-eligible' persons.

Annual repeats of most of these surveys provided comparative cross-sections from which time series trends could be analysed.

Together, the first three surveys aimed to establish: the reasons for seeking care under the Program; the characteristics of those who received care; the oral problems they had at the time they sought care; the types of care they received; and their perceptions of the process of care. This information allowed detailed evaluation of Program outcomes, including conversion of emergency patients to general dental care patients, increases in fillings in preference to extraction, decreases in untreated disease and improvements in oral health.

A second aspect of evaluation was the impact of the Program on social inequalities in access to dental care and oral health outcomes. This required monitoring of population samples, not just the users of the Program, and provided the rationale for the fourth survey. It was envisaged that the National Dental Telephone Interview Survey would be conducted annually, and in 1997–98 there would be an accompanying dental examination survey. Such information serves as the highest level evaluation of the Program's impact through its ability to document those within eligible target groups who have received care and the extent to which the initial problem of social inequalities in access and oral health outcomes has been ameliorated by the Commonwealth Dental Health Program.

This report on the Commonwealth Dental Health Program Evaluation Project is part of a series which includes Evaluation Reports, Research Reports, and technical reports. Earlier technical reports completed were:

- National Dental Telephone Interview Survey 1994
 National Dental Telephone Interview Survey 1995
 National Dental Telephone Interview Survey 1996 (Draft Tables)
- Adult Dental Programs Survey (Cross-sectional) 1994
 Adult Dental Programs Survey (Cross-sectional) 1995
 Adult Dental Programs Survey (Cross-sectional) 1996
 Prospective Adult Dental Programs Survey 1995/96 (Draft Tables)
- Dental Satisfaction Survey 1994
 Dental Satisfaction Survey 1995
 Dental Satisfaction Survey 1996 (Draft Tables)

Together these technical reports present the methods and findings of the surveys conducted by the DSRU during the period 1994 to 1996.

Three Research Reports have been produced in the form of brief newsletters to provide readily interpretable summaries of details from the technical reports.

The Commonwealth Dental Health Program Baseline Evaluation Report 1994:

• briefly described the evaluation data and their sources;

- related the terms of reference for the Evaluation Project to specific population and patient indicators;
- described the key findings among those population and patient indicators in 1994, at the initiation of the Program; and
- put forward a series of objectives drawn from the key findings for monitoring over the life of the Program.

The report was mostly a graphic presentation with a minimum of explanatory text. Further details of the data and their sources can be obtained from the technical reports.

This report updates the findings obtained at baseline, by adding data collected in 1995 and 1996. This enabled trends over the period of the Program to be identified. The population and patient indicators from the baseline report are repeated, plus some additional analyses have been incorporated, presenting either new data items collected since baseline or new breakdowns of data to more fully describe changes under the Program.

1.2 Population and patient indicators

Table 1.2.1 provides a summary of the terms of reference of the Commonwealth Dental Health Program Evaluation Project, the corresponding population and patient indicators, and the explanatory variables by which the indicators are cross-tabulated.

The terms of reference considered include: availability and access, barriers to service use, use of services, health status, appropriateness of care including patient satisfaction with care, and oral health needs.

The population and patient indicators operationalise the terms of reference, and any change in an indicator can be assessed with regard to the objectives of the Program. The explanatory variables provide the level of detail required for observing change in the groups for whom care is being provided. The explanatory variables of card status, residential location, and State or Territory, are designed to provide a social and geographic distribution of the indicators such as the prevalence of edentulism and the usual reason for a dental visit.

Table 1.2.1: Terms of Reference and Population & Patient Indicators

Terms of reference	Population and patient indicators	Explanatory variables
Availability and access	Perceived need for dental visits and treatments	by card status and residential location
	Usual reason for a dental visit	by card status and residential location
	Dental insurance	by card status and residential location
	Awareness of CDHP	by State/Territory and card status
	Waiting time for a check-up	by card status
Barriers	Distribution of affordability and hardship in purchasing dental care	by card status and residential location
Use of services	Time since last visit	by card status and residential location
	Check-up (percentage last visiting)	by card status and residential location
	Public-funded dental visits	by State/Territory and age
	Persons eligible for public care	by State/Territory and age
	Type of public-funded course of care	by State/Territory
	Emergency care (public-funded)	by age, sex, language, aboriginality, oral status, new patient/previous care and location
	Mean number of public-funded dental visits and services	by State/Territory and age
Health status	Edentulism	by card status, residential location and age
	Missing teeth (mean)	by card status, residential location and age
	Social impact	by card status and residential location
Appropriateness of care	Extractions and fillings (per cent of persons)	by card status and residential location by reason
	,	by card status and insurance
	Service areas	by location, State/Territory and emergency/non-emergency
	Oral surgery (extractions)	by age, sex, language, aboriginality, emergency/non-emergency, new/previous and location
	Patient satisfaction scores and comments	by funding status and card status
	Mean services (public-funded care)	by age, sex, language, aboriginality, emergency/non-emergency, new/previous, location and State/Territo
Oral health needs of public-funded patients	Prosthetics, crown status, root status and periodontal status	by age, emergency/non-emergency and location

2 Data Sources

2.1 Adult Dental Programs Survey (Cross-sectional)

Purpose

The purpose of the survey was to describe levels of dental attendance and service provision within public-funded dental programs. A cross-section of dental visits was sampled over a brief period each year to obtain a snapshot of public-funded dental care.

Data collection

Data were collected by State and Territory dental services using a range of manual data forms, optical mark read (OMR) scan forms and computer management information system (MIS) databases. Sampling rates and survey periods were determined for each State and Territory to obtain appropriate yields for analysis, centred around the period of March/April/May each year.

Sampling rates

Sampling rates were determined to obtain 595 persons in each of six age groups, to provide 3,570 persons for the larger Australian States. Sample yields of this size enable prevalence estimates for five sub-groups within each age group with a relative standard error of less than 40 per cent.

Sample yields and mode of collection by year

The table below outlines the sample yields and mode of collection for each State and Territory by year.

Table 2.1.1: Sample yields (number of visits) and mode of collection

		NSW	Vic	Qld	SA	WA	Tas	ACT	NT	All
1994	Mode	OMR	OMR+MIS	Manual	OMR	MIS	OMR	OMR	OMR	
	Yield	3,365	3,140	1,753	2,859	4,000	1,218	743	575	17,653
1995	Mode	_	MIS	OMR	MIS	MIS	MIS	MIS	OMR	
	Yield	_	42,072	3,964	25,989	4,000	2,472	1,025	576	80,098
1996	Mode	_	MIS	OMR	MIS	MIS	MIS	MIS	OMR	
	Yield	_	32,473	6,139	23,889	3,750	579	1,862	467	69,159

Weighting

The data were weighted using the estimated number of persons who made their last visit to either a public dental clinic or public-funded to a private practice within the last 12 months for persons aged 18 years or more from the 1995 and 1996 National Dental Telephone Interview Surveys. This was performed to weight the sample yields from each State and Territory in proportion to the number of public-funded visits for each State and Territory.

2.2 Prospective Adult Dental Programs Survey

Purpose

This survey obtained details of the oral health status and services received throughout a course of care within public-funded dental programs. The survey was conducted as an on-going monitoring survey throughout the year.

Data collection

Data were collected by State and Territory dental services using manual forms or optical mark read (OMR) scan forms to record oral health data and computer management information system (MIS) databases to record patient, visit, and service provision details. All data items can be collected on double-sided OMR forms where there is no access to computer MISs. The survey commenced in mid-1995.

Sampling rates

Sampling rates were determined as for the Adult Dental Programs Survey (Cross-sectional) to provide appropriate sample yields based on patient flows and workloads specific to each State and Territory.

Sample yields and mode of collection

The table below outlines the yields obtained up to September 1996 and the mode of collection for each State and Territory.

Table 2.2.1: Sample yields (number of courses of care) and mode of collection

		NSW	Vic	Qld	SA	WA	Tas	ACT	NT	All
1995/96	Mode	MIS	OMR	OMR	OMR+MIS	OMR+MIS	OMR+MIS	OMR+MIS	OMR	
	Yield	874	203	2,628	753	160	359	26	269	5,272

Weighting

Data were weighted as for the Adult Dental Programs Survey (Cross-sectional) to weight the sample yields from each State and Territory in proportion to the number of public-funded visits for each State and Territory.

2.3 National Dental Telephone Interview Survey

Purpose

The purpose of the National Dental Telephone Interview Survey was to: collect information on basic features of oral health and dental care within the Australian population; provide information on the broader parameters of dental health and access to services; monitor the extent of social inequities associated with oral health and dental care within the community; and investigate the underlying reasons behind dental behaviours and their consequences.

Data collection

The National Dental Telephone Interview Surveys selected random samples of Australians aged five years and over from all States and Territories. The surveys were conducted in the first quarter of each year. Interviews were conducted using computer assisted telephone interviewing techniques. Questions were read directly from the computer screen, and responses entered directly onto the database. Question sequencing was fully automated, and the computer program would only allow valid responses to be entered.

A primary approach letter explaining the nature and purpose of the study was sent to each sampled household approximately 10 days prior to the initial phone call. Up to six calls on differing days and times were attempted to make initial contact with the household (excluding engaged calls). After six consecutive calls with no answer the number was abandoned. Once contact was made with a household, a person aged five years or more was chosen at random from the household. If the target person was at home they were interviewed (if possible), else a call back time was arranged and up to a further six attempts were made to contact the target person. Proxy interviews were conducted for children and for people who were unable to answer questions over the phone, if they had a hearing impairment for example. Some interviews were conducted in languages other than English (where practicable).

Response levels

The table below outlines the number of telephone numbers sampled for each survey; the number of telephone numbers which were 'in scope', that is the number served as a residential number and was not, for example, disconnected or a business number; the number of participants; and the participation rate.

Table 2.3.1: Participation in the National Dental Telephone Interview Surveys

	1994	1995	1996
Number of sampled phone numbers	12.522	8,509	13,075
Number of phone numbers 'in scope'	11,149	7,305	11,605
Number of participants	7,987	5,101	8,292
% participation	71.6	69.8	71.5

Weighting of data

The data for each survey were weighted using the same method for each. The data were weighted by age, sex, and the geographical sampling regions to ensure that the weighted data reflected the age and sex distribution of the Australian population for each region as estimated by the Australian Bureau of Statistics.

2.4 Dental Satisfaction Survey

The content and style of the Dental Satisfaction Survey reflects a conceptual approach that defines satisfaction as the reaction to salient aspects of the context, content (process) and outcome (result) of the dental care experience.

Purpose

The aims of the Dental Satisfaction Survey were to:

- examine the differences in satisfaction primarily between card-holders and non-card-holders who were participants in the 1994, 1995, and 1996 National Dental Telephone Interview Surveys; and
- 1. examine changes over time in the satisfaction among card-holders from the National Dental Telephone Interview Survey with respect to the implementation of the Commonwealth Dental Health Program.

Data collection

The statements used in the satisfaction survey were based on the content of existing satisfaction scales.

The items were presented as statements pertaining to the personal experience of the respondents at their last dental visit or series of visits.

To investigate if there were other aspects of dental satisfaction not incorporated in the questionnaire, respondents were invited to make comments on aspects of their last dental visit with which they were satisfied or dissatisfied, and to make comments on any other issues. All discrete comments were coded into 23 major categories, based on the most frequently occurring types. The comment types were grouped into the conceptual categories of context, content, outcome, and other.

The participants in the 1994, 1995 and 1996 Dental Satisfaction Surveys were drawn from the group that had participated in the corresponding National Dental Telephone Interview Survey. The participants were informed at the time of their telephone interview that they had been chosen for a further questionnaire, and their address was checked with the details already held in the database. A questionnaire was mailed to the address, usually within a week of the telephone interview.

Sampling rates

Potential respondents drawn from the National Dental Telephone Interview Surveys were dentate, aged 18 years and older, and had made a dental visit within the previous 12 months. All card-holders and one-in-four non-card-holders were selected. The table below outlines the number of persons sampled and the response rate for each of the three surveys.

Table 2.4.1: Response rates to the Dental Satisfaction Survey

	1994	1995	1996
Number selected	1,332	700	1,362
Response rate (%)	84.3	86.2	86.4

Weighting of data

All data were weighted by age, sex and location using the estimated resident population of each State and Territory. This weighting procedure meant that reported percentages were corrected for differences in the probability of selection to represent that portion of the population who were dentate, aged 18 and over, and had made a dental visit within the previous 12 months.

3 Results

3.1 Availability and access

Table 3.1.1: Perceived need for dental visits by card status and residential location (per cent)
- dentate persons aged 18+

		Check-up only	1		Treatment	
	1994	1995	1996	1994	1995	1996
Card status						
Card public-funded	16.5	17.2	15.5	37.8	36.1	35.3
Card private own expense	27.2	23.8	23.3	24.1	32.0	23.6
Non-card-holder private	33.3	28.1	28.2	20.3	21.4	23.4
Residential location						
Urban	32.1	26.9	27.3	21.6	23.2	24.1
Rural/remote	28.0	26.1	23.6	22.9	26.2	25.1
Total	31.2	26.6	26.4	21.9	23.9	24.4

Source: National Dental Telephone Interview Survey

Baseline objective

 A shift in card-holders' perceived needs from treatment based visits to check-up visits.

- Among dentate adults, there was a general decline in the percentage perceiving a current need for a check-up only (31.2 per cent in 1994 to 26.4 per cent in 1996). There was a corresponding increase in the percentage of dentate adults perceiving the need for some form of dental treatment increasing from 21.9 per cent in 1994 to 24.4 per cent in 1996.
- Over time there was a slight decrease in the perceived need for dental treatment among dentate adult card-holders who last received public-funded dental care. Among dentate adults who last visited a private clinic there was a decrease over time in the perceived need for only a check-up, and an increase in perceived need for dental treatment among non-card-holders.
- Compared with persons from urban areas, persons from rural or remote areas were less likely to perceive the need for a check-up only.
- Over time there has been a reduction in the differences between card-holders who last received public-funded care and non-card-holders who last received private care. However the differences in perceived need between these two groups, while reduced, are still substantial. Card-holders who last received public-funded dental care were (1) significantly less likely to perceive the need for only a check-up and (2) significantly more likely to perceive the need for treatment.

Table 3.1.2: Perceived need for fillings, clean and scale, and extractions by card status and residential location (per cent)

- dentate persons aged 18+

	Fillings			CI	ean and s	cale	Extractions			
	1994	1995	1996	1994	1995	1996	1994	1995	1996	
Card status										
Card public-funded	25.8	23.6	17.1	20.9	14.7	14.8	12.7	7.5*	9.3	
Card private own expense	14.5	19.2	13.6	13.4	19.8	11.8	5.8	9.1	5.0	
Non-card-holder private	13.0	15.3	16.3	12.2	11.7	12.2	3.1	3.6	4.2	
Residential location										
Urban	13.7	15.9	15.9	13.1	12.8	12.5	3.8	4.3	4.5	
Rural/remote	14.4	18.2	16.0	12.2	14.8	12.0	5.2	5.5	5.8	
Total	13.8	16.5	16.0	12.9	13.3	12.4	4.2	4.6	4.8	

^{*} this estimate has a relative standard error greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objective

 A decrease in the overall percentage of card-holders perceiving a need for treatment, particularly for extractions and fillings.

- Among dentate adult card-holders whose last dental visit was public-funded, the
 perceived need for fillings, extractions, or a clean and scale, all decreased over the
 period 1994 to 1996, while an increase in perceived need for fillings and extractions
 was observed for non-card-holders who last visited a private clinic.
- With respect to the perceived need for fillings there was a significant reduction in the difference between dentate adult card-holders whose last dental visit was public-funded and non-card-holders who last visited a private clinic.
- The difference in the perceived need for extractions between dentate adult card-holders who last made a public-funded dental visit and non-card-holders who last visited a private clinic was reduced. However twice the percentage of card-holders who last made a public-funded dental visit perceived the need for extractions than non-card-holders who last visited a private dentist.

Table 3.1.3: Percentage of persons whose usual reason for a dental visit is for a check-up by card status and residential location

- dentate persons aged 18+

	Card public-funded				l private o expense	wn	Non-card-holder private			
	1994	1995	1996	1994	1995	1996	1994	1995	1996	
Residential location										
Urban	27.4	41.8	37.5	48.7	49.1	45.8	56.1	55.2	55.4	
Rural/remote	30.3	25.2*	37.1	38.4	29.6	38.4	47.8	45.0	45.6	
Total	28.1	37.0	37.5	46.1	42.3	43.7	54.4	52.8	53.1	

^{*} this estimate has a relative standard error greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objective

• An increase in the percentage of card-holders reporting a check-up as the usual reason for making a dental visit to levels comparable with non–card-holders.

