Education and Health Standing Committee

ADEQUACY AND AVAILABILITY OF DENTAL SERVICES IN REGIONAL, RURAL AND REMOTE WESTERN AUSTRALIA

Report No. 1

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ADEQUACY AND AVAILABILITY OF DENTAL SERVICES IN REGIONAL, RURAL AND REMOTE WESTERN AUSTRALIA

Report No. 1

Presented by:
CAROL MARTIN, MLA
Laid on the Table of the Legislative Assembly
on 18 April 2002

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COMMITTEE'S FUNCTIONS AND POWERS

On 30 May 2001, the Legislative Assembly established the Education and Health Standing Committee.

The functions of the Committee are to review and report to the Assembly on –

- The outcomes and administration of the departments within the Committee's portfolio responsibilities;
- Annual reports of government departments laid on the Table of the House;
- The adequacy of legislation and regulations within its jurisdiction; and
- Any matters referred to it by the Assembly including a bill, motion, petition, vote or expenditure, other financial matter, report or paper.

At the commencement of each Parliament and as often thereafter as the Speaker considers necessary, the Speaker will determine and table a schedule showing the portfolio responsibilities of the Committee. Annual reports of the government departments and authorities tabled in the Assembly will stand referred to the Committee for any inquiry the Committee may make.

Whenever the Committee receives or determines for itself fresh or amended terms of reference, the Committee will forward them to each standing and select committee of the Assembly and joint committee of the Assembly and Council. The Speaker will announce them to the Assembly at the next opportunity and arrange for them to be placed on the notice boards of the Assembly.

The general provisions for standing and select committees of the Legislative Assembly will apply to the Education and Health Standing Committee.

INQUIRY TERMS OF REFERENCE

At a meeting on 27 June 2001, the Education and Health Standing Committee resolved to conduct an inquiry into the 'Adequacy and Availability of Dental Services in Regional, Rural and Remote Western Australia.' On 22 August 2001, the Committee resolved to adopt the following terms of reference:

That the Committee examine and report on –

1. the demands and expectations of Western Australians living in regional, rural and remote areas for general and specialist dental services;

2. current access by regional, rural and remote dwellers to general and specialist dental services;

3. demographic, socioeconomic and other factors that impact on overall dental care;

4. the adequacy and cost-effectiveness of public sector dental programs in regional, rural and remote areas;

5. the role of and interaction between government organisations, training institutions, private practitioners and professional bodies in the provision of dental services to regional, rural and remote areas;

6. the impact of professional and legal restrictions on provision of dental services to regional, rural and remote areas;

7. specific community groups who are at risk of poor long-term dental health;

8. any other matters deemed relevant by the Committee.

CHAIR'S FOREWORD

The Education and Health Standing Committee is one of three portfolio-related standing committees appointed by the Assembly at the commencement of every Parliament. Pursuant to Assembly Standing Orders, the Committee may inquire into any matter within its portfolio responsibilities. The departments within the Committee's portfolio responsibilities are Education, Health, Indigenous Affairs and Sport and Recreation.

This is the first report of the Education and Health Standing Committee, which was first appointed on 30 May 2001. The inquiry leading to this report was initiated by the Committee following discussions centring on access to dental services in rural and remote areas of the State.

From its inception, the Committee has shown a keen interest in the challenges faced by the large number of Western Australians who live in regional, rural and remote regions of the State. Health service delivery to rural areas has long been recognised as a major problem throughout Australia and a number of initiatives have recently been introduced, at both State and Federal level, in an attempt to improve services.

Parts of Western Australia are amongst the most sparsely populated in the world. With around 1.9 million people distributed over an area of more than 2.5 million square kilometres, the challenge of delivering health services is arduous. Although the Perth metropolitan area constitutes less than one per cent of the State's land area, 73 percent of the population live in this region. The remaining 27 per cent of the population is spread across 99 per cent of the State's land area. More than three-quarters of the State is classified as remote or very remote. For the many West Australians who live in these regions, access to services is very restricted.

To a large extent, the problem of delivering dental and other health services to regional, rural and remote areas is one of cost. The cost of providing a service to a remote area, for example, is understandably much greater than the cost of providing the same service in the city. Different models of service delivery must therefore be explored, to find a model that delivers the best possible service at an acceptable cost.

Attraction and retention of suitably qualified health professionals is another challenge in the delivery of health services to country areas. There is considerable reluctance on the part of many health professionals to venture out into the bush. Lack of professional support and development and fear of social isolation are two of the greatest impediments in this regard. There is some evidence to suggest that the reluctance of professionals to leave the city can, to some extent, be tempered by early exposure to rural life, for example during training.

Over the last 30 years, the collective oral health of Western Australians has improved dramatically, particularly amongst children. Despite the overall improvement, country residents continue to lag behind their city counterparts, a situation that has arisen partly as a result of reduced access to services.

This report is broad in its scope, examining all aspects of oral health and the provision and use of dental services in regional, rural and remote areas of Western Australia. The Committee identified a number of communities around the State where dental services are failing to meet the needs of residents, explored the many factors that contribute to inadequate dental services and examined the impact of inadequate services on the oral health of country West Australians. A

range of long and short-term options was considered before the Committee agreed on a number of recommendations that are expected to improve the delivery of dental services to country areas and to ultimately improve the oral health of country residents.

I would like to thank my fellow Committee members for their individual and collective contributions to this report and commend the Principal Research Officer, Dr Karen Hall, and the Research Officer, Peter Frantom, for their hard work.

CAROL MARTIN, MLA
CHAIR

ABBREVIATIONS AND ACRONYMS

"ADA"	Australian Dental Association
"ADA (WA)"	WA branch of the Australian Dental Association
"ADC"	Australian Dental Council
"AHMAC"	Australian Health Ministers Advisory Council
"AIHW"	Australian Institute of Health and Welfare
"AMS"	Aboriginal Medical Service
"CDHP"	Commonwealth Dental Health Program
"CPDSS"	Country Patients Dental Subsidy Scheme
"CRROH"	Centre for Rural and Remote Oral Health
"dmft"	Index of decayed, missing and filled deciduous teeth
"DMFT"	Index of decayed, missing and filled permanent teeth
"DSRU"	AIHW Dental Statistics and Research Unit
"DTHA (WA)"	Dental Therapy and Hygiene Association of Western Australia
"GP"	General medical practitioner
"OHCWA"	Oral Health Centre of Western Australia
"PATS"	Patient Assisted Travel Scheme
"SDS"	School Dental Service
"UWA"	University of Western Australia
"WADS"	Western Australian Dental Services

GLOSSARY

"Aboriginal"	Person(s) of Aboriginal descent.
"Admitted patient service"	Dental procedure that must be performed in a hospital under general anaesthesia. Also referred to as inpatient service.
"Caries"	Dental decay.
"Committee"	Refers to the Education and Health Standing Committee.
"Commonwealth Dental Health Program"	Program introduced by the Federal Government in January 1994, which injected an additional $245 million into public-funded dental care provided by the States and Territories from 1993/94 to 1996/97 inclusive.
"Country Patients Dental Subsidy Scheme"	Program whereby private dental practitioners provide subsidised dental care to patients who are eligible for public dental treatment.
"Dental Board of Western Australia"	Authority vested with the statutory functions of registration and discipline of dentists, dental therapists, school dental therapists and dental hygienists pursuant to the *Dental Act 1939*.
"Dental hygienist"	Any person who has completed an approved course of training as a dental hygienist and who satisfies the Dental Board of Western Australia that in accordance with section 44C of the *Dental Act 1939*, he/she is qualified for registration as a dental hygienist.
"Dental prosthetics"	Pursuant to section 3.3 of the *Dental Prosthetists Act 1985*: *(a) the giving of advice to, or the attendance upon, a person for or in conjunction with, or in preparation for, the fitting, constructing, inserting, repairing, or renewing of full artificial dentures or mouthguards.* *(b) the fitting, constructing, inserting, repairing, or renewing of full artificial dentures or mouthguards.*
"Dental Services"	Refers to Perth Dental Hospital and Community Dental Services.
"Dental therapist"	Any person who has completed an approved course of training as a dental therapist and who satisfies the Dental Board of Western Australia that in accordance with section 44B of the *Dental Act 1939*, he/she is qualified for registration as a dental therapist.
"Dentist"	Any person who holds a primary qualification in dental surgery or dental science from any university of the United Kingdom, Ireland, New Zealand or Australia or who holds a Certificate of Dentistry granted by the Australian Dental Council under the auspices of the National Office of Overseas Skills Recognition and is registered under the *Dental Act 1939* to perform acts of dentistry.

"Dentistry"	Pursuant to the *Dental Act 1939*: ***"dentistry"*** *means and includes any operation on or service in connection with the human teeth or jaws, and the artificial restoration of lost or removed teeth, or jaws and the treatment of diseases or lesions, and the correction of malpositions in human teeth or jaws, and any operation, treatment or service on or to any person as preparatory to or for the purpose of or in connection with the fitting, insertion, or fixing of artificial teeth, and also every dental service, act or operation of any kind or nature whatsoever.*
"Department of Health"	Refers to the Western Australian Department of Health.
"Edentulism"	Complete tooth loss.
"Indigenous"	Person(s) of Aboriginal or Torres Strait Islander descent.
"Patient Assisted Travel Scheme"	Scheme that provides financial assistance to country residents who are required to travel more than 100km to attend specialist appointments.
"School dental therapist"	Any person who has completed an approved course of training as a school dental therapist and who satisfies the Dental Board of Western Australia that in accordance with section 44D of the *Dental Act 1939*, he/she is qualified for registration as a school dental therapist.
"Statistical division"	A general-purpose spatial unit developed by the Australian Bureau of Statistics. It is the largest and most stable unit within the Australian Standard Geographical Classification (ASGC) and covers all of Australia without gaps or overlaps or crossing of State or Territory boundaries.
"University"	Refers to the University of Western Australia.

EXECUTIVE SUMMARY

This is the first and final report of the Education and Health Standing Committee into the *Adequacy and Availability of Dental Services in Regional, Rural and Remote Western Australia*. The report considers all aspects of the provision and use of dental services throughout non-metropolitan regions of the State.

Chapter One outlines the background, scope and conduct of the inquiry. Chapter Two considers oral health and dental services in the broader context, examining trends in dental health of Western Australians, the cost of dental disease and the use and delivery of dental services in non-urban locations. Chapters Three to Ten form the main body of this report, examining the evidence gathered by the Committee during the course of its inquiry.

Demands and expectations of Western Australians living in regional, rural and remote areas for general and specialist dental services

The demands and expectations of a community can be considered in terms of: its normative needs, which in turn are determined partly by the underlying oral health status of its residents and partly by their perceived need for treatment; the effective demand, as indicated by the actual use of services; and the level of satisfaction with services, which provides an indication of the success of the dental care program in meeting patients' needs.

Country residents throughout Australia have poorer oral health than city residents, and therefore have a greater normative need for dental services. Although dental health is not a high priority for some WA country residents, there is a general expectation amongst residents that they should have access to the same level and quality of services as city residents.

Dentists in non-metropolitan areas of Western Australia work an average of two hours per week longer than their city counterparts. There is a clear imbalance between supply of and demand for dental services in many rural and remote communities, as evidenced by the considerable waiting times many residents must face. As a consequence, country residents are less likely than their city counterparts to have visited a dentist in the preceding 12 months, and are more likely to have last visited a dentist more than five years ago. Furthermore, country residents are more likely than city residents to exhibit problem-oriented dental visiting patterns. They are more likely to have had teeth extracted and less likely to have had a scale and clean in the preceding 12 months.

A series of nationwide dental satisfaction surveys, conducted by the Australian Institute of Health and Welfare (AIHW) between 1994 and 1996, indicated that there was a lower level of satisfaction with dental services in remote communities compared with rural and urban communities. More recently, a Western Australian survey found that people who received dental treatment through public dental clinics were less satisfied than the WA population as a whole, regardless of whether they lived in the country or in the city. However, those country residents who accessed dental treatment through private country clinics were more satisfied with the care they received than those who were treated in public clinics.

Current access by regional, rural and remote dwellers to general and specialist dental services

In 2000, there were 913 practising dentists in Western Australia, only 16 per cent of whom worked outside Perth, where 27 per cent of the population live. Approximately 85 per cent of dentists worked in the private sector.

Several communities around the State have a shortage of dentists. There is an estimated shortfall in the public sector of up to ten dentists. The shortfall in the private sector is more difficult to estimate, but the total shortfall in private and public sectors may be as high as fifty.

In addition to the shortfall of dentists, residents of many country areas encounter considerable difficulties in accessing public hospitals for admitted patient dental procedures. In some regions, the difficulty arises because very limited theatre time has been made available by the local health service for dental procedures.

Many communities throughout the State have current vacancies in dental positions, and in some regions, there has been considerable difficulty attracting and retaining dental professionals over the last three to four years. The following communities have experienced considerable disruptions to private and/or public dental services in recent years:

- Northwest Health Zone - Carnarvon, Derby, Fitzroy Crossing/Halls Creek, Port Hedland, Kununurra and Newman;
- Midwest Health Zone – Meekatharra, Cue, Mt Magnet, Yalgoo, Karralundi, Wiluna and Burringah;
- Goldfields Health Zone – Kalgoorlie-Boulder, Ravensthorpe, Esperance and Ngaanyatjarra Lands;
- Midlands Health Zone – Merredin, Moora and surrounding communities;
- Great Southern Health Zone – Albany, Narrogin and Katanning; and
- South West Health Zone – Bunbury and Collie.

Demographic, socioeconomic and other factors that impact on overall dental care

Several Western Australian country regions have some of the lowest rates of practising dentists in the nation. The average rate of practising dentists in Western Australia is 48.5 per 100,000 people. The rate in Perth is 55.6, and throughout the rest of the State the rate averages 29.0 dentists per 100,000 people. Of the eight non-metropolitan statistical divisions in Western Australia, five have rates below 20. The rates of practising dental auxiliaries (therapists, hygienists and prosthetists) are also significantly lower in country regions than in the Perth metropolitan area.

Demographic features of a community have considerable bearing on whether or not a private dental practitioner chooses to establish a practice in the region. A community of around 3 - 4,000 people is required to support a general dental practice. The 1996 Census identified fewer than 20 towns in Western Australia with a population greater than 4,000. An even larger community is

required to support a specialist dental practice. The age distribution and transience of a community will also influence the minimum resident population required to support a dental practice.

There are 291 postal districts in Western Australia, 63 of which are classified as remote or very remote. Therefore, for many country residents, a visit to the dentist involves travelling long distances, with all the associated costs and inconveniences. Because of the cost and inconveniences of travelling long distances, many country patients are inclined to limit their dental care to emergency treatment, thus ultimately worsening their oral health. Low-income earners and community members with special needs (e.g. migrants from non-English speaking backgrounds, Aboriginal people, aged people and people with disabilities) face additional challenges in accessing dental services in rural and remote communities.

Many factors detrimentally impact on the provision of dental care to country areas, including: the relatively high cost of delivering services; the inadequate remuneration offered to country dental professionals; a reluctance of dentists to leave major cities; a lack of professional support and development for country dental professionals; and the additional difficulties associated with owning and running a dental practice in a country town.

Fluoridation of drinking water is an important factor in overall dental health. The high cost of establishing and maintaining a fluoridated water supply precludes smaller communities from this important preventive strategy. Approximately 115 regional, rural and remote Western Australian communities do not have access to fluoridated water. Many of these communities are further disadvantaged by their restricted access to dental services.

Adequacy and cost-effectiveness of public sector dental programs in regional, rural and remote areas

The Department of Health allocates more than $45 million for the provision of oral health services to financially and geographically disadvantaged residents of Western Australia. Of this allocation, over $13 million is invested in services to rural and remote locations.

Throughout Australia, residents of rural and remote communities who rely on public dental services have poorer oral health than their urban counterparts. They are more likely to be edentulous (have no natural teeth), have had more extractions in the past 12 months and are more likely to visit a dentist for a problem (as opposed to a check-up). There is a paucity of data relating specifically to Western Australia, but there is no reason to expect that rural and remote residents in this State differ from rural and remote residents around the rest of the nation.

The School Dental Service (SDS) provides comprehensive general dental care for all enrolled school children from preschool to Year 11 (and to Year 12 in some remote areas). The overall success of the SDS is reflected in the striking improvement in dental health of West Australian school children over time: in 1968, more than 95 per cent of 12-year-olds had permanent tooth decay, compared with only 37 per cent in 2000. The estimated value of the service delivered per dollar expenditure is currently about $2.00. Residents of regional, rural and remote communities are generally satisfied with the SDS, although there have been some disruptions to services in recent years due to difficulty in recruiting and retaining dental therapists in some regions.

A number of public sector adult dental services are provided to country residents. General dental care is received in public clinics or in private clinics via the Country Patients Dental Subsidy

Scheme (CPDSS). In contrast to the SDS, many submissions highlighted inadequacies in adult dental services in country areas, as evidenced by lengthy waiting times and major disruptions to services in some regions. One of the greatest impediments to providing adequate dental services to adults relates to recruitment and retention of dental staff, particularly dentists.

There were numerous criticisms of the CPDSS, including: the lengthy waiting time for processing of authorisation for commencement of treatment; the restricted range of dental procedures that it covers; the difficulties dentists encounter in recovering patient contributions; and the large disparity between the fees paid by the CPDSS and the fees that private practitioners would normally charge.

Cessation of the Commonwealth Dental Health Program (CDHP)[1] was also identified as having a profound impact on the dental health of low-income earners in rural and remote communities. Following its abolition in December 1996, the number of people in country Western Australia who were eligible for publicly-funded dental care fell from 100,000 to 65,000. As a consequence, waiting times for treatment increased from an average of three months to nine months.

Admitted patient and specialist services for people relying on public care are also considered by country residents and dental practitioners alike to be inadequate. Of the six dental specialties, only oral surgery and orthodontics appear to be available locally to some country residents.

The Patient Assisted Travel Scheme (PATS), which provides assistance to country residents who are required to travel more than 100km in order to attend specialist appointments, is very costly and largely unavailable for dental treatments.

The role of and interaction between government organisations, training institutions, private practitioners and professional bodies in the provision of dental services to regional, rural and remote areas

There are a number of key groups involved in the provision of dental services. The Perth Dental Hospital and Community Dental Services (Dental Services) is the Government oral health services provider. Planning for services in rural and remote locations involves a close liaison between Dental Services and the Department of Health Purchasing Section. Dental Services also liaises closely with a number of organisations (e.g. Department of Education, Department of Immigration, Australian Dental Association (WA), the University of Western Australia, Dental Assistants Association, Dental Nursing Australia, Government Employees Housing Authority, Aboriginal Medical Services), as well as private practitioners, to ensure ground level delivery of dental services in rural and remote locations.

The Oral Health Centre of Western Australia (OCHWA) was established in early 2002. It will provide the teaching functions (for dentists, dental technicians and prosthetists, dental therapists, dental hygienists and dental chair assistants), the specialist services and some of the general practice dental services previously provided through the Perth Dental Hospital. The original planning of OHCWA was based on the premise that additional metropolitan clinics would be built. The waiting list at Perth Dental Hospital at the time of closure was 4,500. This number is expected to increase until all metropolitan clinics are fully operational.

[1] Program introduced by the Federal Government in January 1994, which injected an additional $245 million into public-funded dental care provided by the States and Territories from 1993/94 to 1996/97 inclusive.

In the medium to long term, recent changes to the dental training program are expected to increase the pool of dentists available to practise in rural and remote communities. The inclusion of a final year outplacement program, an increase in the total number of students and the targeted recruitment of students from rural and Aboriginal backgrounds should have a positive long-term effect, but these measures are unlikely to impact on the current dental crisis.

The Centre for Rural and Remote Oral Health (CRROH) commenced operation in mid 2001 and is funded by the Department of Health. CRROH has a number of roles, including: delivering clinical services to rural and remote areas; conducting research on current issues in oral health in rural and remote regions; promoting oral health and oral health practice; and providing a network of support for rural oral health workers.

There are three critical steps in the provision of dental services to regional, rural and remote communities, the first of which involves training an adequate number of suitably qualified dental personnel. There are many factors to be considered with regard to training, including: recruitment of an adequate total number of students; development of an appropriate curriculum; provision of incentives in the form of scholarships; recruitment of an adequate number of country students; and outplacements in country locations. Whilst measures are being taken to address current training issues, there is still room for improvement with regard to providing scholarships and securing an adequate intake of students from country areas.

The next step in provision of dental services is the attraction and recruitment of appropriately qualified dental professionals. The issues to be considered in this regard include: attraction to country areas; provision of adequate accommodation; integration into the local community; professional support and mentoring; and ongoing professional development. Many communities experience difficulties attracting and retaining qualified dental personnel. Establishment of a mentoring program and greater involvement of local communities in helping dental personnel to integrate into the community would go some way to addressing these problems.

The final step in the process of providing dental services to country areas is to match the oral health needs of the community with an appropriate model of service delivery. This involves: assessment of oral health needs; provision of appropriate services; community education and health promotion; notification of services and advice about financial assistance; encouragement of private practitioners to participate in the CPDSS; and provision of adequate facilities and equipment. Dental Services, CRROH, local governments, private practitioners and professional bodies all have an important role to play in ensuring that dental services meet the oral health needs of rural and remote communities.

The impact of professional and legal restrictions on provision of dental services to regional, rural and remote areas

The dental workforce is made up of dentists and dental auxiliaries, including dental therapists, hygienists, prosthetists and technicians. Dentists, dental therapists, dental hygienists and school dental therapists are regulated under the *Dental Act 1939.* Dental therapists, hygienists and school dental therapists are restricted in the activities they may perform and must work under the direction and control of a dentist. In practice, the level of supervision and consultation between therapists/hygienists and the dentist may be minimal.

Dental prosthetists are regulated under the *Dental Prosthetists Act 1985*. Dental technicians are not currently regulated under an Act in Western Australia. Both prosthetists and technicians

construct and repair dentures and other dental aids. The two professionals differ in that dental prosthetists have additional skills not held by dental technicians, and dental prosthetists may deal directly with the public, whereas dental technicians are employed or contracted by a dentist or prosthetist.

In 2001, the Department of Health completed a review of Western Australian Health Practitioner Legislation, including the *Dental Act 1939* and the *Dental Prosthetists Act 1985*. In relation to dentistry the significant recommendations included: the merging of the *Dental Act 1939* and the *Dental Prosthetists Act 1985* into a single Act to regulate all dental practitioners; and the removal of legislation that restricts school dental therapists to the public sector.

Dentists are recruited via three different pathways. By far the largest proportion of dentists (80-85 per cent) enters the workforce each year through graduation from Australian universities. Net migration from the United Kingdom, New Zealand and Ireland, which hold reciprocal registration agreements with Australia, usually accounts for less than 10 per cent of recruitment into the dental workforce. Dentists entering the workforce via the Australian Dental Council (ADC) examination account for up to 10 per cent of the total annual recruitment. The examination procedure consists of three parts that must be taken sequentially: an occupational English test, which assesses reading, writing, speaking and listening skills; a preliminary examination (written); and a final examination (clinical).

The possibility of introducing a scheme that utilises overseas-trained dentists to provide services in rural and remote locations was raised by Western Australia at the August 2001 Australian Health Ministers' Conference. The proposed scheme involves the restricted registration of dentists to provide services for a period of three to four years in a designated area of unmet need, in return for an alternative form of registration to the ADC examination process.

