



**AUSTRALIAN DENTAL
ASSOCIATION INC.**

2007-08 PRE-BUDGET SUBMISSION

24 November 2006

**Authorised by
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EXECUTIVE SUMMARY

The oral health of the Australian population is neither very good nor very bad. Many in the community enjoy good oral health, aided by timely access to high quality dental care. By contrast, others in the community suffer from poor oral health, spending excessive periods – sometimes years – waiting to receive basic dental care in our public system. For a country with the financial means such as Australia this situation reflects poorly on our health system.

The Australian Dental Association (ADA) believes that the Commonwealth, States and the Territories should do more to address poor oral health. Most importantly, the Commonwealth can no longer abrogate its responsibility to the States and must take up a leadership role to improve the oral health of the Australian population. It is clear the States and territories are not meeting the needs of large sections of the community. This cannot be an excuse as to why the Federal Government should not be involved. These sections of the community need dental services and if the States and Territories are not delivering such services then responsible leadership by the Federal Government dictates that it must provide this most basic of service to these sections of the community. As Australian residents and taxpayers, it is the Federal Government's function to address this shortcoming to ensure proper provision of dental services to the community.

The Commonwealth Government's current contribution to dental expenditure is largely confined to subsidies through the 30% rebate for private health insurance. The Commonwealth provides no direct expenditure for services for people on low incomes, yet this is the group which has the highest prevalence of dental disease and has the greatest difficulty in accessing dental care in our community. Since the cessation of the Commonwealth Dental Health Program, the Commonwealth, States and Territories have engaged in a 'blame game', avoiding responsibility for providing adequately funded dental care for financially disadvantaged Australians.

The National Oral Health Plan has identified what has to be done. Its recommendations are not being implemented; so action by governments, not "blame games," is immediately required.

The ADA's pre-budget submission outlines a clear plan to improve the oral health of the Australian population. In some areas we repeat calls made in our 2006-07 submission, while in others we highlight new areas for action. In both cases, this submission identifies areas where investment by the Commonwealth Government (which in some cases would be at modest levels) would lead to significant improvements in oral health for many in the Australian community.

ADA recommendations for additional expenditure in 2007-08

Item	Additional Funding for 2006-07 (\$)
Dental Workforce and Higher Education	\$4,070,000
Commonwealth Funded National Oral Health Program	\$275,000,000- \$352,000,000.
Indigenous Oral Health	\$2,000,000
Older People	\$10,550,000
Children and Adolescents	\$ 5,000,000
Additional items for Medicare – Anomalies Of The Dentition	\$9,425,000
Oral Health Promotion	\$4,000,000
Federal Chief Dental Officer	\$300,000
TOTAL	\$310,345,000- 387,345,000.

INTRODUCTION

The Australian Dental Association (ADA) is the national body representing approximately 10,000 registered dentists engaged in clinical practice. The primary objectives of the ADA are to promote the practise of evidence-based dentistry and encourage access for all Australians to affordable preventive oral care. Each State and Territory has its own Branch, with individual dentists belonging to both their home state Branch and the national body. Further information on the activities of the ADA and State and Territory Branches can be found on the ADA website at www.ada.org.au.

Submission outline

This submission is broken into four parts:

Part 1: Dental Workforce and Higher Education.

Part 2: Access to Dental Care:

- Commonwealth Funded National Oral Health Program
- Indigenous Oral Health
- Older People
- Children and Adolescents
- Additional Items for Medicare – Congenital Anomalies of the Dentition.

Part 3: Oral Health Promotion.

Part 4: Federal Chief Dental Officer.

Additionally, this submission provides background information summarising expenditure on dental care in Australia over the past 10 years, as well as providing a summary that compares expenditure by each State and Territory (see Appendix).

Part 1: Dental Workforce and Higher Education

“The ADA is ... concerned that not enough is being done to rectify the current dentist shortage, particularly in rural and remote areas and in the public sector.”

DENTAL WORKFORCE AND HIGHER EDUCATION

Workforce

Although Australian dental schools have increased the intake of dental students in recent years, the ADA is still concerned that not enough is being done to rectify the current dentist shortage, particularly in rural and remote areas and in the public sector.

The shortage of dentists is a feature shared with other allied professional groups such as medicine and nursing.¹ Australia's dental workforce is low by international standards, ranking nineteenth out of 29 OECD countries² with a ratio of 47.4 dentists per 100,000 population.³ Workforce shortages are most significant in areas away from metropolitan centres, as will be explored in further detail below. Today, the number of dental graduates from Australia's dental schools is one-third lower than in the 1970s. Graduation levels are at their lowest level for over 50 years⁴ and the number of dental graduates would need to increase by 150 each year for the Australian dental workforce to be sustainable in the medium to long-term.⁵

In addition to workforce shortages, the existing dental workforce is ageing. In 1994, 43% of practising dentists were aged 40 years or under and by 2000, this had fallen to 36.2%. Also in 1994, 28.6% of practising dentists were aged 50 years and over and this had increased to 31.9% by 2000.⁶ As increasing numbers of baby boomer dentists are moving towards retirement years there is potential for a generational void in the dental workforce.⁷ Shortages in the supply of dentists come at a time when demand for care, and in particular care for those requiring complex treatments, is projected to rise. According to Spencer et al:⁸

“The capacity to supply visits is projected to fall well short of the Australian population's demand for dental visits ... If trends in demand continue, even at half [emphasis added] the pace observed during 1983-1998, Australians' demand for dental visits will increase from 23.8 million visits in 1995 to 33.2 million visits in 2010. The increase in demand is projected to be predominantly among middle-aged and older Australians, and for diagnostic, preventive, endodontic and crown and bridge services. The aggregate projected shortage in supply in 2010 is about 3.8 million visits, which equates to approximately 1,500 dental providers.

Workforce shortages are not just restricted to practising dentists. Dental schools are facing the immediate difficulty of attracting and retaining teaching staff, a trend that is common in a number of developed countries.⁹ One reason for this is due to the gap between academic salaries and remuneration for dentists working in private practice.¹⁰ In addition to an overall workforce shortage, there is a maldistribution in the dental workforce. As Table 1 shows, workforce shortages are most acute in outer regional and remote/very remote parts of Australia.