- Among dentate adult card-holders who last received public-funded dental care, the percentage who reported a check-up as their usual reason for a dental visit increased from 1994 to 1996, but remains low and is significantly lower than for non-card-holders.
- In general, dentate adults from rural or remote areas were less likely to report a check-up as the usual reason for a dental visit than were persons from urban areas.

Table 3.1.4: Percentage of persons with dental insurance by card status and residential location – dentate persons aged 18+

	Card public-funded				l private o expense	wn	Non-card-holder private			
	1994	1995	1996	1994	1995	1996	1994	1995	1996	
Residential location										
Urban	3.9	10.1*	7.8*	28.5	30.4	32.6	50.2	46.6	45.2	
Rural/remote	10.7	0.6*	5.2*	20.0	27.4	17.4	49.8	44.1	41.3	
Total	5.9	7.3*	7.0	26.5	29.4	28.3	50.1	46.0	44.4	

^{*} these estimates have relative standard errors greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objective

• No objective specified. A decrease in the percentage of card-holders with dental insurance might be expected if those with insurance change to public-funded dental care in the private sector.

- Among dentate adults, card-holders who last visited a private clinic at their own
 expense were significantly more likely to have dental insurance than card-holders
 who last received public-funded dental care. Non-card-holders were the most
 likely to have dental insurance.
- The percentage of dentate adult non-card-holders with dental insurance declined from 50.1 per cent in 1994 to 44.4 per cent in 1996.

Table 3.1.5: Awareness of the Commonwealth Dental Health Program by State and Territory, and card status (per cent)

- dentate persons aged 18+ whose last visit was <12 months ago

	A	Aware of CDHI	P	E	Believe eligibl	е
	1994	1995	1996	1994	1995	1996
State/Territory						
New South Wales	13.6	28.2	27.1	6.1	8.4	11.5
Victoria	12.9	24.0	18.1	4.8	9.7	10.9
Queensland	21.3	27.1	26.0	10.1	13.3	9.5
South Australia	15.4	32.6	23.3	7.1	17.8	12.6
Western Australia	15.9	28.1	20.9	5.7	12.8	9.4
Tasmania	17.1	16.9	23.6	4.3	4.6	8.9
Australian Capital Territory	12.1	21.6	17.7	7.0	2.1	4.2
Northern Territory	9.0	16.4	15.6	2.8	0.9	7.8
Card status						
Card-holder – public-funded	32.7	61.0	56.3	27.2	60.6	50.9
Public clinic	30.4	58.0	50.4	24.7	57.5	45.7
Private subsidised		69.3	72.1		69.3	65.2
Card private own expense	28.2	34.4	35.2	24.9	27.3	30.1
Non-card-holder - private	11.5	22.3	18.4	1.8	2.9	3.2
Total	15.1	26.9	23.4	6.5	10.4	10.7

Source: Dental Satisfaction Survey

Baseline objective

• None specified (not included in Baseline Report).

- This table presents the percentage of persons who had heard of the Commonwealth Dental Health Program, and the percentage who believed that they were eligible for the Program.
- There was a sharp rise in the awareness of the program between 1994 and 1995, particularly among card-holders.
- Card-holders who received government subsidised care from a private practice had the highest level of awareness of the Program, and belief of eligibility for the Program, with between two-thirds and three-quarters of this group knowing about the CDHP.

Table 3.1.6: Awareness of the Commonwealth Dental Health Program by State and Territory, stratified by card status (per cent)

- dentate persons aged 18+ whose last visit was <12 months ago

		Aware of CDHI	P	i	Believe eligible	е
	1994	1995	1996	1994	1995	1996
New South Wales						
Card-holder	27.8	36.6	49.4	24.5	30.6	43.9
Non-card-holder	10.1	26.3	21.3	1.5	3.2	3.2
Victoria						
Card-holder	26.5	44.2	41.8	23.6	44.2	35.5
Non-card-holder	9.9	20.4	10.9	0.6	3.6	3.5
Queensland						
Card-holder	32.3	50.4	34.7	26.5	46.5	33.1
Non-card-holder	17.9	22.5	24.1	5.1	6.8	4.1
South Australia						
Card-holder	40.9	75.7	53.3	37.8	68.7	47.3
Non-card-holder	12.0	20.7	15.0	3.1	3.7	2.2
Western Australia						
Card-holder	30.9	50.1	40.1	24.9	40.2	34.7
Non-card-holder	12.6	23.9	17.4	1.5	7.6	4.9
Tasmania						
Card-holder	26.5	37.2	49.5	21.2	31.5	44.4
Non-card-holder	15.3	13.7	19.1	1.1	0.4	2.8
Australian Capital Territory						
Card-holder	45.1	30.8	30.8	45.1	22.7	27.9
Non-card-holder	9.6	20.7	16.1	4.0	_	1.3
Northern Territory						
Card-holder	26.2	25.3	54.5	26.2	25.3	54.5
Non-card-holder	7.2	16.1	10.8	0.3	_	2.0
Total	15.1	26.9	23.4	6.5	10.4	10.7

Source: Dental Satisfaction Survey

Baseline objective

None specified (not included in Baseline Report).

- This table presents the percentage of card-holders and non-card-holders by State and Territory who had heard of the Commonwealth Dental Health Program, and the percentage who believed that they were eligible for the Program.
- Awareness of the Program increased during the period 1994 to 1996, particularly among card-holders in New South Wales, Victoria, Tasmania and the Northern Territory.
- The majority of card-holders who were aware of the Program recognised that they were eligible for care. Few non-card-holders believed that they were eligible for dental care under the Commonwealth Dental Health Program.

Table 3.1.7: Waiting time distribution by card status (per cent)
- dentate persons aged 18+ whose last visit was <12 months ago for a check-up

			Time waited		
	<1 month	1-<3 months	3-<6 months	6-<12 months	12+ months
Card public-funded					
1994	47.5	15.9*	10.7*	4.8*	21.1*
1995	43.5*	17.7*	14.6*	8.9*	15.4*
1996	61.5	12.6*	7.5*	7.0*	11.3*
Card private own					
expense					
1994	94.3	1.4*	3.5*	0.8*	_
1995	100.0	_	_	_	_
1996	96.6	3.2*	0.2*	_	-
Non-card-holder private					
1994	96.4	2.4*	1.0*	0.1*	_
1995	95.9	2.3*	1.8*	_	_
1996	94.9	4.2	0.9*	_	_

^{*} these estimates have relative standard errors greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objectives

- Reductions in the percentage of card-holders who must wait 12 months or more for a check-up within the public sector system.
- Increases in the percentage of card-holders obtaining more timely care in the public sector system, with increases in the percentage receiving treatment within 3 months in the first instance and within 1 month in the longer term.

- Among card-holders who in the previous 12 months last received public-funded dental care, 47.5 per cent waited less than one month for a check-up in 1994, which increased to 61.5 per cent in 1996. The percentage waiting for 12 or more months decreased from 21.1 per cent in 1994 to 11.3 per cent in 1996.
- Approximately 95 per cent of dentate adults whose last dental visit was to a private clinic for a check-up in the previous 12 months waited for less than one month.
- Despite the reduction in waiting time for routine public-funded dental care, a substantial percentage of persons still experienced waiting times far in excess of those experienced in the private sector.

3.2 Barriers

Table 3.2.1: Affordability and hardship in purchasing dental care by card status and residential location (per cent)

- dentate persons aged 18+

	Card public-funded			Card private own expense			Non-card-holder private		
	1994	1995	1996	1994	1995	1996	1994	1995	1996
Avoided or delayed visiting because of cost									
Residential location									
Urban	39.1	35.6	34.5	31.7	37.1	37.3	25.3	25.5	29.7
Rural/remote	37.3	23.2*	25.5	38.2	35.4	32.4	22.5	24.0	23.9
Total	38.3	32.0	31.6	33.5	36.5	36.0	24.7	25.2	28.4
Cost prevented wanted or recommended treatment									
Residential location									
Urban	29.4	25.1	30.5	26.9	31.9	30.2	18.1	18.7	22.8
Rural/remote	32.6	24.2*	31.5	28.1	22.2*	26.3	15.3	18.3	17.2
Total	30.2	24.9	30.6	27.1	28.5	29.2	17.5	18.6	21.6

^{*} these estimates have relative standard errors greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objectives

- Reductions in the percentage of card-holders who have avoided or delayed visits due to cost.
- A decrease in the percentage of card-holders for whom cost has prevented dental treatment which was recommended or wanted.

- Among dentate adult card-holders who last received public-funded dental care, the percentage reporting that they avoided or delayed visiting because of the cost reduced from 38.3 per cent in 1994 to 31.6 per cent in 1996. This decrease was against a background where persons who last visited privately (whether card-holders or non-card-holders) reported an increase in avoidance or delay in dental visiting due to cost.
- Among dentate adult non-card-holders who last visited a private dentist the
 percentage who reported that cost prevented recommended or wanted dental
 treatment increased with time across the three surveys.

Table 3.2.2: Affordability and hardship in purchasing dental care by card status and residential location (per cent)

- dentate persons aged 18+ whose last dental visit was <12 months ago

	Card public-funded			Card private own expense			Non-card-holder private		
	1994	1995	1996	1994	1995	1996	1994	1995	1996
Dental visits in the last 12 months were a large financial burden									
Residential location									
Urban	11.5*	7.2*	5.5*	14.2	16.9*	13.6	10.1	10.8	11.7
Rural/remote	4.1*	17.0*	3.1*	10.0*	15.5*	15.4*	8.5	10.9	10.2
Total	9.1*	10.0*	4.7*	13.2	16.5	14.0	9.8	11.0	11.4

^{*} these estimates have relative standard errors greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objective

 Greater reductions in the percentage of rural card-holders who avoid or delay visiting due to cost, or for whom cost prevents recommended or wanted dental treatment.

- Among card-holders who in the previous 12 months last received public-funded dental care, the percentage reporting that dental visits were a large financial burden fell from 9.1 per cent in 1994 to 4.7 per cent in 1996, while card-holders or non-card-holders visiting private dentists showed small increases in the percentage reporting that dental visits were a large financial burden.
- Dentate adult card-holders who last visited privately at their own expense in the last 12 months, remained the most likely to report that their dental visits in the previous year were a large financial burden.

3.3 Use of services

Table 3.3.1: Time since last dental visit by card status and residential location (per cent)
- dentate persons aged 18+

	<1	2 mont	hs	1-	-<2 yea	rs	2-	-<5 yea	rs	5+ year		s
	1994	1995	1996	1994	1995	1996	1994	1995	1996	1994	1995	1996
Card status						,						
Card public-funded	58.6	62.0	67.4	15.7	17.0	17.8	17.5	14.4	9.2	8.2	6.6	5.6*
Card private own expense	51.4	44.1	49.8	19.9	17.9	19.2	15.1	18.1	15.2	13. 6	19. 9	15. 8
Non-card-holder private	57.2	59.4	58.3	19.4	19.3	18.4	14.7	14.3	14.6	8.7	7.1	8.8
Residential location												
Urban	56.2	57.6	57.3	18.8	18.8	18.8	14.8	14.7	14.0	10. 2	9.0	9.9
Rural/remote	51.3	50.6	55.1	19.4	19.2	16.3	15.9	16.5	16.6	13. 4	13. 7	12. 0
Total	55.1	55.8	56.8	18.9	18.9	18.1	15.1	15.1	14.7	10. 9	10. 2	10. 4

^{*} this estimate has a relative standard error greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objectives

- A decrease in the percentage of card-holders whose last visit was five or more years ago.
- An increase in the percentage of card-holders visiting within the last year to levels that are more comparable with non-card-holders.

- Among dentate adult card-holders who last made a public-funded dental visit, the
 percentage who visited in the previous 12 months increased from 58.6 per cent to
 67.4 per cent from the 1994 to the 1996 survey. The percentage of this group whose
 last visit was two or more years ago declined from 25.7 per cent to 14.8 per cent.
- The most probable reason for this shift in the distribution of time since last dental visit is the increase in the number of additional persons able to receive public-funded dental care as a result of the CDHP (see Table 3.3.6).
- Among dentate adults, card-holders who last made a private visit at their own
 expense were consistently the least likely to have made a recent visit. In 1996 the
 percentage of card-holders who last visited five or more years ago was
 15.8 per cent, compared with 5.6 per cent among card-holders who last received
 public-funded dental care, and 8.8 per cent among non-card-holders.
- Among dentate adults, persons from rural or remote areas were less likely to have visited in the previous 12 months and more likely to have last visited five or more years ago than were persons from urban areas.

Table 3.3.2: Percentage of persons whose last dental visit was for a check-up by card status and residential location

- dentate persons aged 18+ whose last dental visit was <12 months ago

	Card public-funded		Card priv	ate own ex	cpense	Non-ca	rd-holder	private		
	1994	1995	1996	1994	1995	1996	1994	1995	1996	
Residential location										
Urban	27.0	29.5	21.3	46.2	35.4	41.0	49.7	46.5	45.0	
Rural/remote	29.9	9.1*	23.0	42.0	36.2*	37.6	46.6	35.0	41.2	
Total	27.6	23.7	21.8	45.2	35.6	40.1	49.1	43.8	43.9	

^{*} these estimates have relative standard errors greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objective

• An increase in the percentage of card-holders who last visited for a check-up to a level approaching that observed for non–card-holders.

- Among dentate adults who visited in the previous 12 months, there was a decrease
 of approximately 5 per cent in the percentage of persons whose last dental visit
 was for a check-up. This decrease was observed among card-holders and
 non-card-holders, whether recipients of public-funded or private care.
- The CDHP's emphasis on emergency care could possibly explain the decrease among public-funded persons. However the corresponding decrease in the private sector may suggest that this reduction may be the result of a more general population shift.
- Recipients of public-funded care have remained the least likely to have last visited for a check-up.

Table 3.3.3: Percentage of persons who last made a public-funded dental visit within the last 12 months, and percentage of persons eligible for public care, by State and Territory, and residential location

- dentate persons aged 18+

	% last making a public-funded dental visit in previous 12 months			% eligible	% eligible for public-funded care		
	1994	1995	1996	1994	1995	1996	
State/Territory							
New South Wales	2.4	4.5	3.8	19.1	18.8	15.4	
Victoria	2.0	3.3	4.1	20.4	19.9	20.9	
Queensland	5.4	6.6	5.6	23.3	21.6	17.8	
South Australia	5.0	6.3	8.5	22.3	22.6	25.4	
Western Australia	4.1	5.0	3.8	19.3	19.2	18.1	
Tasmania	3.2	2.2	4.2	23.3	21.8	20.5	
Australian Capital Territory	1.2	1.1	3.2	9.6	10.0	13.8	
Northern Territory	3.7	2.1	4.2	11.6	8.6	11.3	
Residential location							
Urban	2.8	4.5	4.2	19.2	17.7	17.2	
Rural/remote	4.6	5.0	5.6	23.9	25.5	22.1	
Total	3.2	4.6	4.6	20.3	19.7	18.3	

Source: National Dental Telephone Interview Survey

Baseline objective

• Increases in the percentage of eligible persons accessing public-funded dental care.

- The percentage of dentate adults who last made a public-funded dental visit in the last 12 months increased from 3.2 per cent in 1994 to 4.6 per cent in 1995 and 1996.
- Over this period the percentage of dentate adults eligible for public-funded dental care decreased from 20.3 per cent in 1994 to 18.3 per cent in 1996.

Table 3.3.4: Percentage of card-holders last visiting a public clinic, and percentage of card-holders last making a public-funded dental visit

- dentate card-holders aged 18+ whose last dental visit was <12 months ago

	Card-	holder public	clinic	Card-h	older public-f	unded
	1994	1995	1996	1994	1995	1996
State/Territory						
New South Wales	22.8	31.6	24.5	22.8	43.7	43.3
Victoria	16.9	26.7	19.0	16.9	36.1	32.6
Queensland	46.7	55.4	55.0	46.7	56.9	55.7
South Australia	44.8	37.8	47.6	44.8	52.1	62.5
Western Australia	41.3	49.0	33.0	41.3	54.5	42.6
Tasmania	39.3	26.4	36.0	39.3	32.6	44.7
Australian Capital Territory	22.3	21.7	24.9	22.3	21.7	39.5
Northern Territory	63.3	57.5	64.6	63.3	57.5	71.7
Residential location						
Urban	27.0	38.7	31.0	27.0	46.1	42.6
Rural/remote	35.4	34.6	33.5	35.4	46.4	48.3
Total	29.4	37.5	31.6	29.4	46.2	44.2

Source: National Dental Telephone Interview Survey

Baseline objective

• Maintain the percentage of eligible persons who receive care in public clinics.