The ADA (WA) voiced strong opposition to the use of overseas-trained dentists on numerous grounds, including concerns about the standard of care that these dentists would be capable of providing. In general, other sectors of the Western Australian community gave in-principle support to the use of overseas-trained dentists.

An analogous program, the Overseas Trained Doctors Program, has been operating in Western Australia since October 1999. Since its introduction, 50 doctors have entered the scheme, with more than 40 currently working in rural locations around the State. With fewer vacancies now available for overseas-trained doctors, the recruitment process is more selective than was initially possible.

Specific community groups who are at risk of poor long-term dental health

Although most people living in regional, rural and remote areas of Western Australia are disadvantaged in terms of access to dental services, a number of sub-groups within the community are at a greater disadvantage to others.

Indigenous Australians are at risk of poor long term oral health simply by virtue of the fact that a disproportionately high number (65 per cent) live in rural or remote regions of the State (compared with only 13 per cent of the general population). Many facets of the modern Indigenous lifestyle further increase the risk of poor oral health, including: poor nutrition; low income; lack of access to fluoridated water; poor oral hygiene; high prevalence of diabetes mellitus and rheumatic fever; and lack of access to culturally appropriate services.

There is a well-documented link between low income and poor oral health. In general, low-income earners are more likely to be edentulous, are less likely to have visited a dentist in the preceding 12 months, are more likely to exhibit problem-oriented dental visiting patterns and are more likely to avoid dental treatment due to cost. Low-income earners who live in remote locations have even poorer oral health and more problem-oriented visiting patterns than low-income earners who live in urban locations.

Many aged people are on low incomes, and are therefore subject to the disadvantages faced by low-income earners. Unlike younger community members, aged people do not have the advantage of having grown up with access to fluoridated water and preventive dental programs, therefore, for those who have retained their natural teeth, there is a higher level of need for dental services to maintain them. Loss of mobility also disadvantages aged people living in regional, rural and remote communities. As people age, they are less likely to use their own cars. Lack of public transport in non-urban communities therefore poses a considerable barrier to accessing dental services. Aged people who live in residential care are a particularly high-risk group, because they are often difficult to treat and the level of interest in treating nursing home residents is low for the majority of dentists.

Some groups of children are also at risk of poor long-term dental health. Children become eligible for SDS care on enrolment at school, but prior to this, there is no organised dental care. Although there has been a significant decrease in tooth decay in five-year-olds over the last two decades, many children still experience tooth decay before entering the SDS. By age five, two in five children exhibit tooth decay, and one in ten have four or more decayed teeth. As well as lack of access to organised care, children under five can be both anxious and uncooperative with regard to dental treatment, and some may require dental treatment under general anaesthesia. Oral health in this age group may be further compromised by lack of access to fluoridated water and reduced access to admitted patient dental services in regional, rural and remote areas of the State.

As well as under fives, high school children are at risk of poor long-term dental health. Whilst the uptake rate for primary school children in the SDS is close to 90 per cent, uptake for high school children is only 65 per cent. The rate of uptake declines steadily from age 13 onwards. It is not clear whether the reduced uptake in the SDS for high school aged children relates to a shift toward private dental care, or whether these children, rather than their parents, are increasingly taking responsibility for their own dental care, and are choosing not to continue with regular dental visits.

Basic dental care through the SDS is not available to children with disabilities that limit their ability to sit in a chair and follow a dentist's instructions. Options are limited and often expensive for such children. In regional, rural and remote locations where admitted patient dental services are limited or non-existent, children with disabilities who must receive dental treatment under general anaesthesia are at great risk of poor long-term dental health. Parents who are ineligible for public treatment have little choice but to privately fund their child's treatment, an expensive exercise if even the most basic procedures must be carried out under general anaesthesia.

Other matters

The Committee surveyed a sample of Year 11 students attending country high schools around the State. The broad objectives of the survey were to gain an appreciation of the proportion of students who had considered a career in dental health, to examine what factors might encourage country students to return to the country after completing post-secondary studies, to determine

whether there is evidence of active recruitment of country students into dental training programs and to examine awareness of oral health and hygiene.

Almost 20 per cent of the 545 country students who participated in the Committee's Year 11 Student Dental Survey indicated that they had or were currently considering a career in health, although, only four students indicated that they had previously considered a career in dental health.

Around 75 per cent of students who intend to undertake further studies plan to do so in Perth or another capital city. Only one in five students indicated that they would like to return to the country after graduating. Of those who do not plan to return to the country, one in two cited lack of job opportunities as the main disincentive.

Less than 20 per cent of students recalled having someone visit their school in the preceding 12 months to discuss career opportunities in health fields. None of the students recalled being visited by a dentist, dental student or other speaker promoting careers in dentistry.

FINDINGS

Finding 1

Dentists working in country practices often work longer hours than their city counterparts.

Finding 2

People who live in rural or remote locations are less likely than people who live in the city to have visited a dentist in the past 12 months.

Finding 3

There is an imbalance between the supply of and demand for dental services in regional, rural and remote areas of Western Australia.

Finding 4

People who live in country areas have a greater prevalence of untreated decay and more "missing" teeth than people who live in the city.

Finding 5

People who live in country areas often assign a low priority to dental health.

Finding 6

Country residents generally expect the same level of access to dental services as city residents.

Finding 7

Rural and remote dwellers are more likely than urban dwellers to visit a dentist for a problem rather than a routine check-up.

Finding 8

Throughout Australia, people who live in remote communities are less satisfied with the dental care they receive than people who live in rural or urban areas.

Finding 9

Western Australians who receive dental treatment in public dental clinics, regardless of whether they live in the city or the country, are less satisfied with the level of care they receive than the total population of Western Australians who use dental services.

Finding 10

Country residents who receive dental treatment in private clinics report a higher level of satisfaction with the care they receive than residents who receive treatment in public clinics.

Finding 11

Rural and remote areas of Western Australia have some of the lowest rates of practising dentists in Australia.

Finding 12

Whilst there is currently an estimated shortfall of up to ten dentists in the public sector in country Western Australia, a far greater number would be required to adequately meet the demand for dental services.

Finding 13

Admission of public patients for dental procedures in public hospitals is severely restricted in many country locations, forcing patients to wait for lengthy periods or to travel to Perth to access treatment.

Finding 14

Private practitioners who participate in the Country Patients' Dental Subsidy Scheme (CPDSS) provide a significant proportion of public dental care in country areas. In areas where no public dental service exists, and private dentists do not participate in the CPDSS, residents must pay full fees for dental treatment or travel to the nearest public clinic.

Finding 15

A number of towns in the Northwest Health Zone, including Carnarvon, Derby, Fitzroy Crossing/Halls Creek, Port Hedland, Kununurra and Newman have been difficult to staff with dental professionals in recent years.

Finding 16

Dental services to numerous towns in the Midwest Health Zone, including Meekatharra, Cue, Mt Magnet, Yalgoo, Karralundi, Wiluna and Burringah, have experienced frequent disruptions in recent years.

Finding 17

Residents in a number of areas in the Goldfields Health Zone, including Kalgoorlie-Boulder, Ravensthorpe, Esperance and the Ngaanyatjarra communities, have experienced considerable difficulty accessing dental services in recent years.

Finding 18

Several towns in the Midlands Health Zone, including Merredin, Moora and surrounding communities have had disrupted dental services in recent years.

Finding 19

Several towns in the Great Southern Health Zone, including Albany, Narrogin and Katanning, have been affected by staffing vacancies in dental services in recent years.

Finding 20

Residents of several towns in the South West Health Zone, including Bunbury and Collie, have had disrupted access to dental services in recent years.

Finding 21

The rates of practising dentists, dental therapists, dental hygienists and dental prosthetists per 100,000 population are significantly lower in country Western Australia than in Perth.

Finding 22

Residents of many rural and remote communities must travel long distances to access dental services.

Finding 23

A community of around 3 - 4,000 people is required to support a general dental practice. There are less than 20 towns in Western Australia with a population in excess of 4,000.

Finding 24

Access to dental care in country communities is hampered by factors including the cost and inconvenience of travelling long distances, availability of public services for low-income earners and availability of appropriate services for community members with special needs.

Finding 25

Many factors detrimentally impact on the provision of dental care to country areas, including: the relatively high cost of delivering services; the inadequate remuneration offered to country dental professionals; a reluctance by dentists to leave major cities; a lack of professional support and development for country dental professionals; and the additional difficulties associated with owning and running a dental practice in a country town.

Finding 26

The Western Australian communities that are most disadvantaged in terms of access to dental services often do not have access to fluoridated water, compounding their level of disadvantage.

Finding 27

People in rural and remote communities who rely on public dental services have poorer oral health and access to dental services than people who can afford to privately fund their dental treatment.

Finding 28

The School Dental Service is a successful, cost-effective program that provides access to preventive and restorative dental care for all Western Australian school children. However, due to staffing difficulties, children in some rural and remote communities have experienced varying degrees of disruption to services.

Finding 29

Public dental services for adults are largely inadequate in many regional, rural and remote communities throughout the State. Residents face limited services, lengthy waiting times and frequent disruptions to services.

Finding 30

There are numerous criticisms of the Country Patients Dental Subsidy Scheme, including: the lengthy waiting time for processing of authorisation for commencement of treatment; the restricted range of dental procedures that it covers; the difficulties dentists encounter in recovering patient contributions; and the large disparity between the fees paid by the CPDSS and the fees that private practitioners would normally charge.

Finding 31

Abolition of the Commonwealth Dental Health Program (CDHP) has had a profound impact on low-income earners in country Western Australia, including: a large reduction in the number of people who are eligible for public dental treatment; a significant increase in waiting times and a shift from preventive to emergency dental treatment patterns.

Finding 32

Most country residents have very limited access to specialist dental services in their local area.

Finding 33

The Patient Assisted Travel Scheme (PATS), which aims to provide assistance to country residents who are required to travel more than 100km to see a specialist, is very costly and largely unavailable for dental treatments.

Finding 34

The Oral Health Centre of Western Australia (OHCWA) began operation in January 2002, replacing the Perth Dental Hospital. The waiting list at Perth Dental Hospital at the time of closure was 4,500. This number is expected to increase until all metropolitan clinics are fully operational in the second half of 2002.

Finding 35

The University of Western Australia has made a number of recent changes to the dental program, including an increase in the total dental student intake, the inclusion of an outplacement year and the targeted recruitment of rural and Aboriginal students. These measures are expected to have some long-term impact on the shortage of dentists in regional, rural and remote areas of the State, however, other measures will also be needed. Changes to the dental program are unlikely to impact on the current dental crisis.

Finding 36

It is expected that the Centre for Rural and Remote Oral Health will play an important role in improving the delivery of dental services to rural and remote areas of the State, through a combination of carefully targeted clinical and research strategies.

Finding 37

The Federal Government and other organisations clearly recognise the benefit of providing scholarships as incentives to attract doctors to rural and remote areas. Although the shortage of dental professionals in rural areas is comparable to the shortage of doctors, there are few scholarships offered to dental students.

Finding 38

There are numerous impediments to the attraction and retention of dental professionals in country areas, including: lack of adequate accommodation; difficulty integrating into the local community; lack of educational opportunities for family; and lack of professional support and ongoing professional development.

Finding 39

Advice about the timing of dental visits, and eligibility for subsidised or publicly funded dental care is not well publicised in some rural and remote communities.

Finding 40

Dental practitioners working in rural and remote areas must often deal with inadequate facilities and equipment.

Finding 41

The supply of dentists has the greatest impact on the overall provision of dental services, partly because of the relatively low number of auxiliaries compared to dentists and partly because auxiliaries cannot operate to the exclusion of dentists.

Finding 42

Pursuant to the *Dental Act 1939*, dental therapists, dental hygienists and school dental therapists can perform a wide range of dental procedures under supervision and following consultation with a dentist, however, in practice, the level of supervision and consultation may be minimal.

Finding 43

The majority of dentists are recruited into the dental workforce via graduation from Australian universities. A small number of overseas-qualified dentists also gain registration each year through reciprocal registration agreements, or by passing the Australian Dental Council (ADC) examinations.

Finding 44

The Australian Dental Association (WA) is strongly opposed to the use of overseas-trained dentists to provide dental services in areas of unmet need, in return for an alternative form of registration to the ADC exam. The Association's website actively promoted the view that "*Opportunities for employment in the dental profession in Australia are extremely limited, as there is an oversupply of dentists in all States*." Other sectors of the Western Australian community have given in-principle support for the use of overseas-trained dentists.

Finding 45

Indigenous people are at risk of poor long-term dental health simply by virtue of the fact that they are more likely than non-Indigenous people to live in rural or remote communities. Many facets of modern Indigenous lifestyle further increase the risk of poor long-term dental health.

Finding 46

Low-income earners are at risk of poor long-term oral health. Living in a rural or remote community further adds to the disadvantage experienced by low-income earners.

Finding 47

Aged people living in rural or remote communities are at risk of poor long-term oral health. Aged people in residential care are at a greater disadvantage to aged people living in the community.

Finding 48

Children under five, adolescents, and children with disabilities are at risk of poor long-term dental health.

Finding 49

Of 545 Year 11 students living in regional, rural and remote areas of the State who completed a Student Dental Survey, none indicated that they intend to undertake studies in the field of dental health when they complete high school. Four students indicated that they have previously considered a career in dentistry.

Finding 50

Of the 545 survey respondents, only 16.6 per cent indicated that someone had visited their school in the preceding 12 months to promote career opportunities in health related fields. Sixteen students indicated that a University of Western Australia medical student had visited, and twelve students indicated that a local doctor or other health professional had visited. None of the respondents recalled being visited by a dentist, dental student or other representative from a training institution promoting careers in oral health.

Finding 51

Of the 386 survey respondents (70.8 per cent) who intend to undertake further studies after completing high school, 69.7 per cent intend to study in Perth or another capital city. Most students are either undecided (45.9 per cent) or do not intend to return to their place of residence (33.4 per cent) after completing further studies.

Finding 52

For those survey respondents who intend to return to their place of residence after completing further studies, family and/or friends is the most commonly cited reason (59.3 per cent). For students who do not intend to return to their place of residence, lack of employment opportunities (54.5 per cent) is the most commonly cited reason.

Finding 53

Most survey respondents consider oral health and hygiene to be extremely (52.2 per cent) or quite (42.2 per cent) important. Only 11.0 per cent of students had visited the School Dental Service in the last 12 months, and 50.8 per cent last visited one to two years ago. Approximately 52 per cent of students visited a private dental practitioner some time in the last two years.

RECOMMENDATIONS

The Committee recommends a stronger State commitment to delivery of dental services to regional, rural and remote areas of the State, particularly with regard to adult dental services.

Recommendation S1

In consultation with Dental Services, a concerted effort should be made to address the current shortfall of dentists and dental therapists in the public system by actively recruiting more personnel. Financial and other incentives should be offered to encourage dental professionals working in the public sector to accept postings in regional, rural and remote areas.

Recommendation S2

In consultation with regional development commissions, business incentives should be offered to private dental practitioners to encourage the establishment of dental practices in areas of unmet need throughout the State.

Recommendation S3

Public dental services should be established or expanded in current areas of unmet need. The Committee has identified a number of communities that are currently in most urgent need of improved dental services:

- Communities in the Goldfields Health Zone, including Esperance, Ravensthorpe and the Ngaanyatjarra Lands;
- Communities in the Northwest Health Zone, including Derby, Port Hedland, Newman, Exmouth and Halls Creek;
- Communities in the Midwest Health Zone, including Meekatharra, Cue, Mt Magnet, Karralundi, Wiluna and Burringah.

Recommendation S4

The State should assign a higher priority to the allocation of Commonwealth health funding into dental services.

Recommendation S5

Increased funding should be made available to facilitate the delivery of more extensive specialist dental services to regional, rural and remote areas of the State.

Recommendation S6

Dental scholarships should be established to ensure the delivery of more dentists and better dental services to regional, rural and remote areas of Western Australia. Two types of scholarship should be offered: one that is available only to students from rural or Aboriginal communities; and a second that is offered to students who undertake to work in a rural or remote community for a predetermined period of time after graduation.

Recommendation S7

The Committee fully supports the use of overseas-trained dentists to alleviate the current shortage of dentists in regional, rural and remote areas of Western Australia, and encourages the State to take any necessary steps to expedite the implementation of this scheme.

Recommendation S8

To assist in the implementation of Recommendation S6, a formal program should be established to increase awareness of and promote career opportunities in oral health amongst city and country high school students. The program should be coordinated by the Department of Health in consultation with the Department of Education and the University of Western Australia.

The Committee recommends that the **Department of Health** facilitate an improvement in the delivery of dental services to regional, rural and remote areas through a range of measures.

Recommendation H1

The following steps should be taken with regard to admitted patient dental procedures:

- Inpatient dental procedures should be afforded a higher priority, with a commensurate increase in the relative funding allocation to regional health services;
- A more effective monitoring system should be established to ensure that the number of admitted patient dental procedures performed in regional hospitals is in accordance with both the funding allocation and with the normative level of demand for services in the local area;
- A concerted effort should be made to encourage regional health services to increase the amount of hospital theatre time allocated to dental procedures to ensure that residents of regional, rural and remote communities are not forced to travel to Perth to access treatment; and
- A review should be undertaken to examine the possible use of intravenous sedation for complex or major dental procedures.

Recommendation H2

A comprehensive cost-analysis should be performed to assess the projected lifetime costs, both economic and social, of poor long-term dental health compared to the costs of providing fluoridated water to small rural and remote communities. The analysis should also explore alternative means of supplementing fluoride intake in rural and remote communities.

Recommendation H3

In consultation with Dental Services, a comprehensive review of the Country Patients Dental Subsidy Scheme should be undertaken with a view to streamlining administrative aspects of the program and reducing the waiting time for authorisation to commence treatment.

Recommendation H4

Careful monitoring of the clinical, teaching and research activities of the Oral Health Centre of Western Australia and the Centre for Rural and Remote Oral Health should be undertaken to ensure that the training and research focuses of these facilities do not detrimentally impact on delivery of clinical services, particularly to country areas.

Recommendation H5

In consultation with Dental Services and the Australian Dental Association (WA), a mentoring system should be established, whereby new dental graduates in regional, rural and remote communities are assigned a mentor who will play an active role in professional support and development, as well as assisting with integration into the local community.

Recommendation H6

In consultation with Dental Services, the Department should take immediate measures to improve dissemination of information about visiting dental services and eligibility for publicly funded treatment in regional, rural and remote communities.

Recommendation H7

In consultation with Dental Services and the Centre for Rural and Remote Oral Health, oral health programs specifically targeting disadvantaged members of rural and remote communities should be established. The Committee has identified the following residents of regional, rural and remote communities as being at particular disadvantage with regard to long-term oral health:

- Indigenous people;
- Low-income earners;
- Aged people, particularly those in aged care facilities; and
- Children under five, adolescents, and children with disabilities.

MINISTERIAL RESPONSE

Standing Order 277(1) of the Standing Orders of the Legislative Assembly states that:

> *A report may include a direction that a Minister in the Assembly is required within not more than three months, or at the earliest opportunity after that time if the Assembly is adjourned or in recess, to report to the Assembly as to the action, if any, proposed to be taken by the Government with respect to the recommendations of the Committee.*

The Education and Health Standing Committee directs that the Minister for Health respond accordingly.

CHAPTER 1 INTRODUCTION

1.1 BACKGROUND TO THE INQUIRY

The Education and Health Standing Committee was first appointed on 30 May 2001. Pursuant to the Assembly Standing Orders, the Committee may inquire into any matter within its portfolio responsibilities. The departments within the Committee's portfolio responsibilities are:

- Education;
- Health;
- Indigenous Affairs; and
- Sport and Recreation.

At a meeting on 27 June 2001, the following resolution was agreed to by the Committee:

Resolved, that the Standing Committee examine, report and make recommendations on the adequacy and availability of dental services in rural Western Australia.

On 22 August 2001 terms of reference for the inquiry were adopted.

1.2 CONDUCT OF THE INQUIRY

An advertisement calling for public submissions to the inquiry was placed in the *West Australian* on Saturday, 8 September 2001. Submissions were invited from local governments, regional health services, dental service providers, community groups, training institutions, professional bodies and regional development commissions. The closing date for submissions was extended from 5 October 2001 to 12 October 2001.

The Committee received 46 written submissions from consumers, state and local health service providers, local government offices, dental practitioners and other interested parties. Many of the submissions provided first-hand accounts of experiences with dental services in country regions. Appendix One contains a list of written submissions made to this inquiry.

The Committee held a public hearing in Perth on 12 November 2001. Witnesses who gave evidence at the public hearing are listed in Appendix Two. A number of witnesses tabled supplementary written information at the hearing in response to questions provided on notice. These written submissions are listed in Appendix One.

On 21 November 2001 the Committee travelled to Kalgoorlie for a series of briefings with representatives from Kalgoorlie and other regional towns. Details of these and other briefings held in Perth are included in Appendix Three. Several witnesses tabled written submissions at these briefings, which are listed in Appendix One.

During its Kalgoorlie visit, the Committee had the opportunity to speak informally with a small group of Year 11 students from Eastern Goldfields Senior High. The students' responses to questions about intended post-secondary studies and their thoughts about returning to the Kalgoorlie-Boulder region after completing tertiary qualifications were very enlightening.

Following approval from the Department of Education, the Committee extended this informal survey to a formal questionnaire style survey of a larger sample of Year 11 students from a selection of secondary schools in regional, rural and remote locations throughout the State. The broad objectives of the survey were to provide the Committee with an indication of:

- the proportion of students who have considered a career in health, particularly dental health;
- the likelihood of students returning to regional, rural and remote areas after studying in Perth or large regional centres, and the factors that influence their decision;
- student awareness and perceived importance of oral health; and
- whether secondary students from regional, rural and remote areas are being actively recruited (eg by training institutions) into health training programs.

A total of 545 students from 12 secondary schools completed the survey. The parent information and consent form and Year 11 Student Dental Survey are contained in Appendix Four.

The Committee would like to thank all those persons and organisations that made submissions and/or appeared as witnesses before the Committee. A special thank you is also extended to students and schools that participated in the Year 11 Student Dental Survey.

1.3 SCOPE OF THE INQUIRY

The inquiry is broad in its scope, investigating all aspects of the provision and use of dental services in regional, rural and remote Western Australia.

The report includes, but is not limited to, detailed consideration of the following issues:

- Training of dental personnel;
- Recruitment and retention of dental personnel;
- Normative needs of regional, rural and remote communities for dental services;
- Oral health status of regional, rural and remote residents;
- Legal and professional considerations in the provision of dental services; and
- Models of dental service provision to regional, rural and remote communities.

Whilst the inquiry did not examine dental services in the Perth metropolitan area, figures for metropolitan Perth were used as a benchmark against which to gauge the adequacy of dental services in non-metropolitan regions.

CHAPTER 2 BACKGROUND

2.1 DENTAL HEALTH OF WESTERN AUSTRALIANS

There are many factors that affect the oral health of a population, and individuals within the population, including age, exposure to fluorides, dietary habits, attitude toward oral health, preventive dental behaviours and access to and use of dental services. There is a well-recognised link between early preventive strategies and good dental outcomes in later life.

Oral health outcomes are usually measured in terms of caries experience (dental decay), such as the number of decayed, missing or filled permanent teeth (DMFT) or complete tooth loss (edentulism).