Table 1: Estimated practising dentists and dentists per 100,000 population by ASGC Remoteness Area of main practice location, 2001

Practising dentists per 100,000 population					
State/ Territory	Major city	Inner regional	Outer regional	Remote/ very remote	Australia
NSW	57.0	33.6	18.1	11.1	49.0
VIC	52.4	28.4	22.8	0.0	45.7
QLD	55.7	39.8	34.2	10.6	45.9
SA	66.0	23.5	28.1	27.1	54.7
WA	55.8	32.0	34.9	17.7	48.0
TAS	n.a.	39.2	9.6	0.0	28.2
NT	n.a.	n.a.	36.6	13.8	26.1
ACT	56.0	0.0	n.a.	n.a.	55.9
Australia	56.2	33.6	26.6	22.9	47.4

Source: Teusner, D. N. (2005) 'Geographic distribution of the dentist labour force', Australian Research Centre for Population Oral Health, *Australian Dental Journal*, Vol. 50, No. 2, pp. 119-122.

Note: n.a denotes not applicable.

The impact of workforce shortages is also felt strongly in the public sector. For example, the recent inquiry into dental services in NSW reported a vacancy rate of 20.2% for general dentists and 16.8% for specialist dentist positions in the NSW public sector.¹¹ Such shortages add to the difficulty experienced by those Australians on public dental waiting lists in accessing care. As the ADA has previously reported, over 600,000 people are on waiting lists throughout Australia, with waiting times stretching beyond three years in some parts of the country.¹² It is acknowledged that recently the output of students and overseas graduates has increased. In fact there needs to be a study commissioned to estimate future workforce needs

Higher education

Today's generation of dental students are graduating with higher debts than previous generations. According to The University of Melbourne's Vice Chancellor Glyn Davis, funding to Australian universities is one-third less today than in the mid-1970. For the previous generation, higher education was free while for today's students, higher education costs are the fifth highest in the OECD. For OECD countries, Australia is the only country where government funding per student has fallen since 1995.¹³

While the ADA does not believe that the prospect of higher student debts will necessarily reduce the number of students applying to study dentistry, it is nonetheless concerned that dental graduates – commencing their professional career with significant student debts – will be less likely to work in areas of need, such as the public sector, where remuneration is lower than in the private sector. A recent study of dental graduates' workforce preferences by Sivla et al.¹⁴ found that dental workforce shortages in the Victorian public sector are due to the difficulty in retaining staff in that sector. According to the authors:

“The problems associated with retention in the public sector are significant, with almost 50 per cent of recent graduates who initially

chose to work in the public sector in the past four years have already left or are intending to leave in the next two years. This is remarkable when compared with only two per cent who intend to leave the private sector.”

The same study points out that the decision by recent graduates to move into the private sector is motivated by a range of factors, including continuity of patient care, work environment, a broader range of clinical experience, and remuneration. In its submission to the New South Wales parliamentary inquiry into dental services, the ADA NSW Branch¹⁵ highlighted the disparity in wages for dentists working in the private sector compared to those in the public sector. As Table 2 shows, recent graduates who work in the private sector can earn significantly more (up to \$130,000) than those in the New South Wales public sector (\$56,223) or the Queensland public sector (\$65,954).

If graduates eschew the public sector in favour of the private sector, trends in the maldistribution of the Australia’s dental workforce will widen and public sector waiting lists will continue to grow.

Table 2: Remuneration for dentists with two years post graduation experience

NSW public sector	QLD public sector	Private health insurance clinic	Private practice
\$56,223	\$65,954	\$90,000	Up to \$130,000

Source: NSW Legislative Council (2006) *Dental Services*, Standing Committee on Social Issues, p. 58. (Information based on ADA NSW Branch submission to Legislative Inquiry.)

The ADA is concerned that dental schools/faculties – which are under severe financial strain – will become increasingly reliant on full-fee dental students as one measure to raise much needed revenue. Such a move would be consistent with Tennant and McGeachie’s¹⁶ contention that “the diminution of Federal Government funding (has lead) to a point where the financial viability of some schools is maintained only by supplementary funding”. In response to a question from the NSW Parliamentary Inquiry examining dental services in that state, the Dean of the University of Sydney’s Dental Faculty, Professor Eli Schwarz¹⁷ argued that “there can be little doubt that the Commonwealth funding provided for HECS students in dentistry does not cover the full cost of their tuition”.

ADA recommendation:

Additional Commonwealth Government funding should be provided to:

- *Immediately increase the number of Commonwealth-supported (formally HECS) places in dental schools for Australian dental students.*
- *Increase funding per dental health student at accredited educational institutions.*
- *Create further scholarships for dental students from rural and remote parts of Australia as one measure to address the maldistribution of dentists.*

(The ADA advocates the creation of RAMUS-type scholarships for dental students.)

- *Extend the existing relocation program for medical general practitioners and specialists to dentists. Currently, “doctors can apply for grants of up to \$30,000 to establish a new practice, or up to \$20,000 to join an existing practice in an area of doctor shortage”.¹⁸ The ADA believes a similar program should be created to attract dentists from well serviced metropolitan areas to work in regional, rural and remote areas.*
- *With the support of State and Territory Governments introduce an optional clinical placement year for graduating dentists. This placement year, to be served in the public dental sector, would increase access to dental care for public sector patients and significantly reduce waiting lists. The ADA proposes that dental students who participate in this program receive a reduction of 25% off their HECS bill for each year of placement. Funding for this program should be equally shared by between the Commonwealth and State and Territory Governments.*
- *Create a moratorium or debt forgiveness on for all dental graduates who in turn agree to provide their services in regional, rural and remote areas or in the public sector. The extent of the moratorium or debt forgiveness could reflect the period of time the dental graduate undertakes practice in these particular areas. The longer the period of guaranteed service in regional, rural or remote areas, the greater the moratorium or debt forgiveness.*
- *Provide financial assistance to Schools of Dentistry to assist with recruitment and retention of academic staff to alleviate shortages in the current academic dental workforce.*
- *Fund the establishment and ongoing costs of dental school rural clinics and associated student/intern accommodation.*
- *Commission a study of future workforce needs*

ADA recommendation for expenditure in 2007-08 for dental workforce and higher education

Item	Sub-total	TOTAL
30 additional Commonwealth Supported dental students	\$18,000 per student	\$540,000
15 dental student scholarships	\$25,000 per scholarship	\$375,000
15 dentist relocations	\$25,000 per relocation	\$375,000
3 academic positions per dental school (total 18 positions)	\$150,000 per position	\$2,700,000
Debt forgiveness	10 students – 25% CSP debt discount per year (based on \$32,000 student debt)	\$80,000
TOTAL		\$4,070,000

Part 2: Access to Dental Care

“The ADA calls on the Commonwealth Government to take a leadership role to improve access to dental care for those most disadvantaged in Australia.”