- Among dentate adult card-holders who had made a visit in the 12 months prior to the 1994 survey, 29.4 per cent had last visited a public clinic. This increased to 37.5 per cent in the 12 months prior to the 1995 survey and dropped to 31.6 per cent for the 1996 survey.
- The percentage who last received public-funded care increased from 29.4 per cent in the 12 months prior to the 1994 survey to 44.2 per cent for the 1996 survey.

Table 3.3.5: Estimated number of persons eligible for public care by State and Territory – persons aged 18+

	1994	1995	1996
State/Territory			
New South Wales	983,000	1,013,000	831,000
Victoria	811,000	802,000	834,000
Queensland	573,000	583,000	530,000
South Australia	296,000	302,000	332,000
Western Australia	264,000	263,000	252,000
Tasmania	92,000	90,000	89,000
Australian Capital Territory	27,000	25,000	35,000
Northern Territory	14,000	11,000	14,000
Total	3,060,000	3,089,000	2,918,000

Source: National Dental Telephone Interview Survey

Baseline objective

• No objective specified; included to indicate baseline estimates for the States and Territories.

Evaluation result

 Provides estimates of the number of adults eligible for public-funded dental care by State and Territory and year of survey.

Table 3.3.6: Estimated number of persons who made their last visit to a public dental clinic, and estimated number of persons whose last visit was public-funded to a private practice, by State and Territory, by reason for last dental visit

- persons aged 18+ whose last dental visit was <12 months ago

	1994 Public ^(a)			1	995			1	1996			
			Pul	olic ^(a)	Priv	ate ^(b)	Pul	Public ^(a) Private		ate ^(b)		
	Proble m	Total	Proble m	Total	Problem	Total	Proble m	Total	Problem	Total		
State/Territory	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)	('000)		
New South Wales	111	171	131	169	67	67	131	198	55	70		
Victoria	70	114	73	107	18	27	95	123	52	62		
Queensland	79	143	123	170	3	3	115	161	1	1		
South Australia	57	91	44	56	17	17	59	80	14	20		
Western Australia	42	72	59	66	7	17	32	50	10	11		
Tasmania	9	11	10	11	1	1	12	15	3	3		
Australian Capital Territory	4	7	3	5	_	-	4	9	2	2		
Northern Territory	4	8	4	6	_	_	6	9	_	-		
Total	376	616	448	596	113	122	455	647	137	169		

⁽a) last visit was to a public dental clinic

N.B. The difference betwen the Total and Problem figures represent the number of persons whose last visit was for a check-up

Source: National Dental Telephone Interview Survey

Baseline objective

• Increases in the number of persons being treated as a result of improved access to public-funded dental services.

- In the year prior to the 1995 survey an estimated 122,000 adults last received public-funded dental care in the private sector. The majority of these adults (113,000) last visited for a problem. This result is consistent with the CDHP initially providing emergency-only dental care.
- The number of adults who last received public-funded dental care in the private sector rose to 169,000 for the year prior to the 1996 survey. The majority of these visits (137,000; 81.1 per cent) were for a problem. The ratio of problem to check-up visits was slightly lower in the public sector where an estimated 647,000 adults last received public care 455,000 (70.3 per cent) of them for a problem.
- The number of adults who last received care in a public clinic increased from an estimated 616,000 in the year prior to the 1994 survey, to 647,000 for the 1996 survey.
- The number of adults who last received public-funded dental care increased from 616,000 in the year prior to the 1994 survey, to 718,000 for the 1995 survey, and to 816,000 for the 1996 survey an increase of 200,000.

⁽b) last visit was public-funded to a private dental clinic

Table 3.3.7: Estimated number of persons eligible for public dental care by age – persons aged 18+

	1994	1995	1996
Age			
18–24 years	478,000	372,000	343,000
25–34 years	356,000	337,000	373,000
35–44 years	283,000	344,000	270,000
45–54 years	273,000	343,000	258,000
55–64 years	484,000	491,000	453,000
65–74 years	679,000	702,000	716,000
75+ years	507,000	499,000	504,000
Total	3,060,000	3,089,000	2,918,000

Source: National Dental Telephone Interview Survey

Baseline objective

• No objective specified; included to indicate baseline estimates by age groups.

Table 3.3.8: Estimated number of persons who made their last visit to a public dental clinic, and estimated number of persons whose last visit was public-funded to a private practice, by age

- persons aged 18+ whose last dental visit was <12 months ago

	1994	19	95	19	96
	Public ^(a)	Public ^(a)	Private ^(b)	Public ^(a)	Private ^(b)
Age					
18–24 years	177,000	121,000	_	99,000	11,000
25-34 years	113,000	75,000	10,000	130,000	17,000
35-44 years	63,000	70,000	13,000	117,000	17,000
45-54 years	61,000	48,000	13,000	70,000	18,000
55-64 years	65,000	75,000	8,000	80,000	36,000
64-74 years	88,000	144,000	56,000	96,000	46,000
75 + years	50,000	58,000	23,000	55,000	23,000
Total	616,000	593,000	122.000	648,000	169.000

⁽a) last visit was to a public dental clinic

Source: National Dental Telephone Interview Survey

Baseline objective

No objective specified; included to indicate baseline estimates by age groups.

⁽b) last visit was public-funded to a private dental clinic

Table 3.3.9: Places of dental visits in last two years (number of persons and per cent)

- persons aged 18+ whose last dental visit was <12 months ago

	Site	e of last dental visit (i	n last 12 m	onths)	Private at own expense				
_	Public	Private with gove	ernment subsidy						
Other sites in last 2 years									
Public	538,000 (8.1%)	9,000	(0.1%)	13,000	(0.2%)				
Private with government subsidy	10,000 (0.2%)	114,000	(1.7%)	26,000	(0.4%)				
Private at own expense	58,000 (0.9%)	27,000	(0.4%)	5,785,000	(87.5%)				
Private at own expense and									
Private with government subsidy	10,000 (0.2%)								
Private at own expense and Public		11,000	(0.2%)						
Private with government subsidy and Public				7,000	(0.1%)				

Source: 1996 National Dental Telephone Interview Survey

Baseline objective

None specified (not included in Baseline Report).

- Among dentate adults who visited a dentist during 1995, 87.5 per cent had made all of their dental visits during the previous two years to a private clinic at their own expense; 8.1 per cent made all of their visits to a public clinic; and 1.7 per cent had only government subsidised visits at private clinics.
- An estimated 27,000 dentate adults who last visited privately with a government subsidy had in the previous two years also visited privately at their own expense. However, this movement was offset by 26,000 persons last visiting privately at their own expense, having previously made a government subsidised visit to a private clinic.

Table 3.3.10: Annual household income distribution by card status (per cent) – persons aged 18+

	Card public-funded			l private o expense	wn	Non-ca	Non-card-holder private		
	1994	1995	1996	1994	1995	1996	1994	1995	1996
Annual household income									
<\$12,000	57.3	59.8	50.4	44.6	41.9	40.1	5.6	6.6	6.3
\$12-<20,000	28.4	27.9	31.8	38.0	34.2	32.8	8.6	8.7	9.2
\$20-<30,000	9.7	9.0	12.8	10.9	16.4	14.8	22.0	19.6	17.3
\$30-<40,000	0.8	1.7	3.1	3.1	3.2	6.0	21.1	21.3	17.9
\$40,000+	3.7	1.6	1.9	3.4	4.2	6.3	42.7	43.8	49.4

Source: National Dental Telephone Interview Survey

Baseline objective

None specified (not included in Baseline Report).

- This table shows that persons who last received public-funded dental care resided in households from the lowest income groups. Over 50 per cent were from households with an annual income of less than \$12,000, and over 80 per cent from households of less than \$20,000 per annum.
- Card-holders who last accessed private care at their own expense had a higher income distribution than card-holders who obtained public-funded care. A greater percentage of card-holders who last accessed private care at their own expense were from households of \$12,000 or more per annum compared with card-holders whose last dental visit was public-funded.

Table 3.3.11: Estimated numbers of card-holders whose last visit was public-funded, and estimated numbers of card-holders whose last dental visit was to a private dentist at their own expense, by sociodemographic variables

- dentate card-holders aged 18+ whose last dental visit was <12 months ago

	Ca	rd public-fund	ded	Card	private own ex	cpense
	1994	1995	1996	1994	1995	1996
	('000)	('000)	('000)	('000)	('000)	('000)
Age						
18–24 years	89	77	45	164	97	113
25–44 years	90	140	165	215	187	158
45–64 years	83	113	151	223	152	171
65+ years	80	174	158	219	151	211
Annual household						
income <\$12,000	163	255	208	299	138	212
• •	112	255 135	208 164	299 276	202	193
\$12-<20,000 \$20-<30,000	43	53	86	276 87	128	112
\$30-<40,000	43 3	13	16	45	33	44
\$40,000+	15	10	15	32	39	43
Residential location						
Urban	229	363	361	622	424	487
Rural/remote	109	142	155	199	164	166
Card type						
Pensioner Health Benefits Card	156	315	256	392	261	318
Health Benefits Card	32	20	22	37	41	37
Health Care Card	135	135	202	356	272	270
Other eligible combination	19	35	39	36	14	29
Perceived need						
Check-up only	60	56	54	180	133	113
Treatment	110	157	196	160	133	112
No visit required	172	283	269	475	322	429

Source: National Dental Telephone Interview Survey

Baseline objective

None specified (not included in Baseline Report).

Evaluation result

• This table has been included to provide sociodemographic profiles (and perceived need) of card-holders who last made a public-funded dental visit in the previous 12 months, and also of card-holders who last visited a private dentist in the previous 12 months.

Table 3.3.12: Type of public-funded course of care by State and Territory (per cent)
- persons aged 18+ who visited during the survey period

		Emergency		Ger	neral/Schedul	ed
	1994	1995	1996	1994	1995	1996
State/Territory						
New South Wales	37.4	n.a.	n.a.	56.6	n.a.	n.a.
Victoria	34.6	26.5	28.8	35.4	73.5	71.2
Queensland†	40.3	36.3	34.9	n.a.	55.8	62.1
South Australia	38.4	33.4	36.4	53.9	64.9	60.9
Western Australia	n.a.	26.9	34.5	n.a.	73.1	65.6
Tasmania	43.8	76.5	87.4	46.5	23.5	12.6
Australian Capital Territory	42.9	36.2	33.4	51.4	63.8	66.6
Northern Territory	38.8	33.2	28.9	53.0	58.8	68.7
All	37.0	32.8	34.8	49.7	64.5	63.8

[†] Data not classified as "Scheduled" in Queensland, 1994

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objectives

- A decrease in the levels of emergency care received by persons receiving public-funded dental care.
- An increase in the level of scheduled care received.

- Percentage of persons receiving emergency care varied between States and Territories.
- Overall, the percentage emergency decreased from 37.0 per cent in 1994 to 32.8 per cent in 1995, but increased to 34.8 per cent in 1996.

Table 3.3.13: Percentage of persons receiving emergency care under public-funded dental programs

– persons aged 18+ who visited during the survey period

		1994	1995	1996
Age of patient	<30 years	44.3	44.0	44.3
	30+ years	35.7	30.7	33.1
Sex of patient	Male	39.5	33.7	36.0
	Female	36.7	32.2	33.8
Language	English only	40.7	32.5	35.3
	Other	36.1	34.5	34.5
Aboriginality	Aboriginal	54.8	54.4	46.1
	Non-Aboriginal	38.9	32.4	34.6
Oral status	Dentate	40.4	34.8	36.1
	Edentulous	16.9	16.9	18.8
Site of visit	Urban	40.1	32.7	34.2
	Rural	38.4	32.8	36.1
Patient status†	New patient	46.2	41.9	43.0
	Previous care	36.0	29.2	29.6

[†] Data not available in 1994: from Queensland

Data not available in 1995: from Victoria, South Australia, Tasmania, Australian Capital Territory Data not available in 1996: from Victoria, South Australia, Tasmania, Australian Capital Territory

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objective

 Reductions in emergency care for younger persons, Aboriginals and patients new to public-funded dental programs.

Evaluation result

• There was a trend for the percentage of persons receiving emergency care to be lower in 1996 compared to 1994, for each variable except age of patients (those aged less than 30 years received the same percentage of emergency care in 1994 and 1996) and oral status (edentulous patients received a slightly higher percentage of emergency care in 1996 compared to 1994).

Table 3.3.14: Mean number of public-funded dental visits per public patient in the last year by State and Territory

- persons aged 18+ who visited during the survey period

	1994	1995	1996
State/Territory	<u> </u>		
New South Wales	3.4	n.a.	n.a.
Victoria	2.9	n.a.	n.a.
Queensland	n.a.	2.2	2.1
South Australia	3.1	n.a.	n.a.
Western Australia	4.1	4.3	3.5
Tasmania	2.3	n.a.	n.a.
Australian Capital Territory	3.2	n.a.	n.a.
Northern Territory	3.1	1.6	1.8
All	3.4	2.8	2.5

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objective

 A decrease in the variation in the mean number of visits across States and Territories.

- The mean number of public-funded dental visits per patient in the last year varied by State and Territory.
- There was a trend towards a decreased number of visits in the last year over time, with the overall number declining from 3.4 visits in 1994, to 2.8 visits in 1995, and 2.5 visits in 1996.

Table 3.3.15: Mean number of public-funded dental visits per person in the last year by age

– persons aged 18+ who visited during the survey period

	1994	1995†	1996†
Age			
18–24 years	2.7	1.7	1.6
25–34 years	3.0	2.2	2.3
35-44 years	3.5	2.5	2.7
45–54 years	3.7	3.0	2.5
55–64 years	3.8	3.1	2.7
65+ years	3.6	3.3	2.8
All	3.4	2.8	2.5

[†] In 1995 and 1996 data on number of visits were only available from Western Australia, Queensland and Northern Territory

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objective

• No objective specified; included to indicate baseline estimates by age groups.

- The number of public-funded dental visits per person in the last year was lower among younger age groups of patients.
- The number of public-funded dental visits per person decreased in 1996 compared to 1994 for all age groups of patients.

Table 3.3.16: Mean number of public-funded dental visits per person in the last year by age and type of course of care

- persons aged 18+ who visited during the survey period

		Emergency		G	eneral/Schedu	led
	1994	1995†	1996†	1994	1995†	1996†
Age						
18-24 years	2.1	1.3	1.4	3.1	2.1	1.8
25-34 years	1.9	1.6	1.7	3.6	2.7	2.7
35-44 years	2.7	1.7	2.0	3.6	3.1	3.1
45-54 years	2.3	2.0	2.1	4.1	3.5	2.8
55-64 years	2.9	2.3	2.1	3.7	3.5	3.1
65+ years	2.8	2.5	2.2	3.8	3.7	3.0
All	2.5	1.9	1.9	3.7	3.2	2.8

[†] In 1995 and 1996 data on number of visits were only available from Western Australia, Queensland and Northern Territory

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objective

• Not included at baseline; included here to assess the number of public-funded dental visits by type of course of care.

Evaluation result

• The number of public-funded dental visits per person in the last year tended to be lower among younger age groups, and to decrease in 1996 compared to 1994 for all age groups, for both emergency and general courses of care.

Table 3.3.17: Mean services per public-funded dental visit by State and Territory and type of course of care

- dentate persons aged 18+ who visited during the survey period

		Emergency		No	n-emergency	
	1994	1995	1996	1994	1995	1996
State/Territory						
New South Wales	2.6	n.a.	n.a.	2.9	n.a.	n.a.
Victoria	2.3	2.3	2.4	2.2	2.4	2.3
Queensland	n.a.	2.2	2.1	n.a.	2.2	2.1
South Australia	2.7	2.3	2.2	2.5	2.3	2.2
Western Australia†	‡	1.9	1.8	‡	2.3	3.2
Tasmania	2.3	2.4	2.2	1.7	3.1	2.9
Australian Capital Territory	2.1	2.9	2.6	1.9	3.0	2.5
Northern Territory	2.5	2.6	2.1	2.5	2.5	2.0
AII††	2.5	2.3	2.2	2.6	2.4	2.2

[‡] Data not classified as emergency or non-emergency

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objective

• Reduction of variation of the mean number of services per public-funded dental visit across States and Territories.

- The mean number of services per public-funded dental visit varied by State and Territory and by type of course of care.
- Overall, there was a decline over time for the mean number of services per visit, for both emergency and non-emergency courses of care.

[†] Dentate status not available for Western Australia

^{††} Does not include: Queensland or Western Australia in 1994 Does not include: New South Wales or Western Australia in 1995 and 1996

Table 3.3.18: Mean services per public-funded dental visit by age and type of course of care
- dentate persons aged 18+ who visited during the survey period

		Emergency		No	n-emergency	
	1994	1995	1996	1994	1995	1996
Age						
18–24 years	2.5	2.3	2.3	2.7	2.5	2.4
25-34 years	2.4	2.3	2.3	2.7	2.5	2.3
35-44 years	2.5	2.3	2.3	2.7	2.4	2.3
45-54 years	2.7	2.2	2.2	2.7	2.4	2.2
55-64 years	2.5	2.2	2.2	2.4	2.3	2.2
65+ years	2.5	2.2	2.2	2.4	2.3	2.1
All	2.5	2.3	2.2	2.6	2.4	2.2

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objective

• No objective specified; included to indicate baseline estimates by age groups.