2.1.1 Trends in child dental health

There has been a dramatic decline in caries experience in children over the last two decades. In 1968 more than 95 per cent of Western Australian 12-year-olds had dental caries experience in permanent dentition. By the year 2000, this figure had fallen to 37 per cent.[2] The mean DMFT for 12-year-olds in 1977 was almost 4.0. By 2000 this figure had fallen below 1.0. During this period there was also a reduction in the number of decayed, missing or filled deciduous teeth (dmft) from 2.5 to around 1.7.[3] The figures for Western Australian children compare favourably with children in other States and Territories.[4]

The dramatic improvement in child dental health has been attributed to two important public health initiatives: water fluoridation and the School Dental Service (SDS). Through regular check-ups and routine maintenance, children enrolled in the SDS benefit from early intervention, which ultimately minimises the risk of dental disease. Oral health education and promotion are also important preventive strategies employed by the SDS to ensure the continued good oral health of school children.

Exposure to water fluoridation offers an important protective effect against caries development. A recent study conducted by AIHW examined the relationship between exposure to water fluoridation and caries experience in 5 to 15-year-old children. Age standardised mean dmfs (decayed, missing or filled *surfaces* on deciduous teeth) scores ranged from 6.6 for children with zero fluoride exposure to 3.0 for children with 100 per cent (i.e. lifetime) exposure to water fluoridation. Similarly, age adjusted DMFS (decayed, missing or filled *surfaces* on permanent teeth) decreased from 1.22 for the zero exposure group to 0.86 for the 100 per cent exposure group.[5]

Despite the overall improvement in dental health of children, there remain pockets of at-risk children who continue to have poor dental health. In 1999, 11 per cent of Western Australian 5-year-olds had four or more decayed teeth.[6] Caries experience was highest in the North West of

2 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p12.
3 *Ibid.*
4 Australian Institute of Health and Welfare, 2000, pp19-20, 390-391.
5 AIHW Dental Statistics and Research Unit, 1998b, pp21-37.
6 AIHW Dental Statistics and Research Unit, 2001a, p12.

the State.[7] Children of lower socioeconomic status, of Indigenous origin or who live in rural or remote areas have been identified as having the largest burden of oral disease.[8]

2.1.2 Trends in adult dental health

Whilst there has also been an improvement in adult oral health during the last two decades, the improvement is more moderate than that seen in children. The most notable improvement has been a decline in the prevalence of edentulism (complete tooth loss). In 1979, more than 80 per cent of people over the age of 65 were edentulous, compared with only 40 per cent by 1994. A similar improvement was seen in all adults over the age of 25.[9]

Between 1973 and 1993, there was little change in mean DMFT for 35 to 44-year-old Australians. However, the number of filled teeth increased from eight to 12 and the number of missing teeth decreased from nine to six, indicating an important shift toward restorative dental treatments.[10] Although most adults have had some exposure to fluoridated water, in many cases it will have come too late, as childhood and early adulthood are the critical periods during which long-term dental health is determined.

The shift toward increased retention of teeth has led to an increased per capita demand for dental services amongst Australian adults. However, whilst demand for services has increased, it is still well below the per capita demand of children.[11]

2.2 THE COST OF DENTAL DISEASE

2.2.1 The role of the Commonwealth in provision of dental services

Section 51 (xxiiiA) of the Constitution empowers the Commonwealth to make laws with respect to the provision of dental services, however, the section imposes no responsibility to make such laws. The Commonwealth is also empowered to support publicly funded dental services through section 96 of the Constitution, the so-called 'States grants' power, which empowers the Commonwealth to grant financial assistance to the States on such terms and conditions as it thinks fit. Section 81, the 'Appropriations' power, also allows funding of dental services.

The Commonwealth has had some involvement in the provision of dental services in the past. For example, the Australian School Dental Program was initially funded by specific purpose Commonwealth grants to the States, eventually being subsumed into general-purpose grants. The Commonwealth Dental Health Program, which operated between 1993/94 and 1996/97, provided a total of $245 million over four years. It ceased funding on 31 December 1996, following which the States resumed full responsibility for public dentistry.

The Commonwealth currently provides minimal funding for dental services.

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7 AIHW Dental Statistics and Research Unit, 2001a, p13.
8 Australian Institute of Health and Welfare, 2000, p20.
9 AIHW Dental Statistics and Research Unit, 1998b, p105.
10 *Ibid*, p108.
11 *Ibid*, p109.

2.2.2 Who pays for dental treatments?

In 1998/99 total expenditure on dental services was $2.57 billion Australia-wide, representing around 5 per cent of Australia's total health expenditure. The relative contribution of Government and non-Government sources varied greatly. The largest contribution was made by individuals, who paid $1.64 billion for dental services, representing 19.4 per cent of all monies contributed by individuals to health services, and accounting for a massive 64.2 per cent of total dental services expenditure.

Private Health Insurance Funds contributed $506 million[12] to dental services in 1998/99, representing 12.5 per cent of their total health expenditure, and accounting for 19.8 per cent of all dental services expenditure.

State and local governments contributed $305 million to dental services in 1998/99, representing 2.6 per cent of all State funding contributed to health services, and accounting for 11.9 per cent of total dental services expenditure. In Western Australia, the total State Health budget for 2001/02 is approximately $2.3 billion, of which $45 million (2.0 per cent) has been allocated to oral health.

The Commonwealth contributed $104 million[13] to dental services in 1998/99, just 0.4 per cent of total Commonwealth health expenditure, and 4.1 per cent all monies spent on dental services.[14]

2.2.3 Dental morbidity

In general, when dental services are adequate, and people are receiving the dental care they need, good oral health will be maintained through regular check-ups and routine restorative treatments. At the other end of spectrum, when people do not receive the routine preventive and restorative dental treatments required to maintain good oral health, dental disease will often progress to the stage where extraction of teeth is necessary.

Dental extractions and complex restorative treatments are usually undertaken under general anaesthetic in a hospital. Dental extractions and restorations are amongst the 30 AR-DRG (Australian Revised Diagnosis Related Groups)[15] with the highest number of hospital separations.[16] In 1999/00, dental extractions and restorations were the 19th most common procedure in public hospitals in Western Australia, with 2,361 separations (0.7 per cent of all public hospital separations).[17] During the same period, 8,179 dental extractions and restorations were performed in private hospitals in Western Australia, the second most common procedure, accounting for 3.9 per cent of all procedures in private hospitals. Altogether, 10,540 dental

12 Net contribution, adjusted to account for Commonwealth rebate paid through Private Health Insurance Incentives Scheme (PHIIS), which was introduced on 1 July 1997.

13 Of the $104 million total, $97 million (93%) represented premium rebates to Private Health Insurance Funds through PHIIS.

14 Australian Institute of Health and Welfare, 2001b, p62.

15 The term *Australian Revised Diagnosis Related Groups* is an Australian patient classification system that provides a means of summarising and relating the number and type of patients treated in a hospital to the resources required by the hospital. The classification categorises acute admitted patient episodes of care into groups with similar conditions and similar usage of hospital resources.

16 The term *hospital separation* is used to refer to the episode of care, which can be a total hospital stay (from admission to discharge, transfer or death), or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation).

17 Australian Institute of Health and Welfare, 2001a, pp200-206.

extractions and restorations were performed in public or private hospitals in Western Australia in 1999/00, the sixth most common hospital procedure overall, accounting for 1.9 per cent of all separations.[18]

Dental extractions and restorations are also performed in private day hospitals. Figures relating specifically to Western Australia are not available, but Australia-wide there were 9,401 dental extractions and restorations performed in day hospitals, the eighth most common procedure, accounting for 3.4 per cent of all procedures in day hospitals.[19]

2.3 ORAL HEALTH AND THE USE OF DENTAL SERVICES IN NON-URBAN LOCATIONS

The general health of people living in regional, rural and remote communities is generally worse than that of people living in capital cities. Oral health is no exception, with people in non-urban areas having poorer oral health than their urban counterparts. A number of factors contribute to the disparity between urban and non-urban dwellers, including reduced access to services, lower socioeconomic status and employment levels and sparse infrastructure.[20]

There are clear differences in the level of contact with dental services for people from urban and non-urban locations, as indicated by the time since last dental visit. People from remote locations are less likely than people from urban locations to have visited a dentist in the last 12 months. Conversely, they are more likely to have last visited a dentist more than five years ago. People from rural locations are intermediate between remote and urban dwellers.[21]

There are also clear differences in dental visiting patterns for people living in urban and non-urban locations. Visiting a dentist when problems arise, rather than for routine check-ups, may be a reflection of reduced access to dental services, in terms of availability and/or affordability. Problem-oriented dental visits may also reflect differences in attitude toward dental care. People living in rural and remote locations are more likely than people living in urban locations to exhibit problem-oriented dental visits.[22]

As well as dental visiting patterns, people from non-urban locations fall behind their urban counterparts in terms of oral health status. Tooth loss and the wearing of dentures reflects the cumulative effect of past dental disease and treatment patterns. People from rural and remote locations are more likely to be edentulous than people from urban locations, reflecting different historical treatment patterns between the three locations.[23]

There are many factors that contribute to reduced access to dental services in rural and remote locations, chief amongst them, the skewed distribution of the dental workforce toward major urban centres. In 2000, there were 55.6 practising dentists per 100,000 people in Perth, and only 29.0 practising dentists per 100,000 people throughout the rest of the State.[24] A similar disparity existed for dental auxiliaries (therapists, hygienists and prosthetists).

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18 Australian Institute of Health and Welfare, 2001a, pp200-206.

19 *Ibid*.

20 Australian Institute of Health and Welfare, 2000, p 40.

21 AIHW Dental Statistics and Research Unit, 1999d, p2.

22 *Ibid*.

23 *Ibid*, p1.

24 Information provided by the AIHW Dental Statistics and Research Unit, February 2002.

2.4 DELIVERING DENTAL SERVICES TO REGIONAL, RURAL AND REMOTE AREAS OF WESTERN AUSTRALIA

There is no question that, like any other health service, delivering dental services to rural and remote regions comes at a significantly greater cost than delivering a similar service to urban regions. A balance must be struck between providing a service that will adequately meet the dental health needs of non-urban residents and minimising the cost of delivering such a service. There must also be some attempt at attaining a level of equity, whereby residents of rural and remote regions are not unfairly disadvantaged simply by virtue of their choice of residence.

This report examines in considerable detail the oral health and access to dental services of people living in regional, rural and remote areas of Western Australia. Recommendations are aimed at improving the delivery of services, and hence enhancing the long-term dental health outlook for regional, rural and remote residents.

CHAPTER 3 DEMANDS AND EXPECTATIONS OF WESTERN AUSTRALIANS LIVING IN REGIONAL, RURAL AND REMOTE AREAS FOR GENERAL AND SPECIALIST DENTAL SERVICES

3.1 BACKGROUND

The demands and expectations of residents in regional, rural and remote communities can be considered from a number of perspectives. Figure 3.1 provides a schematic representation of the demand for dental services. The normative needs of a community are determined partly by the oral health status of its residents and partly by their perceived oral health needs. The *actual* use of services in a community will provide some indication of the effective demand. The level of satisfaction with dental services provides a measure of the success of dental health care programs in terms of meeting the patients' needs.

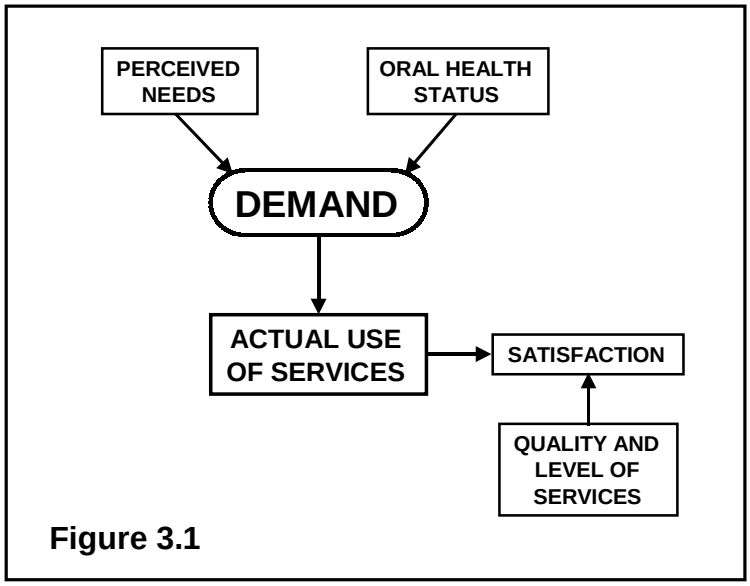

Figure 3.1

The following chapter considers the demands and expectations of people living in regional, rural and remote Western Australia in terms of their use of services, their oral health needs and their level of satisfaction with current services.

3.2 USE OF DENTAL SERVICES IN REGIONAL, RURAL AND REMOTE WESTERN AUSTRALIA

3.2.1 Work practice of dentists

The average number of hours per week worked by dentists in a region provides an indication of the demand for dental services. Information provided by AIHW suggests that dentists working in regional, rural and remote areas of Western Australia work longer hours than their Perth

counterparts. In 2000, the average working week for dentists in Perth was 39.5 hours. By comparison, the average working week for the 146 dentists who worked outside Perth was 41.3 hours. There was considerable regional variability, with dentists in the Upper Great Southern, Midlands and Pilbara regions reporting working weeks in excess of 47 hours. By contrast, dentists in the Central region worked slightly less than their Perth counterparts, at 34.8 hours per week.[25]

A similar pattern of work practice is seen Australia-wide, as reported by Brennan and colleagues.[26] Dentists working in non-capital cities see more patients per hour (1.8 *versus* 1.6) and per day (14.7 *versus* 12.4), and have more visits per year (3,156 *versus* 2,673).

The level of demand for dental services in regional, rural and remote areas can also be gauged by the unusual practices of a) dentists refusing to accept new patients, and b) not issuing reminder notes to existing patients for check-up visits. These strategies are employed by several regional practices as a means of dealing with their inability to meet demand for services.[27]

Finding 1

Dentists working in country practices often work longer hours than their city counterparts.

3.2.2 Pattern of dental care sought by patients

Both the frequency of dental visits and the time since last visit provide some indication of demand for dental services. A recent study by the AIHW Dental Statistics and Research Unit (DSRU) at Adelaide University found that 57.6 per cent of urban dwellers had visited a dentist in the last 12 months, compared with just 53.2 per cent of rural dwellers and 45.8 per cent of remote dwellers.[28] Conversely, only 9.4 per cent of urban dwellers had last visited a dentist more than five years ago, compared with 12.5 per cent of rural dwellers and 15.7 per cent of remote dwellers.[29]

The greatest discrepancy between urban and remote dwellers in time since last dental visit was found in the over 65 age group. In urban locations, 64.6 per cent of people over 65 visited a dentist in the past 12 months, compared with only 52.4 per cent in rural locations and 43.5 per cent in remote locations. Both rural and remote locations recorded a significantly higher proportion of people in the over 65 age group last visiting a dentist more than five years ago (18.7 per cent and 19.3 per cent respectively), compared with urban residents (9.4 per cent).[30]

Figures relating specifically to Western Australian residents were not available at the time of this report, however, the pattern in Western Australia is likely to be similar to that seen in the nation as a whole.

It should be noted that access to and availability of services might also influence frequency of dental visits and time since last visit. For example, residents of rural and remote locations may

25 Information provided by the Australian Institute of Health and Welfare, February 2002.
26 Brennan D, Spencer AJ and Szuster F, 1998, pp12-17.
27 Goldfields Esperance Development Commission, Submission, 12 October 2001, pp3-4.
28 AIHW Dental Statistics and Research Unit, 1998a, p16.
29 *Ibid.*
30 *Ibid.*

have to contend with lengthy waiting lists and/or travel long distances to access services. It is therefore difficult to ascertain whether the difference in pattern of dental visits between urban and non-urban dwellers reflects a difference in access to services, or a difference in the level of demand for services. Both factors are likely to contribute.

Finding 2

People who live in rural or remote locations are less likely than people who live in the city to have visited a dentist in the past 12 months.

3.2.3 Imbalance between supply and demand

In many rural and remote communities, there is a clear imbalance between supply of and demand for dental services, as evidenced by the considerable waiting times some residents face.

In Esperance, for example, the average waiting time for non-urgent treatment at any of the three private dental practices is in the order of eight to nine months.[31] Patients who are in pain and seeking urgent treatment are often forced to wait for up to several weeks.[32] Such excessive waiting times provides a clear indication that demand for dental services is far in excess of supply in some rural and remote communities.

Another telling sign of the imbalance between supply and demand is the situation with regard to dental procedures under general anaesthesia in local hospitals. Dr David McDonald, an oral surgeon who practises in Busselton, has been offered operating theatre time at Busselton Hospital for six public dental patients in 2002, the same allocation as in previous years. As of November 2001, Dr McDonald had already booked in his six patients for 2002 and had another on the waiting list for 2003.[33]

Finding 3

There is an imbalance between the supply of and demand for dental services in regional, rural and remote areas of Western Australia.

3.3 ORAL HEALTH NEEDS IN REGIONAL, RURAL AND REMOTE COMMUNITIES

Expectations and inherent oral health needs are important determinants of the level of demand for dental services within a community. The oral health status of residents, the level of priority that they assign to dental health, their expectations and the circumstances under which they usually seek dental care provide an indication of the oral health needs of regional, rural and remote communities.

31 Goldfields Esperance Development Commission, Submission, 12 October 2001, p8.

32 Jane Mitchell, Practice Manager, Hugh Sharpe's Dental Surgery, Esperance, Briefing, 21 November 2001.

33 Dr David McDonald, Dental Surgeon, Transcript of Evidence, 12 November 2001, p2.

3.3.1 Oral health status and inherent needs of non-urban residents

There is abundant evidence to indicate that residents of non-metropolitan locations throughout Australia have poorer oral health than their metropolitan counterparts, and consequently have a greater inherent need for dental services.

The mean number of missing teeth and the prevalence of untreated decay of permanent teeth is significantly higher in non-metropolitan areas compared with metropolitan areas.[34] The prevalence of edentulism is also significantly higher in non-metropolitan areas for all adults over 35 years of age. For adults 45 years of age or greater, the prevalence is at least 9 per cent higher in non-metropolitan locations.[35]

Figures relating specifically to Western Australians are not available, however there is no reason to expect the pattern in Western Australia to differ substantially from that seen in Australia as a whole.

Finding 4

People who live in country areas have a greater prevalence of untreated decay and more "missing" teeth than people who live in the city.

3.3.2 Prioritising dental care

It is clear from some of the submissions the Committee received that dental health is not always afforded a high priority for people living in regional, rural and remote regions of Western Australia.

The Mullewa Health Services Board of Management stated:

> *There are significant numbers of Aboriginal people … with poor dietary habits and low socio-economic conditions… Unemployment rates are as high as 50% and in the face of impoverishment, these people do not give dental care a high priority.*[36]

The Shire of Plantagenet stated:

> *Anecdotally, we believe that education and information relating to dental hygiene and care (coupled with distance) creates a situation where dental health is not prioritised highly.*[37]

The ADA (WA) interpreted the lower priority for dental care in rural communities as follows:

> *… rural communities are generally more dependent upon seasonal weather patterns. Poor seasons and the unpredictability of rural economics can dictate a greater reservation in expenditure on perceived discretionary items. In the eyes of a proportion of rural community members, non-emergency dental treatment is discretionary, and therefore subject to a*

34 AIHW Dental Statistics and Research Unit. 1998c, pp11-12.
35 *Ibid.*
36 Mullewa Health Services Board of Management, Submission, 26 November 2001, p2.
37 Shire of Plantagenet, Submission, 12 October 2001, p1.

significant degree of restraint in expenditure.[38]

Finding 5

People who live in country areas often assign a low priority to dental health.

3.3.3 Expectations of residents in regional, rural and remote communities

Comments the Committee received by way of submissions were varied. In general, submission authors espoused the view that residents of regional, rural and remote communities should have access to the same level of dental services as people living in Perth. The following is a snapshot of comments made by residents, local governments and health practitioners with regard to demands and expectations of their communities:

- *… we need general dental services to be locally available at all times.*[39]

- *A community Health and Aged Care Survey was conducted in July 2000 and over 80% (n = 126) of respondents indicated the need for improved dental services to the region.*

  The demands and expectations of the Shark Bay community for general and specialist dental services are quite high although hard to achieve.[40]

- *Many Western Australians living outside the metropolitan area expect that dental treatment and advice that they receive should be of the same standard as that provided anywhere else in Australia. Media reports and the availability of internet "advice" on dental treatment modalities and materials have increased the knowledge and expectations of the general public.*[41]

- *Demand for treatment at this Clinic has been increasing rapidly for several years (due to Busselton being the fastest growing country town in Australia) …*

  The two private practice groups providing treatment for patients under general anaesthesia at the Busselton Hospital … have already booked their meagre quota of six public patients each for next year; so doubling the quota per year would not be sufficient.[42]

- *The Shire of Laverton believe that its residents should have the same level of access to various services as residents would expect in more populated and less isolated areas. Council believes that its residents are entitled to the highest level of service, particularly in relation to health, education, communication and transport services.*[43]

38 Australian Dental Association (WA), Submission, 15 October 2001, p3.
39 Lyn Phillips, Submission, 5 October 2001, p1.
40 Shire of Shark Bay, Submission, 5 October 2001, p1.
41 City of Bunbury, Submission, 3 October 2001, p1.
42 Dr David McDonald, Submission, 12 November 2001, p1.
43 Shire of Laverton, Submission, 28 September 2001, p4.

The Perth Dental Hospital and Community Dental Services (Dental Services) had the following general comments to make with regard to demands and expectations in regional, rural and remote communities:

> *It is the experience of this Service that the demands and expectations of rural and remote living Western Australians concerning dental care are very understandable. Services needed for the relief of pain should be available within 2 – 3 hours' travel; regular dental care should be available in the same place as people do their shopping; non-acute specialist care such as orthodontic care should similarly be available at the regional centre but need not be continuously available, a visiting specialist would be adequate.*[44]

Finding 6

Country residents generally expect the same level of access to dental services as city residents.

3.3.4 Problem-oriented versus preventive dental visits

The type of dental care sought and received by residents of regional, rural and remote areas suggests there may be a lower perception of the need for dental care. A recent DSRU report, based on findings from a series of National Dental Telephone Interview Surveys involving almost 18,000 people throughout Australia, found that 52.7 per cent of urban dwellers *usually* visited a dentist for a check-up, compared with 42.4 per cent of rural dwellers and 39.8 per cent of remote dwellers.[45]

A closer inspection of the services performed during dental visits indicates that there are differences by geographical location in the rate of preventive and restorative procedures. Rates of diagnostic, preventive and crown and bridge services are significantly lower in non-capital than in capital locations.[46] A greater proportion of persons from rural and remote locations are likely to have had an extraction in the previous 12 months compared with urban dwellers. Conversely, rural and remote dwellers are less likely to have had a scale and clean.[47]

It should be noted that restricted access to dental services might also contribute to the propensity for rural and remote dwellers to visit dentists for problems, rather than for check-ups.

Finding 7

Rural and remote dwellers are more likely than urban dwellers to visit a dentist for a problem rather than a routine check-up.

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44 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p5.

45 AIHW Dental Statistics and Research Unit. 1998a, p22.

46 Brennan D, Spencer AJ and Szuster F, 1998, pp12-17.

47 AIHW Dental Statistics and Research Unit. 1998a, p21.

3.4 SATISFACTION WITH DENTAL SERVICES

Consumer satisfaction with dental services provides a useful measure of the extent to which the care given meets the demands and expectations of patients. Satisfaction is commonly used in community surveys of dental care.