COMMONWEALTH FUNDED NATIONAL ORAL HEALTH PROGRAM

In its 2006-07 pre-budget submission,¹⁹ the ADA called on the Commonwealth Government to take a leadership role to improve access to dental care for those most disadvantaged in Australia. As the ADA has previously pointed out, there are more than 600,000 Australians on waiting lists for public sector dental care, with waiting periods extending beyond three years in some parts of Australia.²⁰

In this submission the ADA repeats the call made in 2006-07. That is, the Commonwealth Government should take immediate and significant steps to improve the delivery of dental care in the community, with a particular emphasis on providing funding for dental care to those who are most financially disadvantaged. The time has long passed where dental professionals and the broader community can accept the Commonwealth and the State and Territories blaming each other for the problem of poor oral health in Australia.

The need for leadership by the Commonwealth was recently expressed in a national report on the state of dental care by the Australian Council of Social Service (ACOSS).²¹ ACOSS argued:

“The Commonwealth Government’s current Budget surplus is in excess of \$10 billion and the Prime Minister and the Council of Australian Government’s recently demonstrated how national leadership can drive implementation in the case of mental health policy and cancer services ... [There is] the continuing need for the Commonwealth Government to increase its funding commitment and exercise its leadership in planning amore efficient, sustainable and equitable system of oral health promotion, prevention of disease, and treatment.” (p. 3)

Of most concern to the ADA is the lack of access to dental care experienced by people from financially disadvantaged backgrounds. Socio-economically disadvantaged groups rate their oral health poorer than more advantaged groups and report more tooth loss and more problems with their teeth, mouth or dentures than advantaged groups.²² The impact of poor oral health is significantly higher for people without private health insurance (who are more likely to be low-income earners) than those with private health insurance.²³ People on concession cards are 20% less likely to visit a dentist than non-card holders and are more than two times as likely to have a tooth extracted.²⁴ People who are disadvantaged by socioeconomic status experience greater levels of oral disease than those from more affluent groups. This has been acknowledged by Australia’s National Oral Health Plan²⁵ which argues that “profound disparities exist across socio-economic groups in Australia ... [as] the incidence of caries and periodontal disease increases as socio-economic status decreases.” Spencer²⁶ has referred to this as the “polarisation of the burden of [oral] disease”.

A significant misconception held by many is that poor oral health behaviour is the reason why people who are disadvantaged by socio-economic status experience poor oral health. As Table 3 shows, contemporary research challenges this notion by showing that people from disadvantaged groups are as equally inclined to practice oral health self-care as those from more affluent groups. By contrast, socio-economic status is strongly associated with access to dental care (dental visiting) as people from advantaged areas are more likely to visit a dentist than people from disadvantaged areas. In turn, this positively impacts on oral health.²⁷

Table 3: Mean scores for dental visiting and dental self-care according to levels of socioeconomic disadvantage of areas (grouped as quintiles) – adjusted for age in years

Index of Relative Socioeconomic Disadvantage (IRSD) quintiles*	Dental visiting – adjusted for age	Dental self-care – adjusted for age
Low	2.36	2.39
Low to moderate	2.49	2.39
Moderate	2.48	2.39
Moderate to high	2.54	2.30
High	2.73	2.51

Source: Sanders AE, Spencer AJ and Slade GD (2006) 'Evaluating the role of dental behavior in oral health inequalities', *Community Dentistry and Oral Epidemiology*, 34: 71-79.

* Higher IRSD indicate lower levels of disadvantage.

(This table shows that people from areas of socioeconomic disadvantaged [low IRSD] are as equally inclined to practice oral health self-care as those from more affluent groups, however, are less likely to visit a dentist than people from areas of socioeconomic advantage.)

ADA recommendation:

As access to dental care is associated with oral health status, the ADA believes that the Commonwealth Government should provide targeted funding to improve access to dental care for financially disadvantaged groups. This could take the form of a program similar, to the former Commonwealth Dental Health Program but with necessary improvements to overcome shortcomings that existed there. Such a Program should be jointly conducted by the Commonwealth and State and Territory Governments, and would improve access to dental care to socio-economically disadvantaged groups.

The development of this program should achieve uniform criteria for:

- *Emergency care*
- *Restorative care*
- *Incentives for disease prevention*
- *Health maintenance opportunities.*

ADA recommendation for expenditure in 2007-08

Two patients per week for 46 weeks each year by 8500 dentists at \$350-\$450 per visit: \$275,000,000-\$352,000,000.

INDIGENOUS ORAL HEALTH

Health outcomes for Aboriginal and Torres Strait Islander people are much worse than for the general population. Aboriginal and Torres Strait Islander people experience greater levels of disease and disability, die much younger and experience a poorer quality of life due to ill health.²⁸

For Indigenous males, life expectancy is 59.4 years compared to 76.6 years for non-Indigenous males. For Indigenous females, life expectancy is 64.8 years compared to 82.0 years for non-Indigenous females. For all age groups, mortality rates for Indigenous Australians are almost three times higher than non-Indigenous Australians.²⁹

The oral health of Aboriginal and Torres Strait Islander people is consistent with their poor general health. In 2003-04, for example, there were approximately 2,000 hospital admissions for Aboriginal and Torres Strait Islander people due to oral conditions.³⁰

Until the 1980s Aboriginal children were recognised as having better oral health than non-Aboriginal children. During 1998-2000, tooth decay and the number of missing teeth doubled for Aboriginal adults aged 35-44 years, while the number of filled teeth grew three-fold. Complete loss of all natural teeth (edentulism) was higher for Aboriginal people of all age groups (16.2%) compared to non-Aboriginal people (10.2%).³¹

Today, average rates of tooth decay in Aboriginal children are twice as high as non-Aboriginal children.^{32,33} A recently published Western Australian study of pre-school children found only 26% of Aboriginal children were caries-free compared to 51% for non-Aboriginal children. The same study also showed that the average number of decayed, missing and filled teeth for Aboriginal children was 4.29 compared to 1.89 for non-Aboriginal children.³⁴

Factors that contribute to the poor oral health of Aboriginal and Torres Strait Islander people include:

1. Poor access to dental care – many Aboriginal and Torres Strait Islander people live in remote parts of Australia. In these communities there are fewer dental services and people are required to travel further to obtain care.^{35, 36}
2. Lack of access to fluoride – fluoridation of drinking water is a highly successful public health measure that prevents dental decay.³⁷ Despite this, rural and remote areas of Australia are less likely to be fluoridated than metropolitan areas, reducing access for many Aboriginal communities.³⁸ In 2005, Armfield³⁹ found that decayed, missing and filled teeth (dmft) in 5-6 year-olds was between 47% and 75% higher in non-fluoridated areas compared to fluoridated areas.

