



VICTORIAN STATE BUDGET SUBMISSION 2011-2012

To Mr Kim Wells, Treasurer
Mr David Davis, Minister for Health

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About ADAVB

The Australian Dental Association Victorian Branch is the professional association of dentists in Victoria and represents more than 3000 members, including undergraduate dental students and candidates for the Australian Dental Council examines (overseas trained dentists). This submission has been prepared to assist the Government in framing a Budget that will improve the oral health of many Victorians, especially children the aged and for the whole community to benefit from the efficient and effective use of dental records to identify victims, whether in Victoria or at a disaster overseas.

Executive Summary

1. Oral health promotions
 - a. Dental care for children: Combating increasing rates of tooth decay
 - i. Dental decay is becoming more common in children and teenagers
 - b. Obesity and diabetes
 - i. The epidemic of obesity and diabetes poses major health risks. These two major issues can be fought effectively at State and Federal levels at next to no cost by embedding them in existing health programs. As there is considerable overlap in the causes of these health risks, there would be a double-barrel affect making the oral health campaigns more potent.
2. Aged care
 - a. Elderly people living in aged care residential facilities have difficulties in accessing dental care. ADAVB offers three proposals to improve the oral health of these people.

- b. The proposals have been costed and range from two inexpensive programs to a deluxe scheme.
3. Victim identification
 - a. The on-going capability of the highly successful forensic odontology team at the Victorian Institute of Forensic Medicine is at risk because of lack of funding, many members are approaching retirement and there is no succession plan. There is an urgent need for ongoing financial support to re-invigorate The University of Melbourne's Graduate Diploma in Forensic Odontology, especially as most of the nation's forensic odontologists are Victorians.
 - b. Senior Government and ADAVB representatives should meet to ensure the capability of Human Identification Services and develop career paths and recognise the need for proper professional remuneration.

1. Oral health promotions

A. Dental care for children: Combating increasing rates of tooth decay

Dental decay is becoming more common in children and teenagers.

The paper *Changes in South Australian children caries experience: Is caries re-surfacing?* (Jason M Armfield, John Spencer, Australian Research Centre for Population Oral Health, The University of Adelaide, Australian Dental Journal 2004; 49-2) found "strong evidence that the declines in caries that occurred through to the 90s have come to an end and have reversed".

The Australian Institute of Health and Welfare report *Dental health of Australia's teenagers and pre-teen children: The Child Dental Health Survey 2003-04* (David S Brennan, Jason M Armfield), publish 17 January 2010) showed that decay is relatively common in children and teenagers:

- Between 40 - 57% of 12 - 15 year-olds had some history of decay
- On average 12-year-olds had slightly more than one decayed missing and filled tooth
- Nearly half of six-year-old children had a history of decay in the 'baby' teeth, i.e. one or more decayed, missing and filled deciduous teeth.

The report pointed to a number of causes:

- Increased intake of acidic foods and soft drinks, which dissolve teeth. Fruit juice and soft drinks are high in sugar and acidity which eat away at the enamel, causing tooth decay. The report also identified the consumption of sports drinks and acidic juices in baby bottles and 'sippy' cups
- Inadequate brushing
- Changes in dietary patterns including less drinking of fluoridated mains water
- Increased snacking, especially on processed foods with high sugar and carbohydrate content

- Lower consumption of fruits and vegetables
- Changes in school dental programs.

ADAVB urges the Government to:

- Promote sensible diets, brushing and flossing of teeth, drinking fluoridated mains water, and fluoridating the drinking water of the remaining 5% of Victorians who are connected to reticulated water.
- Coordinate the efforts of the Community Services, Health and Education Departments
- Provide additional resources to Dental Health Services Victoria, especially dentists and dental therapists to treat children.

B. Obesity and diabetes

Australia is experiencing an unprecedented epidemic of diabetes and obesity. Obesity is a driving force behind type 2 diabetes, which has cardiovascular and other complications such as renal failure and blindness. The epidemic poses major health risks and costs in the future. About 1.5 million Australians are diabetic.

The first signs and symptoms of diabetes can occur in the mouth. Paying attention to oral health can lead to earlier diagnosis and treatment.

