

SUBMISSION TO THE PRODUCTIVITY COMMISSION ON THE ECONOMIC IMPLICATIONS OF AN AGEING AUSTRALIA.

INTRODUCTION.

The Productivity Commission is required to undertake a research study to examine the productivity, labour supply and fiscal implications of likely demographic trends over the next 40 years with a view to assisting in understanding the challenges and opportunities resulting from an ageing Australia.

The Australian Dental Association Inc. (ADA) represents approximately 8,500 registered dental practitioners within Australia. This constitutes well over 90% of all dental practitioners in this country.

The primary object of the ADA is to encourage the improvement of the health of the public and to promote the art and science of Dentistry.

As such, the ADA provides the following submission to the Productivity Commission drawing to its attention certain issues peculiar to dentistry that require attention and evaluation, in addressing the issues the subject of the study.

Of primary importance is the necessity to recognise that the social impact that oral disease has upon quality of life, eating, pain and appearance is no less significant in the aged than for the general population. Evidence linking oral health and general health is growing with links established between periodontal disease and cardiovascular disease and between plaque accumulation and aspiration pneumonia. Focus on improving oral care delivery to the Aged will result in improved general health.

Any evaluation of the impact of an ageing population upon dentistry requires an assessment of the following key areas. They are the impact of ageing upon:

1. the demand for dental services,
2. the members of the dental workforce,

A number of recent studies have been completed investigating these issues and the Commission would do well to closely analyse these.¹ These studies provide clear statistical data that will be heavily relied upon by the ADA in making its submissions.

1. DEMAND FOR DENTAL SERVICES

There is no disputing that the population profile of Australia has significantly changed over the last 2 decades. In 1945, the population distribution was one that could be graphed in a pyramid shape, with the vast majority of the population being at the base of the pyramid and the aged, being far fewer at the peak. It is predicted that within the next fifty years, "the aged dependency ratio" will deteriorate significantly. Currently there are 5.25 people in the potential workforce for every person aged 65 or more. By 2050, it is estimated that this will have fallen by half to 2.2.² A very significant shift is clearly in existence.

This increased aging Australian population, living in the new millennium, has dental needs that are very different and more complex than those experienced by previous adult cohorts during the twentieth century. Over the last three decades, with improved preventive dental measures being available to the public and an increased focus by much of the community on issues of oral hygiene, statistics reflect that these oral health trends have resulted in a decrease in tooth loss and therefore an increase in the number of teeth that require ongoing care.

This has significantly increased the demand for dental care with treatment being more complex.

Demand for dental care can be determined by looking at the number of dental visits made and the number of services that are provided at each visit.

¹ Teusner DN & Spencer AJ 2003. Projections of the Australian dental labour force. AIHW cat. No. POH 1. Canberra: Australian Institute of Health and Welfare (Population Oral Health series No. 1).

Spencer AJ, Teusner DN, Carter KD & Brennan DS. The dental labour force in Australia: the position and policy directions. AIHW cat. No. POH 2. Canberra: Australian Institute of Health and Welfare (Population Oral Health series No. 2).

² An Ageing Australia: small beer or big bucks? Gary Banks-Presentation to the South Australian Centre for Economic Studies, Economic Briefing, Adelaide, 29 April, 2004.

The frequency of dental visits increased by about 50% in the period 1979 to 1995 due to factors such as:

- community affluence,
- increasing educational attainment,
- consumer expectations about health/dental services,
- scientific and technological advancement,³
- the increasing retention of natural teeth across the population,
- the ageing of the community.

All of this increased demand obviously creates a need for additional expenditure. Mr. Banks in his address⁴ refers to the fact that both the PBS and hospital expenditures dramatically increase with the age of the consumer. The same applies to expenditure for dental care.

For example, in the 65 age group and above, the percentage of such people making a dental visit in the last 12 months increased from 21% in 1979 to 61 % in 1999. The percentage of endentulism (the loss of all natural teeth) among persons in the same age group dropped from 66% ⁵in 1979 to 33% in 1999. At the same time, however, patients across all adult age groups now have more decayed teeth than in 1995-1996⁶.

As dental caries is reported to be the most prevalent health condition in the population, demand for dental services is anticipated to rise by a further 21% in the period 1995 to 2010⁷. As this will be across the entire population of the nation, this increase will impose significant pressure upon the accessibility of dental care for the aged, who may be hampered through age to access such treatment.