3.4.1 National Dental Satisfaction Surveys 1994, 1995, 1996

The DSRU conducted a series of Dental Satisfaction Surveys in association with the National Dental Telephone Interview Surveys in 1994, 1995 and 1996. Items surveyed were presented as statements pertaining to the personal experience of the respondents at their most recent dental visit or series of visits.

The residential postcode of survey respondents was used in conjunction with the Rural and Remote areas classification scheme of the Commonwealth Department of Health and Aged Care[48] to categorise respondents as urban, rural or remote.

Three dimensions of satisfaction with dental care were measured. These were:

- Context (ease of making an appointment, waiting time, dentist and clinic staff issues);
- Content (communication, explanation of treatment and options, thoroughness of service); and
- Outcome (service results and improvement in oral health).

Respondents were asked to indicate their level of satisfaction on 31 items by assigning a score between 1 (strongly dissatisfied) and 5 (strongly satisfied). Compared to urban dwellers, residents of remote locations recorded significantly lower values for measures relating to context, content, outcome and overall satisfaction. Residents of rural areas were lower only on the content sub-scale (see table 3.1 below).

Table 3.1

Mean satisfaction score for conceptual categories by residential location – dentate persons aged 18 years or more whose last visit was within the previous 12 months.[49]

	Urban	Rural	Remote	Total
Context	4.28	4.35	3.92*	4.29
Content	4.23	4.15*	3.94*	4.21
Outcome	4.22	4.27	4.04*	4.23
Satisfaction	4.24	4.26	3.97*	4.24

* P < 0.05 *versus* urban[50]

48 Now known as the Australian Department of Health and Ageing.

49 AIHW Dental Statistics and Research Unit. 1998a, p27.

50 Statistically significant, with less than five per cent probability that difference occurred by chance.

When survey items were considered individually, residents of remote communities recorded significantly lower scores than urban residents for numerous items. In general, however, residents of rural communities recorded a similar level of satisfaction on most items to their urban counterparts (see table 3.2 below). Only those items that showed a greater than 0.25 difference between urban and remote dwellers are shown.

Table 3.2

Mean satisfaction scores for individual items by residential location – dentate persons aged 18 years or more whose last visit was within the previous 12 months.[51]

Individual questionnaire items	Urban	Rural	Remote
Ease of arranging visit	4.02	4.12	3.62
Travel to clinic convenient	4.13	4.18	3.69
Explained procedures during treatment	4.11	4.07	3.71
Prompt visit	4.13	4.22	3.78
Distance to clinic	4.31	4.37	3.85
Tended by preferred professional	4.53	4.49	3.95
Impersonal professional	4.34	4.22	4.01
Satisfied with care	4.43	4.44	4.03
Explained treatment needed	4.51	4.43	4.06
Care improved dental health	4.39	4.39	4.09
Same professional each visit	4.52	4.53	4.14
Answered questions	4.53	4.44	4.20
Confident of good dental care	4.49	4.49	4.20

These data illustrate two important points. First, there is a lower level of satisfaction with dental services in remote communities, compared with the level of satisfaction in rural and urban locations. By inference, therefore, the demands and expectations of residents of remote communities for dental services are not being met. Second, residents of rural communities exhibit a similar level of satisfaction on most items as that reported by residents in urban locations. This observation suggests that, in general, the demands and expectations of residents of rural communities are probably being met as well as those of residents of urban locations. This observation does not, of course, preclude the possibility of individual variation between rural communities.

Finding 8

Throughout Australia, people who live in remote communities are less satisfied with the dental care they receive than people who live in rural or urban areas.

3.4.2 Western Australian Dental Patient Satisfaction Survey 2000

A more recent survey was conducted by researchers in Social and Preventive Dentistry at Adelaide University on behalf of Dental Services. This survey differs from the DSRU national

[51] AIHW Dental Statistics and Research Unit. 1998a, p37.

surveys insofar as: a) coverage was restricted to Western Australia; and b) only adults who were eligible for public funded dental care were surveyed.

A sample of 1,656 users of the Western Australian Dental Service (WADS), who had used the service in the preceding 12 months, were selected for the survey, 414 from each of the following four groups:

- Perth Dental Hospital;
- Metropolitan clinics;
- Country clinics; and
- Private country clinics.

Those clients who received their treatment in private country clinics did so through the Country Patients Dental Subsidy Scheme.

Of the patients selected, approximately 1,100 returned questionnaires. The WADS survey examined satisfaction in relation to five categories: context, content, outcome, cost and facilities.

The results of the WADS survey paint a slightly different picture to the DSRU survey. In each category, and in terms of overall satisfaction, patients who visited private country clinics recorded the highest satisfaction score (see table 3.3 below). Country residents who attended public clinics did not report lower levels of satisfaction than metropolitan residents in any of the categories examined.

Table 3.3

Mean satisfaction scores for conceptual categories by location of dental care.[52]

	Dental Services			Private
	Perth	Metro	Country	Country
Context	3.71	3.80	3.85	4.31
Content	3.95	4.02	4.25	4.31
Outcome	3.65	3.95	4.09	4.17
Cost	3.52	3.69	3.69	3.51
Facilities	3.67	3.81	3.92	4.41
Satisfaction	3.76	3.89	4.00	4.28

In contrast to the Australia-wide DSRU study, which indicated a significantly lower level of satisfaction for residents of remote locations, the WADS survey suggests that country residents exhibit the same level of satisfaction with dental services as metropolitan residents.

A comparison between WADS data, Western Australian population data (collected by the DSRU in 1994-96 and 1999) and Australian population data (collected by the DSRU in 1994-96) is shown in table 3.4 below. The population data are overall averages for public and private patients in urban, rural and remote areas of Western Australia and Australia.

[52] Social and Preventive Dentistry, Adelaide University, 2001, p25.

Table 3.4

Comparison of the WADS 2000 survey with WA population data (1994-1996 and 1999 DSRU)[53] and with Australian population data (1994-94 DSRU)[54]

	WADS				WA population		Australian population
	Perth	Metro	Country	Country private	1994-96	1999	1994-96
Content	3.75	3.81	3.93	4.33	4.24	4.14	4.29
Context	3.90	3.98	4.19	4.25	4.14	4.12	4.21
Outcome	3.65	3.98	4.09	4.17	4.18	4.18	4.23
Cost	3.52	3.69	3.69	3.51	3.19	3.10	Not avail.
Facilities	3.67	3.81	3.92	4.41	4.27	4.05	Not avail.
Satisfaction	3.79	3.91	4.03	4.30	4.20	4.16	4.24

The data clearly show that level of satisfaction with dental services is considerably lower for users of WADS public clinics than for the West Australian population as a whole. In every category, with the exception of cost, the WA population as a whole was more satisfied with dental services than WADS clients who visited public clinics. By contrast, WADS clients who were treated in private country clinics were as satisfied, and in some categories, more satisfied, than the WA population as a whole.

Similarly, the satisfaction level of WADS clients is consistently lower than satisfaction levels of the Australian population as a whole. The Western Australian population as a whole exhibited a similar level of satisfaction to the Australian population.

Combined, the WADS and DSRU surveys highlight a number of salient points with regard to the level of satisfaction with dental services for Western Australians who live outside the Perth metropolitan area:

1. Western Australians who receive dental treatment through public dental clinics are less satisfied with the level of care they receive than the WA population as a whole;

2. People living in country WA who receive dental treatment through public dental clinics are no less satisfied than people who receive dental treatment through Perth Dental Hospital or metropolitan clinics;

3. Western Australians who live in country areas and access publicly-funded dental care report a higher level of satisfaction when this care is received in private clinics than when it is received in public clinics;

4. For the Australian population as a whole, people who live in remote locations are significantly less satisfied with the quality of dental services they receive than people who live in rural or urban locations; and

5. For the Australian population as a whole, people who live in rural locations report a similar level of satisfaction with dental services as people who live in urban locations, with the

[53] Social and Preventive Dentistry, Adelaide University, 2001, p36.

[54] AIHW Dental Statistics and Research Unit. 1998a, p27.

exception of issues relating to the content of service provision (communication, explanation of treatment and options, thoroughness of service).

Although the WADS survey suggests that country residents are just as satisfied with dental services as metropolitan residents, information as to the precise location of public and private country clinics was not included in the report, therefore it is not known whether any respondents lived in remote locations.

People who live in remote locations generally access dental care through visiting services, whereas in rural locations, depending on the size of the community, services may be visiting or continuous.[55] This factor may contribute to the difference in level of satisfaction with dental services in rural and remote areas.

Clearly for Western Australians who access dental services through public clinics, there is some level of dissatisfaction, regardless of location. However, this does not diminish the fact that, in general, people who do not live in urban locations experience some level of dissatisfaction with the quality of dental services they receive.

Finding 9

Western Australians who receive dental treatment in public dental clinics, regardless of whether they live in the city or the country, are less satisfied with the level of care they receive than the total population of Western Australians who use dental services.

Finding 10

Country residents who receive dental treatment in private clinics report a higher level of satisfaction with the care they receive than residents who receive treatment in public clinics.

3.5 CONCLUDING REMARKS

In summary, the demands and expectations of people who live in regional, rural and remote areas of Western Australia can be summarised as follows:

1. Compared to urban residents, country residents:
    - Have poorer oral health status;
    - Are more likely to visit a dentist for a problem than for a check-up;
    - Are less likely to have visited a dentist in the last 12 months, and are more likely to have last visited a dentist more than five years ago;
    - Have decreased perceived oral health needs; and

[55] Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p6.

- Assign a lower priority to oral health.

2. Dentists who work in country Western Australia work longer hours than their city counterparts to cope with the high demand for services. Australia wide, dentists practising in non-capital areas see more patients per day, and more patients per year.

3. There is an imbalance between supply of and demand for dental services, as evidenced by extensive waiting lists for urgent and non-urgent general dental treatment and for oral surgical procedures.

4. For the population as a whole, people who live in remote locations, and to some extent, people who live in rural locations, are less satisfied with the quality of dental services they receive than people who live in urban locations. When only public dental patients are considered, country and metropolitan WA residents are equally dissatisfied with the quality of dental care they receive.

CHAPTER 4 CURRENT ACCESS BY REGIONAL, RURAL AND REMOTE DWELLERS TO GENERAL AND SPECIALIST DENTAL SERVICES

4.1 THE WESTERN AUSTRALIAN DENTAL WORKFORCE

In 2000, there were 913 practising dentists in Western Australia.[56] Approximately 85 per cent practised in the private sector, and more than half of these private sector dentists worked in solo practices.[57] Of those whose main practice was in the public sector, almost 40 per cent worked in the Perth Dental Hospital.[58]

The geographic distribution of practising dentists varies greatly throughout the State, and has a major impact on access to dental services. Only 16 per cent of practising dentists work outside Perth, where 27 per cent of the population live.[59]

Rural and remote areas of Western Australia experience some of the lowest rates of practising dentists in the nation. In 2000, the national average was approximately 47.0 dentists per 100,000 population, a rate of 55.9 in capital cities and 31.4 in other regions.[60] Western Australia's average was 48.5 dentists per 100,000 population, 55.6 in the Perth metropolitan area, and 29.0 throughout the rest of the State.[61] Of the eight non-urban statistical divisions[62] in Western Australia, five have fewer than 20 practising dentists per 100,000 population.[63]

Finding 11

Rural and remote areas of Western Australia have some of the lowest rates of practising dentists in Australia.

4.2 GENERAL ACCESS ISSUES FOR PEOPLE IN REGIONAL, RURAL AND REMOTE WESTERN AUSTRALIA

Existing dental services in regional, rural and remote Western Australia consist of both public (public clinics, mobile clinics, outreach services, school dental services) and private (private dentists, private dental prosthetists, private orthodontists) services.[64] From the numerous submissions the Committee received, it is apparent that several towns and/or regions throughout

56 Information provided by the Australian Institute of Health and Welfare, February 2002.
57 *Ibid.*
58 *Ibid.*
59 Australian Bureau of Statistics, 2001a, pp15-16.
60 Information provided by the Australian Institute of Health and Welfare, February 2002.
61 *Ibid.*
62 The term *statistical division* is a general purpose spatial unit developed by the Australian Bureau of Statistics. It is the largest and most stable unit within the Australian Standard Geographical Classification (ASGC) and covers all of Australia without gaps or overlaps or crossing of State or Territory boundaries.
63 Information provided by the Australian Institute of Health and Welfare, February 2002.
64 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p1.

the State currently have unfilled dental positions both in the public and private sectors. Furthermore, a number of towns and/or regions have experienced considerable difficulty attracting and retaining dental staff over the last few years.

On 12 November 2001, the Committee conducted a public hearing to obtain evidence on the adequacy and availability of dental services. Two important issues relating to access to dental services came to light during the course of this hearing: the current shortfall of dentists in country Western Australia; and the ongoing problems with inpatient dental procedures in public hospitals.

4.2.1 Current shortfall of dentists in regional, rural and remote areas.

Several witnesses were asked to provide an estimate of the current shortfall of dentists in rural and remote areas. The responses follow.

Mr David Neesham, Director of Dental Services:

> *I would say about eight to 10. That does not mean that we have 10 fewer dentists, because we get what we can out of the metro area. We have provided services, but the end result in the total system indicates that shortage. … We could do with at least eight.*[65]

Mr Neesham also indicated that the current problems are likely to worsen over the coming years because of our increasingly dentate population:

> *People of my generation and the one immediately following it have undergone extensive dental work, but we have most of our teeth. They need extensive work. The generation before ours had very few teeth; they had dentures.*
>
> *We should look at the manpower that must deal with that demand. That need has been identified nationally, and that is why I am saying we have a staffing problem. There is a looming dental manpower problem.*[66]

Ms Suzanne McKechnie, General Manager, General Health Purchasing and Mr Clory Carrello, Purchasing Manager, both of the Department of Health, were also asked to comment on the current number of vacancies:

> ***Ms McKechnie**: We have six vacant rural dental positions in the government system.*
>
> ***Mr BOARD**: Do you know where those vacancies exist?*
>
> ***Mr Carrello**: Our information is that the vacancies are in Meekatharra, Newman, Halls Creek, Port Hedland, Exmouth and Ravensthorpe.*
>
> ***Mr ANDREWS**: How long have those positions been vacant - for example, in Meekatharra?*

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65 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p7.

66 *Ibid*, pp7-8.

***Mr Carrello**: More than two years.*[67]

Dr Nicholas Boyd, President of the ADA (WA), indicated that there could be a shortfall of up to 50 dentists in the public and private sectors combined.[68]

Finding 12

Whilst there is currently an estimated shortfall of up to ten dentists in the public sector in country Western Australia, a far greater number would be required to adequately meet the demand for dental services.

4.2.2 Admitting rights for dental procedures on public patients in public hospitals

Questions were also posed to witnesses with regard to admitting rights for dental procedures on public patients in public hospitals. Responses from both Dental Services and the Department of Health indicated that there are serious problems in provision of this service in some regional, rural and remote areas.

Mr David Neesham, Director of Dental Services, made the following comments in respect of admitting rights for dental procedures:

> *Those services are not available in country Western Australia across the board. The Department of Health has made a bit of a mess of that, primarily because of a lack of awareness …*
>
> *In addressing the fact that people were accessing hospitals in country areas and not paying the hospital component of the fees, care was made inaccessible. One does not have to be smart to work out that that disenfranchised a large percentage of the population … A financially able patient who goes to a public hospital for private dental care should be charged for the hospital component of those costs so that the State is not out of pocket. They should access that treatment in their own community if possible. The alternative is a huge cost to get the same treatment in Perth or somewhere else. A public patient, whether treated publicly or privately, should have that treatment provided free of charge. That is the policy, and it is sensible. We were charging about 25 per cent for the work done in hospital. All we then need is reasonable access to those services.*
>
> *A private country dentist - for example, in Albany where the private dentists have visiting rights - would admit his patients privately and they would pay nothing. We have the ridiculous situation of having a competent public dentist who could treat public patients but who cannot get admitting rights. Both dentists should have them, but the private patients should pay, so the State is not out of pocket. Public patients, whether treated by the private or public dentist, should not have been charged.*
>
> *… Part of the problem was that dentists lost admitting rights at the time of the medical*

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67 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health and Clory Carrello, Purchasing Manager, Department of Health, Transcript of Evidence, 12 November 2001, pp5-6.

68 Dr Nicholas Boyd, President, Australian Dental Association (WA), Transcript of Evidence, 12 November 2001, p3.

agreement between hospitals and doctors over doctors' visiting rights.[69]

Ms Suzanne McKechnie, General Manager, Health Purchasing, Department of Health, made the following comments with regard to admitting rights for public patients:

> ***Mr BOARD**: A number of issues have been raised by different groups and individuals about access, particularly to surgery, in regional areas or towns where public hospitals are limiting access to a very few public patients; in fact to a handful each year. Are you aware of the extent of that in Western Australia, and the number of people who may have to travel to Perth to receive oral surgery as a result of limitations on access placed by regional hospitals?*
>
> ***Ms McKechnie**: We do not have a consolidated sense of the size of that change. We are aware of particular health service regions where the problems exist, to a greater or lesser degree. … there are two issues associated with admitting people to hospital for dental procedures. One is that, generally speaking, people would be admitted because they require a general anaesthetic. If that is the case, then the ability to admit people for procedures in local hospitals is related to the capacity and availability of anaesthetists. The other is that all hospitals operate on the basis of a clinical priority system for planned procedures. The clinical urgency of a dental procedure would be evaluated alongside of that of other elective surgery, for example. Given the criteria of those services, it would be unusual for a dental procedure to be required within 30 days, which would make it an urgent procedure, rather than a procedure that would be required in the 30 to 90 day range. Members may be aware of the ongoing challenges within the system to provide access to people for non-urgent procedures. I would rate dental surgery as being a non-urgent procedure.*[70]

Dr David McDonald, a private dental surgeon advised the Committee of the critical situation in Busselton:

> *… the Busselton District Hospital is funded to allow only 12 public admissions a year, which number is divided between my practice and the Louise McArthur dental practice. That has limited the number of general anaesthetic procedures we can do. Many of the people referred from the Vasse Dental Clinic cannot afford private dental fees. The Busselton District Hospital will accept private patients, but it charges $300 or $350 for theatre fees. That can be difficult for some of the patients referred from the dental clinic. Alternatively, they can go to St John of God Health Care, a private hospital in Bunbury, which charges about $800 for theatre fees.*
>
> *Patients that cannot be treated in Busselton go to Perth but there is a huge waiting list, so they cannot get treated. I cannot tell you how many are involved…*
>
> *… Dentistry is always the last area considered; it is always the poor cousin when it comes to allocating funds across the board. We have a vast pool of patients who are despairing. I am talking about only basic treatment, nothing fancy. It is urgent work for the relief of pain.*[71]

Dr Anthony Lepere, a private dental practitioner, advised the Committee that intravenous sedation, an alternative to general anaesthesia, could be used to alleviate some of the current problems with admitted patient procedures.

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69 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, pp8-10.

70 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Transcript of Evidence, 12 November 2001, p3.

71 Dr David McDonald, Dental Surgeon, Transcript of Evidence, 12 November 2001, pp1-5.

> *… many patients could undergo treatment under IV sedation in the dentist's rooms thereby avoiding the need for an expensive and resource depleting general anaesthetic. This would allow better use of public hospital facilities and permit more public patient access to scarce resources.*
>
> *I personally advanced the idea of offering a post graduate certificate in dental sedation and pain control to the University more than* 5 *years ago. This would be similar to the program that has been running for the past 12 years at the University of Sydney, faculty of dentistry. … It is illustrative to note that a number of private dental practitioners from regional Western Australia have expressed an interest in obtaining the Diploma of Sedation and Pain Control in Dentistry from the University of Sydney, but have been put off by the fact of having to spend a large amount of time not just out of their practices but out of their state.*[72]

Dr Lepere further advised the Committee that intravenous sedation is less costly, both biologically (20 to 30 minute recovery time *versus* 3 hours for general anaesthesia) and economically (in terms of use of resources, staff and monitoring).[73]

In evidence to the Committee, Dr Lepere made the following comments:

> ***Mr ANDREWS****: Are you saying that there should be more intravenous sedation rather than general anaesthetics?*
>
> ***Dr Lepere****: Quite right.*
>
> ***Mr ANDREWS****: What is the argument against that and why is it not happening now?*
>
> ***Dr Lepere****: It is a cultural issue. The only argument I can find against it is that people are discouraged as undergraduates from doing anything about it.*
>
> ***Mr ANDREWS****: What per cent of cases handled by general anaesthetic should be handled by intravenous sedation?*
>
> ***Dr Lepere****: Up to 70 per cent of them.*
>
> ***Mr ANDREWS****: Therefore, 70 per cent of those who have a general anaesthetic could have intravenous -*
>
> ***Dr Lepere****: Can be done under sedation.*
>
> ***Mr ANDREWS****: Would the kids who are traditionally hard to handle - the five-year-olds or whatever - benefit more from this type of sedation rather than the GA?*
>
> ***Dr Lepere****: I believe so.*
>
> ***Mr ANDREWS****: Therefore, they as well as the elderly would be a target group?*
>
> ***Dr Lepere****: Yes.*[74]

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72 Dr Anthony Lepere, Submission, 11 October 2001, pp3-4.

73 Dr Anthony Lepere, Dental Surgeon, Transcript of Evidence, 12 November 2001, pp2-3.

74 *Ibid*.

Finding 13

Admission of public patients for dental procedures in public hospitals is severely restricted in many country locations, forcing patients to wait for lengthy periods or to travel to Perth to access treatment.

4.3 FACTORS THAT IMPACT ON ACCESS TO DENTAL SERVICES

4.3.1 Level of demand for services

Numerous factors will impact on access to dental care, some of which have been touched on above. The overall level of demand for dental services in a community, and therefore access for individuals within the community, will vary with such factors as the age distribution, transience and overall size of the community.

A community with a relatively youthful population may have a lower demand for dental services than one in which the population is older. A number of regions in the Southwest of WA have relatively older populations, and therefore might be expected to require greater access to dental services.

A community that has a high proportion of transient residents (e.g. who frequently visit Perth or other large regional centres) may have a reduced demand for dental services within the local area, freeing up access for other residents. Mining communities have somewhat transient populations, and therefore may require a lower rate of dental practitioners per capita than other communities.

In addition to the age and transience of a community, its overall size, relative to the number of resident or visiting dental practitioners, will determine the level of demand and hence the ease of access for individuals in the community. When access is restricted, waiting times for both emergency and routine treatment become unacceptably high, and oral health within the community deteriorates.

4.3.2 Distance from dental services

Another important factor with regard to access to dental services, is the distance that residents of rural and remote communities must travel. According to the Department of Health, there are currently five shires in rural WA that have dental services more than 100km away.[75] In many cases, even greater distances must be travelled to access specialist care.

Numerous submissions commented on the excessive distances that residents must travel to access dental services. This issue is covered in greater details for each of the different regions of WA (section 4.4 below). Residents who must travel large distances to access dental care will require access to a private vehicle, or public transport, and may also be faced with considerable costs for travel and, in some instances, accommodation. A further inconvenience may be the need to take time off work.

[75] Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Transcript of Evidence, 12 November 2001, p6.