The most common oral health problems affecting people with diabetes are:

- Periodontal disease
- Gum abscesses
- Tooth decay
- Fungal infections such as thrush
- Lichen planus (an inflammatory, autoimmune skin condition)
- Mouth ulcers
- Taste disturbances
- A dry, burning mouth (low saliva levels).

Recommendations

As diabetes and obesity are national – and international – problems, a Commonwealth approach is ultimately needed. ADAVB recommends that the State Government should advocate:

- that all junk foods and soft drinks are kept out of health institutions, schools and public institutions
- transform the school environment and curriculum to improve physical and nutritional education

- national agreement for universal labelling of nutritional content of food products e.g. easy to understand front-of-labelling to help people make healthier food choices
- reformulating processed foods to make them healthier
- reducing advertising and marketing of unhealthy foods to children
- coordinated policy and legislative changes with greater attention to the urban environment, transportation infrastructure, and workplace opportunities for education and exercise
- for governments at all tiers to commit to optimising opportunities for exercise in a safe environment
- a multidisciplinary, coordinated approach in health, finance, education, sports and agriculture to reverse the underlying causes of the "obesity" epidemic
- a public awareness and education program, harnessing – nationally - the knowledge and community standing and reach of the health professions and their associations and organisations such as the Australian Chronic Disease Prevention Alliance (Cancer Council Australia, Diabetes Australia, Kidney Health Australia, Heart Foundation, National Stroke Foundation), about obesity and diabetes.

2. Aged care

Elderly people living in residential aged care facilities have particular difficulty accessing dental care. With an ageing population who are retaining more of their natural teeth, this will become a more significant problem in the near future. ADAVB contends that the following proposals should be considered.

Proposal for dental care in nursing homes

Background

There are about 45,000 elderly residents living in about 850 residential aged care facilities (nursing homes) in Victoria. Improvements in oral health over the past 50 years has seen a substantial increase in the proportion of dentate people in this sub-population, resulting in more than 50% of residents having natural teeth (on average 14 teeth present). Co-morbidity, polypharmacy, physical and cognitive impairment inherent in this group substantially increases their risk of dental disease. There are also known links between oral and systemic diseases, including atherosclerosis, stroke and aspiration pneumonia.

Education of carers in nursing homes is important in improving the daily oral hygiene care of residents, and this needs to be supported by regular dental visits (Peltola *et al.*, 2006). Improved oral hygiene and frequent professional oral health care is known to reduce the progression or occurrence of respiratory diseases among high-risk elderly in nursing homes (Azarpazhooh and Leake, 2006). Oral hygiene interventions have been shown to reduce the rate of pneumonia by 40% and mortality associated with aspiration pneumonia (Raghavendran *et al.*, 2007; Adachi *et al.*, 2002). The incidence of aspiration pneumonia in nursing home residents has been reported to be 33 per 1,000 per year (Marrie, 1990). This would equate to 1485 hospitalisations in Victoria per year. A

comprehensive oral health program that could reduce the rate of hospitalisations by 40% as reported in the literature would result in 600 fewer hospitalisations annually, resulting in improved quality of life for the affected people and significant cost savings for the healthcare system.

Rationale

- A pain free, healthy dentition (natural or prosthetic) is essential for adequate nutrition and quality of life.
- Improved oral health may result in up to a 40% reduction in admissions to hospitals for aspiration pneumonia.
- Caring staff can be instructed about the specific oral hygiene requirements of residents.

There are several options available that could address these issues of improved access to dental care for nursing home residents:

- Dental teams visiting nursing homes
- Enhancing existing public Domiciliary Unit
- Engaging private dental care providers.

Option 1 – Private Provider Aged Care Dental Scheme With Portable Equipment

Approximately 90% of dentists work in the private sector. A recent study showed that about 50% of Victorian private general practitioners provide care to residents of nursing homes, although they provide only 1 hour per month on average (Hopcraft *et al.*, 2008). Lack of portable equipment and space to provide treatment in facilities were identified as significant barriers to the provision of care to residents, and the lack of adequate undergraduate education in the care of residents was also identified as a significant issue. The South Australian Dental Service currently operates a Private Provider Aged Care Dental Scheme, where private practitioners (dentists and dental hygienists) are paid on a fee-for-service arrangement to provide treatment to nursing home residents in their nursing home. This successful program has several private dentists and dental hygienists currently providing services to residents of South Australian nursing homes, and supported with a pool of portable dental equipment maintained by South Australian Dental Service.