Evaluation result

 The mean number of services per public-funded dental visit declined in 1996 compared to 1994 for all age groups of patients, for both emergency and non-emergency courses of care.

3.4 Health status

Table 3.4.1: Percentage edentulous persons by card status, residential location, and age – persons aged 45+

	4	5–54 yea	ars 55-64 years			rs		65+ year	s
	1994	1995	1996	1994	1995	1996	1994	1995	1996
Card status									
Card public-funded	8.8*	20.7*	18.8*	40.9	37.1	30.1	51.1	49.9	46.3
Card private own expense	14.8*	2.7*	16.9*	28.1	23.0*	33.3	42.1	46.6	41.3
Non-card-holder private	7.3	6.8	6.1	9.6	17.1	10.1	20.9	28.3	24.6
Residential location									
Urban	8.9	8.4	6.0	18.1	21.4	18.0	35.4	41.4	35.0
Rural/remote	16.8	12.3*	16.0	27.7	27.3	26.8	53.6	49.0	48.0
Total	10.9	9.5	8.6	20.6	23.6	20.5	40.3	43.6	38.9

^{*} these estimates have relative standard errors greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objectives

- Reductions (in the long term) of differences in edentulism rates between card-holders and non-card-holders by age groups.
- Reductions (in the long term) of the differences in edentulism rates between persons in rural and urban areas by age groups.

- Card-holders aged 45 years or over (whether last visiting a private dentist or public clinic) were more likely to be edentulous than non-card-holders, for a given age group.
- Among adults 65 years or older the prevalence of edentulism among card-holders was approximately twice that observed among non-card-holders.
- Adults from rural or remote areas were more likely to be edentulous than persons from urban areas. The relative discrepancy between them was greatest among the younger age groups.

Table 3.4.2: Mean number of missing teeth by card status, residential location, and age – dentate persons aged 45+

	4	45–54 years 55–6			55–64 yea	64 years			s
	1994	1995	1996	1994	1995	1996	1994	1995	1996
Card status									
Card public-funded	8.8	10.6	9.8	15.0	11.7	10.4	15.0	16.6	14.3
Card private own expense	8.1	7.3	7.0	11.5	11.2	10.5	14.4	14.7	14.1
Non-card-holder private	6.8	6.2	5.9	8.5	8.1	8.0	11.9	12.8	11.3
Residential location									
Urban	6.8	6.7	6.0	9.1	8.5	8.4	13.0	13.8	12.5
Rural/remote	8.2	6.7	7.1	11.8	10.3	9.6	14.5	15.8	13.9
Total	7.1	6.7	6.3	9.7	9.2	8.7	13.3	14.3	12.9

Source: National Dental Telephone Interview Survey

Baseline objectives

- Medium term reductions in the difference of average tooth loss between card-holders and non-card-holders by age groups.
- Medium term reductions in the differences of average tooth loss between persons in rural and urban areas by age groups.

- Patterns of tooth loss among dentate adults aged 45 and over were similar to those observed with respect to edentulism (see Table 3.4.1).
- Among the dentate, card-holders had a greater number of missing teeth than non-card-holders.
- Persons from rural and remote areas had a greater number of missing teeth than persons from urban areas.
- Over time the mean number of missing teeth for each age group declined as persons move from one age group into the next.

Table 3.4.3: Social impact^(a) by card status and residential location (per cent) – dentate persons aged 18+

	A	ppearanc	:e ^(b)	Avoid food				Toothach	e
	1994	1995	1996	1994	1995	1996	1994	1995	1996
Card status									
Card public-funded	29.9	31.3	29.5	25.5	26.4	24.4	23.3	18.4	19.8
Card private own expense	18.2	21.0	21.0	14.6	18.2	14.8	10.9	13.7	13.2
Non-card-holder private	18.8*	19.1	19.6	12.7	12.1	13.2	10.9	11.2	11.9
Residential location									
Urban	19.3	21.7	20.7	13.9	13.7	14.2	12.0	11.9	13.2
Rural/remote	20.6	17.7	19.1	12.5	12.6	12.3	10.9	11.5	11.5
Total	19.6	20.6	20.4	13.5	13.5	13.8	11.7	11.8	12.8

⁽a) percentage of persons reporting 'very often', 'often', or 'sometimes' during the last 12 months

Source: National Dental Telephone Interview Survey

Baseline objective

 Reductions in the extent of social impact for card-holders to levels more comparable with those experienced by non-card-holders.

- From 1994 to 1996 dentate adults who last visited a private dentist, whether card-holders or not, experienced a slight increase in the percentage reporting toothache in the previous 12 months. The prevalence of toothache decreased among dentate adult card-holders receiving public care.
- Despite decreasing toothache prevalence among adults receiving public-funded dental care, it still remained high compared with dentate adults who last obtained care in the private sector.

⁽b) have felt uncomfortable with appearance of teeth, mouth, or dentures

this estimate has a relative standard error greater than 25 per cent

3.5 Appropriateness of care

Table 3.5.1: Percentage of persons having fillings or extractions by card status and reason for last visit

- dentate persons aged 18+ whose last visit was <12 months ago

		Fillings			Extractions	
	1994	1995	1996	1994	1995	1996
Problem						
Card public-funded	50.5	61.0	66.7	43.8	26.9	36.5
Card private own expense	57.3	74.0	62.5	24.5	17.3*	24.9
Non-card-holder private	65.1	64.7	61.8	18.7	22.6	18.7
Check-up						
Card public-funded	21.7*	63.9	53.5	4.0*	9.7*	5.2*
Card private own expense	27.1	32.6*	28.3	6.6*	3.8*	6.8*
Non-card-holder private	32.4	29.1	30.3	2.6*	4.1*	3.3
Total						
Card public-funded	42.5	61.7	63.8	32.6	22.7	29.7
Card private own expense	43.9	59.2	48.3	16.3	12.5*	17.6
Non-card-holder private	49.0	49.1	47.9	10.8	14.5	11.9

^{*} these estimates have relative standard errors greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objective

 A decrease in extraction rates for card-holders and an increase in filling rates to levels experienced by non-card-holders, particularly for those visiting for a problem.

- Among dentate adult card-holders who last received public-funded care for a problem in the previous 12 months, there was a significant increase in the percentage receiving fillings and a decrease in extractions from 1994 to 1996.
- Among the public-funded group last attending for a check-up, there was a significant increase in the provision of fillings from 1994 to 1996.
- Compared with non-card-holders visiting private dentists, persons receiving
 public-funded care were still more likely to receive fillings or extractions.
 However, over the duration of the CDHP, there was a significant shift in service
 provision toward restoration for those who last received public-funded dental care.

Table 3.5.2: Percentage of persons having fillings or extractions by insurance status and card status – dentate persons aged 18+ whose last visit was <12 months ago

		Fillings			Extractions	
	1994	1995	1996	1994	1995	1996
Card public-funded						
Insured	32.1*	52.6*	59.4	16.1*	41.7*	2.7*
Uninsured	43.3	62.4	64.4	33.8	21.2	32.3
Card private own expense						
Insured	40.6	60.4	39.7	7.0*	8.0*	15.1*
Uninsured	45.8	58.4	54.7	21.2	16.7*	19.4
Non-card-holder private						
Insured	49.7	53.0	48.0	9.5	9.5	10.0
Uninsured	48.3	45.0	47.9	12.7	20.1	14.1

^{*} these estimates have relative standard errors greater than 25 per cent

Source: National Dental Telephone Interview Survey

Baseline objective

 A decrease in extraction rates for non-insured card-holders to rates found for non-card-holders and insured card-holders.

Evaluation result

• In general, regardless of card-holder status or place of last visit, uninsured adults were more likely to have extractions than insured persons.

Table 3.5.3(a): Percentage* of persons receiving services per visit under public-funded dental programs by main service areas, and State and Territory

- dentate persons aged 18+ who visited during the survey period

1994	NSW	Vic	Qld‡	SA	WA††	Tas	ACT	NT	AII†
Diagnostic	47.5	56.1	2.8	48.3	47.3	50.7	34.3	57.1	50.5
Preventive	16.0	10.6	17.8	14.4	3.6	2.9	11.8	16.9	13.6
Periodontic	13.3	8.9	8.1	13.3	11.8	6.0	12.1	18.0	11.7
Oral surgery	12.7	15.8	16.8	9.7	20.1	27.9	10.6	19.0	13.7
Endodontic	2.8	4.0	3.8	4.6	6.3	4.2	5.6	11.3	3.6
Restorative	35.8	27.2	34.3	42.2	27.6	37.9	27.2	35.1	33.9
Crown and bridge	3.0	1.4	1.2	4.3	2.4	1.0	1.0	1.6	2.6
Prosthodontic	9.1	16.5	11.5	6.8	6.3	13.2	20.2	12.9	11.4
Miscellaneous	20.1	5.0	2.2	13.3	1.2	4.5	8.4	7.8	13.5
Temporary/emergency	6.8	8.5		13.5	18.9	9.6	14.6	8.9	8.6

[†] Does not include data from Queensland or Western Australia

Table 3.5.3(b)

1995	NSW	Vic	Qld	SA	WA††	Tas	ACT	NT	AII†
Diagnostic	n.a.	48.6	44.6	51.8	48.5	67.8	60.4	60.0	49.3
Preventive	n.a.	3.4	12.2	5.1	2.8	0.6	_	13.0	6.4
Periodontic	n.a.	21.4	14.7	17.9	21.5	12.5	22.5	18.3	18.2
Oral surgery	n.a.	14.5	13.4	11.2	14.9	28.7	19.7	17.7	14.2
Endodontic	n.a.	4.7	5.5	8.6	5.4	6.8	6.4	7.9	5.9
Restorative	n.a.	47.9	36.2	44.6	30.5	45.5	62.8	33.1	43.6
Crown and bridge	n.a.	2.5	2.5	2.3	2.7	0.7	2.0	2.6	2.4
Prosthodontic	n.a.	5.5	22.8	4.2	7.6	0.1	_	17.5	10.4
Miscellaneous	n.a.	0.5	6.6	2.5	1.2	0.1	_	10.2	3.0
Temporary/emergency	n.a.	9.1	8.1	7.7	14.4	18.8	8.7	7.5	8.9

[†] Does not include data from New South Wales or Western Australia

Table 3.5.3(c)

1996	NSW	Vic	Qld‡	SA	WA††	Tas	ACT	NT	AII†
Diagnostic	n.a.	51.2	43.2	51.5	37.6	56.2	53.8	48.9	49.1
Preventive	n.a.	8.8	12.1	6.8	0.2	_	1.0	11.8	8.9
Periodontic	n.a.	17.4	16.6	17.2	32.1	16.1	21.2	17.3	17.1
Oral surgery	n.a.	14.2	14.8	11.2	17.9	28.0	15.2	13.2	14.3
Endodontic	n.a.	5.6	4.2	8.1	6.2	2.6	4.5	5.8	5.6
Restorative	n.a.	42.0	37.0	40.3	41.1	51.2	51.0	39.1	40.7
Crown and bridge	n.a.	2.8	1.6	2.7	5.2	1.0	2.7	2.4	2.3
Prosthodontic	n.a.	6.5	19.7	7.8	-	_	2.6	12.0	10.5
Miscellaneous	n.a.	3.3	3.3	3.1	0.2	-	2.9	5.8	3.1
Temporary/emergency	n.a.	7.4	4.1	7.1	21.3	11.9	9.8	4.8	6.5

[†] Does not include data from New South Wales or Western Australia

Source: Adult Dental Programs Survey (Cross-sectional)

[‡] Service areas differ in definition from other States and Territories

^{††} Dentate status not available in Western Australia

^{††} Dentate status not available in Western Australia

^{††} Dentate status not available in Western Australia

[‡] Data collected over a course of care, and disaggregated into visits

^{*} Columns do not sum to 100 per cent as persons may receive services in more than one service area per visit

Baseline objective

• Reductions in oral surgery (extractions) and increased levels of preventive care.

- The percentage of persons receiving services under public-funded dental programs showed variation in main service areas between States and Territories.
- Between 1994 and 1995 the percentage of persons receiving restorative services (fillings) increased from 33.9 per cent to 43.6 per cent, and decreased slightly, to 40.7 per cent in 1996.

Table 3.5.4: Percentage* of persons receiving services per visit under public-funded dental programs by type of course of care and main service area

	- dentate persons ag	ed 18+ who	visited during	g the surve	v period
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	Emergency			N	on-emergenc	у
	1994	1995	1996†	1994	1995	1996†
Diagnostic	59.6	63.0	64.3	44.9	42.0	40.4
Preventive	5.7	3.9	5.4	18.5	7.8	10.9
Periodontic	4.0	7.1	10.1	16.4	24.1	21.1
Oral surgery	26.3	25.7	24.8	5.9	8.2	8.4
Endodontic	4.3	6.3	6.0	3.2	5.7	5.3
Restorative	37.0	40.9	39.4	32.0	45.1	41.4
Crown and bridge	2.1	1.0	0.9	2.8	3.1	3.1
Prosthodontic	5.9	5.9	6.3	14.8	12.8	12.9
Miscellaneous	13.4	3.8	3.6	13.6	2.5	2.9
Temporary/emergency	15.3	17.8	13.6	4.5	4.1	2.6

[†] Data collected over a course of care for Queensland in 1996, and disaggregated into visits

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objective

• A shift in service provision towards restorative procedures for those attending for emergency care.

Evaluation result

• The percentage of persons receiving restorative services (fillings) under public-funded programs increased between 1994 and 1995 for both emergency and non-emergency courses of care, and declined slightly between 1995 and 1996.

^{*} Columns do not sum to 100 per cent as persons may receive services in more than one service area per visit

Table 3.5.5: Percentage* of persons receiving services per visit under public-funded dental programs by site of visit and main service area

- dentate persons aged 18+ who visited during the survey period

		Urban				
	1994	1995	1996†	1994	1995	1996†
Diagnostic	49.2	49.0	49.1	44.5	50.2	49.0
Preventive	16.1	6.3	9.0	9.2	6.6	8.8
Periodontic	13.7	19.6	18.7	10.6	14.8	13.5
Oral surgery	12.8	13.4	13.4	16.9	16.2	16.5
Endodontic	3.6	6.0	5.7	3.3	5.7	5.2
Restorative	36.8	44.8	41.1	39.0	40.7	39.7
Crown and bridge	3.3	2.4	2.4	1.3	2.2	2.0
Prosthodontic	10.0	9.7	11.1	9.8	12.0	9.3
Miscellaneous	17.0	2.5	3.1	10.9	4.0	3.2
Temporary/emergency	8.5	8.6	6.2	9.1	9.3	7.2

[†] Data collected over a course of care for Queensland in 1996, and disaggregated into visits

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objectives

- Increases in diagnostic and preventive services for persons from rural areas.
- Decreases in oral surgery and restorative procedures for persons from rural areas.

- The percentage of persons receiving restorative services (fillings) under public-funded dental programs mainly increased at urban sites between 1994 and 1995.
- The percentage of persons receiving diagnostic services increased in rural areas between 1994 and 1995.

^{*} Columns do not sum to 100 per cent as persons may receive services in more than one service area per visit

Table 3.5.6: Percentage* of persons receiving oral surgery (extractions) per visit under public-funded dental programs

- dentate persons aged 18+ who visited during the survey period

		1994	1995	1996††
Age of patient	<30 years	16.4	19.9	19.3
	30+ years	12.7	12.9	13.4
Sex of patient	Male	16.1	16.7	17.0
	Female	11.9	12.4	12.3
Language	English only	14.3	14.0	14.1
	Other	12.5	16.2	15.0
Aboriginality	Aboriginal	34.6	34.5	20.7
	Non-Aboriginal	13.2	13.9	14.2
Visit type	Emergency	26.3	25.7	24.8
	Non-emergency	5.9	8.2	8.4
Site of visit	Urban	12.8	13.4	13.4
	Rural	16.9	16.2	16.5
Patient status†	New patient	15.9	18.8	19.3
	Previous care	12.8	11.5	12.2

[†] Data not available in 1994: from Queensland Data not available in 1995: from Victoria, South Australia, Tasmania, Australian Capital Territory Data not available in 1996: from Victoria, South Australia, Tasmania, Australian Capital Territory

Source: Adult Dental Programs Survey (Cross-sectional)

Baseline objective

 Reductions in the frequency of oral surgery, particularly for emergency care patients, younger persons, males and Aboriginals.