3. Greater exposure to risk factors such as smoking, poor diet, alcohol, stress and trauma that contribute to dental caries, as well as a range of other health problems such as heart disease, stroke, cancer, diabetes.^{40,41,42}
4. Social exclusion, unemployment, stress and addiction, which all contribute to poor health, including poor oral health.^{43, 44, 45}
5. Changing lifestyle patterns – a change from a traditional diet (high in fibre and sugar and low in saturated fats) to one high in sugar, saturated fats and refined carbohydrates is reflected in the poor oral health of Indigenous Australians. Additionally, access to fresh fruit and vegetables is particularly difficult for many living in remote communities.^{46,47}

ADA recommendation:

Initiatives in the areas of Indigenous health should focus on the provision of primary care, particularly through the involvement of Aboriginal health workers. In the short to medium-term, this necessitates the need for Aboriginal health workers to receive oral health training which focuses on oral health promotion. In the long-term, additional vocational and higher education places should be set aside to increase the number of Aboriginal and Torres Strait Islander people working in oral health.

Immediate effort is required to reduce risk factors – such as poor diet, alcohol misuse, poor living conditions, and poverty – associated with the poor oral health of Aboriginal and Torres Strait Islander people.

Steps are also required to improve diet, access to dental care and to increase access to fluoridated water supplies.

ADA recommendation for expenditure in 2007-08

Recommendation	Sub-total	TOTAL
Oral health training for Aboriginal health workers	\$1,000,000	
Vocational training assistance for Aboriginal dentists	\$700,000	
Fluoridation facilities	\$300,000	
TOTAL		\$2,000,000.

OLDER PEOPLE

For people aged over 65 years, the prevalence of tooth decay, gum disease and oral cancer is higher than for the general population. Access to dental care can become more difficult as people get older, while oral diseases have the potential to impact negatively on older people's general health and social functioning.

Long-term oral health trends highlight good and bad news for Australia's ageing population. On the positive side, older people are retaining their natural teeth in greater numbers than before. In 1979, 60% of older people had no natural teeth. By 1989, this had fallen to 44% and is expected to drop to 20% by 2019.⁴⁸

The bad news is that older people experience a range of oral health problems at greater rates than the general population. Prominent amongst these are dental decay, gum disease, dry mouth and oral cancer. Teeth extractions associated with gum disease increase with age.⁴⁹ As Table 4 shows, people aged over 65 years have higher rates of edentulism (missing teeth), few sound teeth and more filled and decayed teeth than the general population.

Table 4: Edentulism rates and mean numbers of sound, filled and decayed teeth for older Australians, 1988-97

	All Australians aged 5+ (1988-89)	Adults aged 65+ (1996)	Nursing home residents (1997)
Edentulous (%)	16%*	38%	66%
Sound teeth	13.1	8.7	7.0
Filled teeth	5.6	8.3	3.8
Decayed teeth	1.1	0.3	1.1
Total number of teeth	19.8	17.3	11.9

Source: Australian Health Ministers' Advisory Council (2001) *Oral Health of Australians: National Planning for Oral Health Improvement*, Final Report, Steering Committee for National Planning for Oral Health, p. 36.

* Data only available for people aged 20 years and older

These problems are not specifically related to old age, but as the Australian Health Ministers' Advisory Council⁵⁰ argue:

"The cumulative effects of oral disease throughout life become apparent in old age. In addition, the many chronic and systemic diseases that have been associated with poor oral health become more prevalent".

Older people living in residential accommodation and older people with dementia have particular oral health problems. These include declining cognitive status, poorer general health, declining physical functioning, difficulties with swallowing, and nutritional problems. Oral diseases and related conditions can lead to pain, problems with speech, discomfort when eating certain foods and concerns about self appearance.⁵¹

Despite research highlighting the relatively poor oral health status of Australia's older population, the ADA considers that too little is being done to redress this. The ADA believes that the Commonwealth Government should provide leadership to implement the range of initiatives outlined in Australia's National Oral Health Plan to improve older people's oral health. Amongst a number of key points, the Plan calls for:

- Improved oral health assessments through the Home and Community Care program and the Aged Care Assessment Service.
- Improved oral hygiene programs to assist people older people to live independently in the community.
- Ensure that oral health is taken into account when developing a care plan for people in residential accommodation.
- More affordable transport to enable older people to attend dental appointments.
- Greater funding for public dental care.

The ADA has undertaken 2 very effective pilot programs in South Australia and Queensland. Any approach adopted should only be developed after review of these programs.

ADA recommendations:

The Commonwealth Government should provide leadership to implement the range of initiatives outlined in Australia's National Oral Health Plan to improve older people's oral health. Amongst a number of key points, the Plan calls for:

- *Mandatory and uniform oral health assessments through the Home and Community Care program and the Aged Care Assessment Service.*
- *Improved oral hygiene programs to assist people older people to live independently in the community.*
- *Secure sufficient resources to ensure that oral health is taken into account when developing a care plan for people in residential accommodation.*
- *More affordable transport to enable older people to attend dental appointments.*
- *Greater funding for public dental care.*
- *Development of additional professional education for dental health professionals in the oral health needs of older people and in the training of carers and nursing home staff.*
- *Initiate appropriate regulatory changes to enable dental hygienists under dentist oversight to provide services to eligible older persons through Home and Community Care programs and aged care assessment.*

ADA recommendation for additional spending in 2006-07

Recommendation	Sub-total	TOTAL
Oral health examination for residents in aged care accommodation (assuming 60,000 examinations annually)	\$100 per examination	\$6,000,000
Development of oral health plan for each person in residential accommodation	\$2,000,000	\$2,000,000
Oral health training manual	\$250,000	\$250,000
Portable dental equipment	\$2,000,000 plus \$300,000 per year to support	\$2,300,000
TOTAL		\$10,550,00

CHILDREN AND ADOLESCENTS

Although the oral health of Australian children is generally of a high standard (ranking second best among OECD countries.⁵²), recent trends are showing a decline in childhood oral health status. Deciduous decay across children of all age groups increased during the period from 1996-1999. (This increase followed a fall in rates of decay from 1991-1996.) The trend since 1996 was most significant for five year old year old children, who experienced a 21.7% increase in deciduous decay during this period.⁵³

Indigenous children are a significant population group with poor oral health. According to the Australian Institute of Health and Welfare's (AIHW) Dental Statistics and Research Unit.⁵⁴

“Aboriginal and Torres Strait Islander children have more than twice the caries rates of non-Indigenous children in the deciduous dentition. Dental caries in the permanent dentition among 12-year-old Indigenous children is almost twice that of non-Indigenous children. Dental caries rates in Indigenous children seem to be increasing.”