4.3.3 Cost of dental services

For many West Australians, one of the biggest impediments to good dental health is the associated cost. In a national survey of almost 18,000 people, including urban and non-urban residents, a significant proportion of respondents indicated that they would have considerable difficulty in paying a $100 dental bill.[76] Respondents who were 65 years or more and living in remote locations recorded the highest proportion with difficulty paying a $100 dental bill (30.7 per cent).[77]

4.3.4 Abolition of the Commonwealth Dental Health Program

The Commonwealth Dental Health Program (CDHP), which co-existed with State programs, provided a limited range of treatment free of charge to Health Care Card holders from July 1994 to December 1996 in WA. The CDHP was available to about 400,000 people in WA, 100,000 of whom lived in rural and remote locations.

Since withdrawal of the CDHP, financially disadvantaged individuals have had to qualify for assistance under the more stringent State funded programs, reducing the number of eligible rural and remote residents in WA to 65,000.[78] Eligibility criteria for State funded dental care were significantly stricter than those used to assess eligibility for a Health Care Card. However, recent changes to eligibility criteria have seen the scheme expanded to include all people holding current Health Care Cards and Pensioner Concession Cards.[79] As a result of the new initiative, people who were previously eligible receive a 75 per cent subsidy, and newly eligible Health Care Card and Pensioner Concession Cardholders receive a 50 per cent subsidy.[80]

4.3.5 The Country Patients Dental Subsidy Scheme

In rural locations, a significant proportion of public dental care is provided by private practitioners who participate in the Country Patients Dental Subsidy Scheme (CPDSS). The CPDSS utilises private dental practitioners to provide Government subsidised oral health care to eligible patients. In those areas where no public dental service exists, and private dentists do not participate in the CPDSS, residents must either pay full fees for dental treatment, or alternatively travel to the nearest town where they are able to access public or subsidised private treatment. The Department of Health provided the Committee with a list of private practitioners who were participating in the CPDSS[81] (see Table 4.1 below).

Dental Services advised the Committee that there are several locations where a private practitioner does not participate in the CPDSS, including Karratha and Wagin, as well as locations where a private practitioner has withdrawn from providing a service, such as Southern Cross and Boyup Brook.[82]

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76 AIHW Dental Statistics and Research Unit, 1998a, p25.
77 *Ibid*, p25.
78 Council on the Ageing, Submission, 12 November 2001, p4.
79 Department of Health, Submission, 18 October 2001, p2.
80 *Ibid.*
81 Information current as at September 2001.
82 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p8.

Table 4.1

Dentists throughout Western Australia participating in the Country Patients Dental Subsidy Scheme.[83]

Health Zone	Town	Number of Dentists Participating
Northwest	Broome	3 + 1 prosthetist
	Karratha	1*
	Kununurra	1
	South Hedland	1
Midwest	Carnarvon	1
	Dongara	1
	Geraldton	5 + 1 prosthetist
	Kalbarri	1
	Three Springs	1
Goldfields	Esperance	2
	Kalgoorlie	1 prosthetist
Midlands	Beverley	2 + 1 prosthetist
	Jurien	1
	Kellerberrin	1
	Merredin	1
	Moora	2
	Narambeen	1
	Northam	2 + 1 prosthetist
	Toodyay	1
	Wongan Hills	1
	York	1
Great Southern	Albany	4
	Denmark	2
	Katanning	3
	Kojonup	1
	Lake Grace	1
	Mt Barker	1
	Narrogin	2 + 1 prosthetist
	Wagin	3*
South West	Bridgetown	1
	Busselton	1 + 1 prosthetist
	Collie	3
	Donnybrook	2
	Dunsborough	1
	Harvey	2
	Manjimup	2
	Margaret River	4 + 1 prosthetist
	Walpole	1
TOTAL		64 + 8 prosthetists

* Conflicts with information provided by Dental Services.

[83] Department of Health, Submission, 18 October 2001, pp11-29.

There is some question as to the process by which the Department of Health is made aware of withdrawals of private practitioners from the CPDSS, as illustrated by the following comments from the Research and Evaluation Coordinator, Upper Great Southern Primary Health Service, submitted by way of the Health Consumers' Council:

> *I know of another isolated town within the Upper Great Southern Health Service which has a visiting sole private practitioner – he signed up to the scheme when he started but he had only been practising a very short while before he withdrew. Since then I have enquired about a list of participating practitioners from the Dept of Health and they still had him on the list. So it seems that when a community loses its service from a private practitioner there is not an established process to ensure that the DOH are informed that a serious gap now exists.*[84]

Finding 14

Private practitioners who participate in the Country Patients' Dental Subsidy Scheme (CPDSS) provide a significant proportion of public dental care in country areas. In areas where no public dental service exists, and private dentists do not participate in the CPDSS, residents must pay full fees for dental treatment or travel to the nearest public clinic.

4.4 ACCESS TO DENTAL SERVICES IN REGIONAL, RURAL AND REMOTE AREAS

As indicated in section 4.1 above, approximately 85 per cent of dentists in Western Australia work in private practice. While accurate figures can be obtained on the number and precise location of dental professionals in the public sector, it is difficult to obtain accurate figures on dental professionals working mainly in the private sector.

Australian Dental Association (WA) records indicate that Albany has 10 general dental practitioners, Bunbury 22 and Geraldton 11. There may also be a small number of non-ADA members in each of these centres. There is also a range of visiting specialists in each of these centres, although the exact number is not known. Accurate figures are not available to identify numbers of private general dental practitioners in smaller rural communities. [85]

Both the Department of Health and Dental Services have provided the Committee with a detailed list of the number and locations of dentists working mainly in the public sector. Although less comprehensive, a number of submissions also provided information on private dental practitioners in their region. In line with Department of Health convention, the status of existing dental services throughout the State has been considered separately for each of the six non-metropolitan Health Zones, which are:

1. The Northwest Health Zone, comprising the Kimberley, West Pilbara, East Pilbara and Gascoyne Health Services;

2. The Midwest Health Zone, comprising the Midwest, Murchison and Geraldton Health Services;

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84 Health Consumers' Council, Submission, 2 October 2001, p2.

85 Australian Dental Association (WA), Submission, 15 October 2001, p6.

3. The Goldfields Health Zone, comprising the Northern Goldfields and South East Coastal Health Services;

4. The Midlands Health Zone, comprising the Western, Eastern Wheatbelt, Avon and Central Wheatbelt Health Services;

5. The Great Southern Health Zone, comprising the Upper Great Southern, Central Great Southern and Lower Great Southern Health Services; and

6. The South West Health Zone, comprising Wellington Harvey/Yarloop, Bunbury, Vasse/Leeuwin and Warren/Blackwood Health Services.[86]

The status of existing general and specialist dental services in each Health Zone throughout the State are considered in detail below. Towns and/or regions with current vacancies, as well as towns and/or regions with ongoing difficulties attracting and retaining dental practitioners are also identified.

4.4.1 Northwest Health Zone

The Northwest Health Zone is the northernmost region of the State. The estimated resident population of the Northwest Health Zone was 80,723 in 2000.[87] Together the localities make up more than one-third of Western Australia's total area.[88]

4.4.1.1 Existing general and specialist dental services in the Northwest Health Zone

4.4.1.1.1 Public Clinics, Mobile and Itinerant Services

Community dental service clinics (fixed) are located in Derby, Fitzroy Crossing, Halls Creek, Port Hedland, Newman and Exmouth.[89] Mobile and outreach dental services also operate out of Broome, Karratha (visiting Dampier, Pannawonica, Roebourne, Tambrey and Wickham), Kununurra (visiting Halls Creek, Warmun and Wyndham) and Tom Price (visiting Paraburdoo).[90]

Itinerant dental services are based in Derby, Fitzroy Crossing, Halls Creek, Newman and Port Hedland. These are supported by fly-in fly-out services from Perth. Aboriginal communities in the Northwest Health Zone are visited by outreach services several times per annum for up to one week's duration per visit (see table 4.2 below).

86 Department of Health, Submission, 18 October 2001, pp8-31.
87 Australian Bureau of Statistics, 2000, pp33-37.
88 Department of Health, Submission, 18 October 2001, p8.
89 *Ibid*, p9.
90 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, Appendix B.

Table 4.2

Visiting dental services to Aboriginal communities in the Northwest Health Zone. [91]

Itinerant service	Aboriginal Community	Number of visits per annum
Derby	Looma	8
	Kalumburu	7
	Oombalgurri	7
	La Grange (Bidyadanga)	5
	One Arm Point (Bardi)	5
	Beagle Bay	4
	Lombadina (Djarindjin)	4
	Gibb River (Ngallagunda)	2
	Mt Barnett (Kupungarri)	2
Fitzroy Crossing	Noonkambah (Yungngora)	5
	Xmas Creek (Wangkatjungka)	5
	Gogo (Bayulu)	4
	Yakanara	3
	Millajidee (Kadjina)	2
	Muludja	2
	Cherrabun (Djugerari)	1
Halls Creek	Balgo (Wirimanu)	6
	Warmun	6
	Yiyili	4
	Kundat Djaru (Ringers Soak)	3
	Mandangala (Glen Hill)	2
Port Hedland	Marble Bar	5
	Nullagine	3
	Yandeyarra (Mugarinya)	3
	Warralong	2
	Brockman	1
	Strelley	1
	Woodstock (Mumbultjari)	1
Newman	Jigalong	5
	Punmu and Well 33 (Kunawarriji)	3
	Cotton Creek (Parrngurr)	2

4.4.1.1.2 Other Visiting services

Dental Services also provide community dental services to Onslow one day per week from Exmouth and to the towns of Denham and Useless Loop on an annual basis from Perth. [92]

4.4.1.1.3 School Dental Services in the Northwest Health Zone

- Karratha Primary School;
- Newman Dental Clinic;
- Port Hedland Primary School;

91 Department of Health, Submission, 18 October 2001, p10.

92 *Ibid*.

- South Hedland Primary School;
- Carnarvon Primary School;
- Derby Dental Clinic (Derby District High School, Holy Rosary Primary School);
- Fitzroy Crossing Dental Clinic (Fitzroy Crossing District High School);
- Exmouth Dental Clinic;
- Onslow Dental Clinic;
- Broome Mobile Unit (Broome Primary School, Cable Beach Primary School, St Mary's Primary School);
- Karratha Mobile Unit (Dampier Primary School, Pannawonica Primary School, Roebourne Primary School, Tambrey Primary School, Wickham Primary School);
- Kununurra Mobile Unit [Halls Creek District High School, Kununurra District High School, St Joseph's School (Kununurra), Ngalangangpum Catholic School (Warmun), Wyndham District High School, St Joseph's School (Wyndham)]; and
- Tom Price Mobile Unit (Tom Price Primary School, North Tom Price Primary School, Paraburdoo District High School).[93]

4.4.1.1.4 Dental Services At Aboriginal Medical Services

The Centre for Rural and Remote Oral Health (CRROH)[94] is responsible for the following services within the Northwest Health Zone:

- The establishment of new visiting dental services to Roebourne Aboriginal Medical Service (AMS) (10 visits per annum on a five-day per visit basis); and
- The provision of additional dental services to Carnarvon AMS. Carnarvon AMS previously received a visiting service two days per month through private arrangements organised by the School of Dentistry at UWA. This service has been extended by CRROH to five days per month (10 visits per annum).

4.4.1.1.5 Specialist Services

Private orthodontist subsidised services to eligible patients are currently available in Broome, Derby and Karratha. Arrangements for subsidised orthodontic care have been put in place in Kununurra, Newman, Paraburdoo and South Hedland, however, as of October 2001, these services had not commenced.[95]

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93 Department of Health, Submission, 18 October 2001, pp11-13.

94 The Centre for Rural and Remote Oral Health was established in 2001. It is a joint initiative between the Department of Health and the Faculty of Medicine and Dentistry at the University of Western Australia.

95 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, Appendix E.

4.4.1.1.6 Admitted Patient Services

Admitted patient oral health services are provided through numerous hospitals in the Northwest Health Zone (see table 4.3 below). Patients may also be admitted as private dental patients (figures not available).

The Department of Health determines the level of funding to public hospitals for dental procedures under general anaesthesia:

> *The level of funding is based on past level of activity and demand for services in the region. This is balanced against competing demand for other services at the hospital.*[96]

Table 4.3

Number of public patients admitted to public hospitals in the Northwest Health Zone for oral health procedures, 2000/01.[97]

Hospital	Oral Health Procedures
Broome District Hospital	33
Carnarvon Regional Hospital	11
Derby Regional Hospital	67
Exmouth District Hospital	3
Fitzroy Crossing Hospital	18
Halls Creek Hospital	4
Kununurra District Hospital	25
Newman District Hospital	8
Onslow District Hospital	2
Paraburdoo District Hospital	1
Port Hedland Regional Hospital	67
Roebourne District Hospital	8
Tom Price District Hospital	6
Wickham District Hospital	1
Wyndham District Hospital	7

4.4.1.2 Comments on access to dental services from organisations, residents and dental practitioners in the Northwest Health Zone

The Shire of Exmouth stated:

> *Exmouth has had no Dental Service since August 20, 2001 and a replacement dentist is not expected until a date to be fixed, possibly late October 2001.*
>
> *There are no specialist dental services provided in Exmouth. People requiring specialist services must travel to Perth under the Patient Assisted Travel Scheme (PATS) and are directed to designated specialists. Visits to orthodontists for teeth straightening and the like are treated as cosmetic and PATS is not available. People must travel to Karratha or Perth*

96 Department of Health, Submission, 2 January 2002, p1.
97 *Ibid*, pp3-4.

for that treatment at their own expense.[98]

Wirraka Maya Health Service, an Aboriginal Health Service based in South Hedland, made the following comments with regard to access to dental services for Aboriginal communities in the Pilbara region:

> *The Pilbara Health Plan consultation results indicate that most communities surveyed were receiving limited assistance with oral health through education and the community. However few communities had regular access to dentists, with many having a dentist visit the community once every year or second year.*
>
> *In the Pilbara no dental services are provided through appropriate Aboriginal Community Controlled Health Services.*[99]

4.4.1.3 Current vacancies in services in the Northwest Health Zone

When asked if all public dental clinics were currently fully staffed and operational, Mr David Neesham, Director of Dental Services, indicated that there were vacancies. No details have been provided with regard to the extent of current vacancies in adult dental services in the Northwest Health Zone, however, information provided by both Dental Services and the Dental Therapy and Hygiene Association of WA, DTHA (WA), indicate that numerous vacancies exist in the SDS.

The DTHA (WA) advised the Committee that as of November 2001, approximately 20,000 school children (eight per cent of all school children enrolled in the SDS) were not receiving a service due to lack of dental staff. A considerable proportion of these children are in the Northwest Health Zone.[100]

Dental Services indicated that the northern country region had ten FTE (full time equivalent) dental therapists with four vacancies in 2001. Due to lack of dental staff, the School Dental Services did not operate in Carnarvon Primary School (1,040 children affected), Newman Dental Clinic (830 children affected), South Hedland Primary School (1,430 children affected) and Tom Price Mobile Unit (visiting Tom Price, North Tom Price and Paraburdoo Primary Schools).[101, 102]

4.4.1.4 Areas in the Northwest Health Zone that have been historically difficult to staff

Dental Services indicated that a number of fixed and mobile dental clinics in the Northwest Health Zone have been difficult to staff over the last three to four years (see Table 4.4 below).

98 Shire of Exmouth, Submission, 27 September 2001, pp1-2.
99 Wirraka Maya Health Services Aboriginal Inc., Submission, 16 October 2001, pp3-5.
100 Dental Therapy and Hygiene Association (WA), Submission, 12 November 2001, p1.
101 *Ibid*.
102 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, p4.

Table 4.4

Disruptions to adult dental services in the Northwest Health Zone in the last 3 to 4 years.[103]

Service	Disruptions to service
Derby Itinerant	Difficulty staffing in 2001. Now have ex-Perth dentist to do some regions.
Hedland Itinerant	Last fully staffed in 1998. Had some dental officer relief from Perth in 2001.
Newman	Dental Services took over service in 2001, not fully staffed since then. Ex-Perth relief used. Only 7 months covered in 2001. Dental therapist sent in 2000, but could not get dental officer.
Exmouth	Last fully staffed in 1999, Ex-Perth relief for 2000 – year not fully covered. Ex-Perth relief Oct – Dec 2001.
Halls Creek	New position 2001, unable to fill. Fitzroy Crossing dental officer trying to cover both areas.

In addition to fixed and mobile adult clinics, School Dental Services in the Northwest Health Zone have suffered a number of vacancies and disruptions over the last three to four years (Table 4.5).

Table 4.5

Disruptions to School Dental Services in the Northwest Health Zone in the last 3 to 4 years. [104]

School Dental Service	Disruptions to service
Carnarvon	Limited coverage from Perth in 2000, 2001.
South Hedland	Limited staffing in 2001 ex-Perth. Always difficult to staff.
Tom Price Mobile	2001 staffed by dental officer (not dental therapist). Ex-Perth dental therapist for less than half expected duration.

Attracting and retaining dental staff, particularly dental officers, has been traditionally difficult in a number of towns in the Northwest, including Carnarvon, Derby, Fitzroy Crossing/Halls Creek, Port Hedland, Kununurra and Newman.[105]

Finding 15

A number of towns in the Northwest Health Zone, including Carnarvon, Derby, Fitzroy Crossing/Halls Creek, Port Hedland, Kununurra and Newman have been difficult to staff with dental professionals in recent years.

103 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, p2.
104 *Ibid*, p4.
105 *Ibid*, p3.

4.4.2 Midwest Health Zone

The Midwest Health Zone extends northwards along the coast from the Shire of Coorow to north of Kalbarri, and extends eastwards to the Shires of Meekatharra and Sandstone. In 2000, the estimated resident population was 49,342.[106]

4.4.2.1 Existing general and specialist dental services in the Midwest Health Zone

4.4.2.1.1 Public Clinics, Mobile and Itinerant Services

Community dental service clinics are located in Geraldton and Meekatharra.[107] The public dental officer from Meekatharra also provides oral health services via a mobile dental van to residents of Mt Magnet and Sandstone (14 weeks per annum), Cue (five weeks per annum), Yalgoo (four weeks per annum), Karralundi (two visits per annum, each of five days duration) and Burringurrah (three visits per annum, each of five days duration).[108]

4.4.2.1.2 Other Visiting Services

Dental Services provides community dental services to Badgingarra, Coorow, Eneabba, Perenjori and Tardun on an annual basis.[109]

4.4.2.1.3 School Dental Services

- Allendale Primary School (Geraldton);
- Bluff Point Primary School (Geraldton);
- Rangeway Primary School (Geraldton);
- Geraldton Mobile Unit [Carnamah Primary School, Dongara High School, Kalbarri Primary School, Mingenew Primary School, Morawa District High School, Mullewa District High School, Our Lady of Mount Carmel (Mullewa), Northampton District High School, St Mary's School (Northampton), Three Springs Primary School];
- Meekatharra Mobile Unit (Meekatharra District High School, Mount Magnet District High School, Cue Primary School, Yalgoo Primary School); and
- Perth-based Mobile Community Dental Unit 3 [Badgingarra Primary School, Coorow High School, Eneabba Primary School, Perenjori Primary School, Wandalgu Catholic Primary School (Tardun), Christian Brothers Agricultural School (Tardun), Leeman Primary School, Shark Bay Primary School].[110]

106 Australian Bureau of Statistics, 2000, pp30-35.
107 Department of Health, Submission, 18 October 2001, p15.
108 *Ibid*, pp15-16.
109 *Ibid*, p16.
110 *Ibid*, p17.

4.4.2.1.4 Dental Services At Aboriginal Medical Services

In the Midwest Health Zone, CRROH will be establishing a new visiting service to Geraldton AMS. The dental officer will visit the AMS on 10 occasions per annum and each visit will be of five days duration.[111]

4.4.2.1.5 Specialist Services

Subsidised private orthodontist services are not currently available in the Midwest Health Zone. Arrangements have been put in place to provide subsidised orthodontic services for eligible patients in Geraldton, but care provision had not commenced as of October 2001.[112]

4.4.2.1.6 Admitted Patient Services

Admitted patient oral health services are provided through several hospitals in the Midwest Health Zone (see Table 4.6 below). Patients may also be admitted as private dental patients (figures not available).

Table 4.6

Number of public patients admitted to public hospitals in the Midwest Health Zone for oral health procedures, 2000/01.[113]

Hospital	Oral Health Procedures
Dongara Health Service	1
Geraldton Regional Hospital	37
Kalbarri Health Service	-
Meekatharra District Hospital	3
Morawa District Hospital	-
Mullewa District Hospital	3

4.4.2.2 Comments on access to dental services from organisations, residents and dental practitioners in the Midwest Health Zone

The Shire of Yalgoo stated:

> *Yalgoo is serviced intermittently by a dental service using a mobile caravan.*
>
> *This year, the dental caravan has been upgraded and there were four visits scheduled to Yalgoo. However, we are advised that the fourth visit will not occur because of a lack of dentists willing to service this area.*[114]

111 Department of Health, Submission, 18 October 2001, p16.
112 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, Appendix E.
113 Department of Health, Submission, 2 January 2002, pp3-4.
114 Shire of Yalgoo, Submission, 4 October 2001, p1.

Perenjori Shire Council asserted:

> *Residents of Perenjori* (350km from Perth) *in normal circumstances utilise this practice. However aged or incapacitated or health card residents have no access to dental clinics other than Perth, which if receiving treatment means the person must find means of travel and accommodate themselves in the metropolitan area.*[115]

Geraldton Health Service indicated:

> *While Geraldton has sufficient dental support through private dentists and a Dental Health Service Clinic the wider Mid West and Murchison Health Service Districts are poorly serviced. In particular Meekatharra has continually struggled to recruit and retain dentists either resident or visiting. These patients are often required to attend either Geraldton or Perth for oral health conditions that have worsened due to poor local access.*
>
> *There are difficulties accessing specialist services in the region for more than basic assessment and treatment.*[116]

Mullewa Health Services Board of Management made the following comments:

> *A number of people living on farms and stations do not have ready access to dental assessment or treatment on a regular basis, and second yearly visits do not provide for adequate follow-up and monitoring, and limit the nature of dental care provided. This severely disadvantages the clients by virtue of their remote locations.*
>
> *Specialist Dental Services must be accessed in Regional Centres (Geraldton or Carnarvon) and this poses problems such as:*
>
> 1. *Dental appointments are difficult to obtain due to the excessive local workloads of dentists working in the more populated Regional Centres;*
>
> 2. *There is no emergency dental service available without travelling, sometimes up to several hundred kilometres;*
>
> 3. *Not all clients are eligible for Patient Assisted Travel Scheme subsidies – and travel to a dentist may incur significant expense (fuel costs, accommodation, time, and overnight stays…); and*
>
> 4. *Aboriginal people prefer not to leave their hometown locality to access health care services, particularly when this might involve an overnight stay.*
>
> *There is little statistical data to support the need for dental services in the region, as many clients simply do not have time, money or motivation to address their oral/dental health care needs. …*[117]

The Health Consumers' Council advised the Committee of the following comments made by a Mingenew resident:

> *There are no dental services in Mingenew, only a Schools Program Dental service which attends on a yearly basis (on some occasions Mingenew has missed out).*

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115 Perenjori Shire Council, Submission, 15 October 2001, p1.