Evaluation result

• The percentage of persons receiving oral surgery (extractions) under public-funded dental programs showed little variation between 1994 and 1995. However, there was a decrease in the percentage of Aboriginal patients receiving extractions between 1995 and 1996.

^{††} Data collected over a course of care for Queensland in 1996, and disaggregated into visits

Columns do not sum to 100 per cent as persons may receive services in more than one service area per visit

Table 3.5.7: Mean satisfaction scores for individual items by status of funding of last visit
- dentate persons aged 18+ whose last visit was <12 months ago

	Public-funded	Private	Difference	All
Saw preferred dentist		,		
1994	3.54	4.53	0.99	4.46
1995	3.59	4.60	1.01	4.52
1996	3.77	4.65	0.88	4.55
Saw same dentist				
1994	3.38	4.63	1.25	4.53
1995	3.83	4.48	0.65	4.43
1996	3.71	4.66	0.95	4.54
Explained options				
1994	3.12	3.92	0.80	3.87
1995	3.48	3.87	0.39	3.85
1996	3.68	3.86	0.18	3.83
Problems fixed				
1994	3.54	4.35	0.81	4.29
1995	3.94	4.26	0.32	4.24
1996	3.86	4.26	0.40	4.23
Improved dental health				
1994	3.82	4.43	0.61	4.37
1995	4.07	4.41	0.34	4.40
1996	4.06	4.41	0.35	4.39
No untreated problems				
1994	3.45	4.27	0.82	4.22
1995	4.05	4.16	0.02	4.17
1996	3.41	4.24	0.83	4.16
	5.41	7.27	0.00	4.10
Arrange appointment 1994	3.45	4.05	0.60	3.99
1995	3.94	3.97	0.03	3.99
1996	3.79	4.14	0.03	4.12
	3.19	4.14	0.33	4.12
Prompt visit	2.40	4.47	0.00	4.40
1994	3.48	4.17	0.69	4.13 4.05
1995	3.74	4.09	0.35	
1996	3.74	4.26	0.52	4.22
No better care	0.05	4.05	0.70	4.00
1994	3.35	4.05	0.70	4.00
1995	3.71	3.92	0.21	3.92
1996	3.55	4.00	0.45	3.95
Appropriate care				
1994	3.81	3.90	0.09	3.89
1995	4.14	4.31	0.17	4.30
1996	4.33	4.23	-0.10	4.24
No unexpected pain				
1994	3.92	4.20	0.28	4.17
1995	3.97	4.05	0.08	4.05
1996	4.16	4.16	0.00	4.15
Explained treatment				
1994	3.71	4.07	0.36	4.06
1995	3.58	4.10	0.52	4.06
1996	3.92	4.17	0.25	4.14

Source: Dental Satisfaction Survey

Baseline objective

 Increases in satisfaction scores across individual items for card-holders receiving public care.

- On a scale of 1 = strongly dissatisfied to 5 = strongly satisfied, in the 1994 Dental Satisfaction Survey recipients of public-funded care, although satisfied, had a score more than 0.5 points lower than private patients for the first nine items. The final three items, 'appropriate care', 'no unexpected pain', and 'explained treatment' showed less difference between public-funded and private patients.
- Care must be taken in the interpretation of individual items of a satisfaction survey; the differences between participating groups are measured by the global and sub-scale satisfaction scores.
- Substantial reductions in the difference between public and private patients have been made since 1994 in the aspects of 'explained options', 'problems fixed', 'improved dental health', 'arrange appointment', and 'no better care'.
- Improvements in mean satisfaction score were recorded in all items except 'no untreated problems' which remained static in 1994 and 1996.
- Any expectation of dramatic improvements in satisfaction scores of card-holders receiving public care is unrealistic the dimensions of satisfaction assessed by the Dental Satisfaction Survey include some aspects which cannot be achieved in a system of public care, *viz.* choice of dentist, saw same dentist at each visit, waiting time, and treatment options and outcomes that are compromised by the presenting oral health of the client. Individuals who have been disadvantaged by delays in receiving treatment and past experiences of inappropriate treatment have little chance in the short-term of matching the scores of those who make regular dental visits on 'improved dental health', 'time taken for improvement ', and 'no untreated problems', regardless of card-holder status and location (public or private) of dental visit.
- Aspects of public care in which modification is achievable include waiting time at
 the clinic; friendly staff; attitude and communication skills of the dentist;
 explanations of treatment needs and options available; pain; and advice on teeth
 and gums. Several of these items have shown improvement across the past three
 surveys; whilst others have not shown substantial differences between public and
 private patients at any stage.

Table 3.5.8: Mean satisfaction score for conceptual categories by card status
- dentate persons aged 18+ whose last visit was <12 months ago

	Context	Content	Outcome	Satisfaction
Card-holder – public-funded				
1994	3.68	3.68	3.66	3.69
1995	3.85	3.91	4.03	3.94
1996	3.89	3.98	3.79	3.93
Public clinic				
1994	3.67	3.66	3.65	3.67
1995	3.61	3.79	3.98	3.80
1996	3.68	3.84	3.71	3.79
Private subsidised				
1994				
1995	4.56	4.25	4.17	4.33
1996	4.41	4.36	3.98	4.29
Card-holder – private own expense				
1994	4.29	4.16	4.22	4.20
1995	4.33	4.14	4.20	4.25
1996	4.39	4.37	4.28	4.35
Non-card-holder -				
private				
1994	4.30	4.25	4.29	4.26
1995	4.30	4.21	4.23	4.25
1996	4.38	4.24	4.27	4.30
Total				
1994	4.25	4.20	4.24	4.21
1995	4.27	4.18	4.21	4.23
1996	4.33	4.23	4.23	4.27

N.B. context = appointment/waiting time, dentist and clinic staff issues content = communication, explanation of treatment and options, services provided outcome = service results, improvement in oral health satisfaction = mean score for 24 original satisfaction items

Source: Dental Satisfaction Survey

Baseline objective

 Increases in the mean satisfaction scores, particularly the context score, for card-holders who receive public care.

- All groups recorded mean scores which indicate satisfaction with their most recent dental visit or series of visits, with scores ranging from 3.61 to 4.56 (measured on a scale of 1 = strongly dissatisfied to 5 = strongly satisfied).
- Users of public clinics (card-holders only) recorded substantially lower satisfaction scores on all scales than users of private practices.
- For all scales, card-holders who used private practices had similar mean satisfaction scores to non-card-holders using private practices, and very similar scores to the national average for each year.

- Consistently low satisfaction scores for each year were recorded by card-holders attending public clinics on the context scale, highlighting waiting time, appointment and preferred dentist issues.
- Card-holders receiving subsidised care from private dentists were the group with the highest mean scores on the context, content and overall satisfaction scales.
- Card-holders receiving public-funded dental care showed considerable increases in mean satisfaction scores on all scales between 1994 and 1996.

Table 3.5.9: Percentage of persons who offered satisfied or dissatisfied comments* by card status – dentate persons aged 18+ whose last visit was <12 months ago

	Satisfied			Dissatisfied		
_	1994	1995	1996	1994	1995	1996
Card status					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Card-holder – public-funded	77.6	76.7	74.4	69.5	62.6	54.5
Public clinic	77.0	79.1	71.0	70.5	76.3	61.6
Private subsidised		70.6	84.9		28.1	32.5
Card-holder – private own expense	74. 7	71.4	79.4	55.9	51.7	51.1
Non-card-holder - private	76.5	74.4	77.8	52.8	55.6	57.3
Total	75.8	74.7	77.6	52.9	55.4	56.4

^{*} among those who offered comments

Source: Dental Satisfaction Survey

Baseline objective

 Reductions in the frequency of dissatisfied comments from persons receiving public care.

- Comments volunteered by respondents to a mailed survey may include areas of
 concern which were not covered in the survey and may strengthen the associations
 found by quantitative research methods. Almost two-thirds of the respondents to
 the Dental Satisfaction Surveys proffered comments regarding aspects of their
 dental care.
- There was very little difference in the frequency of satisfied comments, with between 70 per cent and 85 per cent of each group proffering one or more positive comment(s).
- The frequency of dissatisfied comments was similar among non-card-holders and card-holders who attended private practices at their own expense. Higher levels of dissatisfied comments were expressed by card-holders who attended public clinics.
- The lowest frequencies of dissatisfied comments were recorded by card-holders receiving subsidised care from private dentists.
- Between 1994 and 1996, card-holders who were recipients of public-funded care showed small decreases in the frequency of satisfied comments, and substantial reductions in the frequency of dissatisfied comments. During the same period, non-card-holders recorded increasing frequencies of dissatisfied comments – higher in 1996 than public care recipients.

Table 3.5.10: Percentage of persons who offered satisfied comments* by conceptual categories by card status – dentate persons aged 18+ whose last visit was <12 months ago

	Context	Content	Outcome	Other
Card-holder – public-funded				
1994	42.8	19.7	37.4	18.1
1995	22.3	13.6	54.9	20.1
1996	26.9	13.8	54.3	21.7
Public clinic				
1994	41.3	20.2	36.2	17.0
1995	22.3	17.8	57.2	20.8
1996	25.0	9.9	54.0	17.5
Private subsidised				
1994				
1995	22.3	2.9	49.1	18.4
1996	32.9	25.9	55.2	34.8
Card-holder – private own expense				
1994	36.1	27.4	42.5	18.6
1995	24.6	21.3	42.1	15.1
1996	34.6	20.7	54.1	23.6
Non-card-holder -				
private				
1994	42.3	30.8	36.6	24.0
1995	31.8	26.4	34.5	23.4
1996	33.3	30.0	39.0	23.7
Total				
1994	40.9	28.5	38.6	21.8
1995	30.3	25.1	36.5	22.4
1996	32.8	27.9	42.1	23.5

^{*} among those who offered comments

N.B. context = appointment/waiting time, dentist and clinic staff issues content = communication, explanation of treatment and options, services provided outcome = service results, improvement in oral health other = cost, hygiene, other comments

Source: Dental Satisfaction Survey

Baseline objective

• Retention of the level of satisfied comments provided by card-holders, particularly among those receiving public-funded dental care.

- The key areas of satisfaction were friendly and caring dental providers and dental staff, and the service provided.
- Public patients showed a decline in the percentage of context or appointment-related comments, which was offset by an increase in the frequency of comments satisfied with treatment outcome.
- Over the three surveys, the overall percentage of satisfied comments remained stable, with the decline in context comments from around 41 per cent to around 33 per cent being the only minor variation.

Table 3.5.11: Percentage of persons who offered dissatisfied comments* by conceptual categories by card status – dentate persons aged 18+ whose last visit was <12 months ago

	Context	Content	Outcome	Other	Cost
Card-holder – public-funded					
1994	45.5	3.1	12.6	29.5	11.1
1995	28.7	9.5	24.4	25.3	8.9
1996	32.5	9.6	17.3	27.8	13.6
Public clinic					
1994	45.5	3.2	12.6	29.1	10.0
1995	35.6	11.9	26.7	32.7	11.2
1996	39.1	12.7	19.5	29.8	12.1
Private subsidised					
1994					
1995	11.0	3.5	18.6	6.5	2.9
1996	11.9	0.0	10.3	21.4	18.1
Card-holder – private own expense	9				
1994	13.5	5.8	18.1	38.7	25.9
1995	17.4	2.9	13.2	44.2	28.2
1996	18.3	1.5	9.5	35.2	28.4
Non-card-holder -					
private					
1994	8.9	1.6	19.1	38.3	25.8
1995	11.2	1.3	13.3	45.4	26.2
1996	13.0	3.6	13.5	45.2	33.8
Total					
1994	12.3	2.4	17.8	36.1	23.7
1995	13.2	2.1	14.0	43.2	24.2
1996	15.7	3.9	13.5	42.3	31.1

^{*} among those who offered comments

N.B. context = appointment/waiting time, dentist and clinic staff issues content = communication, explanation of treatment and options, services provided outcome = service results, improvement in oral health other = cost, hygiene, other comments

Source: Dental Satisfaction Survey

Baseline objective

• A decrease in the level of dissatisfied comments among users of public-funded dental care concerning access to services and waiting times.

- The key areas of dissatisfaction were in the context category, such as waiting times for card-holders visiting public clinics and in the cost category among card-holders or non-card-holders visiting private dentists at own expense.
- In the category of context, dissatisfied comments were made by over 35 per cent of patients last attending a public clinic compared with less than 20 per cent of patients last attending a private clinic.

- Private patients who were responsible for their own expenses, whether card-holders or non-card-holders, showed slight increases in the frequency of context or appointment-related dissatisfied comments, and an increase in the frequency of other/cost comments.
- Over the three surveys, the overall percentage of comments in the categories of context, content and outcome remained stable, but increases in the frequency of other comments and cost dissatisfaction were observed.

3.6 Appropriateness of care – mean services for public-funded patients

The findings on mean services per visit under public-funded dental programs was included to augment the baseline data on percentage of persons receiving care.

These breakdowns were not presented at baseline, hence no baseline objectives are specified in this section.

Table 3.6.1: Mean services per visit under public-funded dental programs by main service areas
- dentate persons aged 18+ who visited during the survey period

	1994†	1995‡	1996††
Diagnostic	0.69	0.67	0.65
Preventive	0.23	0.09	0.12
Periodontic	0.23	0.19	0.18
Oral surgery	0.22	0.21	0.22
Endodontic	0.05	0.08	0.08
Restorative	0.55	0.80	0.72
Crown and bridge	0.03	0.03	0.03
Prosthodontic	0.15	0.13	0.13
Miscellaneous	0.28	0.03	0.03
Temporary/emergency	0.10	0.10	0.07

[†] Does not include Queensland or Western Australia

Source: Adult Dental Programs Survey (Cross-sectional)

- Restorative (fillings) services per visit increased from 0.55 in 1994, to 0.80 in 1995, and declined slightly to 0.72 in 1996.
- Endodontic (root canal) services per visit increased between 1994 and 1996.
- Mean services per public-funded visit decreased between 1994 and 1996 for diagnostic, preventive, periodontal, prosthodontic, miscellaneous and temporary/emergency services.
- Oral surgery (extractions) and crown and bridge services were the same in 1994 and 1996.

[‡] Does not include New South Wales or Western Australia

^{††} Does not include New South Wales or Western Australia

Table 3.6.2: Mean services per visit under public-funded dental programs by type of course of care and main service area

- dentate persons aged 18+ who visited during the survey period

		Emergency			lon-emergenc	у
	1994	1995	1996	1994	1995	1996
Diagnostic	0.84	0.84	0.84	0.60	0.58	0.55
Preventive	0.09	0.05	0.07	0.32	0.11	0.15
Periodontic	0.07	0.07	0.10	0.33	0.25	0.22
Oral surgery	0.38	0.33	0.32	0.13	0.15	0.16
Endodontic	0.05	0.07	0.07	0.05	0.09	0.08
Restorative	0.56	0.58	0.57	0.55	0.92	0.80
Crown and bridge	0.03	0.01	0.01	0.03	0.03	0.03
Prosthodontic	0.07	0.07	0.07	0.20	0.16	0.16
Miscellaneous	0.23	0.04	0.04	0.31	0.03	0.03
Temporary/emergency	0.17	0.20	0.15	0.05	0.05	0.03

Source: Adult Dental Programs Survey (Cross-sectional)

- Oral surgery services (extractions) decreased over time for emergency courses of care, but showed a small increase for non-emergencies.
- Restorative services (fillings) per visit increased slightly between 1994 and 1996 for emergency courses of care.
- For non-emergencies, restorative services per visit increased between 1994 and 1996 (0.55 to 0.80); this involved an increase between 1994 and 1995 followed by a decrease between 1995 and 1996.

Table 3.6.3: Mean services per visit under public-funded dental programs by site of visit and main service area

- dentate persons aged 18+ who visited during the survey period

		Urban			Rural	
	1994	1995	1996	1994	1995	1996
Diagnostic	0.69	0.68	0.66	0.59	0.65	0.64
Preventive	0.29	0.09	0.12	0.12	0.08	0.12
Periodontic	0.31	0.20	0.19	0.16	0.15	0.14
Oral surgery	0.21	0.19	0.20	0.25	0.25	0.25
Endodontic	0.05	0.08	0.08	0.04	0.09	0.07
Restorative	0.62	0.82	0.74	0.62	0.76	0.68
Crown and bridge	0.04	0.03	0.03	0.01	0.02	0.02
Prosthodontic	0.12	0.12	0.14	0.11	0.16	0.11
Miscellaneous	0.39	0.03	0.03	0.16	0.05	0.03
Temporary/emergency	0.10	0.10	0.07	0.11	0.11	0.08

Source: Adult Dental Programs Survey (Cross-sectional)

Evaluation results

- Oral surgery services (extractions) per visit showed no change over time for patients at rural sites, but tended to decrease slightly over time for patients at urban sites.
- Restorative services (fillings) per visit increased between 1994 and 1995, and then
 decreased in 1996 for patients at both urban and rural sites (but showed an overall
 increase). The magnitude of the change was greatest at urban sites.
- Preventive and periodontal services per visit were higher at urban compared with rural sites in 1994, but declined over time at urban sites with the effect of reducing the variation by site in 1996.