With increased visits, there has also been an increase in the number of services that are provided at each visit. As stated, the greater the tooth retention rate that exists, the greater the number of services that will be required. The AIHW Dental Statistics and Research Unit Research report, No. 8-Demand for Dental Care, reported that in the period 1983 to 1998 there had been an increase in the number of services per visit of approximately 22%.⁸ This paper forecast that if past trends in demand, for dental visits per person per year and dental services, remained linear, then the total demand for dental visits would rise by 39.4 % and the total demand for dental services by 54%, by 2010.

It therefore follows that the size of the Dental workforce must keep pace with this demand; for should it fail to do so, the oral health of all age groups, but particularly the aged who are susceptible to oral disease, will deteriorate along with their general health. The obvious ramification of this is that the cost of medical as distinct from dental care will escalate markedly. (See Table 1.)

2. MEMBERS OF THE DENTAL WORKFORCE.

Dentists

With the community calling for better access to dental care, the existing resources are having considerable difficulty providing them. This difficulty is not confined to the delivery of dental care to the aged but it will clearly impact upon it. Already waiting lists for public dental treatment are lengthening and some reports suggest that patients are waiting up to at least 3 years to access dental care.

The Australian Dental Association Inc. is concerned that the delivery of dental care to Australians is being compromised by a relative lack of resources and that unless the problem is addressed urgently the deterioration will continue and a significant crisis will be created.

There are insufficient dentists practicing in Australia to enable proper dental care to be provided across all regions.

Noting the facts set out above dealing with demand for dental services it is worth taking note of the following facts:

- There are currently approximately 9,250 registered dental practitioners within Australia. Of these 75% are male and 25% female.
- The current population of Australia is estimated to be 20,000,000 people.

³ Demand for Dental Care -AIHW Dental Statistics and Research Unit Research Report No.8-January 2003.

⁴ See footnote 2

⁵ AIHW DSRU Carter et al. 2001.

⁶ AIHW DSRU: Brennan DS & Spencer AJ 2004. Oral Health trends among adult public dental patients.

⁷ AIHW Dental Statistics and Research Unit Research Report No. 8-Demand for Dental Care, January 2003

⁸ AIHW-DSRU Research Report No. 8-Demand for Dental Care, January 2003

- Approximately 85% of registered dental practitioners engage in general practice, with approximately 12% engaged as specialists. The remainder is involved in administration and research/education.
- Of those engaged in general practice: approximately 83% are involved in private practice, 16% in public sector practice with the remainder involved in industry and other activities.
- Approximately one third of registered dental practitioners are aged 50 and above. This statistic suggests that within the foreseeable future, the number of dentists practicing will decrease as will the number of hours of practice provided by those within this group that continue to practise.
- Studies reveal that to cater for the changing oral health of the nation, population increase and the expected decrease in the number of dental practitioners through retirement etc, and to maintain an adequate dental labour force, the number of dental graduates from the present Australian Dental Schools will need to increase by 120 per year. Existing dental graduates number approximately 220 per year from the five existing dental schools. To satisfy the need for the required increase, these existing dental schools should increase graduate numbers by 24 graduates each per year, according to Spencer et al⁹. This study provides a detailed analysis of the dental profession and identifies the impact which factors such as the age of the members of the profession, their work practices and their sex have on determining the capacity for the profession to meet the demands imposed.
- The average age of active or practising dentists is 44 years; of male dentists, 46 years, and female dentists 38 years. When it is borne in mind that, historically, female dentists practise, on average, fewer hours per week, this trend in increasing female participation in the profession, whilst welcome, necessitates more graduates to counter this reduction in "dental" hours worked¹⁰ (See Table 2).
- There is no current comprehensive program in place to plan for the production of additional dentists to cater for increased demand.
- University funding to dental schools has been insufficient and staffing levels have fallen drastically. The dental profession has assisted in overcoming this funding shortfall by providing voluntary unpaid tuition but more full time dentists are needed in academia and research.
- A recent OECD study identified Australia as second last in the quality of its adult oral health. A more recent study has identified that, for children in the age group 4-12, Australia is placed 4th best in the table prepared of participating countries¹¹. This discrepancy emphasises the need to focus on adult oral health at all age levels.
- Further, enquiries of various dental schools suggest that Federal funding to Universities for the training of dental students is not necessarily totally being expended by the Universities on dental training and is being diverted to other courses. Consequently, dental schools are chronically under funded leaving an incapacity to be able to fully respond to the workforce challenges which are worsening.