116 Geraldton Health Service, Submission, 1 November 2001, p1.

117 Mullewa Health Services Board of Management, Submission, 26 November 2001, p2.

> *The nearest dentist is either at Dongara (58km) or Three Springs (55km). … There is a bus service (on the Midlands road) – a bus leaves at 10am but the return trip is three days later.*
>
> *Appointments after 4pm are generally booked for months ahead. … The surgery hours are 9am – 5pm, with no after hours service. Both practices are private and health care cardholders must pay the full rate.*
>
> *Access to dental services for low-income earners is either a trip to Geraldton (125km) or Perth (200km).*[118]

The Shire of Greenough simply stated "*… as there are no dental clinics within the Shire of Greenough we are unable to make a submission…*"[119]

4.4.2.3 Current vacancies in dental services in the Midwest Health Zone

Dental Services advised the Committee that as of October 2001 the Meekatharra Dental Clinic was vacant. In addition to servicing the Meekatharra region, this clinic provides a visiting service to Cue, Mt Magnet, Yalgoo, Karralundi, Wiluna and Burringah.[120]

Vacancies affected two School Dental Services in the Midwest Health Zone in 2001. The Geraldton Mobile unit covers some 1,610 children[121], visiting ten schools (Carnamah Primary School, Dongara High School, Kalbarri Primary School, Mingenew Primary School, Morawa District High School, Mullewa District High School, Our Lady of Mount Carmel (Mullewa), Northampton District High School, St Mary's School (Northampton), and Three Springs Primary School).[122]

Community Dental Unit 3, a Perth based mobile van, was also vacant in 2001[123], affecting some 900 children[124] at eight schools (Badgingarra Primary School, Coorow Primary School, Eneabba Primary School, Perenjori Primary School, Wandalgu Catholic Primary School (Tardun), Christian Brothers Agricultural School (Tardun), Leeman Primary School; and Shark Bay Primary School).

4.4.2.4 Areas in the Midwest Health Zone that have been historically difficult to staff

Dental Services and the Department of Health have indicated that the Murchison region has experienced difficulties recruiting and retaining staff to provide oral health services at the Meekatharra Dental Clinic. The clinic was last fully staffed in 1997. Since then a relief dental officer has been used when possible.[125] The Department of Health has indicated that a fly-in fly-out service, using dental officers based in Perth, has recently been established in an attempt to provide a more stable service to the community.

In addition to the Meekatharra clinic, several School Dental Services have experienced frequent disruptions to services in recent years. The Geraldton Mobile Unit has had a very limited service

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118 Health Consumers' Council, Submission, 2 October 2001, p4.
119 Shire of Greenough, Submission, 26 September 2001, p1.
120 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, Appendix A.
121 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, p4.
122 Department of Health, Submission, 18 October 2001, p17.
123 Dental Therapy and Hygiene Association (WA), Submission, 12 November 2001, p1.
124 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, p4.
125 *Ibid*, p2.

in 2001, although prior to that it was adequate. Community Dental Unit 3, servicing a number of schools in the Midwest region is "*always difficult to staff*".[126]

Finding 16

Dental services to numerous towns in the Midwest Health Zone, including Meekatharra, Cue, Mt Magnet, Yalgoo, Karralundi, Wiluna and Burringah, have experienced frequent disruptions in recent years.

4.4.3 Goldfields Health Zone

The Goldfields Health Zone extends north from the coast at Eucla along the borders of South Australia and the Northern Territory into remote central desert country, and west along the south coast. In 2000 there were 60,082 people in the Goldfields Health Zone, almost 50 per cent of whom were recorded in the City of Kalgoorlie-Boulder.[127]

4.4.3.1 Existing general and specialist dental services in the Goldfields Health Zone

4.4.3.1.1 Public Clinics, Mobile and Itinerant Services

Community dental service clinics are located in Boulder and Ravensthorpe. Itinerant general dental services operate out of Boulder (visiting Eucla, Coonana and Tjuntjuntara) and Ravensthorpe (Bremer Bay, Gairdner, Hopetoun, Lake King and Newdegate).[128] A mobile general dental service operating out of Perth visits Laverton, Leonora and Leinster.[129]

4.4.3.1.2 School Dental Services in the Goldfields Health Zone

- Boulder Primary School;
- Esperance Primary School;
- Kambalda West Primary School;
- North Kalgoorlie Primary School;
- South Kalgoorlie Primary School;
- Kalgoorlie Dental Clinic (Laverton Primary School, Leonora District High School, Leinster Primary School);
- Kalgoorlie Mobile Unit (Coolgardie Primary School, Norseman District High School);

126 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, p4.
127 Australian Bureau of Statistics, 2000, pp30-33.
128 Department of Health, Submission, 18 October 2001, p19.
129 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, Appendix B.

- Mobile Dental Unit based in Ravensthorpe (Ravensthorpe District High School, Gairdner Primary School); and
- Esperance Primary School Mobile Unit (Cascades Primary School, Condingup Primary School, Grass Patch Primary School, Munglinup Primary School, Salmon Gums Primary School, Scadden Primary School).[130]

4.4.3.1.3 Dental Services At Aboriginal Medical Services

Kalgoorlie AMS (Bega Garnbirringu Health Service) previously received a visiting service two days per month through private arrangements organised by the School of Dentistry at UWA. This service has been extended by CRROH to five days per month (10 visits per annum).

CRROH is also responsible for the establishment of new visiting services to Warburton AMS (10 visits per annum on a five-day per visit basis) and Wiluna AMS (10 visits per annum on a five-day per visit basis). The Warburton service is expected to visit the Ngaanyatjarra communities.[131]

4.4.3.1.4 Specialist Services

Subsidised private orthodontist services are provided to eligible patients in Kalgoorlie-Boulder. Arrangements have been put in place in Esperance, but these services had not commenced as of October 2001.[132]

4.4.3.1.5 Admitted Patient Services

Admitted patient oral health services are provided through a number of hospitals in the Goldfields Health Zone (see table 4.7 below).

Table 4.7

Number of public patients admitted to public hospitals in the Goldfields Health Zone for oral health procedures, 2000/01.[133]

Hospital	Oral Health Procedures
Esperance District Hospital	34
Kalgoorlie Regional Hospital	62
Laverton District Hospital	1
Leonora District Hospital	1
Norseman District Hospital	1
Ravensthorpe District Hospital	2

130 Department of Health, Submission, 18 October 2001, pp20-21.
131 *Ibid*, pp19-20.
132 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, Appendix E.
133 Department of Health, Submission, 2 January 2002, pp3-4.

4.4.3.2 Comments on access to dental services from organisations, residents and practitioners in the Goldfields Health Zone

Dr Catherine Moore, a medical practitioner from the Banksia Medical Centre in Esperance commented on the critical shortage of dentists in the Esperance region:

> *Frequently as a doctor, both in general practice and working in the emergency department at the hospital on weekends, we have to deal with dental problems. The number of patients that we have had to see within the last year I feel is significantly higher than in previous years. Presumably there are many reasons for people presenting to doctors rather than dentists about dental problems but I feel at least one of them is the shortage of dentists and the time people have to wait for an appointment. I have frequently seen people's dental abscesses and dental pain who have been told they have several weeks wait. The wait to see a dentist for routine work is now over 6 months in Esperance. The other reason that people see doctors rather than dentists is the cost of seeing a dentist is often too high for them. I have had patients tell me that they cannot afford to go and see a dentist and that they will just wait until the tooth literally drops out.*[134]

Ms Jane Mitchell, Practice Manager at one of the three private dental surgeries in Esperance painted a grim picture of the current situation for residents of Esperance and surrounding regions. The average waiting time is 8 – 12 months, and no dentists are currently taking new patients. Dentists set aside an emergency time, on average one hour per dentist per day, but this is generally used in advance and patients who are in pain must often wait for several weeks before being treated.[135]

Ms Mitchell's comments were echoed by the Shire of Esperance, which stated in its submission that all dentists are pre-booked for months in advance, and emergency procedures are only performed if the patient is in a great deal of pain. The Shire indicated that there are currently three dentists in Esperance, and none in surrounding areas, amounting to a rate of one dentist per 4,400 people. [136]

The Shire of Esperance provided the Committee with several specific examples of Esperance residents who have been inconvenienced by the lack of access to dental services in the region. The following extract is from a letter penned by one resident:

> *My daughter had a toothache in January this year. When I rang the dentist to explain that we needed an urgent appointment I was told the dentist was fully booked for months ahead and we had to wait for a cancellation. We received a call to attend the dentist 2 1/2 weeks later at which time he didn't have time to treat the filling, only take note of the problem. This was mid-February. The next available appointment was June 21st! My daughter was expected to wait four months with a toothache for an appointment for a filling. I asked that we be contacted if there was a cancellation and I rang each week to check. We waited 3 weeks for a cancellation, in all a wait of nearly 6 weeks to have a toothache seen to!*[137]

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134 Dr Catherine Moore, Submission, 26 September 2001, p1.

135 Jane Mitchell, Practice Manager, Hugh Sharpe's Dental Surgery, Esperance, Briefing, 21 November 2001.

136 Shire of Esperance, Submission, 9 October 2001, p1.

137 Shire of Esperance, Submission, 21 November 2001, p13.

The Shire of Ravensthorpe made the following comments about access to dental services in Ravensthorpe and surrounding regions:

> *The dental health clinic in Ravensthorpe was newly refurbished in year 2000 (and includes a residence, etc), that has remained vacant for the past month pending confirmation of funding to support a resident dentist.*
>
> *It is not unusual for clients / patients to have to travel 500 kilometres return by road in order to avail themselves of scheduled preventative, remedial and emergency dental health care.*[138]

In correspondence to the Ravensthorpe District Hospital dated 15 November 2001, Mr David Neesham, Director of Dental Services, indicated that the Service "*has had considerable difficulty recruiting to fill the dental officer position at Ravensthorpe since the resignation of the last permanent dentist in June 2000.*"[139]

Disruptions in the Ravensthorpe Dental Clinic have also impacted on the neighbouring Shires of Dundas and Jerramungup:

> *The last visit that Norseman received from a dentist was in March 2000.* [140]
>
> *In previous years Jerramungup has had the dental van for 4-6 weeks. This year the van was present for only 3 weeks.*
>
> *The dental van now alternates between Bremer Bay and Gairdner primary schools and on average only stays for 2-week periods.*
>
> *In previous years, both schools have had the van present for at least 4 weeks, allowing enough time to treat community members.*[141]

The Shire of Laverton made the following comments on current access to dental services for residents:

> *There are no full time or regular visits to this area by general and specialist dental services. At present the only dental service available to residents of this shire is when the mobile dental clinic visits the town approximately twice per year. The mobile dental clinic appears to concentrate on providing dental care to the school children.*
>
> *Most residents of this shire requiring general and specialist dental services are required to travel to either Kalgoorlie or Perth to meet these needs. This is particularly expensive and difficult for older residents and residents on restricted incomes who would find the costs of travel and accommodation to either Kalgoorlie or Perth to be quite expensive.*[142]

Bega Garnbirringu Health Service is an Aboriginal community controlled health service in Kalgoorlie-Boulder. Over the past 18 months the organisation has established a culturally appropriate dental service. The service was established with the assistance of unpaid volunteer

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138 Shire of Ravensthorpe, Submission, 3 October 2001, p1.
139 Shire of Ravensthorpe, Submission, 21 November 2001, p5.
140 *Ibid*, p7.
141 *Ibid*, p8.
142 Shire of Laverton, Submission, 28 September 2001, p4.

dentists, local and from Perth. Since July 2001, funding has been made available through CRROH, enabling one week long dental visit per month, 10 times per year.

An Aboriginal Healthworker works alongside the dentist as the dental assistant and as well as providing the usual clinical support for the dentist, the assistant facilitates a culturally appropriate service.

Dr David Dunn, Medical Director of Bega Garnbirringu, made the following comments about the dental health program at Bega Garnbirringu:

> *Providing dental services within the Aboriginal community controlled health service has been very successful. This model makes dental services much more accessible to Aboriginal people. Bega Garnbirringu sees over 90% of the Aboriginal people in Kalgoorlie-Boulder and has over 7000 clients. It is a very efficient model as it enables the dental service to utilise the already established infrastructure including reception staff, clinical records, computerised patient recall systems, childcare and transport services.*
>
> *The unmet need of the Aboriginal community in the Goldfields for dental services is huge. The current visiting service, although a good start, is inadequate. Funding needs to be increased to employ a full-time dentist and Aboriginal dental assistant. Currently the cost of the Aboriginal dental assistant is unfunded.*
>
> *As a medical practitioner working in Aboriginal health in the Goldfields for over a decade I continue to be deeply concerned about the lack of dental services for Aboriginal people and the appalling state of oral health amongst the patients I see. I would estimate that around 90% of the clients I see have very bad oral health. It is common place to see whole teeth destroyed by dental caries. Patients are still pulling their own teeth out with pliers because of pain and the lack of dental services.*[143]

Mr John Bowler, MLA, the Member for Eyre, stated:

> *All the small towns within Eyre - Norseman, Southern Cross, Leonora, Laverton and Leinster do not have a resident dentist and are serviced by the mobile Community Dental Units who visit once a year. These towns do not have any visiting orthodontists and have to travel to large country centres or Perth.*[144]

The Shire of Ngaanyatjarraku is located 1,700km north of Perth in the Western Desert. The shire serves nine Aboriginal communities - Warburton, Warakurna, Tjirrkarli, Tjukurla, Wannan, Patjarr, Jameson (Mantamaru), Blackstone (Papulankutja) and Wingellina (Wingellina) with a combined population of 1,643. The Shire made the following comments about access to dental services in the Ngaanyatjarra communities:

> *Dental services within the Shire's boundaries are almost non-existent, Ngaanyatjarra Health Services provides the service on an ad hoc basis. The larger communities such as Warburton and Warakurna receive dental services once a year, the other communities once every two or three years.*
>
> *The closest regional centre for dental services are located in either Alice Springs or*

143 Bega Garnbirringu Health Services Aboriginal Corporation, Submission, 4 October 2001, pp1-2.

144 John Bowler, MLA, Submission, 9 October 2001, p1.

Kalgoorlie, which are both located approximately 1,000km away.

Public dentists in Kalgoorlie will only see patients on a needs basis and do not take appointments, which creates additional scheduling difficulties.[145]

Mr Douglas Josif, Manager, Ngaanyatjarra Health Service supported these comments, and further added:

The times when a dentist does visit the communities they are swamped with acute, serious cases that then does not leave time for any dental/oral hygiene education. There are also no options for dentures and other dental plates to be organised. The service provided is only acute type services once or twice a year if we are lucky.[146]

The Goldfields Esperance Development Commission provided a comprehensive overview of dental services in the Goldfields Health Zone. In addition to corroborating the above submissions, the Commission raised a number of other issues:

One dental practice in Esperance reported that Esperance Hospital had (very recently) determined that because of funding issues, patients receiving 'in-hospital' dental surgery, would only be admitted as 'private patients' ie they would have to pay theatre fees, bed fees and for the anaesthetist, as well as for the dentist.

Advice from Community Dental Services suggests that the Ravensthorpe facility can (when operating) only be accessed by those patients whose means-tested income level qualifies them for the 'Country Patients Dental Subsidy Scheme'. This means that even if an appointment time had been available, a 'non-eligible' patient requiring routine treatment could not have been seen by the Community Dental Service dentist. In effect, although there was a 'dentist on their doorstep', many people in Ravensthorpe still had to travel to Esperance, Albany or elsewhere for dental treatment.

… it is reported that at least one dental surgery in Kalgoorlie 'manages' its waiting list (to what appears to be a reasonable time) by <u>not</u> sending out 'check-up reminder notices', and by giving preference to existing patients. … While some dentists in Kalgoorlie-Boulder may contend that their waiting lists are 'acceptable', this view is not shared by other informed people spoken to by GEDC. Their view is that if 'reminder notices' were to be sent out (as would be standard practice in Perth), then demand for dental services could then be considered 'normal' (and waiting lists would be much longer, without additional staff). That reminder notices are not being sent out, and thus demand for routine dental services is lower than it otherwise might be, suggests that the overall standard of dental health in Kalgoorlie-Boulder is declining …[147]

4.4.3.3 Current vacancies in the Goldfields Health Zone

Vacancies for dental officers currently exist in Ravensthorpe mobile dental unit and Ngaanyatjarra Health Service. Both adults and children in Ravensthorpe and surrounding regions are affected by the lack of dental staff. More than 1,600 people in Ngaanyatjarra Aboriginal communities are affected by the inability of Ngaanyatjarra Health Service to recruit a dentist.

145 Shire of Ngaanyatjarraku, Submission, 9 October 2001, p1.

146 Ngaanyatjarra Health Service, Submission, 12 October 2001, p2.

147 Goldfields Esperance Development Commission, Submission, 12 October 2001, pp3-9.

Esperance does not have a community dental clinic, and the number of dentists has fallen from six to three in the last two years, precipitating the current crisis in dental care in this region.

4.4.3.4 Areas in the Goldfields Health Zone that have been historically difficult to staff

Dental Services advised that both Kalgoorlie and Ravensthorpe have been traditionally difficult to staff with dental officers. In recent years a number of public dental services have been heavily disrupted (Table 4.8 below).

Table 4.8

Disruptions to public dental services in the Goldfields Health Zone in the last 3 to 4 years.[148]

Service	Disruptions to service
Kalgoorlie School Dental Service	Vacant position for significant periods filled with relief staff and subsequently sponsored overseas dentist.
Goldfields clinic	Vacant for significant periods, covered by relief staff. Fully staffed in 2001.
Ravensthorpe	Vacant since June 2000, covered by relief dentists for short periods from Perth.

In addition to vacancies in the public system, towns such as Esperance have experienced tremendous difficulty attracting and retaining private practitioners in recent years.

Finding 17

Residents in a number of areas in the Goldfields Health Zone, including Kalgoorlie-Boulder, Ravensthorpe, Esperance and the Ngaanyatjarra communities, have experienced considerable difficulty accessing dental services in recent years.

4.4.4 Midlands Health Zone

The Midlands Health Zone extends northwards from the outskirts of Perth along the coast to Jurien, and eastwards approximately 400km to the Eastern Wheatbelt.[149] In 2000, the estimated resident population was 54,196.[150]

4.4.4.1 Existing general and specialist dental services in the Midlands Health Zone

4.4.4.1.1 Community Dental Clinics, Mobile and Itinerant Services

Perth-based mobile units provide community dental services to a number of towns in the Midlands Health Zone on an annual basis - Beacon, Bencubbin, Dalwallinu, Goomalling, Koorda, Mukinbudin, Wyalkatchem, Badgingarra and Hyden.[151]

148 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, pp1-3.
149 Department of Health, Submission, 18 October 2001, p22.
150 Australian Bureau of Statistics, 2000, pp24-29.
151 Department of Health, Submission, 18 October 2001, p23.

4.4.4.1.2 School Dental Services

- Northam Primary School;
- Corrigin Mobile Unit (Beverley District High School, Brookton District High School, Corrigin District High School, Cunderdin District High School, Kondinin Primary School, Kulin Primary School, Quairading District High School, Wooroloo Primary School, Wundowie Primary School, York District High School);
- Merredin Mobile Unit (Bruce Rock District High School, Kellerberrin District High School, Mt Walker Primary School, Narembeen District High School, Nungarin Primary School, South Merredin Primary School, Southern Cross District High School, Tammin Primary School, Trayning Primary School);
- Moora Mobile Unit [Bindoon Primary School, Gingin District High School, St Joseph's Primary School (Moora), Wongan Hills District High School];
- Perth-based Community Dental Unit 2 (Beacon Primary School, Bencubbin Primary School, Dalwallinu District High School, Goomalling Primary School, Dowerin District High School, Koorda Primary School, Mukinbudin District High School, Wyalkatchem District High School); and
- Perth-based Community Dental Unit 3 (Lancelin Primary School, Jurien Primary School, and Cervantes Primary School). [152]

4.4.4.1.3 Specialist services

There are currently no subsidised private specialist services in the Midlands Health Zone. Arrangements for subsidised orthodontic care have been put in place in Merredin and Moora, however these services had not commenced as of October 2001.[153]

4.4.4.1.4 Admitted Patient Services

A small number of admitted patient dental procedures are provided through a number of public hospitals in the Midlands Health Zone (Table 4.9 below).

[152] Department of Health, Submission, 18 October 2001, pp23-24.

[153] Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, Appendix E.

Table 4.9

Number of public patients admitted to public hospitals in the Midlands Health Zone for oral health procedures, 2000/01.[154]

Hospital	Oral Health Procedures
Beverley District Hospital	-
Bruce Rock War Memorial Hospital	1
Corrigin District Hospital	-
Cunderdin District Hospital	-
Dalwallinu District Hospital	1
Goomalling District Hospital	-
Kellerberrin Memorial Hospital	-
Kondinin District Hospital	1
Merredin District Hospital	4
Moora District Hospital	3
Narembeen District Hospital	-
North Midlands District Hospital	1
Northam Regional Hospital	20
Quairading District Hospital	-
Southern Cross District Hospital	1
Wongan Hills District Hospital	2
Wyalkatchem District Hospital	-
York District Hospital	-

4.4.4.2 Comments on access to dental services from organisations and residents in the Midlands Health Zone

The Health Consumers' Council advised the Committee of the following situation faced by a Toodyay resident:

> *A couple of months ago (before 24/04/01), he phoned the dentist in Toodyay, with concerns centring on a toothache. The receptionist informed him that there was no appointment available until 24/09/01 and she could put his name on the list, but to be aware that there were ten people on the wait-list ahead of him so this appointment was not firmly in place.*
>
> *… is on an invalid pension, but has dealt with the same situation in the past by travelling to Perth, staying overnight at his mother's place in Carlisle and then taking the train to Perth and waiting at the Perth Dental Clinic from 8.00am until he has been seen.*[155]

Mrs Lyn Phillips, a resident of Dowerin, wrote:

> *At present our rural area is serviced by general dental services in a local town (35km distant from our farm). This town is serviced by two dentists who share a practice … The people here are somewhat disadvantaged for emergency dental therapy, and would need to travel to Perth in such circumstances, or consult a different dentist elsewhere. This is difficult for the elderly especially, who find travelling long distances very tiring, not to mention the*

154 Department of Health, Submission, 2 January 2002, pp3-4.

155 Health Consumers' Council, Submission, 2 October 2001, p6.

expense.[156]

The Shire of Chittering submitted:

> *The Country Dental Service has been reduced in this area. It is vital that this service visit the Bindoon Primary School and the Catholic Agricultural College at least once a year to provide adequate delivery of dental care. The current sporadic visits do not allow for meaningful child/student dental care where follow-up work is required.*
>
> *Secondly, there is currently no access to orthodontic services or treatment in the Chittering, Gingin or Bullsbrook regions.*[157]

4.4.4.3 Current vacancies in dental services in the Midlands Health Zone

The DTHA (WA) advised the Committee that the Moora Mobile Dental Unit, which services a number of schools in the Midlands region [Bindoon Primary School, Gingin District High School, St Joseph's Primary School (Moora) and Wongan Hills District High School] is currently not in operation.[158]

The Committee received no further evidence of vacancies in the Midlands region.

4.4.4.4 Areas that have been historically difficult to staff

Dental Services advised the Committee that the Merredin and Moora mobile units and the Perth-based Community Dental Unit 2 (which visits numerous Midwest communities) have been vacant for short periods over the last three to four years, although there has been minimal disruption to the school dental program. [159] Perth-based Community Dental Unit 3, which services a small number of schools in the Midlands Health Zone is always difficult to staff.[160]

Finding 18

Several towns in the Midlands Health Zone, including Merredin, Moora and surrounding communities have had disrupted dental services in recent years.