Table 3.6.4: Mean services per visit for oral surgery (extractions) under public-funded dental programs

- dentate persons aged 18+ who visited during the survey period

		1994	1995	1996
Age of patient	<30 years	0.24	0.27	0.26
	30+ years	0.21	0.20	0.21
Sex of patient	Male	0.28	0.26	0.26
·	Female	0.18	0.18	0.18
Language	English only	0.23	0.21	0.20
	Other	0.20	0.24	0.22
Aboriginality	Aboriginal	0.47	0.54	0.27
	Non-Aboriginal	0.21	0.21	0.21
Visit type	Emergency	0.38	0.33	0.32
	Non-emergency	0.13	0.15	0.16
Site of visit	Urban	0.21	0.19	0.20
	Rural	0.25	0.25	0.25
Patient status†	New patient	0.25	0.26	0.31
	Previous care	0.20	0.17	0.20

[†] Data not available in 1994: from Queensland Data not available in 1995: from Victoria, South Australia, Tasmania, Australian Capital Territory Data not available in 1996: from Victoria, South Australia, Tasmania, Australian Capital Territory

Source: Adult Dental Programs Survey (Cross-sectional)

Evaluation results

- Some decreases in mean oral surgery services (extractions) per visit under public-funded dental programs were observed over time, with large effects occurring for Aboriginal patients and for emergency courses of care.
- Increases in mean oral surgery services (extractions) were observed for patients aged less than 30 years and new patients under public-funded dental programs.

Table 3.6.5: Mean services per visit for oral surgery (extractions) and restorative services (fillings) under public-funded dental programs by State and Territory

- dentate persons aged 18+ who visited during the survey period

	Extractions			Fillings		
	1994	1995	1996#	1994	1995	1996#
State/Territory						
New South Wales	0.21	n.a.	n.a.	0.58	n.a.	n.a.
Victoria	0.27	0.23	0.21	0.47	0.92	0.76
Queensland	n.a.	0.19	0.24	n.a.	0.60	0.62
South Australia	0.14	0.15	0.16	0.67	0.84	0.74
Western Australia†	0.30	0.21	0.25	0.44	0.63	1.19
Tasmania	0.38	0.40	0.35	0.55	0.77	0.82
Australian Capital Territory	0.13	0.24	0.20	0.42	1.29	0.98
Northern Territory	0.27	0.30	0.17	0.57	0.56	0.53
All††	0.22	0.21	0.22	0.55	0.80	0.72

[†] Dentate status not available for Western Australia (means are for both dentate and edentulous)

Source: Adult Dental Programs Survey (Cross-sectional)

Evaluation results

- The mean number of oral surgery services (extractions) per visit varied between States and Territories, but overall showed a slight decrease from 0.22 services per visit in 1994 to 0.21 in 1995 before returning to 0.22 in 1996.
- Decreased mean numbers of oral surgery services (extractions) per visit between 1994 and 1996 were observed in Victoria, Western Australia, Tasmania, and the Northern Territory. However, only Victoria showed a consistent decrease over the three points in time, with most of the decline occurring between 1994 and 1995.
- Overall, mean restorative services (fillings) per visit increased in 1995 and then decreased in 1996. This pattern was observed in Victoria, South Australia, and the Australian Capital Territory.
- Queensland and the Northern Territory showed little change in restorative services (fillings) over time.
- Western Australia showed a trend towards increased mean numbers of restorative services (fillings) per visit over time.

[#] Data collected over a course of care in Queensland, and disaggregated into visits

^{††} Does not include data from Western Australia (1994, 1995, 1996), Queensland (1994), New South Wales (1995, 1996)

3.7 Oral health needs of public-funded patients

The findings in this section refer to oral health needs of public-funded patients attending for care during the period 1995–96. These data were not collected at baseline of the Program, hence no baseline objectives are stated. Instead these data provide an indication of the oral health needs of public-funded patients during the final stages of the Program.

Table 3.7.1: Dental prosthetics by age and type of course of care (per cent) – all persons

	No pro	stheses	Full	denture	Partial	denture	Fixed	bridge		ture & idge
	Uppe	Lowe	Uppe	Lowe	Uppe	Lowe	Uppe	Lowe	Uppe	Lowe
	r	r	r	r	r	r	r	r	r	r
Age 18-24 years										
Emergency	98.8	99.4	0.6	0.4	0.7	_	_	_	_	0.1
Non-emergency	99.2	99.5	0.4	0.6	0.4	_	_	_	_	_
All	99.0	99.4	0.5	0.5	0.6	_	_	_	_	0.1
Age 25-34 years										
Emergency	93.4	98.9	0.5	0.5	5.5	0.6	0.5	0.1	_	_
Non-emergency	86.6	99.5	5.1	_	7.7	0.5	0.6	_	_	_
All	90.2	99.2	2.7	0.2	6.6	0.6	0.6	0.1	_	_
Age 35-44 years										
Emergency	86.2	94.8	3.6	0.6	7.3	3.5	1.9	1.1	1.0	_
Non-emergency	76.8	89.5	13.7	7.4	8.7	2.4	0.8	0.7	_	_
All	81.3	92.1	8.8	4.1	8.1	2.9	1.3	0.9	0.5	_
Age 45-54 years										
Emergency	69.8	83.1	8.0	1.4	18.0	13.9	3.6	1.7	0.7	_
Non-emergency	57.8	88.4	19.5	12.6	16.5	5.2	6.1	0.8	0.1	_
All	63.6	82.1	13.9	7.1	17.2	9.6	4.9	1.2	0.4	_
Age 55-64 years										
Emergency	49.3	72.4	23.3	7.2	24.0	18.2	3.2	2.2	0.3	_
Non-emergency	44.5	64.1	34.6	19.3	20.3	16.5	0.4	0.1	0.2	_
All	46.5	67.7	29.7	14.2	21.9	17.2	1.6	1.0	0.3	_
Age 65+ years										
Emergency	35.9	51.0	33.8	15.3	26.4	31.6	3.6	2.3	0.3	_
Non-emergency	29.5	44.4	46.9	32.8	22.7	21.5	1.0	1.3	_	_
All	32.1	47.1	41.5	25.5	24.2	25.7	2.1	1.7	0.2	-

Source: Prospective Adult Dental Programs Survey

Oral health result

• The percentage of persons with no prostheses declined across older age groups of patients; was lower for the upper jaw compared to the lower jaw; and was lower for non-emergency compared with emergency courses of care for patients in age groups 35–44 years and older.

Table 3.7.2: Mean number of tooth crowns by age and type of course of care – dentate persons

	Decayed (mean)	Missing (mean)	Filled (mean)	DMFT (mean)
Age 18–24 years	(,	(,	(222)	(222)
Emergency	3.22	0.72	3.49	7.43
Non-emergency	1.85	0.47	4.66	6.97
All	2.58	0.60	4.03	7.22
Age 25-34 years				
Emergency	3.27	1.72	5.94	10.92
Non-emergency	2.95	2.76	6.74	12.45
All	3.13	2.22	6.32	11.66
Age 35-44 years				
Emergency	2.04	3.78	8.00	13.82
Non-emergency	1.84	3.43	8.45	13.73
All	1.94	3.60	8.22	13.77
Age 45-54 years				
Emergency	1.72	6.33	8.46	16.50
Non-emergency	1.21	6.03	9.64	16.88
All	1.47	6.18	9.03	16.69
Age 55-64 years				
Emergency	1.34	9.02	6.95	17.31
Non-emergency	1.05	8.71	7.15	16.91
All	1.19	8.84	7.06	17.09
Age 65+ years				
Emergency	1.10	10.87	6.40	18.37
Non-emergency	0.75	9.98	7.28	18.00
All	0.92	10.40	6.86	18.17

- Mean numbers of combined decayed, missing and filled teeth (DMFT) increased across older age groups, with mean numbers of decayed teeth peaking in younger age groups (18–24 and 25–34 years) and mean numbers of missing teeth peaking in older age groups (55–64 and 65 years or more).
- The mean number of decayed teeth was higher for emergency compared with non-emergency courses of care for all age groups.
- The mean number of filled teeth was lower for emergency compared with non-emergency courses of care for all age groups, particularly for patients aged 18–24 years.

Table 3.7.3: Mean number of tooth roots by age and type of course of care – dentate persons

	Decayed (mean)	Filled (mean)	DF (mean)
Age 18–24 years			<u></u>
Emergency	0.16	0.13	0.30
Non-emergency	0.26	0.22	0.48
All	0.21	0.17	0.38
Age 25-34 years			
Emergency	0.47	0.27	0.74
Non-emergency	0.13	0.11	0.24
All	0.31	0.19	0.50
Age 35-44 years			
Emergency	0.33	0.32	0.65
Non-emergency	0.17	0.20	0.38
All	0.25	0.26	0.51
Age 45-54 years			
Emergency	0.42	0.63	1.04
Non-emergency	0.25	0.23	0.48
All	0.34	0.43	0.77
Age 55-64 years			
Emergency	0.31	0.82	1.12
Non-emergency	0.23	0.44	0.67
All	0.27	0.62	0.89
Age 65+ years			
Emergency	0.40	0.74	1.15
Non-emergency	0.24	0.58	0.82
All	0.32	0.66	0.98

- Mean numbers of combined decayed and filled roots (DF) tended to increase across older age groups.
- Mean numbers of filled roots increased across older age groups.
- Emergency courses of care were associated with higher mean numbers of decayed roots for age groups 25–34 years and older.
- In addition to coronal caries experience, up to a further tooth (on average) has decay or a filling on its root surface(s).

Table 3.7.4: Most severe periodontal condition (CPITN) by age and type of course of care (per cent) – dentate persons

	Health	Bleeding	Calculus	Pockets 4–5mm	Pockets 6mm+
Age 18–24 years					
Emergency	16.5	23.3	48.3	10.1	1.8
Non-emergency	28.1	30.7	32.8	8.0	0.4
All	21.8	26.7	41.2	9.2	1.2
Age 25-34 years					
Emergency	5.6	11.2	55.6	20.7	7.0
Non-emergency	12.7	13.3	60.7	10.0	3.4
All	8.9	12.2	58.0	15.7	5.3
Age 35-44 years					
Emergency	5.4	9.9	53.9	21.3	9.5
Non-emergency	8.0	13.2	56.5	14.8	7.5
All	6.7	11.6	55.2	18.0	8.5
Age 45-54 years					
Emergency	5.6	14.3	36.5	32.5	11.1
Non-emergency	14.5	7.9	41.3	25.5	10.9
All	9.8	11.3	38.7	29.2	11.0
Age 55-64 years					
Emergency	2.8	8.7	43.4	31.9	13.3
Non-emergency	7.8	12.4	48.3	20.4	11.3
All	5.5	10.7	46.1	25.6	12.2
Age 65+ years					
Emergency	4.9	11.2	39.9	28.3	15.8
Non-emergency	11.7	14.5	39.1	27.5	7.2
All	8.3	12.9	39.6	27.9	11.4

- The percentage of persons in periodontal health was highest in the youngest age group.
- The percentage of persons with periodontal pockets of 6mm or more was higher in age groups aged 45–54 years and older.
- Non-emergency courses of care were associated with higher percentages of periodontal health compared with emergencies for all age groups.
- There was a higher percentage of patients with periodontal pockets of 6mm or more among emergency courses of care compared with non-emergencies for all age groups, and particularly among patients aged 65 years or more.

Table 3.7.5: Dental prosthetics by age and site of visit (per cent) – all persons

	No Pro	stheses	Full c	lenture	Partial	denture	Fixed	bridge		ture & idge
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
Age 18–24 years										
Urban	98.9	99.5	0.4	0.4	0.7	_	_	_	_	0.1
Rural	99.1	99.3	0.6	0.7	0.3	_	_	_	_	_
All	99.0	99.4	0.5	0.5	0.6	_	_	_	_	0.1
Age 25-34 years										
Urban	91.5	98.9	0.6	0.3	7.0	8.0	0.9	_	_	_
Rural	87.7	99.7	6.3	0.1	6.0	0.1	_	0.1	_	_
All	90.2	99.2	2.7	0.2	6.6	0.6	0.6	0.1	_	_
Age 35-44 years										
Urban	85.0	92.6	5.9	2.3	6.7	3.8	1.7	1.4	0.8	_
Rural	75.2	93.2	12.8	5.4	11.3	1.4	0.6	_	_	_
All	81.3	92.1	8.8	4.1	8.1	2.9	1.3	0.9	0.5	_
Age 45-54 years										
Urban	66.2	83.3	9.4	2.7	8.8	12.3	4.8	1.7	0.6	_
Rural	57.4	77.1	26.1	19.0	10.9	3.7	5.6	0.3	_	_
All	63.6	82.1	13.9	7.1	17.2	9.6	4.9	1.2	0.4	_
Age 55-64 years										
Urban	49.3	67.8	25.4	10.9	22.8	19.9	2.1	1.4	0.4	_
Rural	41.5	70.5	39.4	20.8	18.7	8.7	0.5	_	_	_
All	46.5	67.7	29.7	14.2	21.9	17.2	1.6	1.0	0.3	_
Age 65+ years										
Urban	35.1	49.7	36.4	22.7	25.5	25.4	2.8	2.2	0.2	-
Rural	23.1	38.4	56.9	34.0	19.9	27.6	0.1	_	-	_
All	32.1	47.1	41.5	25.5	24.2	25.7	2.1	1.7	0.2	_

- The percentage of persons with no prostheses in the upper jaw tended to be higher for patients in age groups 25–34 years and over at urban sites compared with rural sites.
- In the 45–54 and 65 years or more age groups a higher percentage of patients at urban sites had no prostheses in the lower jaw compared with patients at rural sites.

Table 3.7.6: Mean number of tooth crowns by age and urban/rural site of visit – dentate persons

	Decayed (mean)	Missing (mean)	Filled (mean)	DMFT (mean)
Age 18–24 years	(mount	(modily	(mount	(mount)
Urban	2.47	0.73	3.74	6.94
Rural	2.77	0.32	4.60	7.69
All	2.58	0.60	4.03	7.22
Age 25-34 years				
Urban	2.84	1.99	5.93	10.76
Rural	3.58	2.63	6.99	13.20
All	3.13	2.22	6.32	11.66
Age 35-44 years				
Urban	2.13	3.41	7.65	13.19
Rural	1.49	4.22	9.54	15.26
All	1.94	3.60	8.22	13.77
Age 45-54 years				
Urban	1.37	5.87	8.91	16.15
Rural	1.94	7.34	9.05	18.33
All	1.47	6.18	9.03	16.69
Age 55-64 years				
Urban	1.21	8.88	7.29	17.38
Rural	1.17	8.86	6.13	16.17
All	1.19	8.84	7.06	17.09
Age 65+ years				
Urban	1.02	9.88	6.97	17.87
Rural	0.54	12.19	6.54	19.27
All	0.92	10.40	6.86	18.17

- Patients at rural sites had a higher mean number of combined decayed, missing and filled teeth (DMFT) compared with urban sites for most age groups.
- The highest mean number of decayed teeth occurred for patients aged 25–34 years at rural sites.
- The highest mean number of missing teeth occurred for patients aged 65 years or more at rural sites.

Table 3.7.7: Mean number of tooth roots by age and urban/rural site of visit – dentate persons

	Decayed (mean)	Filled (mean)	DF (mean)
Age 18–24 years	(incur)	(mean)	(mean)
Urban	0.16	0.24	0.40
Rural	0.30	0.06	0.36
All	0.21	0.17	0.38
Age 25-34 years			
Urban	0.39	0.26	0.64
Rural	0.17	0.09	0.26
All	0.31	0.19	0.50
Age 35-44 years			
Urban	0.31	0.29	0.60
Rural	0.09	0.21	0.29
All	0.25	0.26	0.51
Age 45-54 years			
Urban	0.38	0.59	0.97
Rural	0.22	0.01	0.23
All	0.34	0.43	0.77
Age 55-64 years			
Urban	0.32	0.82	1.14
Rural	0.12	0.07	0.18
All	0.27	0.62	0.89
Age 65+ years			
Urban	0.36	0.79	1.15
Rural	0.17	0.19	0.36
All	0.32	0.66	0.98

- The mean number of combined decayed and filled tooth roots (DF) was higher for patients at urban compared with rural sites for all age groups.
- Mean numbers of filled roots were higher for patients at urban sites compared with rural sites for all age groups.
- Mean numbers of decayed roots were lower for patients at urban sites compared with rural sites in the youngest age group (aged 18–24 years) but was higher in age groups 25–34 years and older.