ADA recommendation:

Additional government funding should be allocated to:

- *Ensure adequate funding is provided so that all children, regardless of their social and economic circumstances can access and receive an oral examination and treatment.*
- *Provide additional funding for the increase in incidence of school dental services through out the country.*
- *Oral health promotion that targets adolescents. It should take into account risk factors – such as poor diet, eating disorders, soft drink consumption, obesity and smoking – that contribute to poor adolescent oral health.*

ADA recommendation for additional spending in 2006-07

Recommendation	Sub-total	TOTAL
Provision of additional funding to supplement school dental services-estimate only	\$2,500,000	
Funding for oral health promotion activities-estimate only	\$2,500,000	
TOTAL		\$5,000,000.

ADDITIONAL ITEMS FOR MEDICARE – CONGENITAL ANOMALIES OF THE DENTITION

Disturbances in both the form and structure of tooth development may be genetic in aetiology. Some of these inherited disorders occur in isolation whilst others are associated with various additional systemic disorders. The more common of these disorders is Amelogenesis Imperfecta (AI) which is a group of inherited disorders of tooth enamel (recent estimations suggest a prevalence of 1:4000 births). Defects in the structure and function of dentine also exist. Whilst this latter condition, Dentinogenesis Imperfecta (DI) is less common, (approx 1:8000 children) the affect on the dentition is catastrophic structurally, functionally and aesthetically.

As a result of their genetic aetiology these conditions create a disproportionately high burden of care for a small number of families. In addition to being at increased risk of dental caries, tooth wear and periodontal disease, individuals with these anomalies are reported to have reduced quality of life, self esteem and social functioning. Anxiety and cost are the two main barriers to these families in seeking appropriate treatment. Outcomes are significantly improved if preventive and restorative care is implemented early. Long term most of these individuals will require comprehensive full mouth rehabilitation the outcomes of which are optimized by good paediatric oral healthcare.

ADA recommendations:

That the Commonwealth Government provides funding through additional MBS items for treatment for the following groups: (Prevalence and cost based on those for the state of Victoria in 2005, then extrapolated for Australia).

Pre-school

- *Total number of affected individuals aged 1 – 5 years in Victoria = 15.*
- *Estimated total number for Australia = 50*
- *Mean cost per child of treatment = \$2500 per child.*
- *Sub-total = \$125,000.*
- *Nature of treatment required – Principally preventive and protective restorative treatment. For example, stainless steel crowns and anterior strip crowns to prevent tooth tissue loss, sensitivity and caries whilst simultaneously improving aesthetics.*

Primary School

- *Total number of affected individuals aged 6-10 years in Victoria = 32.*
- *Estimated total number for Australia = 90*
- *Mean cost per child of treatment = \$4,300 per child.*
- *Sub-total = \$387,000.*
- *Nature of treatment required – Principally preventive and protective restorative treatment. For example, fissure sealants, cast onlays on first permanent molars and minimal preparation anterior veneers to prevent tooth tissue loss, sensitivity and caries whilst simultaneously improving aesthetics.*

High School

- *Total number of affected individuals aged 11-16 years in Victoria = 87.*
- *Estimated total number for Australia = 200*
- *Mean cost per child of treatment = \$15,000 per child.*
- *Sub-total = \$3,000,000.*
- *Nature of treatment required – Principally orthodontic with ongoing preventive and some protective restorative treatment E.g. Many of these children require routine orthodontic treatment prior to final full mouth rehabilitation. For certain types of AI, late orthodontic treatment and orthognathic surgery is required to manage the associated significant skeletal discrepancies. Ongoing minimal preparation of composite restorations is required for both prevention of wear and maintenance of aesthetics.*

Young adulthood

- *Total number of affected individuals aged 17- 22 years in Victoria = 76.*
- *Estimated total number for Australia = 180*
- *Mean cost per child of treatment = \$33,000 per child.*
- *Sub-total = \$5,940,000.*
- *Nature of treatment required – Principally prosthetic rehabilitation with some late orthodontics and orthognathic surgery. In some cases of AI, removal of the severely worn dentition and replacement of missing teeth using implants would optimize the outcomes. However this scenario will be limited to the most severely affected cases*

Adulthood

Ongoing maintenance will be essential particularly for those individuals with full mouth rehab.

ADA recommendation for additional spending in 2006-07

\$9,452,000

Part 3: Oral Health Promotion

“Additional government funding should be provided to promote good oral health. The most effective way to improve health and to reduce long term health costs is to invest in health promotion programs which focus risk factors that contribute to poor oral health.”

ORAL HEALTH PROMOTION

Oral health promotion recognises the link between oral disease and the broader social and economic determinants of oral health, taking into account the underlying cause of illness and disease.⁵⁵ This is recognised by *Australia's National Oral Health Plan*⁵⁶ which has adopted a "population health approach to oral health". The Plan argues:

"[That] programs, services and institutions of public health emphasise the prevention of disease and the health needs of the population as a whole. This approach has developed in response to growing recognition of the importance of the social, economic, cultural and environmental determinants of health".

The link between oral health and disease and general health and disease is an important aspect of contemporary oral health promotion.⁵⁷ Rather than focusing on single diseases, a contemporary oral health promotion recognises that many diseases – such as heart disease, stroke, cancer, diabetes and caries – share common risk factors including smoking, poor diet, alcohol, stress, hygiene and trauma and common health factors such as improved diet and exercise.^{58,59}

Research examining the social determinants of oral health has shown that social class, education, income, lifestyle, environmental factors, psychological stress and oral health behaviour are associated with variables of oral health status.⁶⁰

Over the past two decades, Governments throughout Australia have achieved success in delivering health promotion messages. Examples of successful campaigns include sun smart, quit smoking, injury prevention and the national alcohol campaign. In addition, successful screening programs have raised awareness and promoted the benefits of early detection through screening for breast, cervical and bowel cancer.

ADA recommendation:

The most effective way to improve health and to reduce long term health costs is to invest in health promotion programs which focus risk factors that contribute to poor oral health. The impact of a stronger focus on oral health promotion has the potential to be significant both from a health and financial perspective.

Further, a concerted effort is required to promote the benefits of water fluoridation. Fluoridation is a safe, effective and equitable public health measure to reduce the prevalence of dental caries in all age groups. It should be implemented and maintained in those communities where there is an insufficient natural fluoride content for this purpose.

ADA recommendation for additional spending in 2006-07

\$4,000,000

Part 4: Federal Chief Dental Officer.

Part 4: Federal Chief Dental Officer.

One of the major flaws in the approach taken by the Federal Government in relation to its role in dental care delivery is its fragmented approach. Currently, it participates in direct funding for dental services for Veterans and the armed forces, funding assistance for some Australians through the 30% rebate, provision of acute hospital care for dental emergencies, funding to the States and Territories and in respect of the aged delivery of some dentistry services, and the recent enhanced primary care scheme.