4.4.5 Great Southern Health Zone

The Great Southern Health Zone is bounded to the north by the Central Wheatbelt, to the east by the lower Goldfields, to the south by the Southern Ocean and to the west by the South West region.[161] In 2000, the estimated resident population was 70,528.[162]

156 Lyn Phillips, Submission, 5 October 2001, p1.
157 Shire of Chittering, Submission, 5 October 2001, p1.
158 Dental Therapy and Hygiene Association (WA), Submission, 12 November 2001, p1.
159 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, pp1-4.
160 *Ibid*, p4.
161 Department of Health, Submission, 18 October 2001, p25.
162 Australian Bureau of Statistics, 2000, pp20-25.

4.4.5.1 Existing general and specialist dental services in the Great Southern Health Zone

4.4.5.1.1 Community Dental Clinics, Mobile and Itinerant Service

A community dental service clinic is located in Albany. A mobile service based in Ravensthorpe (Goldfields Health Zone) provides community dental services to Bremer Bay on a biennial basis and to Lake King and Newdegate on an annual basis.[163]

4.4.5.1.2 School Dental Services in the Great Southern Health Zone

- Albany Primary School;
- Spencer Park Primary School (Albany);
- Yakamia Primary School (Albany);
- Katanning Mobile Unit (Dumbleyung District High School, Gnowangerup District High School, Katanning Primary School, Kojonup District High School, Lake Grace District High School, Nyabing Primary School, Ongerup Primary School, Tambellup Primary School);
- Mt Barker Mobile Unit (Cranbrook Primary School, Denmark District High School, Frankland Primary School, Kendenup Primary School, Mt Barker Primary School, Rocky Gully Primary School, Walpole Primary School);
- Narrogin Mobile Unit (Boddington District High School, Darkan District High School, Narrogin Primary School, Wagin District High School, Wickepin Primary School, Williams District High School); and
- Ravensthorpe based Mobile Dental Unit I (Bremer Bay Primary School, Lake King Primary School and Newdegate Primary School).[164]

4.4.5.1.3 Specialist Services

A private orthodontist provides subsidised services to eligible patients in Albany.[165]

4.4.5.1.4 Admitted Patient Services

Admitted patient oral health services are provided through numerous hospitals in the Great Southern Health Zone (see table 4.10 below).

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163 Department of Health, Submission, 18 October 2001, p26.

164 *Ibid*, pp26-27.

165 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, Appendix E.

Table 4.10

Number of public patients admitted to public hospitals in the Great Southern Health Zone for oral health procedures, 2000/01.[166]

Hospital	Oral Health Procedures
Albany Regional Hospital	271
Boddington District Hospital	2
Denmark District Hospital	1
Dumbleyung District Memorial Hospital	-
Gnowangerup District Hospital	-
Katanning District Hospital	10
Kojonup District Hospital	-
Lake Grace District Hospital	1
Narrogin Regional Hospital	18
Plantagenet District Hospital	15
Wagin District Hospital	1

4.4.5.2 Comments on access to dental services from organisations, residents and practitioners in the Great Southern Health Zone

The Shire of Boddington stated:

> *The Shire of Boddington, which comprises approximately 1,600 residents, does not have the convenience of dental services within the Shire. The State funded Mobile Dental Clinic visits the Boddington District High School (350+ students) once each year but is not permitted to treat adult patients i.e. year 12 students and above.*
>
> *A dental surgery exists in Pinjarra, which is 75 kilometres from Boddington. Narrogin is 85 kilometres and Mandurah and Armadale each 95 kilometres from Boddington. Of course many rural and remote communities are more isolated than Boddington, however the fact remains that a dental service is not available locally - which is an inconvenience.*[167]

The Shire of Broomehill submitted the following:

> *It seems that for private patients the availability of services is reasonable subject to the individual's willingness and ability to travel to suit surgery hours. A potential downside here is that the service provider may well change from treatment to treatment, i.e. it may not be possible for the patient to attend the same surgery each time.*
>
> *Clearly the overall cost of the service is increased by the cost of travel etc. If I need to travel to Albany for treatment my real cost is the treatment less any health cover rebate plus additional travelling time [say 3 hours] plus fuel [say $25+].*
>
> *For those reliant on public programs the picture is grim indeed, it seems private practitioners, already thin on the ground, need to focus on the paying customer to ensure the viability of their practices.*[168]

166 Department of Health, Submission, 2 January 2002, pp3-4.
167 Shire of Boddington, Submission, 26 September 2001, p1.
168 Shire of Broomehill, Submission, 4 October 2001, p1.

The Shire of Plantagenet stated:

> *The township of Rocky Gully … is 65km from Mount Barker (where our one dentist is located) and trips into town may be infrequent, especially without access to public transport.*[169]

4.4.5.3 Current vacancies in the Great Southern Health Zone

Dental Services indicated that vacancies in Albany Dental Clinic have led to reduced services in 2001. A half time vacancy in the SDS also existed in 2001. Although services were not disrupted, the level of service was reduced.[170]

4.4.5.4 Areas that have been historically difficult to staff

The only community dental clinic in the Great Southern Health Zone, located in Albany, has been traditionally difficult to staff with dental officers. The position of Dentist in Charge has been vacant since mid 2000, and a second dental officer position has been vacant since May 2001.[171]

In addition to dental officer vacancies in the Albany Dental Clinic, both Narrogin and Katanning Mobile dental units have been without dental therapists for significant periods of time over the last three to four years, with significant disruption to the SDS. Some 1,987 and 1,882 children respectively have been affected by vacancies in these services.[172]

Finding 19

Several towns in the Great Southern Health Zone, including Albany, Narrogin and Katanning, have been affected by staffing vacancies in dental services in recent years.

4.4.6 South West Health Zone

The South West Health Zone extends southwards from the Shire of Harvey along the southwest coast to the town of Walpole, and inland to the Shires of Collie, Bridgetown and Manjimup.[173] In 2000, there was an estimated resident population of 126,889 people in the South West Health Zone.[174]

4.4.6.1 Existing general and specialist dental services in the South West Health Zone

4.4.6.1.1 Public Clinics, Mobile and Itinerant Services

Community dental service clinics are located in Bunbury and Busselton.[175]

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169 Shire of Plantagenet, Submission, 12 October 2001, p1.
170 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, p2.
171 *Ibid*, pp2-3.
172 *Ibid*, p4.
173 Department of Health, Submission, 18 October 2001, p28.
174 Australian Bureau of Statistics, 2000, pp16-19.
175 Department of Health, Submission, 18 October 2001, p29.

4.4.6.1.2 Dental Services To Aboriginal Patients

Dental Services have recently established dental services one day per week at the Bunbury Dental Clinic for Aboriginal patients of the South West Aboriginal Medical Service.[176]

4.4.6.1.3 Specialist Services

Private orthodontists currently provide subsidised services to eligible patients in Bunbury and Busselton.[177]

4.4.6.1.4 Admitted Patient Services

The Department of Health advised that admitted patient oral health services are provided at a number of public hospitals in the South West Health Zone (see table 4.11 below).

Table 4.11

Number of public patients admitted to public hospitals in the South West Health Zone for oral health procedures, 2000/01.[178]

Hospital	Oral Health Procedures
Augusta District Hospital	2
Bridgetown District Hospital	33
Bunbury Regional Hospital	19
Busselton District Hospital	15
Collie District Hospital	10
Donnybrook District Hospital	-
Harvey District Hospital	3
Margaret River District Hospital	36
Nannup District Hospital	-
Pemberton District Hospital	-
Pingelly District Hospital	2
Warren District Hospital (Manjimup)	5
Yarloop District Hospital	-

4.4.6.1.5 School Dental Services

- Adam Road Primary School (Bunbury);
- Amaroo Primary School (Collie);
- Australind Senior High School;
- Glen Huon Primary School (Eaton);
- Manjimup Primary School;
- South Bunbury Primary School;

176 Department of Health, Submission, 18 October 2001, p29.
177 *Ibid*.
178 Department of Health, Submission, 2 January 2002, pp3-4.

- West Busselton Primary School;
- Bridgetown Mobile Unit (Balingup Primary School, Boyup Brook Primary District High School, Bridgetown Primary School, Nannup District High School, Northcliffe District High School, Pemberton District High School);
- Bunbury Mobile Unit (Boyanup Primary School, Capel Primary School, Carey Park Primary School, Dardanup Primary School, Donnybrook Primary School, Donnybrook District High School);
- Harvey Mobile Unit (Brunswick Junction Primary School, Harvey Primary School, Yarloop Primary School); and
- Margaret River Mobile Unit (Margaret River Primary School, Cowaramup Primary School; Augusta Primary School, Dunsborough Primary School).[179]

4.4.6.2 Comments on access to dental services from organisations, residents and practitioners in the South West Health Zone

The City of Bunbury's submission suggests that even in large regional centres, access to dental services is inadequate:

> *There is currently no access for any patients to receive dental treatment in the Bunbury Regional Hospital. This impacts particularly on children requiring restorative or surgical treatment or treatment of trauma. For patients without the means to pay for private hospital fees or insurance, there may be no adequate or appropriate way to deliver treatment in Bunbury. Many children in pain must be referred to Princess Margaret Hospital for emergency treatment. As Bunbury has a government dental clinic, there is no access to the Country Patients Dental Subsidy Scheme. Eligibility for treatment at a government dental clinic is means tested. This leaves many lower income earners unable to receive subsidised treatment and unable to afford private treatment. Even for those eligible for treatment at a government facility, there is a mandatory trip to Perth and a waiting list to contend with.*[180]

Dr David McDonald, a dental surgeon in Busselton, alerted the Committee to problems that public patients in the Busselton region face in relation to access to public hospitals for dental procedures requiring general anaesthesia. His submission disputes evidence provided by the Department of Health[181] with regard to the number of dental procedures performed in Busselton and Bunbury hospitals:

> *At present Busselton District Hospital will only allow a total of twelve public admissions per year for dental procedures … All other patients must be admitted as private patients. The situation is made worse because Bunbury Regional Hospital will not admit any patients requiring dental treatment …* [182]

179 Department of Health, Submission, 18 October 2001, pp30-31.
180 City of Bunbury, Submission, 3 October 2001, pp1-2.
181 Department of Health, Submission, 2 January 2002, pp3-4.
182 Dr David McDonald, Submission, 11 October 2001, p1.

In support of the above comments, Dr McDonald provided the Committee with a copy of correspondence from Busselton Hospital, stipulating the number of patient admissions per year.[183]

4.4.6.3 Current vacancies in dental services in the South West Health Zone

Dental Services advised that as of October 2001 there were no public sector vacancies for dental officers or therapists in the South West Health Zone.[184]

4.4.6.4 Areas that have been historically difficult to staff

Dental Services has indicated that Bunbury has been traditionally difficult to staff with dental officers. The position of Area Dental Officer, coordinating the SDS in the Bunbury region, has been vacant since 1998, being covered by relief dentists during this time. It is currently filled by an overseas sponsored dentist.[185] Both Bunbury and Collie School Dental Services have experienced variable vacancies since 1999. Vacancies have been covered by relief dental therapists, or in Bunbury, by dentists from the Bunbury Dental Clinic. There has been no disruption to services, although the level of service has been reduced.[186]

A dental officer vacancy also existed in the Bunbury Dental Clinic in 1999, with a consequent reduction in service.[187]

Finding 20

Residents of several towns in the South West Health Zone, including Bunbury and Collie, have had disrupted access to dental services in recent years.

The Committee recommends a stronger State commitment to delivery of dental services to regional, rural and remote areas of the State, particularly with regard to adult dental services.

Recommendation S1

In consultation with Dental Services, a concerted effort should be made to address the current shortfall of dentists and dental therapists in the public system by actively recruiting more personnel. Financial and other incentives should be offered to encourage dental professionals working in the public sector to accept postings in regional, rural and remote areas.

183 Dr David McDonald, Submission, 12 November 2001, p5.
184 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, pp2-4.
185 *Ibid.*
186 *Ibid*, p5.
187 *Ibid.*

Recommendation S2

In consultation with regional development commissions, business incentives should be offered to private dental practitioners to encourage the establishment of dental practices in areas of unmet need throughout the State.

Recommendation S3

Public dental services should be established or expanded in current areas of unmet need. The Committee has identified a number of communities that are currently in most urgent need of improved dental services:

- Communities in the Goldfields Health Zone, including Esperance, Ravensthorpe and the Ngaanyatjarra Lands;
- Communities in the Northwest Health Zone, including Derby, Port Hedland, Newman, Exmouth and Halls Creek;
- Communities in the Midwest Health Zone, including Meekatharra, Cue, Mt Magnet, Karralundi, Wiluna and Burringah.

The Committee recommends that the **Department of Health** facilitate an improvement in the delivery of dental services to regional, rural and remote areas through a range of measures.

Recommendation H1

The following steps should be taken with regard to admitted patient dental procedures:

- Inpatient dental procedures should be afforded a higher priority, with a commensurate increase in the relative funding allocation to regional health services;
- A more effective monitoring system should be established to ensure that the number of admitted patient dental procedures performed in regional hospitals is in accordance with both the funding allocation and with the normative level of demand for services in the local area;
- A concerted effort should be made to encourage regional health services to increase the amount of hospital theatre time allocated to dental procedures to ensure that residents of regional, rural and remote communities are not forced to travel to Perth to access treatment; and
- A review should be undertaken to examine the possible use of intravenous sedation for complex or major dental procedures.

CHAPTER 5 DEMOGRAPHIC, SOCIOECONOMIC AND OTHER FACTORS THAT IMPACT ON OVERALL DENTAL CARE

5.1 DEMOGRAPHIC FACTORS

5.1.1 Population distribution in Western Australia

The estimated resident population of Western Australia at the end of the 2000 June quarter was 1,883,860.[188] Of these, 1,381,127 people[189] or 73 per cent of the State's population, lived in the Perth metropolitan area. The remaining 502,733 people were dispersed throughout regional, rural and remote Western Australia.

Population density in country Western Australia is heavily concentrated in major regional centres, particularly in the Central, Kimberley, Pilbara and South Eastern districts.[190] In the Kimberley region, 76 per cent of residents live in Broome, Kununurra or Derby. Similarly, 69 per cent of Pilbara residents live in Port Hedland, Karratha and Newman; 65 per cent of residents in the South Eastern district live in Kalgoorlie-Boulder or Esperance; and 54 per cent of residents in the Central region live in Geraldton or Carnarvon.[191]

5.1.2 Distribution of the dental workforce in Western Australia

5.1.2.1 Dentists

In 2000 there were approximately 1,002 registered dentists in Western Australia, 913 of whom were practising.[192] Of the 913 practising dentists, 85 per cent worked in private practice. Only 16 per cent of practising dentists worked outside the Perth metropolitan area. Table 5.1 (below) shows the distribution of dentists in Western Australia by statistical division.

188 Australian Bureau of Statistics, 2000, p9.

189 *Ibid*.

190 *Districts* equate to statistical divisions, as defined by the Australian Bureau of Statistics. They are distinct from the Health Zones used by the Department of Health. The Pilbara and Kimberley districts form part of the Northwest Health Zone. The Central district, minus the Shire of Wiluna, forms the Midwest Health Zone. The South Eastern district, plus the Shire of Wiluna, forms the Goldfields Health Zone.

191 Australian Bureau of Statistics, 1998a, p26 and Australian Bureau of Statistics, 1998b, pp6-7.

192 Information provided by the Australian Institute of Health and Welfare, February 2002.

Table 5.1

Rate of practising dentists per 100,000 estimated resident population by statistical division of main practice location, 2000.[193]

Statistical division	ERP	Number of practising dentists	Rate	Percentage
Perth	1,381,127	767	55.6	84.0
South West	187,862	78	41.5	8.5
Lower Great Southern	52,128	29	55.2	3.2
Upper Great Southern	19,610	3	17.3	0.4
Midlands	52,986	8	16.0	0.9
South Eastern	58,926	5	8.6	0.6
Central	60,253	14	22.5	1.5
Pilbara	40,429	3	8.4	0.4
Kimberley	30,539	5	16.6	0.6
TOTAL	1,883,860	913	48.5	100.0

N.B. Estimated resident population (ERP) – Australian Bureau of Statistics Cat. No. 3235.5, 30 June 2000.

5.1.2.2 Dental therapists

There were 331 practising dental therapists in Western Australia in 2000, 178 of whom were involved in the SDS.[194] This figure equates to 17.6 practising therapists for every 100,000 people in the State. Current geographic distribution figures are not available, however, in 1997 there were 19.6 and 12.7 practising therapists for every 100,000 people in Perth and the rest of the State respectively. [195] Based on the estimated resident population at the time, some 63 practising therapists (20 per cent) were working in country Western Australia.[196]

5.1.2.3 Dental hygienists

There were 82 practising dental hygienists in Western Australia in 2000. Of these, two were practising in the public program, two were teaching and 78 were involved in private practice.[197] In 1997 there were only 23 practising dental hygienists in Western Australia, none of whom worked outside the Perth metropolitan area.[198] The large increase in the hygienist labour force has resulted from the introduction of the dental hygienists course in 1996. Current data on the geographic distribution of practising hygienists in Western Australia is unavailable.

5.1.2.4 Dental prosthetists

There were 54 practising prosthetists in Western Australia in 1998. There were 3.3 practising prosthetists for every 100,000 people in the Perth metropolitan region and 1.8 per 100,000 throughout the rest of the State.[199] Based on the estimated resident population of country Western Australia at the time, this equates to 9 practising dental prosthetists working outside the Perth

193 Information provided by the Australian Institute of Health and Welfare, February 2002.
194 *Ibid*.
195 AIHW Dental Statistics and Research Unit, 1999b, p4.
196 Based on population data in Australian Bureau of Statistics, 2001a, pp15-16.
197 Information provided by the Australian Institute of Health and Welfare, February 2002.
198 AIHW Dental Statistics and Research Unit, 1999a, pp1-4.
199 AIHW Dental Statistics and Research Unit, 1999c, p3.

metropolitan area.[200] More recent figures on the number of practising prosthetists and their geographic distribution are not available.

Finding 21

The rates of practising dentists, dental therapists, dental hygienists and dental prosthetists per 100,000 population are significantly lower in country Western Australia than in Perth.

5.1.3 Remoteness and dental care

5.1.3.1 Classifying remoteness

With a disproportionately high percentage of the population living in the Perth metropolitan area, the problem of providing essential services, in particular health related services, to people in country Western Australia has been significant. To determine whether country communities are receiving adequate essential services and are not being detrimentally affected by distance, there is a requirement that a standard form of measure be adopted.

> *In order to systematically tailor services to meet the needs of Australians living in regional Australia, 'remoteness' (identified with lack of accessibility to services regarded as normal in metropolitan areas) needs to be defined.*[201]

The Commonwealth Department of Human Services and Health [202] in co-operation with the National Key Centre for Social Applications of Geographical Information Systems (GISCA) and the Australian Bureau of Statistics developed the ARIA (Accessibilty/Remoteness Index for Australia) system to describe the degree of remoteness of populated localities.

The ARIA system is based on road distance, specifically the distance between population and essential services. It was designed to be independent of socio-economic and urban/rural population factors, as these can be ambiguous. ARIA was also designed to incorporate postcode districts as the standard area of measure. Each postal district within Western Australia has been given an ARIA remoteness classification. These classifications are grouped into five categories based on their respective ARIA score. The categories are:

- **Highly Accessible** (ARIA score 0 – 1.84) – relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction.
- **Accessible** (ARIA score 1.85 – 3.51) – some restrictions to accessibility of some goods and services and opportunities for social interaction.
- **Moderately Accessible** (ARIA score 3.52 – 5.80) – significantly restricted accessibility of goods and services and opportunities for social interaction.
- **Remote** (ARIA score 5.81 – 9.08) – very restricted accessibility of goods and services and opportunities for social interaction.

200 Based on population data in Australian Bureau of Statistics, 2001a, pp15-16.
201 Commonwealth Department of Health and Aged Care, 2001, p3.
202 Now known as the Australian Department of Health and Ageing.

- **Very Remote** (ARIA score 9.09 – 12) – very little accessibility of goods and services and opportunities for social interaction.[203]

Analysis of Western Australian postal districts and their corresponding ARIA scores highlights the geographic isolation that hampers the provision of essential services to country communities. There are 291 postal districts in Western Australia, 113 of which are located in the metropolitan area. Of the remaining 178 districts, 63 are classified as either remote or very remote. Western Australians living outside the metropolitan area and immediate surrounds have either significantly restricted, very restricted or very little accessibility to essential services (see Figure 5.1 below). [204]

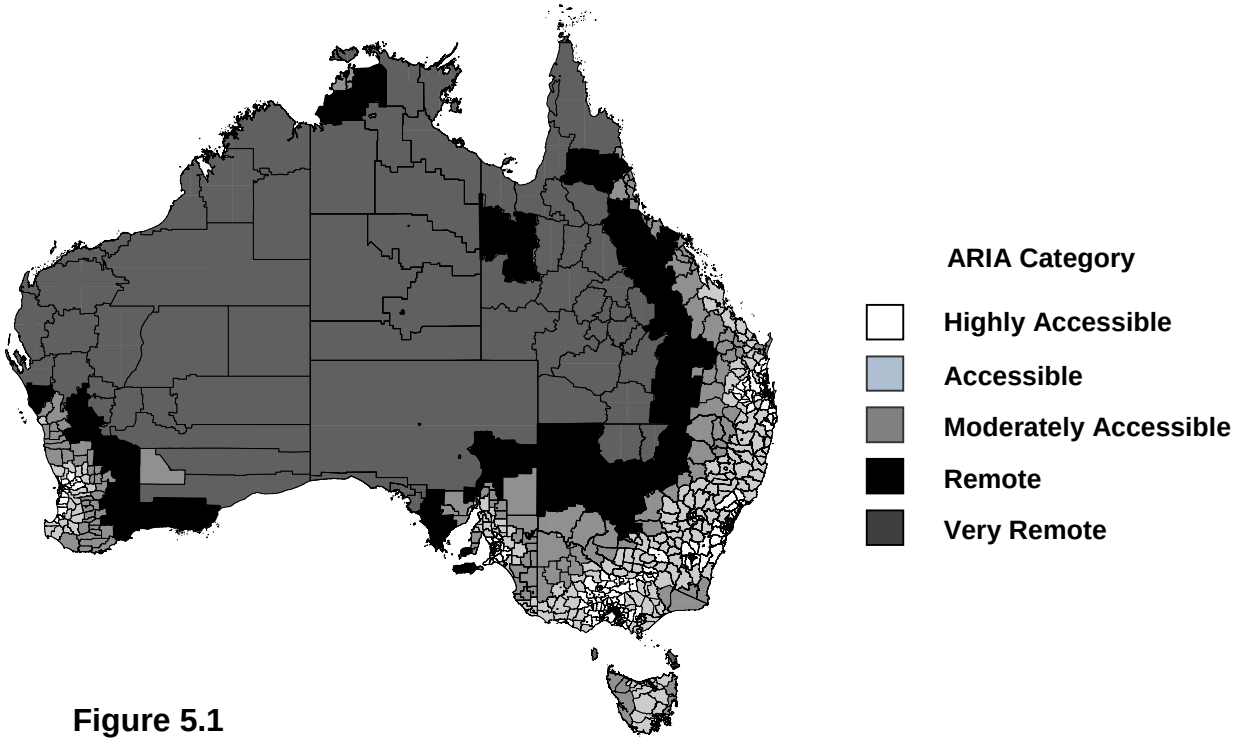

Figure 5.1

5.1.3.2 Remoteness and access to dental services

Remoteness impinges directly on the availability of health services. Dental Services in its submission to the Committee stated that:

> *…only 13 percent of the approximately 1,000 registered dentists in WA have registered addresses outside the Perth Metropolitan area.*[205]

The Council on the Ageing (WA) provided information with regard to the availability of dental care in rural and remote shires in Western Australia (Table 5.2 below).