Table 3.7.8: Most severe periodontal condition (CPITN) by age and site of visit (per cent) – dentate persons

	Health	Bleeding	Calculus	Pockets 4–5mm	Pockets 6mm+
Age 18–24 years					•
Urban	14.6	26.2	46.4	11.2	1.6
Rural	34.2	27.7	32.0	5.7	0.4
All	21.8	26.7	41.2	9.2	1.2
Age 25-34 years					
Urban	6.8	9.0	60.5	18.6	5.1
Rural	13.1	18.4	52.6	10.2	5.8
All	8.9	12.2	58.0	15.7	5.3
Age 35-44 years					
Urban	5.8	11.4	51.4	21.9	9.5
Rural	8.8	12.3	62.0	10.2	6.7
All	6.7	11.6	55.2	18.0	8.5
Age 45-54 years					
Urban	4.4	11.8	39.9	31.1	12.8
Rural	18.4	11.2	40.1	26.3	4.0
All	9.8	11.3	38.7	29.2	11.0
Age 55-64 years					
Urban	4.8	7.7	44.7	28.7	14.1
Rural	7.6	18.8	51.7	15.6	6.4
All	5.5	10.7	46.1	25.6	12.2
Age 65+ years					
Urban	5.5	13.0	40.8	27.2	13.6
Rural	19.4	12.7	35.2	29.5	3.2
All	8.3	12.9	39.6	27.9	11.4

- The percentage of patients in periodontal health was higher for patients at rural sites compared with urban sites for all age groups.
- The percentage of patients with periodontal pockets of 6mm or more was lower for patients at rural sites compared with urban sites for most age groups, particularly for those aged 45–54 years and older.

4 Discussion

4.1 Introduction

The CDHP was introduced in January 1994. It injected additional funds into public-funded dental care under dental plans developed by each State and Territory. Each State and Territory entered into agreement on maintenance of effort in their provision of dental care in addition to the expansion of their provision of public-funded dental care with the additional Commonwealth funds. The level of Commonwealth funding increased from \$18 million for the period January to June 1994, through \$60 million for the financial year 1994–95, to \$100 million for the financial year 1995–96.

The CDHP funding was allocated to two separate components:

- the Emergency Dental Scheme (EDS); and
- the General Dental Scheme (GDS).

The allocation of funds to each Scheme varied over the four financial years of the Program as set out in the table below:

Table 4.1.1: Commonwealth Dental Health Program funding schedule (millions)

	January-June 1994	1994–95	1995–96	July-December 1996
Emergency Dental Scheme				
\$ millions	\$18	\$30	\$30	\$15
% of allocation	100%	50%	30%	30%
General Dental Scheme				
\$ millions	_	\$30	\$70	\$35
% of allocation	_	50%	70%	70%

The Emergency Dental Scheme was implemented to broaden the possible range of treatment options for patients making emergency or problem visits. Specifically it was aimed at increasing the retention of teeth through treatment of disease with fillings rather than extractions.

The General Dental Scheme was implemented to draw persons receiving public-funded care into routine general dental care. Across the years of the CDHP, the funding schedule gradually gave emphasis to the GDS over the EDS. However, the timing of the implementation of the Schemes and the phasing in of full funding, set ceilings to what could be expected in outcomes of the Program over the short time (less than three years), that it has operated. In addition, any slippage in the implementation of the Schemes or delays in achieving full expenditure of allocated funds reduce the capacity of the Program to reach expected outcomes.

4.2 Awareness and eligibility

Public awareness of the CDHP increased from 15.1 to 23.4 per cent from 1994 to 1996. Awareness among card-holders who last received public-funded dental care increased from 32.7 to 56.3 per cent, while in 1996, 50.9 per cent of card-holders who last received public-funded care believed they were eligible to receive benefits under the CDHP. Card-holders who last received government subsidised care from a private practice had the highest level of awareness of the CDHP, 72.1 per cent in 1996. Based on the self-reported social security status of a sample of Australians, the estimated number of adults eligible for public-funded dental care was approximately three million in each of the years 1994, 1995 and 1996. In 1996 over a third of these card-holders were aged 65 years or more (41.8 per cent), a further quarter (24.4 per cent) were aged between 45–64 years, and over a fifth (22.0 per cent) were 25–44 years. Only just over one tenth (11.8 per cent) were young adults aged 18–24 years.

4.3 Contact with the CDHP

In the 12 months leading to 1994, 616,000 adults received public-funded dental care at their last visit. This increased to 718,000 in 1995 and 816,000 in 1996. Over the two years of the CDHP there was a 32.5 per cent increase in the number of adults who last received public-funded dental care in the previous 12 months compared with the baseline during 1993. However, the impact of the CDHP on card-holders receiving public-funded dental care is more complex than these figures imply. First, CDHP funds supplemented existing State or Territory funding for public dental care. Some 616,000 adults could have been expected to have last received public-funded dental care in a year under existing State or Territory funding. This Report documents that the nature of care all card-holders have received altered under the CDHP. Therefore, some of the CDHP funding has resulted in shifts in the mix of services provided across the existing baseline level of persons receiving public-funded dental care. In addition, a further 200,000 adults last received public-funded dental care. Second, the estimate of persons receiving public-funded dental care reflects the number of persons who last made a public-funded dental visit in the 12 months prior to their interview. The number of courses of care may be considerably higher. For instance, there may have been an emergency and general course of care, in any year. Further, as a course of care may have multiple visits, the number of visits may be much higher than any estimated number of courses of care.

In contrast to the age distribution of adult card-holders, persons who last received public-funded dental care in the 12 months leading to 1996 had a lower percentage of persons aged 65 years or more (26.9 per cent), a similar percentage of 45–64 year olds (25.0 per cent), and higher percentages of 25–44 year olds (34.4 per cent) and 18–24 year olds (13.5 per cent). The percentage of persons who last received public-funded dental care showed an inverse u-shaped relationship with age, increasing at first to peak among the 35–44 year olds, then decreasing across the older age groups to the lowest percentages among those aged 75 years or more.

Those who last received public-funded dental care were heavily biased to the financially disadvantaged. Over three-quarters (82.2 per cent) of card-holders who last received public-funded dental care were from households with incomes under \$20,000. This was in contrast to non-card-holders, who were predominantly from households with incomes of \$20,000 or more per annum.

4.4 Access and barriers

(a) Perceived needs for visits and treatment

The majority of dentate adults perceived a need for a check-up or treatment. However, a lower percentage of card-holders perceived a need for a check-up than non–card-holders. Over the 24 months of the CDHP the percentage of card-holders who last received public-funded dental care who perceived a need for treatment decreased, whereas the trend was toward an overall increase of percentage of adults who perceived a need for treatment. Among card-holders who last received public-funded dental care, there was a decrease in the perceived need for extractions (12.7 to 9.3 per cent) and fillings (25.8 to 17.1 per cent). However, despite these decreases, the percentage of card-holders who last received public-funded dental care who perceived a need for an extraction was still twice the level of that among adult non–card-holders who last visited a private dentist (9.3 compared with 4.2 per cent).

The CDHP had impacted on perceived need, presumably by a combination of reducing unmet need among card-holders who last received public-funded dental care and bringing additional persons with a potentially lower backlog of unmet dental needs into contact with public-funded dental care. However, card-holders were still considerably disadvantaged compared with non–card-holders in terms of their perceived oral health.

Among adult card-holders there was an increase in the percentage who reported usually visiting for a check-up (28.1 to 37.5 per cent). However, despite this increase, the percentage of card-holders who usually visit for a check-up was considerably lower than among non–card-holders who last visited a private dentist (37.5 compared with 53.1 per cent). Usual visiting pattern reflects long-term use of dental services and may not reflect well the most recent reason for visiting. The increase in the percentage of card-holders who reported usually visiting for a check-up may have resulted from either changed visiting behaviour during the 24 months of the CDHP or the additional persons receiving public-funded dental care being considerably more likely to report usually visiting for a check-up.

(b) Cost and financial burden

Over the 24 months of the CDHP there was a decrease in the percentage of card-holders who avoided or delayed visiting because of cost (38.3 to 31.6 per cent), while non–card-holders who last visited a private dentist showed an increase in the percentage who avoided or delayed visiting because of cost (24.7 to 28.4 per cent). Similarly, there was a decrease in the percentage of card-holders who last received public-funded dental care for whom dental visits were a large financial burden (9.1 to 4.7 per cent), while card-holders who last visited a private dentist at their own expense showed a slight increase in the percentage for whom dental visits were a large financial burden (13.2 to 16.5 to 14.0 per cent).

(c) Insurance

Dental insurance is a modifying factor in the affordability and hardship associated with dental care purchased from private dentists. Few card-holders who last received public-funded dental care had insurance in 1996. The percentage of card-holders who last received public-funded dental care with dental insurance was markedly lower (7.0 per cent) than among card-holders who last visited a private dentist at their own expense (28.3 per cent), or non–card-holders who last visited a private dentist (44.4 per cent). There had been a decrease in the percentage of non–card-holders with insurance over the 24 months of the CDHP (50.1 to 44.4 per cent).

(d) Waiting time

Prior to the CDHP less than half (47.5 per cent) of card-holders who last received public-funded dental care for a check-up waited less than a month for that visit and over one-fifth (21.1 per cent) waited 12 months or more. The percentage of card-holders who last received public-funded dental care waiting less than one month for a check-up increased substantially (61.5 per cent) and the percentage waiting 12 months or more almost halved (11.3 per cent) over the 24 months of the CDHP. However, waiting times were still in marked contrast to non–card-holders who last visited a private dentist, who nearly all waited less than one month (94.9 per cent), with nobody reporting waiting 12 months or more.

4.5 Use of services

(a) Time since last visit

There was an increase in the percentage of card-holders who last received public-funded dental care who had visited within the last 12 months (58.6 to 67.4 per cent). This was in contrast to non–card-holders who last visited a private dentist who showed little change in this percentage (57.2 to 58.3 per cent). The high percentage of card-holders who last received public-funded care visiting within the last 12 months indicates that the CDHP was associated with a significant shift in utilisation. This shift may reflect a surge in utilisation as additional resources were devoted to public-funded dental care over the 24 months of the CDHP and could stabilise under steady-state funding. However, the high percentage of card-holders who last received public-funded dental care who had visited in the last 12 months might also reflect a repetitive cycle of emergency care seeking, or the result of attempts to move some card-holders on to a maintenance care cycle. The continuation of the high percentage of emergency courses of care tends to favour the repetitive cycle of emergency visiting as a major contributor to the increased percentage of card-holders who last received public-funded dental care who have visited in the last 12 months.

(b) Public and private sector visits

The location of the last visit among dentate card-holders showed little change over the 24 months of the CDHP. For each year around a third of dentate card-holders who made a visit in the last 12 months last visited a public clinic (29.4, 37.5 and 31.6 per cent).

However, this percentage showed marked variation across the States and Territories. The Northern Territory and Queensland had the highest percentages of dentate card-holders who last visited a public clinic in the previous 12 months (64.6 and 55.0 per cent), while this percentage was lowest in Victoria, the Australian Capital Territory and New South Wales (19.0, 24.9 and 24.5 per cent). Variation in this percentage reflects the decisions of card-holders to seek public-funded dental care or purchase dental care from private dentists, and the extent to which each State or Territory provided its public-funded dental care through public clinics or private dentists. The injection of additional funding from the CDHP into the public provision of dental care did not significantly change the overall percentage of dentate eligible adults who last received their dental care from a public clinic.

This is also consistent with the overall stability in where adults received their dental care in Australia across the 24 month period of the CDHP. The location where dental care was received within the previous 24 months was examined for persons whose last visit was in the 12 months leading to 1996. Nearly all (97.4 per cent) showed no movement between private care at their own expense, care at public clinics, and government subsidised private care. Most were persons who received all their dental care from a private dentist at their own expense (87.5 per cent), followed by a small percentage who received all their dental care at a public clinic (8.1 per cent) and a very small percentage who received their care at private dentists under subsidy (1.7 per cent). Approximately one in forty had moved between the above three categories. While the largest movement was into public clinics for care (1.2 per cent), some (0.7 per cent) moved to private dentists at their own expense. A further small percentage moved to private dentists under subsidy (0.7 per cent), with the previous location being private (0.4 per cent), public (0.1 per cent) or both (0.2 per cent). Provision of dental care from private dentists at the person's own expense predominates all delivery of dental care. Further, most patients' circumstances with regard to the care they received over a two-year period remained stable and there was only a small movement in any direction between care from a private dentist at own expense, subsidised private care, and care at public clinics.

(c) Reason for seeking care

The reason for seeking dental care (check-up or problem) is an area where a substantial social gradient has existed. Compared with non–card-holders a lower percentage of card-holders visit for a check-up and a higher percentage visit for a problem. This influences the nature of the dental care received. A lower percentage of card-holders who last received public-funded dental care in the 12 months leading to 1996 visited for a check-up (21.8 per cent) than non–card-holders who last visited a private dentist (43.9 per cent). Visiting for a check-up declined over the 24 months of the CDHP for all adults. However, the decrease in the percentage visiting for a check-up among card-holders who last received public-funded dental care (27.6 to 21.8 per cent) was greater than the decrease among non–card-holders who last visited a private dentist (49.1 to 43.9 per cent). These changes indicate that the reason for visiting had not moved from problems toward check-ups under the CDHP and that the gap between card-holders and non–card-holders remained even after the 24 months of the CDHP.

This most likely reflects structural aspects of the CDHP such as the initial exclusive period of the Emergency Dental Scheme (January to June 1994), then the balance of the

Emergency Dental Scheme and General Dental Scheme (July 1994 to June 1995). Only from July 1995 was the emphasis of the CDHP meant to move toward the General Dental Scheme. A second contributing factor may be the operation of waiting lists for check-ups or general dental care in public-funded dental care. These waiting lists and the time card-holders spend on them encourage an emergency visiting pattern where there is no waiting time. This could have been further exacerbated under the CDHP by the availability of a wider range of emergency dental treatment, including restoration of teeth rather than just extraction of teeth, which narrows the difference in type of care likely to be received under either reason for visiting.

The predominance of problem visiting is most likely a contributing factor to the higher percentage of card-holders who had made a visit in the last 12 months. While the increase in the percentage of card-holders visiting *per se* appears to be a positive feature under the CDHP, it is apparent that much of this visiting was for problems or emergency care, and not for general dental care flowing from a check-up.

4.6 Presenting oral health

(a) Tooth loss

Adult card-holders have had poorer oral health than non-card-holders. Card-holders have higher levels of tooth loss, both complete tooth loss (edentulism) and partial tooth loss (missing teeth among dentate adults). During the 24 months of the CDHP the percentage of card-holders aged 65 years or more who last received public-funded dental care and who were edentulous decreased (51.1 to 46.3 per cent). In fact, edentulism decreased for all adults. This change in edentulism therefore represents a broad temporal trend and it is unlikely that a 24 month period is sufficient to capture any effect of the CDHP on edentulism. It should be noted, however, that twice the percentage of card-holders who last received public-funded dental care aged 65 years or more were edentulous in 1996 compared with non-card-holders who last visited a private dentist (46.3 compared with 24.6 per cent). Further, the percentage of persons aged 65 years or more who were edentulous was higher in rural areas than urban areas (48.0 compared with 35.0 per cent). Edentulism continues to decrease, but is still markedly higher among disadvantaged groups.

It is also unlikely that partial tooth loss would be sensitive to the CDHP over only a 24 month period. Partial tooth loss, expressed as Missing teeth (M in the DMFT index) among dentate adults is a lifelong cumulative occurrence. It will, therefore, reflect experience of disease and its management over periods of time much longer than the 24 months of the CDHP. For all older-aged adult groups of card-holders who last received public-funded care the number of self-reported missing teeth decreased during the 24 months of the CDHP (as a result of younger cohorts with fewer missing teeth progressing through these age groups over time). For instance, among card-holders aged 65 years or more who last received public-funded dental care, the number of missing teeth decreased (15.0 to 14.3 teeth). However, missing teeth decreased overall for persons aged 65 years or more (13.3 to 12.9 teeth). After 24 months of the CDHP card-holders aged 65 years or more who last received public-funded dental care still had a higher number of missing teeth than non–card-holders (14.3 compared with 11.3 teeth).