The ADA says that a more coordinated and sophisticated approach is required. The Federal Government has assumed a responsibility in delivery of medical care to the community. With ever increasing evidence of there being a clear relationship between good general health and good dental health, a level of responsibility should extend to dental care delivery.

The ADA says that the Federal Government ought to provide leadership on dental delivery by providing standards that have to be achieved in Australia to ensure that a minimum standard of dental health is achieved. The ADA is not calling for the Federal Government to assume the role of the provider of dental care but rather the assumption of a leadership role in ensuring that through various government agencies, Federal State and Territory, an appropriate level of service is assured for all Australians.

Elsewhere in this submission the ADA has provided information about the poor status of oral health in this country and the ADA says that this status has to be improved and a level of general dental health be achieved as befits our economic status within the world. Reference has been made to the “blame game” participated in by the Federal Government, State and territory governments. This constant attempted re-direction of responsibility by governments has to cease.

All governments have a responsibility to their constituents, to provide basic services and in the Australian community this extends to ensuring basic health services are provided including dental care. Governments must work and join together to ensure that this delivery is achieved.

It is no answer for the Federal government to point blame in the direction of others. If basic services are not provided then it is the responsibility of all governments, including the Federal Government, to ensure that they are provided.

The Federal Government must monitor dental care delivery and if it is found wanting in any state or territory sphere then it must step in to ensure this is rectified.

This can be done by either the calling on the State or Territory government to immediately respond and deliver requisite services or by the imposition of some economic or funding sanction being imposed on the State or territory

government until the required level and standard of care reaches the level dictated by the Federal Government.

The Federal Government has set in train a National Adult Oral Health Survey for which it is to be congratulated⁶¹. With the National Oral Health Plan having been agreed to by all levels of government, the time of publication of the Survey will create an ideal time for there to then be an analysis of how Australia is faring in relation to its oral health and to identify where action is required. Direction and focus to what needs to be addressed can then be implemented.

The ADA says that the creation of a Federal Chief Dental Officer within the Department of Health and Ageing at this time would enable an efficient allocation of resources to be created to take the steps required to remedy the areas of deficiency identified in the National Survey. This Federal Officer should be empowered to review the National Oral Health Plan and the results of the National Adult Oral Health Survey to then determine what steps need to be taken in Australia to achieve a level of oral health care delivery that the Governments consider befits Australia's status within the world. The ADA would be happy to add its expertise to any such review.

A national set of standards for oral health would be determined and a program devised nationally for those services to be delivered. The delivery program would be implemented as decided by all levels of government, with the Federal government taking a leadership role in determining if all levels of Government are delivering the services in accordance with the agreement reached.

ADA Recommendations:

1. *The creation of the position of Federal Chief Dental Officer.*
2. *The creation of standards that have to be achieved in Australia to ensure that a minimum standard of dental health is achieved.*
3. *The designation of responsibility for delivery of dental care between governments.*
4. *The monitoring of the quality of oral health delivery by governments.*
5. *If necessary, the implementation of sanctions upon those sectors of government who have not delivered services in accordance with the agreement reached.*

ADA Recommendation for additional spending in 2006-07

Creation of the position of Federal Chief Dental Officer	\$150,000
Supporting staff	\$150,000

APPENDIX

Dental Health Expenditure

The Australian Institute of Health and Welfare's recently published *Health Expenditure Australia 2004-05*⁶² confirms the trend of rising expenditure on dental services in Australia. As the table below shows, expenditure on dental care has risen from \$1.9 billion in 1994-95 to over \$4.7 billion in 2004-05. During this period, dental expenditure's share of total health expenditure grew from 3.8% to 5.7%.

Expenditure by individuals continues to account for the majority share of total dental expenditure, rising from 58.8% in 1994-95 to 67.3% in 2004-05. During the same period, the following trends were observed for other sources of funds:

- Direct outlays by the Commonwealth Government fell from 5.4% to 1.6% of total dental expenditure.
- Since its introduction in 1997-98, the 30% rebate for private health insurance, which provides subsidies for dental ancillary cover, has grown to account for 7.2% of total dental expenditure.
- Recent years has seen State, Territory and Local Governments increase spending on dental care. After peaking at 13% of total expenditure in 1999-00, State, Territory and Local Government expenditure fell to 8.1% in 2001-02 before rising to 9.9% in 2004-05.
- Rebates returned to patients by private health insurance funds continue to fall. In 1994-95 expenditure by private health insurance funds accounted for 28.1% of total dental expenditure. By 2004-05 this figure fell to 13.8%.

Expenditure on dental services by source of funds: 1994-95 to 2004-05 (\$ million)

	GOVERNMENT			NON-GOVERNMENT			Total
	Commonwealth Government			Health Funds	Individuals	Other	
	Direct Commonwealth Outlays	30% Rebate	State, Territory and Local				
1994-95	105		141	546	1,143	8	1,943
1995-96	152		205	564	1,149	10	2,080
1996-97	97		297	596	1,551	9	2,550
1997-98	44	32	328	600	1,611	8	2,623
1998-99	6	97	305	603	1,640	11	2,662
1999-00	69	193	373	442	1,794	11	2,882
2000-01	68	254	341	520	2,255	10	3,448
2001-02	71	280	329	666	2,727	12	4,085
2002-03	82	316	441	721	3,140	12	4,712
2003-04	77	321	445	706	3,054	9	4,612
2004-05	77	347	472	661	3,221	9	4,787

Source: Source: Australian Institute of Health and Welfare, 'Health Expenditure Australia', Various Years

Expenditure by State and Territory Governments

Expenditure on dental services by State and Territory Governments (see table below) ranges from a high of \$132.4 million in Queensland to a low of \$7.6 million in the Australian Capital Territory. Just as total dental expenditure varies considerably throughout Australia, there is also a considerable range in the level of per capita expenditure and expenditure per concession card holder by each State and Territory. (An examination of expenditure per concession card holder is important as eligibility for public dental care is generally limited to people with concession cards.)

As the table below shows, the Northern Territory spends the highest on a per capita basis (\$37.84) and per concession card holder (\$171.50). By contrast, New South Wales spends the least on a per capita basis (\$17.60) and per concession card holder (\$74.59) than any other State or Territory. Australia's third populous State, Queensland, spends the second highest on a per capita basis (\$32.81) and third highest per concession card holder (\$139.43). (As only 5% of Queensland is fluoridated, it is not surprising that that both decay and levels of dental expenditure are highest in that State.)