A program that addresses the major issues of portable dental equipment and appropriate funding on a fee-for-service basis is required to better engage the private dental sector in the provision of dental care for residents of aged care facilities.

Costing assumptions:

There are 45,000 residents in aged care facilities in Victoria, with approximately 50% dentate. All dentate residents require an examination, scale and clean, oral hygiene instruction and application of topical fluorides, while about 50% require extractions (mean 1.3 extractions) and 50% require restorations (mean 1.8 restorations) (Hopcraft, 2010).

Funding Proposal

A fee schedule based on DVA schedule (with a loading to accommodate the difficulties of providing care in a nursing home) to provide treatment to residents of aged care facilities provided by private practitioners (dentists, dental hygienists and dental prosthetists). Additional funding for run education and training programs for participating dentists, dental hygienists and prosthetists.

This program could be rolled out over a number of years with the gradual provision of portable equipment to designated areas. The funding proposal at present only covers the estimated treatment needs for dentate residents (based on data from previous research), and is a 'worst-case' scenario – some residents will still access domiciliary care, and some will not want to access care.

Initial funding proposal

Portable dental equipment (\$40,000) x 5 units = \$200,000

Recurrent funding for treatment provided by private practitioners based on DVA (fee-for-service basis) to treat approximately 1500 patients annually = \$1.05million (*)

- Capital costs \$0.2 million
- Recurrent costs \$1.05 million
- **Total costs \$1.25 million**

(*) – approximate treatment cost for dentate resident of \$700 per course of care, based on examination, periodontal treatment (scale and clean), preventive treatment and average 1.3 extractions and 1.8 restorations (based on current research of treatment needs), travel to RACF, administrative costs (writing clinical notes in RACF records, liaise with nursing staff, travel and set-up portable equipment)

Depending on the success of this program on, recurrent funding could be increased if there was demand from dentists to participate in the scheme (this is the advice from South Australia, where there is currently more demand from dentists than funding available), and capital funding increased to provide additional portable equipment based on demand.

Option 2 - Expanded Domiciliary Service

The current Domiciliary Service consists of approximately three full-time employed (FTE) dentists working in metropolitan Melbourne, with limited/no service for regional and rural Victoria. There are currently domiciliary vans that are not used due to lack of staff. It is therefore **proposed to fund additional domiciliary vans and staff, particularly for regional and rural areas** – 1 van per regional area based at regional community health centres. Domiciliary teams to consist of a dentist and a dental hygienist to ensure a greater focus on oral health education/promotion for carers and nursing staff in residential aged care facilities.

- **Total costs \$1.0 million**

Option 3 - Dental teams with equipment In RACFs

A team consisting of a dentist, dental nurse, hygienist and dental prosthetist to be responsible for approximately 10 nursing homes (500 residents) on a rotational basis every fortnight. Members of the team could provide oral hygiene education to the staff on each visit to the nursing home tailored to the specific needs of the residents. The roll out of dental teams will be done gradually over five years starting with a team in metropolitan Melbourne and one in the country.

Portable dental equipment required for each nursing home (including operating cart, handpieces, instruments, x-ray unit) - \$40,000

Funding Proposal

There are about 850 residential aged care facilities in Victoria, for a total capital outlay of approximately \$32 million (850 x \$40,000).

Recurrent salary funding would be required to establish 85 dental teams consisting of a dentist, dental hygienist, dental prosthetist and dental assistant (~\$250,000), as well as funding for maintenance of equipment and consumables.

- Capital costs \$32.0 million
- Recurrent costs \$21.25 million
- **Total costs \$53.25 million**

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4. Support of Forensic Odontology capability in Victoria

Background

Prior to 1989, forensic odontological services to the State Coroner were provided via the Victorian Institute of Forensic Medicine (VIFM) by a group of private dental practitioners. This led to occasions when expertise was unavailable.