To alleviate this significant shortage of registered dental practitioners within Australia there is a necessity to:

- 1) Extend funding to the various dental schools/faculties to facilitate the education of additional dental students. To achieve this, there needs to be an increase in the agreed number of supported places within dental faculties.
- 2) Due to deterioration in numbers of teaching and nursing students, there has been recognition by the Government of a need for special treatment to be provided to students participating in teaching and nursing studies. In view of the existing chronic shortage of dentists and dental

⁹ Spencer AJ, Teusner DN, Carter KD & Brennan DS. (2003). The dental labour force in Australia: the position and policy directions. AIHW cat. No. POH 2. Canberra: Australian Institute of Health and Welfare(Population Oral Health series No.2).

¹⁰ "There have been marked differences in the practice activity of dentists by sex and age. On average, the usual number of hours worked by female dental practitioners was 33.7 hours per week, which was substantially less than male practitioners at an average of 41.1 hours per week. The most productive age groups, in terms of hours usually worked per week were the 35-44 age group for male dentists (43.8 hours) and the 20-29 age group for female dentists (37.4 hours). Hours worked declined markedly for male and female dentists aged 55 years or older (35.3 hours per week)". Spencer AJ, Teusner DN, Carter KD & Brennan DS. (2003). The dental labour force in Australia: the position and policy directions. AIHW cat. No. POH 2.

¹¹ AIHW DSRU: Armfield JM, Roberts-Thomson KF, Slade GD & Spencer AJ 2004. Dental Differences between Boys and girls: The Child Dental Health Survey. Australia 2000.

students, the ADA suggests that similar provisions/incentives be extended to dental schools/faculties to enable the expansion of numbers of students.

- 3) In relation to recommendation 2 and 3, the ADA suggests that to assist in the increased recruitment of dental students there be introduction of a fee repayment and interest moratorium for dental graduates who work in public sector and rural areas until an income of a minimum of \$ 75,000 p.a. is earned by a graduate.
- 4) The ADA requests that the Federal Government funding provided to Universities for dental schools be quarantined, as apparently is the case for medical schools, so it will be expended by the Universities on dental schools only.

There is an inequitable distribution of dentists across Australia, resulting in insufficient levels of dental care being provided.

- Currently, there is an inequitable distribution of dental professionals geographically and across the public and private sectors. There are particular problems associated with people with specific disadvantages (relating to socio-economic status, general health, age or location) obtaining access to dental practitioners for treatment. (See Table 3).
- Studies suggest that one of the best sources for obtaining practitioners to practice in these areas is to attract candidates from such backgrounds including rural and remote areas.
- The cost associated with the pursuit of a dental degree creates a financial burden upon the graduating student. For the HECS graduate under the present Higher Education proposals, a fee liability of \$45,000 will arise with a full-fee paying student having a liability of about \$180,000. As such, a graduate's incentive will be to enter the workforce in an arena where the greatest remunerative return is available, so that the liability can be satisfied in the shortest and most economical way.

The ADA suggests that to address the inequities that exist so as to facilitate the impact of increased demand for dental services, the following is required:

- 1) Additional focus must be given to the creation of further scholarships to residents of country and remote areas. The ADA suggests the creation of a number of specific Commonwealth places for students with a regional background.
- 2) Consideration should be given to the provision of a moratorium or debt forgiveness on fee indebtedness for all dental graduates who in turn agree to provide their services in designated public sector and rural and remote areas. The extent of the moratorium or debt forgiveness could reflect the period of time the dental graduate undertakes practice in those particular areas. The longer the period of service, within defined limits, in those areas the greater the moratorium or debt forgiveness.
- 3) The extent of the substantial fee indebtedness that would arise for a dental graduate may cause the graduate to focus upon private rather than public sector work, where the remuneration achieved would probably be significantly higher. Repayment of the debt would be more efficient and economic if such work was pursued. Similar financial incentives to those outlined in the preceding two paragraphs should therefore be introduced to graduates who agree to provide a period of service in the public sector.

Allied Dental Workforce.