(b) Experience of dental decay and gum disease

Oral examinations conducted on samples of card-holders receiving public-funded dental care in 1995–96 have documented extensive present and past experience of dental decay (dental caries). The total mean of teeth with experience of decay at age 12 years for Australian children was 1.1 in 1993 (AIHW, 1996). Card-holders aged 18–24 years had a mean of 7.2 teeth with decay experience (DMFT = 7.2) and 2.6 teeth with untreated decay (DT = 2.6). The experience of decay rose across all adult age groups to reach 18.2 teeth in dentate card-holders aged 65 years or more. Untreated decayed teeth rose to a peak among dentate card-holders 25–34 years, then declined across older age groups to be lowest among those aged 65 years or more. Filled teeth (decayed teeth managed with restorations), rose across older age groups until 45–54 year olds, then declined. However, missing teeth (extracted because of decay or poor bone or soft tissue support), rose steadily across the age groups to peak in the 65 years or more age group where it was the dominant expression of past experience of dental diseases.

Card-holders who received public-funded dental care at an emergency visit had higher numbers of decayed teeth, fewer filled teeth and in older adult age groups, higher numbers of missing teeth than card-holders who received general dental care. Card-holders also have on average a further tooth which has decay or a filling on its root surfaces. This was again higher among card-holders making an emergency visit.

Not infrequently the supporting tissues around those teeth present had advanced destructive gum disease. The percentage of card-holders with deep pockets separating the supporting tissues from the tooth was associated with age, ranging from 1.2 per cent among 18–24 year olds to 12.2 per cent among 55–64 year olds. Again this percentage was higher among card-holders who received emergency dental care than those who received general dental care.

While the overall level of cumulative decay experienced was somewhat lower than observed for the whole population in the National Oral Health Survey of Australia 1987–88, the level of untreated decayed teeth among card-holders who received public-funded dental care in 1995–96 was higher than the population at that time (1987–88). This indicates that while broad temporal shifts in decay experience are occurring, including a benefit for card-holders, card-holders are still at a disadvantage with regard to measures of unmet need for treatment for decay experience.

(c) Toothache

One area of self-reported oral health that showed improvement during the 24 months of the CDHP was the experience of toothache. Non–card-holders showed little change in the percentage reporting a toothache as an impact of oral diseases. Card-holders who last received public-funded dental care showed a decrease in the percentage who reported experiencing a toothache in the previous 12 months (23.3 to 19.8 per cent). This would be consistent with improved frequency of visiting in the last 12 months under the CDHP. However, even with that decrease the percentage of card-holders who last received public-funded dental care experiencing a toothache was almost twice that among non–card-holders who last visited a private dentist (19.8 compared with 11.9 per cent).

Card-holders still have widespread experience of dental disease that impacts on their lives.

4.7 Appropriateness of care

Oral health outcomes, such as edentulism, partial tooth loss and numbers of teeth with decay experience, will take extended periods of time to substantially alter and the social inequalities experienced by card-holders will not be diminished easily. However, a significant avenue for these and other oral health outcomes to improve is via a shift in the appropriateness of dental care which card-holders receive. It was desirable for the CDHP to move card-holders from: emergency to general dental care; extraction to restoration; and, treatment to prevention.

(a) Emergency and general care

There are two separate assessments of changes in the balance of emergency and general dental care under the 24 months of the CDHP. The first is derived from self-reported reason for the last dental visit, either check-up or problem. The estimated number of adults who last received public-funded dental care within the previous year increased from 616,000 to 816,000 across the 24 months of the CDHP. However, the estimated number of persons who last visited for a check-up decreased substantially over the first 12 months, then increased, but to a level below the baseline (240,000 in 1993 compared with 224,000 in 1995). On the other hand the reported number of persons who last visited for a problem increased (376,000 to 592,000). Most of the increase in visits made for a problem occurred through the 137,000 persons who reported last visiting a private dentist for public-funded dental care for a problem. An additional 32,000 card-holders reported last visiting a private dentist for public-funded dental care for a check-up. Most public-funded care provided by private dentists was associated with visits for a problem (81.1 per cent) rather than a check-up (18.9 per cent). Between 1994 and 1996 the percentage of persons who reported receiving their care at a public clinic in association with a check-up decreased from 39.0 to 29.7 per cent.

The self-reported reason for a visit does not directly link with the second source of data, a classification by providers of whether a visit was for emergency or general dental care. Emergency care includes dental problems involving relief of pain, while general care includes both check-ups and dental problems which do not involve relief of pain.

The percentage of card-holders receiving public-funded emergency dental care initially decreased, then slightly increased across the 24 month period (37.0 to 32.8 to 34.8 per cent). This trend toward slightly lower levels of emergency dental care was consistent among card-holders of different sex, language spoken at home, Aboriginality, site of visit, and whether the card-holder was a new or previous patient to public-funded dental care. The percentage of card-holders receiving public-funded emergency dental care was highest among Aboriginals and patients aged below 30 years.

This resistance to a substantial movement away from emergency dental care is in contradiction to the CDHP objective of decreasing the levels of emergency care received by card-holders receiving public-funded dental care. As type of visit has previously been closely related to the number of visits in a course of care and services received, especially extractions, this resistance in movement to general dental care will have constrained the gains possible in the appropriateness of services provided.

(b) Numbers of visits and services

The number of visits in the last year per card-holder receiving public-funded dental care decreased over the 24 months of the CDHP (3.4 to 2.8 to 2.5). This decrease for all card-holders reflects a move to fewer visits both for those receiving emergency care and those receiving general dental care.

The mean number of services per visit also decreased, both among card-holders receiving emergency care (2.5 to 2.3 to 2.2) and general dental care (2.6 to 2.4 to 2.2). Card-holders receiving public-funded dental care made fewer visits and received fewer services per visit by the end of the 24 months of the CDHP. This might suggest that there was a decrease in the backlog of dental needs presented by both card-holders receiving emergency and general dental care. However, this was not translated into a shift away from emergency dental care toward general dental care. This may reflect a culture of care seeking among long term card-holders, or administrative procedures within the public dental authorities which favour previous or new patients in seeking emergency dental care. Waiting lists and times might be a sufficient cause for card-holders to seek emergency dental care rather than general dental care. Any change in the services received within these different courses of care so that they are both perceived as beneficial to the card-holder would also support card-holders (and dentists) in pursuing emergency dental care.

(c) Mix of services

Both self-reported and provider-reported information indicates changes in the mix of services provided over the 24 months of the CDHP. Self-reported data allow comparison of card-holders whose last visit was public-funded with card-holders or non-card-holders whose last visit was to a private dentist at their own expense.

There was no change in the percentage of non–card-holders who last visited a private dentist, who received extractions in the previous 12 months (10.8 to 11.9 per cent). However, the percentage of card-holders who last received public-funded dental care who received extractions slightly decreased (32.6 to 29.7 per cent). The percentage of persons receiving extractions among card-holders who last received public-funded dental care who visited for a problem was considerably higher, but decreased substantially (43.8 to 36.5 per cent) while the percentage receiving extractions among card-holders who last made a public-funded visit for a check-up slightly increased (4.0 to 5.2 per cent).

There was no change in the percentage of non–card-holders who last visited a private dentist who reported receiving a filling in the last 12 months (49.0 to 47.9 per cent). However, the percentage of card-holders who last received public-funded dental care who received fillings increased markedly (42.5 to 63.8 per cent); the increase occurred among those whose reason for last visiting was a problem (50.5 to 66.7 per cent) and also for those last visiting for a check-up (21.7 to 53.5 per cent).

Some of these changes among card-holders are confirmed by the provider-reported information on services provided to card-holders receiving public-funded dental care. Among all dentate card-holders the mean number of oral surgery (extraction) services per visit remained the same between 1994 and 1996 (0.22 services per visit), while the

mean number of restorative services per visit initially increased between 1994 and 1995, then decreased slightly in 1996 (0.55 to 0.80 to 0.72 services per visit).

Among card-holders receiving public-funded emergency dental care the mean number of oral surgery services per visit decreased between 1994 and 1996 (0.38 to 0.32 services per visit), while the mean number of restorative services per visit remained constant (0.56 to 0.57 services per visit). Among card-holders receiving public-funded general dental care the mean number of oral surgery services showed a small increase (0.13 to 0.16 services per visit), but the number of restorative services per visit increased (0.55 to 0.80 services per visit). The rate of oral surgery services per visit among card-holders seeking general dental care in 1996 was half the rate of oral surgery services per visit among card-holders seeking emergency dental care (0.16 compared with 0.32 services per visit) after 24 months of the CDHP. Oral surgery services remained higher among patients who were young, male, Aboriginal, emergency care seekers, in rural areas, or who were new patients to public-funded dental care. The rate of restorative services per visit among card-holders seeking general dental care was nearly 1.5 times the rate of restorative services per visit among card-holders seeking emergency dental care (0.80 compared with 0.57 services per visit) after 24 months of the CDHP.

4.8 Satisfaction with dental care

Satisfaction reflects the extent to which the dental care persons receive meets their needs, expectations, and whether it is considered an acceptable standard of service. Satisfaction is both an important outcome of care and a determinant of future patterns of care. Satisfaction scores were measured for dentate adult persons whose last dental visit was in the previous 12 months. Satisfaction scores for card-holders who last received public-funded dental care at a public dental clinic were lower in 1994 than the scores for non–card-holders who last went to a private dentist. Among non–card-holders who last went to a private dentist there was little change in overall satisfaction score (4.26 to 4.30) or the three sub-scale scores for context (4.30 to 4.38), content (4.25 to 4.24) and outcome (4.29 to 4.27).

(a) Changes in satisfaction

Among card-holders who last received public-funded dental care the overall satisfaction score increased markedly (3.69 to 3.93) and there were increases in each of the three sub-scales: context (3.68 to 3.89); content (3.68 to 3.98); and, outcome (3.66 to 3.79). Most of the improvement in satisfaction scores among card-holders who last received public-funded dental care came from those whose care was public-funded at a private dentist. This group had satisfaction scores equal to those non–card-holders who last visited a private dentist. Less substantial increases in satisfaction occurred over the 24 months of the CDHP among card-holders who last visited a public clinic. The overall satisfaction score for card-holders who last visited a public clinic increased (3.67 to 3.79), as did the sub-scale score for content (3.66 to 3.84) and outcome (3.65 to 3.71). There was no change in the sub-scale score for satisfaction with context among card-holders who last visited a public clinic (3.67 to 3.68).

(b) Gaps in satisfaction

The gap in satisfaction scores between card-holders who last received public-funded dental care and non–card-holders who last received care from a private dentist narrowed over the 24 months of the CDHP. This was predominantly due to the higher satisfaction scores among card-holders who last received public-funded dental care from private dentists, with rather less improvements in satisfaction scores among card-holders who last received public-funded dental care at a public clinic. Any expectation of dramatic improvements in satisfaction scores among card-holders who received public-funded care at a public clinic is unrealistic. Some aspects of satisfaction cannot be achieved in the short-term within the public clinic system of dental care delivery. There are constraints on the choice of dentist, seeing the same dentist each visit and treatment options. These issues arise after many card-holders have waited a considerable time for appointments. All these issues influence satisfaction scores, especially sub-scale scores on context.

4.9 Implications for future public-funded dental care

The CDHP performance over the 24 months following its implementation provides indications of a number of issues that might be considered in any future public-funded dental care. The following discussion briefly identifies and discusses a number of the more salient issues.

Public-funded dental care has been characterised by high demand for limited resources. This has led to long waiting times for general dental care. This disincentive to wait for general dental care from public clinics has encouraged card-holders to either seek emergency dental care or private dental care financed out of their own pocket. Both of these later situations have been associated with unacceptably high rates of extraction of natural teeth. With high numbers of emergency patients, public clinics become trapped in a cycle of addressing only main complaints, frequently by extraction of teeth, while individuals facing hardship with purchasing general dental care from private dentists have frequently opted for extraction of teeth.

Any effort to improve access to dental care for adults faces two core tasks: altering the nature of dental care provided to card-holders seeking public-funded dental care and increasing the number of card-holders who are able to access dental care in any year. Both tasks can absorb substantial additional funds. Only a minority of card-holders receive public-funded dental care in any one year. Those most in need may not necessarily be among those receiving public-funded dental care. Given limited resources it would be desirable to introduce specific targeting of public-funded dental care to those card-holders most in need. Criteria for need may be duration of financial hardship, permanent physical, social or mental disability, extent and severity of unmet dental needs, or likely compliance of persons with recommended dental health behaviours. Such criteria, either individually or in combination, may target those in need leading to optimal equity and oral health gains among card-holders from future programs. Further, it would be possible to introduce differential categories for priority in accessing dental care of a varying nature. This would create different waiting times for different dental care. Measures like these could assist in further improving the equity in public-funded dental care.

There were clear indications that the CDHP altered the nature of services being provided in public-funded dental care. Card-holders received fewer extractions (among those receiving emergency dental care) and more fillings (especially among those receiving general dental care). However, the intention behind the visits had not altered. Both the self-reported reason for seeking care and the providers' classifications of the type of course of care indicated that there was little movement away from emergency dental care to general dental care. As problem-oriented visiting or emergency dental care are both associated with higher rates of extraction and lower rates of fillings for decayed teeth (and little or no preventive dental care), the continuation of a sizeable proportion of card-holders in emergency dental care limits the gain that can be made in changing the nature of services provided.

This could be addressed by curtailing emergency dental care by the introduction of more restrictive criteria on the urgency of needed dental care. An alternative, which could be pursued in combination or separately, is the introduction of a co-payment for emergency dental care. This might assist in depressing the demand for emergency dental care, the urgency or priority of which can frequently not be validated. As general dental care is associated with more comprehensive (and costly) care, any move in this direction should be accompanied by more restrictive targeting and the introduction of priority categories for length of waiting time and different levels of dental care.

Any gain in moving away from emergency to general dental care can be reinforced by the incremental development of systems for recall of card-holders for check-ups. Establishing a pool of card-holders with continuity of care would allow the monitoring of individual oral health outcomes, delivery of appropriate preventive care, and improved provider and card-holder satisfaction with dental care. Continuity of care reduces the average cost of care provided and allows higher percentages of eligible card-holders to be covered by the resources available for public-funded dental care.

Reaction of providers to the CDHP has not been a formal aspect of its evaluation. However, it offers an important extra dimension to any consideration of its effectiveness and directions for future policy (Butler, 1996; Pavia, 1995).

Under the CDHP, States and Territories developed policies that varied considerably in the balance of public clinic or private dentist provision of public-funded dental care. The expansion of the provision of public-funded dental care through public clinics suffers from lag times in adding additional clinic facilities and attracting dentists and other staff. Where public clinics were given more emphasis in the provision of additional care, new arrangements to increase facilities were still emerging. This included the development of intern programs for dental graduates. Improved management of the provision of additional dental care also takes time to emerge. This includes both the development of management information systems and innovative guidelines for clinical care and patient management. Public dental authorities were progressing in these areas which need further emphasis in the on-going provision of public-funded dental care.

The majority of private dentists, when offered the opportunity to participate in providing public-funded dental care, did so. As eligible card-holders receiving public-funded dental care from private dentists were approximately 2.4 per cent of all adults using dental services in any one year, many private dentists provided care to

only a small number of eligible card-holders under the CDHP. Concerns emerged from private dentists about:

- the restricted scope of benefits (especially under the Emergency Dental Scheme which dominated care provided by private dentists);
- fees paid for items of care; and
- particular administrative arrangements such as the separation of emergency and general dental care.

Most of these concerns could be addressed by policy changes leading to restrictions on emergency care and emphasis on more comprehensive, but highly targeted general dental care.

A number of secondary benefits can be identified under the CDHP. These include the development of a dental policy focus in the Commonwealth Department of Health and Family Services and the support of management information systems in the States and Territories, required annual dental plans, and participation in the monitoring and evaluation of adult access to dental care (conducted by the Australian Institute of Health and Welfare's Dental Statistics and Research Unit). A better informed environment emerged which could sustain more detailed dental health policy analysis, leading to improved service and oral health. Further, a number of smaller ancillary activities were supported such as the Remote and Aboriginal Dental Care Demonstration Projects and Rural Dental Projects under the National Oral Health Advisory Committee and the Quality Assurance Program which was in development. These were important public dental health initiatives and rare instances of a national focus on oral health and dental care in Australia. Future dental policy should give more weight to the secondary benefits of public-funded dental care.

4.10 Summary

The CDHP increased the number of eligible card-holders who received public-funded dental care in any year, reduced their waiting time, increased their satisfaction with care, and moved the provision of services in the direction of less extractions and more fillings. However, the CDHP did not achieve a shift from emergency to general dental care as desired during the 24 months after its implementation, which will have limited the movement away from extractions and added to provider dissatisfaction.

In the comparatively short time that it operated, the CDHP achieved improved public-funded dental care for more card-holders. However, card-holders are still disadvantaged in terms of their oral health and access to dental care. Future initiatives to improve access to care and the oral health of disadvantaged Australian adults can benefit from more restricted targeting of eligibility, and altered procedures for the provision of care so as to give more emphasis to general dental care.

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