In 1989 Professors Stephen Cordner, the then newly appointed director of the VIFM and Professor Peter Reade of the School of Dental Science, Dr John Clement was appointed to head an institutionally-based team of volunteers. The volunteers had previous forensic experience or were drawn from recent graduates of the post graduate program offered at the School of Dental Science, University of Melbourne, under the guidance of Dr Clement.

With the exception of Dr Clement, who received a small stipend to organise and train the team, the provision of service around the clock was entirely voluntary and *pro bono*. This situation persisted until 2004 when the team members were paid an 'on-call' fee of \$750 per month, irrespective of the workload. This was increased to \$850 per month in 2008 where it has remained.

The 2002 Bali terrorist bombings prompted awareness of the need for correct, scientific identification of the deceased and with Melbourne hosting the Commonwealth Games 2006, the Victorian Government funded the formation of the Centre of Human Identification at the VIFM.

The Centre's role encompasses:

- Disaster Victim Identification services in Australia and overseas
- Victorian case work services
- Education and training nationally and internationally
- Research.

The Centre distinguished itself with successful investigations of these disasters:

- The Indian Ocean tsunami 2004
- Operation RAMSI in the Solomon Islands 2004
- Myrhee plane disaster 2004
- Mt Hotham plane disaster 2005
- Donald car crash 2006
- Burnley tunnel crash 2007
- Yogyakarta air crash 2007

Following withdrawal of Victorian Government support in 2008, financial responsibility for the Centre of Human Identification was taken over by the VIFM and its name was changed to Human Identification Services. Professor Clement's contract was not renewed as a cost saving measure. Dr Anthony Hill was appointed Head of the Unit and remained to oversee the provision of forensic odontological services to the

December 2010

Coroner. HIS again distinguished itself with successful investigations of the following disasters:

- East Timor humanitarian investigations 2008
- Papua New Guinea air crash 2009
- Samoa tsunami 2009
- The Victorian bushfires 2009

Contrary to the popularly held belief that DNA technology provides the majority of the solutions of identification of unknown human remains, it is in fact forensic odontology that has been, and for the foreseeable future will remain, the pre-eminent method for rapid and accurate identification of the deceased. For example, 110 of the 173 victims of the recent Victorian bushfires were identified with dental input.

The withdrawal of State funding to forensic odontology has already had serious consequences. The VIFM has no ability to support The University of Melbourne Graduate Diploma in Forensic Odontology program. This was identified as a State-funded statutory body (VIFM) subsidising a federally funded university course. Victoria has been well served by the Graduate Diploma in Forensic Odontology since its inception in 1990. However, this is no longer operating nor accepting students, despite a strategic need to maintain expertise and continued interest in the program from both local and overseas dentists. At a time when specialist registration for forensic odontologists is imminent, the existence of facilities in Victoria to generate and maintain expertise through continuing education is becoming an important issue. Current discussions between the Australian Society of Forensic Odontology and the Royal Australasian College of Pathologists would lead us to anticipate that the minimum mandatory requirements to be recognised as a specialist in forensic odontology are:

- a postgraduate qualification (e.g. a Diploma leading to a Masters degree or Doctorate)
- documented evidence of current and continuous experience in all facets of forensic odontology
- Evidence of continuing education.

Whilst the VIFM forensic odontology team is currently one of the best in the world in terms of education, training and experience, many of the team are approaching retirement and no succession plan is in place to ensure the continuity of expertise into the future.

There is an urgent need for ongoing financial support to re-invigorate the Diploma program that has underpinned the existing situation and ensure the ability of the State to maintain expertise sufficient to cope with major disasters in Victoria. An alternative, which has been discussed, is the upgrading of the current diploma program to a Masters degree. This would be very attractive to government funded students from overseas, particularly the region to Australia's near north. It would also have strategic and security benefits to Australia as a whole.

Recommendations

That senior Victorian Government and ADAVB representatives have talks about:

- the on-going capability in forensic odontological expertise into the future with the development of appropriate career paths
- recognition of the need for proper professional remuneration.