As has been outlined earlier demand for dental care in the aged has and will continue to increase. As a significant proportion of the dental services required by the aged will be by way of provision of basic oral hygiene and preventive training, the ADA feels that utilisation of the dental auxiliary workforce would be advantageous here.

Dental hygienists are the appropriate dental auxiliary for this purpose and more need to be trained and employed in this sector of our health and welfare system. Prevention of oral disease, particularly the most prevalent ones of dental caries and periodontal disease, has to be the cornerstone of all of Australia's oral health planning. It is particularly relevant to the dentate aged where the major need is often assistance with maintenance of good oral hygiene which, in turn, will minimise any significant dental and periodontal problems. Dental hygienists, in conjunction with dentists, are ideally trained to fulfil this role for aged persons in their own home or in domiciliary care.

The school dental services have played, and continue to play, a significant part in the achievement of high standards of oral health of Australian children. It is essential that children are given the best chance of obtaining and maintaining optimum oral health and the school dental services should not be downgraded. Moves to extend the duties of dental therapists in some States, supposedly in the interests

of creating a more cost effective workforce, are all ironically making these auxiliaries far more attractive to private sector employers, so that many dental therapists are not remaining in the school dental services. The drain of cost-effective talent from the public sector will not alleviate any existing workforce shortages but rather only serve to shift the problem to another sector of the population. Expensive moves to increase the number of training places for these auxiliaries will only be frustrated by the failure to lock them into public service (where they are most suitable) upon completion of their training.

It also needs to be borne in mind that extension of duties for dental auxiliaries requires expensive additional training which still does not equip the dental therapist with the knowledge and skills of a dentist. For the ageing population, the range of dental care problems are becoming more, not less, complex and the solution can only be to train more dentists and dental hygienists in conjunction with a comprehensive preventative program.

CONCLUSION:

Immediate action:

The ADA has identified problems that exist in delivery of oral health care to an ageing Australia and which need to be immediately addressed by the Productivity Commission. It also hopes that it has outlined appropriate action that the ADA believes will enable the problems to be overcome.

It is clear that variation in the make up of the population, both from the perspective of the patients that require treatment and the profession that can deliver those services, necessitates the need for immediate action and the ADA, on behalf of its members requests the Government give this matter its urgent attention.

Longer term solution:

Whilst we have in this paper focussed upon the immediate steps required to be taken to rectify the problem created by the ageing of the population and dental work force, implementation will provide some solutions in the short to immediate term-10-20 years.

The ADA believes that a longer term solution exists to redress the growing problem that will be created in providing increasing dental care to this group. This solution is for there to be an increased focus on the issue of prevention.

Much dental disease is of a preventable nature and all available evidence shows fluoridation of reticulated water supplies has had a very significant effect in reduction of dental caries in this country. There remain many towns and cities which have not introduced this cost-effective preventive measure and Government should take whatever measures are necessary to introduce or extend water fluoridation as soon as possible. The endorsement given at the recent Australian Health Ministers Conference on 29 July 2004 to fluoridation is welcomed but the ADA says that immediate action is required pursuant to that endorsement so that this measure is implemented urgently. Whilst this action will not create an immediate solution, it will over time produce a dramatic reduction in dental disease, thus reducing the demand for dental treatment. Investment in the implementation of this measure will result in considerable savings in later health expenditure.

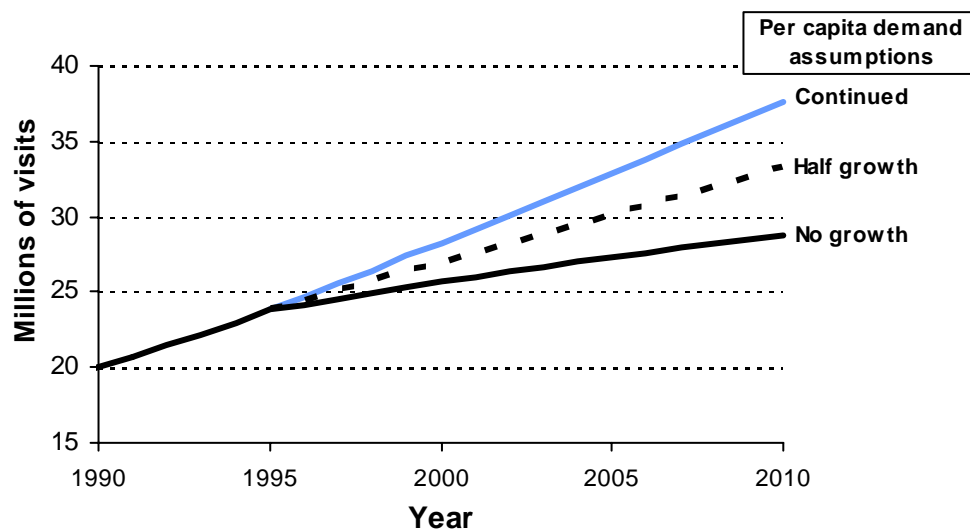
Other preventive measures include oral hygiene, dietary and behavioural modification. These too need to be included in any scheme.