Total expenditure, per capita expenditure and expenditure per health card holder for States and Territories, 2005-06

	Dental Expenditure (\$)	Population	Per capita expenditure (\$)	No of concession card holders	Expenditure per concession card holder (\$)
NSW	120,000,000	6,817,100	17.60	1,608,864	74.59
VIC	126,300,000	5,078,500	24.87	1,254,324	100.69
QLD	132,400,000	4,035,700	32.81	949,566	139.43
WA	56,110,000	2,042,800	27.47	446,959	125.54
SA	47,200,000	1,552,300	30.41	432,513	109.13
TAS	14,500,000	488,700	29.67	149,879	96.74
ACT	7,585,500	328,100	23.12	50,607	149.89
NT	7,792,000	205,900	37.84	45,434	171.50
TOTAL	\$511,887,500	20,549,100	\$24.91	4,938,146	\$103.66

* Source: Australian Dental Association NSW Branch

** Source: Australian Bureau of Statistics, 3101.0 Australian Demographic Statistics, Accessed from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0> on 12 October 2006.

*** Source: Centrelink.

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REFERENCES

- ¹ Productivity Commission (2005) *Australia's Health Workforce*, Research Report, Canberra, p. 11.
- ² Teusner, D and Spencer, AJ (2003) *Dental Labour Force, Australia 2000*, Dental Statistics and Research Unit, Australian Institute of Health and Welfare, AIHW Cat. No. DEN 116.
- ³ Teusner, D. N. (2005) 'Geographic distribution of the dentist labour force', Australian Research Centre for Population Oral Health, Australian Dental Journal, Vol. 50, No. 2, pp. 119-122.
- ⁴ National Advisory Committee on Oral Health (2004) *Healthy Mouths Healthy Lives: Australia's National Oral Health Plan*, A Committee Established by the Australian Health Ministers' Conference.
- ⁵ Spencer, AJ, Teusner, DN, Carter, KD and Brennan, DS (2003) *The Dental Labour Force in Australia: The Position and Policy Directions*, Population Oral Health Series No. 2, AIHW cat. No. POH 2, Australian Institute of Health and Welfare, Canberra.
- ⁶ Teusner, D and Spencer, AJ (2003) *Dental Labour Force, Australia 2000*, Dental Statistics and Research Unit, Australian Institute of Health and Welfare, AIHW Cat. No. DEN 116.
- ⁷ Australian Dental Association Victorian Branch (2006) *Association Calls for More Dentists*, Media Release, 31 March.
- ⁸ Spencer, AJ, Teusner, DN, Carter, KD and Brennan, DS (2003) *The Dental Labour Force in Australia: The Position and Policy Directions*, Population Oral Health Series No. 2, AIHW cat. No. POH 2, Australian Institute of Health and Welfare, Canberra.
- ⁹ Martin Hobdell, M, Sinkford, J, Alexander, C, Alexander, D, Corbet, E, Douglas, C, Katrova, L, Littleton, P, MacCarthy, D, McK.Cherrett, H, Schou, L, Wen, F and Zhuan, B (2002) 'Ethics, equity and global responsibilities in oral health and disease', *European Journal of Dental Education*, 6 (Suppl. 3), pp 167-178.
- ¹⁰ Tennant, M and McGeachie, J (1999) 'Australian dental schools: Moving towards the 21st century', *Australian Dental Journal*, Vol. 44, No. 4, pp. 238-242.
- ¹¹ NSW Parliament (2006) *Dental Services*, Legislative Council, Standing Committee on Social Issues, p. 55.
- ¹² Australian Dental Association (2005) *Time for a New Commonwealth Dental Health Program*, National Dental Update, September.
- ¹³ Davis, G (2006) 'Convincing public opinion that funding universities adequately is essential', *Melbourne Update*, Vol. 5, No. 3: 1.
- ¹⁴ Silva, M, Phung, K, Huynh, W, Wong, H, Lu, J, Aijaz, A and Hopcraft, M (2005) 'Factors influencing recent dental graduates' location and sector of employment in Victoria', *Australian Dental Journal*, Vol. 51, No. 1: 46-51.
- ¹⁵ ADA NSW (2005) *Inquiry into Dental Services in NSW: Submission to the New South Wales Legislative Council Standing Committee on Social Issues*, pp. 47-49.
- ¹⁶ Tennant, M. and McGeachie, J. (1999) 'Australian dental schools: Moving towards the 21st century', *Australian Dental Journal*, Vol. 44, No. 4, pp. 238-242.
- ¹⁷ Letter from Professor Schwarz to Standing Committee on Social Issues, (NSW) Legislative Council, Accessed from <http://www.parliament.nsw.gov.au/prod/parliament/committee.nsf/0/24655748EAF4A8D1CA25714000825F1C> on 28 April 2006.
- ¹⁸ Abbot, T (2004) *More Doctors in Areas of Need*, Media Release, 14 January.
- ¹⁹ Australian Dental Association (2006) *2006-07 Pre-Budget Submission*, 15 November.
- ²⁰ Australian Dental Association (2005) 'Time for a new Commonwealth Dental Health Program', *National Dental Update*, September.
- ²¹ Australian Council of Social Service (ACOSS) (2006) *Fair Dental Care For Low Income Families: National Report on the State of Dental Care*, ACOSS Info Paper, October.
- ²² Sanders, A and Spencer AJ (2004) 'Social inequality in perceived oral health among adults in Australia', *Australian and New Zealand Journal of Public Health*, Vol. 28, No. 2, pp. 159-166.
- ²³ Australian Research Centre for Population Oral Health (2003) *Social Impact of Oral Conditions Among Australian Adults*, AIHW Dental Statistics and Research Unit, Report No. 24, The University of Adelaide
- ²⁴ Carter KD and Stewart JF (2002) cited in Spencer AJ and Harford J (no date) *Submission to the Senate Select Committee on Medicare*, Australian Research Centre for Population Oral Health, The University of Adelaide, Accessed from

http://www.aph.gov.au/Senate/committee/medicare_ctte/fairer_medicare/submissions/sub212.doc on 31 July 2006/

- ²⁵ National Advisory Committee on Oral Health (2004) *Healthy Mouths Healthy Lives: Australia's National Oral Health Plan 2004-2013*, A Committee Established by the Australian Health Minister's Conference, p. 27.
- ²⁶ Spencer, AJ (2004) *Narrowing the Inequality Gap in Oral Health and Dental Care in Australia*, Australian Health Policy Institute, The University of Sydney, p. 11.
- ²⁷ Sanders AE, Spencer AJ and Slade GD (2006) 'Evaluating the role of dental behavior in oral health inequalities', *Community Dentistry and Oral Epidemiology*, 34: 71-79.
- ²⁸ Australian Institute of Health and Welfare (2006) *Australia's Health 2006: The Tenth Biennial Health Report of the Australian Institute of Health and Welfare*, AIHW Cat. No. AUS 73, p. 221.
- ²⁹ Australian Institute of Health and Welfare (2006) *Mortality Over the Twentieth Century in Australia: Trends and Patterns in Major Causes of Death*, AIHW Cat. No. PHE 73, p. 7.
- ³⁰ Trewin D and Madden R (2005) *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, Australian Bureau of Statistics and Australian Institute of Health and Welfare, ABS Cat. No. 4704.0, AIHW Cat. No. IHW14.
- ³¹ Australian Research Centre for Population Oral Health (2003) *Oral Health of Aboriginal and Torres Strait Islander Persons*, DSRU Research Report No. 14, The University of Adelaide.
- ³² Jamieson LM, Bailie RS, Beneforti M, Koster CR and Spencer AJ (2006) 'Dental self-care and dietary characteristics of remote-living Indigenous children', *Rural and Remote Health*, 6: 503.
- ³³ Australian Research Centre for Population Oral Health (2003) *Oral Health of Aboriginal and Torres Strait Islander Persons*, DSRU Research Report No. 14, The University of Adelaide.
- ³⁴ Kruger E, Dyson K and Tennant M (2005) 'Pre-school child oral health in rural Western Australia', *Australian Dental Journal*, 50 (4): 258-262.
- ³⁵ Martin-Iverson N, Phatouros A and Tennant M (1999) 'A brief review of indigenous Australian health as it impacts on oral health', *Australian Dental Journal*, 44 (2): 88-92.
- ³⁶ Kruger E, Dyson K and Tennant M (2005) 'Pre-school child oral health in rural Western Australia', *Australian Dental Journal*, 50 (4): 258-262.
- ³⁷ Australian Dental Association (2005) 'The Public Health Benefits of Water Fluoridation', *National Dental Update*, November.
- ³⁸ Martin-Iverson N, Phatouros A and Tennant M (1999) 'A brief review of indigenous Australian health as it impacts on oral health', *Australian Dental Journal*, 44 (2): 88-92.
- ³⁹ Armfield J (2005) 'Public Water Fluoridation and dental health in New South Wales', *Australian and New Zealand Journal of Public Health*, Vol. 29, No. 5: 477-483.
- ⁴⁰ Watt RG (2005) 'Strategies and approaches in oral disease prevention and health promotion', *Bulletin of the World Health Organization*, Vol. 83, No. 9: 711-718.
- ⁴¹ Sheiham A, and Watt RG (2000) 'The common risk factor approach: a rational basis for promoting oral health', *Community Dentistry and Oral Epidemiology*, Vol. 28: 399-406.
- ⁴² Australian Institute of Health and Welfare (2006) *Mortality Over the Twentieth Century in Australia: Trends and Patterns in Major Causes of Death*, AIHW Cat. No. PHE 73, p. 7.
- ⁴³ Wilkinson R and Marmot M (2003) *Social Determinants of Health: The Solid Facts*, Second Edition, World Health Organization.
- ⁴⁴ Australian Institute of Health and Welfare (2006) *Australia's Health 2006: The Tenth Biennial Health Report of the Australian Institute of Health and Welfare*, AIHW Cat. No. AUS 73, p. 221.
- ⁴⁵ Australian Research Centre for Population Oral Health (2003) *Social Determinants of Oral Health*, AIHW Dental Statistics and Research Unit, Research Report No. 9, The University of Adelaide, Australian Institute of Health and Welfare.
- ⁴⁶ Martin-Iverson N, Phatouros A and Tennant M (1999) 'A brief review of indigenous Australian health as it impacts on oral health', *Australian Dental Journal*, 44 (2): 88-92.
- ⁴⁷ Jamieson LM, Bailie RS, Beneforti M, Koster CR and Spencer AJ (2006) 'Dental self-care and dietary characteristics of remote-living Indigenous children', *Rural and Remote Health*, 6: 503.
- ⁴⁸ National Health Strategy (1992) cited in King, PL (1999) 'Oral Health Needs of the Elderly', *NSW Public Health Bulletin*, Vol. 10, No. 8: 96-97.
- ⁴⁹ Gift, HC (1998) cited in King, PL (1999) 'Oral Health Needs of the Elderly', *NSW Public Health Bulletin*, Vol. 10, No. 8: 96-97.

-
- ⁵⁰ Australian Health Ministers' Advisory Council (2001) *Oral Health of Australians: National Planning for Oral Health Improvement*, Final Report, Steering Committee for National Planning for Oral Health, Australian Health Ministers Conference, p. 36.
- ⁵¹ Chalmers, JM (2003) 'Oral health promotion for our ageing Australian population', *Australian Dental Journal*, Vol. 48, No. 1: 2-9.
- ⁵² National Advisory Committee on Oral Health, op. cit., p. 7.
- ⁵³ Armfield, JM, Roberts-Thompson, KF and Spencer, AJ (2003) *The Child Dental Health Survey, Australia 1999: Trends Across the 1990s*, AIHW Cat. No. DEN 95, The University of Adelaide, AIHW, Dental Statistics and Research Series No. 27, p. 27.
- ⁵⁴ Australian Institute of Health and Welfare (2003) *Oral Health of Aboriginal and Torres Strait Islander Persons*, AIHW Dental Statistics Research Unit, Australian Research Centre for Population Oral Health, Research Report No. 14, The University of Adelaide.
- ⁵⁵ Watt, RG (2002) 'Emerging theories into the social determinants of health: implications for oral health promotion', *Community Dentistry and Oral Epidemiology*, Vol. 30: 241-247.
- ⁵⁶ National Advisory Committee on Oral Health, op. cit., p. 3.
- ⁵⁷ Australian Research Centre for Population Oral Health (2003) *Social Determinants of Oral Health*, AIHW Dental Statistics and Research Unit, Research Report No. 9, The University of Adelaide, Australian Institute of Health and Welfare.
- ⁵⁸ Watt, RG (2005) 'Strategies and approaches in oral disease prevention and health promotion', *Bulletin of the World Health Organization*, Vol. 83, No. 9: 711-718.
- ⁵⁹ Sheiham, A and Watt, RG (2000) 'The common risk factor approach: a rational basis for promoting oral health', *Community Dentistry and Oral Epidemiology*, Vol. 28: 399-406.
- ⁶⁰ Newton, JT and Bower, EJ (2005) 'The social determinants of oral health: new approaches to conceptualizing and researching complex causal networks', *Community Dentistry and Oral Epidemiology*, Vol. 33: 25-34.
- ⁶¹ The ADA itself has contributed \$60000 to the conduct of this Survey.
- ⁶² Australian Institute of Health and Welfare (2006) *Health Expenditure Australia 2004-05*, AIHW Cat. No. HWE 35, Health and Welfare Expenditure Series No. 28, Canberra.