If prevention is not an integral part of all dental programs then ultimately there will be no amount of money or sufficient dental workforce available to solve the growing dental problems of Australia.

David S Houghton
Federal President

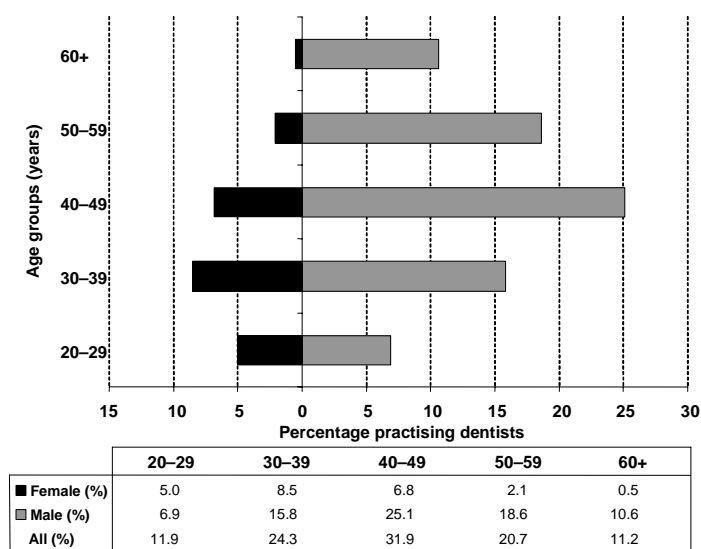
TABLES:

Table 1 : Projected total demand for dental visits



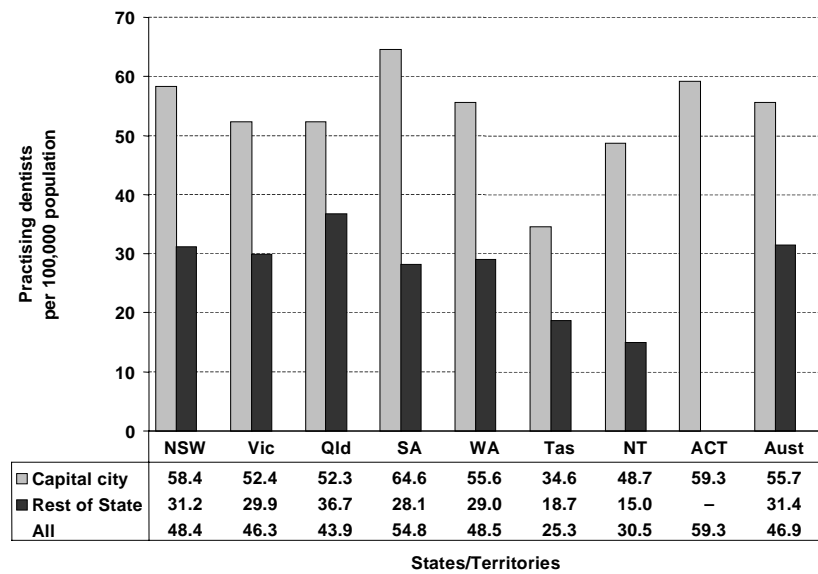
Source: AIHW DSRU: Teusner & Spencer 2003a

Table 2 : Percentage practising dentists by sex and age group, 2000



Source: AIHW DSRU: Teusner & Spencer 2003a

Table 3. Practising dentists per 100,000 population by region, 2000



Source: Spencer AJ, Teusner DN, Carter KD & Brennan DS. The dental labour force in Australia: the position and policy directions.