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203 Commonwealth Department of Health and Aged Care, 2001, p3.

204 Source: Australian Bureau of Statistics and Australian Institute of Health and Welfare, 2001, p148.

205 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p10.

Table 5.2

Access to rural and remote dental services. [206]

	1996/97	1997/98	1998/99	1999/00	2000/01
Shires have no service*	42	40	38	42	41
Shires have a public dental clinic	11	11	10	11	12
Shires have a public mobile service, visits at least once a year	22	19	19	17	17
Shires have either a local or visiting practitioner	35	40	43	40	40

* Based on access to dental care within 100 kilometres of the main town of each shire on at least an annual basis.

These data show that a large number of communities have no or restricted access to regular dental services within the local area.

In other communities, large distances must be travelled to access dental services. Access to transport and associated travel costs may influence an individual's decision to visit a dentist. Depending on the distance involved, patients may also need to find accommodation whilst away from home.

> *The need to travel long distances to appointments in combination with factors such as time away from work and family commitments, as well as travel expenses, is as great an influence on a patient's decision to postpone or neglect treatment as the consideration of the cost of the treatment itself.*[207]

In its submission, the Shire of Ravensthorpe advised:

> *It is not unusual for clients/patients to have to travel 500 kilometres return by road in order to avail themselves of scheduled preventative, remedial and emergency dental health care.*[208]

Evidence provided to the Committee suggests that distance, when coupled with a general lack of access to regular dental treatment and extended waiting lists, penalises residents in country Western Australia. Dental visits are skewed towards emergency treatment rather than general dental care.

> *The reason for seeking dental care influences the treatment likely to be received. Visiting for a specific problem rather than a routine examination may reflect the inability to access dental services. The greater distances involved, present a barrier to the provision and the access to regular dental care in rural and remote areas.*[209]

The Health Consumers' Council advised the Committee of the following situation faced by a Mingenew resident:

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206 Council on the Ageing, Submission, 5 October 2001, Appendix 3.

207 City of Bunbury, Submission, 3 October 2001, p2.

208 Shire of Ravensthorpe, Submission, 3 October 2001, p2.

209 Australian Dental Association (WA), Submission, 15 October 2001, p2.

The nearest dentist is either Dongara (58kms) or Three Springs (55km). Both practices are private and health care card holders must pay the full rate.

...has been disadvantaged as she does not have access to a vehicle - her husband requires this for work purposes. ...access to dental services for low-income earners is either a trip to Geraldton (125kms) or Perth (200kms), which means finding overnight accommodation, asking her husband to take a couple of days off work and fuel costs.[210]

The Shire of Laverton stated:

Most residents of this shire requiring general and specialist dental services are required to travel to either Kalgoorlie or Perth to meet these needs. This is particularly expensive and difficult for older residents on restricted incomes who would find the costs of travel and accommodation to either Kalgoorlie or Perth to be quite expensive.[211]

Finding 22

Residents of many rural and remote communities must travel long distances to access dental services.

5.1.4 Community demographics and dental care

Demographic features of a community will have considerable bearing on whether or not a private dental practitioner chooses to establish a practice in the region. To establish and run a private practice successfully, there exists the requirement that there be enough potential patients in the immediate surrounds. A ratio of 1:1,000 was determined from studies in Sweden to be an optimum figure for a sustainable practice,[212] however, the ADA (WA) advised the Committee that a community of around 2,750 people might be required to support a general dental practice.[213] In a recently published article, Steele *et al* reported that 186 postcode regions in Western Australia had a population of less than 2,500.[214] Almost 80 per cent of postcode regions with a population of less than 2,500 are in non-urban regions.

The ADA (WA) further advised that whilst a figure of 2,750 might be accurate nationwide, a community that seeks only basic or 'relief of pain' treatment will necessarily be very much larger to support a general dental practice. Given that only a small number of general practice patients need to be referred to a dental specialist, the size of a community required to support a specialist dental service will be larger still.[215]

210 Health Consumers' Council, Submission, 2 October 2001, p4.
211 Shire of Laverton, Submission, 28 September 2001, p3.
212 Dr Nicholas Boyd, President, Australian Dental Association (WA), Transcript of Evidence, 12 November 2001, p3.
213 Australian Dental Association (WA), Submission, 15 October 2001, p4.
214 Steele L, Pacza T and Tennant M, 2000, pp22-28.
215 Australian Dental Association (WA), Submission, 15 October 2001, pp4-5.

Mr David Neesham, Director of Dental Services, advised the Committee that, in his opinion, a dentist in private practice would not go to a country area with a population of less than 4,000.[216] The 1996 Census figures show that there were less than 20 towns in Western Australia with a population of 4,000 or more people.[217]

The ADA (WA) indicated that the transience of a community would also influence the minimum resident population required to support a general dental practice:

> *Where a proportion of a rural or remote community travels to Perth even periodically, and seeks routine care, the size of a community required to support a dentist will again be much larger.*[218]

The age profile of a community will also affect the delivery of dental services. A community with a population that is skewed toward older age groups will have different dental requirements than a community with a younger age distribution.

The Goldfields Esperance Development Commission made the following comments with regard to age distribution and transience of a community, comparing a relatively young and transient community (Kalgoorlie) with an older, less mobile community (Esperance):

> *Clearly the delay in getting an appointment in Esperance is much more pronounced than in Kalgoorlie (nine months against approx 5 weeks). Yet the dentist/population ratio suggests that Kalgoorlie should be 'worse off' (4: 32,042 = 8010) than Esperance (3: 13,271 = 4423). It has been suggested that the 'older demographic' in the South East leads to a greater demand for dental services. There is a view that many people in the mining community in Kalgoorlie, who are perhaps originally from Perth, have chosen to retain their 'Perth dentist', perhaps visiting that dentist on work or holiday trips to Perth. The Esperance population is less transient, and thus a greater proportion of the population in the town would see an 'Esperance dentist', by comparison with the Kalgoorlie situation.*[219]

Finding 23

A community of around 3 - 4,000 people is required to support a general dental practice. There are less than 20 towns in Western Australia with a population in excess of 4,000.

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216 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p4.

217 Australian Bureau of Statistics, 1998a, pp9-13.

218 Australian Dental Association (WA), Submission, 15 October 2001, p4.

219 Goldfields Esperance Development Commission, Submission, 12 October 2001, p8.

5.2 SOCIOECONOMIC FACTORS

5.2.1 Access to care in non-urban areas

5.2.1.1 Cost and inconvenience associated with travelling long distances

For people who live in Perth, a selection of dentists can usually be found relatively close to home. This is generally not the case for residents of rural and remote, and even some regional communities. For many country residents, a visit to the dentist involves travelling long distances, with all the associated costs and inconveniences:

> *The need to travel long distances to appointments in combination with factors such as time away from work and family commitments, as well as travel expenses, is as great an influence on a patient's decision to postpone or neglect treatment as the consideration of the cost of the treatment itself.*[220]

Mrs Lyn Phillips of Dowerin informed the Committee of the specific problems that farmers might face with regard to accessing dental services distant to their residence:

> *Due to our family situation it was often difficult to book up appointment times several months ahead during school holidays, as you were not sure when certain essential seasonal jobs would be done, ie shearing, spray topping, hay cutting.*
>
> *… the logistics of travelling to Perth, such as expense of fuel, time (farmers can't afford lost employment time), safety (if you are elderly, or unaccustomed to driving in Perth).*[221]

Councillor Mary Smith of the Shire of Ravensthorpe advised the Committee that the cost and inconvenience of travelling long distances to access dental treatment was one of the major issues raised by community members in relation to dental services in the region:

> *The cost of travel and accommodation for prolonged treatment, and the time needed for this, can preclude people from seeking the treatment. This is a particular burden to the many people who do not travel out of the area on a regular basis. It is not desirable for families to have to spend their annual leave going to the dentist.*[222]

The Shire of Mullewa advised the Committee that specialist dental services must be accessed in regional centres (Geraldton or Carnarvon) some distance away, which poses problems for some community members:

> *Aboriginal people prefer not to leave their hometown locality to access health care services, particularly when this might involve an overnight stay.*[223]

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220 City of Bunbury, Submission, 3 October 2001, p2.

221 Lyn Phillips, Submission, 5 October 2001, p2.

222 Shire of Ravensthorpe, Submission, 21 November 2001, p1.

223 Mullewa Health Services Board of Management, Submission, 26 November 2001, p2.

Because of the cost and inconvenience of travelling long distances to access dental services, many country patients are inclined to limit their dental care to emergency treatment rather than regular maintenance dental care. This approach ultimately impacts on oral health.

5.2.1.2 Access for low-income earners

Low-income earners can be severely disadvantaged regardless of where they live, but those who live in regional, rural and remote communities often face additional challenges.

In most instances, low-income earners must rely on public dental services, as they are unable to afford the fees associated with private treatment. Availability of public services in the local area will therefore have an important bearing on access to dental services for low-income earners. Whilst access to free dental care through the SDS is generally adequate in most areas of the State, access to community dental services is problematic for many adults in regional, rural and remote areas (see Chapter 6).

In many country locations, the only access to subsidised dental care for low-income earners is via the Country Patients Dental Subsidy Scheme. The ADA (WA) informed the Committee that 67 of its country members participate in the CPDSS. Whilst this ensures reasonable access to subsidised care for many country residents, the Committee received several submissions that highlighted areas where there is neither a private practitioner participating in the CPDSS nor a public dental service.[224]

As well as availability of services, eligibility for publicly funded or subsidised dental care is an important determinant of access to dental care for low-income earners. Termination of the Commonwealth Dental Health Program (CDHP) in 1996 reduced the number of residents eligible for public dental care from 100,000 to 65,000 in regional, rural and remote Western Australia:

> *Because its emphasis was on those with the least ability to pay and with fewest options, the CDHP was an important part of the safety net … Many of the clients of the CDHP were Aboriginal people from isolated communities and those in greatest need: people on low-incomes who had limited access to dental care and few options for care.*[225]

It was not until 2001 that the WA Department of Health increased the level of funding to expand the eligibility criteria for Government subsidised oral health care. In the interim, the oral health status of ineligible low-income earners has declined substantially, and waiting times for eligible patients has increased markedly.[226]

5.2.1.3 Community members with special needs

A number of groups have special needs with regard to dental services, which may not be easily obtained in regional, rural and remote communities.

5.2.1.3.1 Migrants from non-English speaking backgrounds

Immigrants form an increasing proportion of the Australian population: in 1999, 24 per cent of the population was born in another country. Of these, 39 per cent were born in non-English

224 Council on the Ageing, Submission, 5 October 2001, p4.
225 Wirraka Maya Health Services Aboriginal Inc., Submission, 16 October 2001, p3.
226 Wirraka Maya Health Services Aboriginal Inc., Submission, 16 October 2001, p9.

speaking countries.[227] Migrants from non-English speaking countries often have problems understanding health messages in English, a factor that may present a considerable barrier to accessing dental and other health services in country Western Australia. Immigrants may also come from cultures in which the traditional diet is low in caries-risk components and there is no tradition of tooth brushing and oral hygiene.[228]

5.2.1.3.2 Aboriginal people living in rural and remote communities

With one in five Aboriginal people living in very remote communities[229], access to ongoing dental care is severely restricted. This lack of dental service provision has a devastating effect on oral health amongst Aboriginal communities.

For the many Aboriginal people who live in remote communities in Western Australia, lack of access to culturally appropriate dental services may pose a considerable barrier. The recent establishment of a culturally appropriate dental service in the Bega Garnbirringu Aboriginal Health Service in Kalgoorlie has been very well received by clinic patients.[230]

Many facets of the modern Aboriginal lifestyle contribute to poor oral health. This matter is considered in detail in Chapter 9.

5.2.1.3.3 Aged people

Aged people living in regional, rural and remote communities face several challenges in accessing appropriate dental care. People aged 65 years or more have higher levels of caries experience, edentulism and periodontal disease than younger members of the community.[231] For the 60 per cent of aged people who wear a full or partial denture[232], access to a dental prosthetist is essential. As detailed in Chapter 5, there were 54 registered dental prosthetists practising in WA in 1998[233], few of whom were working outside the metropolitan area.

Accessing dental prosthetists is problematic for many country residents, as advised by the Manager of Nutrition Services at Bunbury Primary Health Services:

> *As a Clinical Dietitian I have often come across patients in the Bunbury Regional Hospital who are having difficulties with the texture of their food because of ill fitting dentures. These are usually people of lower socio-economic status who can't afford to have dentures fixed or repaired. Their options are to wait for the public facility to make the alterations or pay for it themselves, which invariably they can't afford. This ultimately impacts on their nutritional status because of the effect on their dietary intake.*[234]

The normative dental health needs of aged people who are not edentulous will be higher than the general population, because in general they will not have had the benefit of a lifetime of water fluoridation and preventive dental care.

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227 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p9.
228 *Ibid.*
229 Australian Bureau of Statistics and Australian Institute of Health and Welfare, 2001, p16.
230 Bega Garnbirringu Health Services Aboriginal Corporation, Submission, 4 October 2001, p2.
231 AIHW Dental Statistics and Research Unit, 1998b, pp52-69.
232 AIHW Dental Statistics and Research Unit, 1998a, p15.
233 AIHW Dental Statistics and Research Unit, 1999c, p3.
234 Bunbury Primary Health Services, Submission, 24 September 2001, p1.

The Council on the Ageing advised that a lack of dental services in the local area might force many seniors to relocate to areas closer to the required services. The Council is firmly of the belief that such a move can have devastating effects on those concerned.

> *…the current lack of facilities in rural towns often means seniors are forced to move away to better-equipped areas, losing the social support which is so important to people of any age group, but particularly seniors. The social consequences of this forced relocation are disastrous for many older people, and in particular, for Indigenous Australians.*[235]

5.2.1.3.4 People with disabilities

People with disabilities, particularly severe disabilities, often need to have even the most basic dental treatment performed under general anaesthesia. As discussed in preceding chapters, in order to undergo dental procedures under general anaesthesia, patients must be admitted to a hospital. In most country locations, there are lengthy waiting times for public inpatient dental procedures, and in some regions, it is not possible to be admitted as a public patient at all. Where it is not possible to access public services locally, patients must either be admitted as private patients and pay the associated costs, or travel to Perth to access services.

Finding 24

Access to dental care in country communities is hampered by factors including the cost and inconvenience of travelling long distances, availability of public services for low-income earners and availability of appropriate services for community members with special needs.

5.2.2 Provision of care to non-urban areas

5.2.2.1 Delivering public dental services to country residents

There is no disputing the fact that delivering dental, and other health services, to residents of non-metropolitan areas is considerably more expensive than delivering similar services to metropolitan residents. Given funding constraints, a balance needs to be struck between the service provided and the funding commitment. The Department of Health, through Dental Services, has the task of optimising dental services within the necessary budgetary constraints.

The Department of Health advised the Committee that the total commitment to the State Oral Health Program is over $45 million, of which over $13 million is specifically allocated to rural and remote areas.[236] An estimated 27 per cent of the Western Australian population lives in rural and remote areas of the State.[237] Combined, these figures indicate that per capita expenditure on oral health services is similar for urban and non-urban areas of the State. Given the high cost of service provision, [238] clearly residents of rural and remote areas will not receive the same level of service as urban residents.

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235 Council on the Ageing, Submission, 5 October 2001, p1.

236 Department of Health, Submission, 18 October 2001, p34.

237 Australian Bureau of Statistics, 2001a, pp15-16.

238 Perth Dental Hospital and Community Dental Services, Submission, 18 February 2002, p3.

The type of public dental services delivered to a community depends on several factors, including the size of the community and whether or not there is an existing private practice. As advised by Mr David Neesham, Director of Dental Services:

> *The best and most economical service for government is not to have a government service. Our philosophy is that a single practitioner is a better arrangement than a private practice in the public service. We want a viable private practice. The Government will have to decide whether small communities get a service and whether that service should be accessed at a regional centre.*[239]

Dental services in country Western Australia are largely restricted to general dental care. However, a general dentist undertakes a number of procedures that may be considered specialist care, including crown and bridge work, prosthetics, and endodontics (root fillings).[240]

Large regional centres can generally expect to have access to a high level of comprehensive general dental care and regular visiting specialist services. Rural communities, depending on their size, might be provided with a visiting or continuous service. A more comprehensive range of care is likely to be available to rural communities large enough to have a continuous service. Remote communities are generally serviced by visiting dental services that are limited to provision of basic and emergency care. The number of visits can vary from several times a year to less than once a year.

The level of public dental services provided to rural and remote communities is often constrained by the willingness of dentists to take up such postings. A number of remote communities are currently serviced by dentists on a fly-in fly-out basis. This option appears to be more acceptable to dental practitioners than that of operating continuously out of larger regional centres, providing an outreach service to remote communities.

5.2.2.2 Remuneration

For dentists working in the public sector, one of the major financial considerations with regard to working in country locations is the level of remuneration. The Committee was informed that there are no financial incentives for public dentists working in the country. The level of remuneration for dentists in the public system was described to the Committee as 'ridiculous', because dentists in the public program are classified on a public service salary scale.[241]

It would appear, however, that in some country areas, financial incentives are not enough to lure dentists. The Committee was advised that several country shires have offered enticements including the use of a fully furnished house and a well-equipped dental facility and were still unable to either attract a dentist or retain one for any reasonable period of time.[242]

The Shire of Ngaanyatjarra, the most remote shire in Western Australia, has offered remuneration of up to $5,000 per week in an attempt to attract a dentist to operate and deliver services out of the Shire's dental vehicle.[243] To date it has been unsuccessful.

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239 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p6.

240 *Ibid*, pp1-2.

241 *Ibid*, p6

242 Councillor Mary Smith, Shire of Ravensthorpe, Briefing, 21 November 2001.

243 Shire of Ngaanyatjarraku, Submission, 9 October 2001, p1.

5.2.2.3 Reluctance of dentists to leave major cities

In 2001 the Australian Health Sector Recruiting Office ran a Bursary competition for final year dental students from all Australian Universities. The topic 'Why are many dentists reluctant to leave the major cities?' was chosen. Students identified four major issues:

> *Firstly, it seems the biggest perception is that dentistry outside the major cities is a lonely profession. It is considered that not only are they isolated geographically, but that rural practitioners can lack professional and academic support. As a result of this, inexperienced dentists in particular may consequently feel that they lack the confidence to effectively deal with complications or emergencies. Also, it is thought that access to specialist services and the opportunity for ongoing professional development is usually found in metropolitan areas.*
>
> *Secondly, the thought of relocating can prove overwhelming for families who would leave behind close relatives and friends. There are many factors to consider - finding good jobs for spouses, children starting a new school, limited childcare facilities and terminating existing church and/or community commitments. The thought of social upheaval, change in lifestyle and adjustment to living in a small rural community is often unappealing for dentists. This is particularly true for the increasing number of dentists from non-English speaking and/or immigrant backgrounds who may fear racism and may not have ventured outside major Australian cities which display familiar aspects of their own cultures.*
>
> *Thirdly, there is a lack of exposure to rural dentistry and rural life as dental students. Unlike Medicine, rural rotations are not a compulsory component of most dental curriculums. Students may therefore find them too difficult to organise or are hindered by financial restraints due to the lack of scholarships or bursaries.*
>
> *Fourthly, most dental students come from major cities or at least reside there for the five year duration of the course where they develop friends and professional contacts. This helps to explain their reluctance to search for work in rural areas.*[244]

5.2.2.4 Lack of professional support and development

Country people, like their metropolitan counterparts, expect a high quality of service. However, the skill level required to deliver such a service most often comes with experience. Inexperience may cause anxiety amongst younger dentists and this can discourage them from continuing to operate in country areas. Dental Services made the following comments with regard to inexperience:

> *Unfortunately, many public dentists working in remote areas are relatively inexperienced, and there is frequently high staff turnover so that people cannot count on meeting the same clinician at each dental visit.*[245]

There is a perception amongst dental graduates that isolation, both geographic and professional, coincides with little or no professional support.

Dental Services in their submission to the Committee stated:

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244 Australian Dental Practice Magazine, September 2001.

245 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p5.

> *A number of clinicians, particularly new graduates, are reluctant to take up country appointments where they will be the sole practitioner in the community. They express concern that they miss the benefit of mentoring by more experienced clinicians and the support that other clinicians can provide. Opportunities for professional development in the rural setting are limited and travel to the metropolitan area to participate in ongoing education is costly.*[246]

Professor Louis Landau, Executive Dean of the Faculty of Medicine and Dentistry at the University of Western Australia advised the Committee that CRROH and student groups like Spinrphex (comprising medical, dental, health science and nursing students) were creating a heightened interest in rural medicine and dentistry.[247] However, Professor Landau also advised the Committee that it would be four or five years before there would be any noticeable change in the number of dental graduates taking up country postings.[248]

5.2.2.5 Establishing a private dental practice in country WA

There are a number of socioeconomic and logistical factors to be considered for dentists contemplating private practice in regional, rural or remote communities. The potential client base, which will relate to demographic features such as the size of a community and its normative oral health needs, will be one of the first issues a private practitioner must consider with regard to the viability of a country dental practice. Demographic issues impacting on establishment of dental practices in country areas were considered in section 5.1 above. Other major considerations include a lack of trained chairside assistants, problems with servicing of equipment and on-sale of practices and the mix of private to public patients.

5.2.2.5.1 Lack of trained chairside assistants

The ADA (WA) reported that a large number of its members, who either currently practise in the country or have done so recently, have cited the lack of trained chairside staff as a major concern and very strong deterrent to '*practising in the bush*'.

> *To provide a high standard of dental care, adequate training of all members of the dental team is essential. Long gone are the days when a dentist could manage at the chairside by him/herself. This is particularly significant with the increased requirements for sophisticated and reliable infection control measures. This shortage has recently been partly relieved by a regional training program for chairside assistants in Bunbury; however other regional centres report a dearth of personnel even suitable for 'on the job' training bearing in mind the complexities of modern dental materials, equipment and infection control procedures.*[249]

5.2.2.5.2 Difficulty servicing equipment

In addition to difficulties recruiting suitable chairside assistants, dentists in country areas also experience considerable difficulty with servicing of specialised equipment. The ADA (WA) informed the Committee that it is difficult to have certain items of dental equipment serviced

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246 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p26.

247 Professor Louis Landau, Executive Dean, Faculty of Medicine and Dentistry, University of Western Australia, Transcript of Evidence, 12 November 2001, p3.

248 *Ibid*, p4.

249 Australian Dental Association (WA), Submission, 15 October 2001, p4.

within the metropolitan area, and the prospect of having these same items serviced in regional, rural and remote areas is almost non-existent. [250]

5.2.2.5.3 On-sale of private practices

The inability of many rural dentists to either sell their existing practice or secure a locum in their absence is a significant barrier to attracting dentists into a regional, rural or remote environment. The Goldfields Esperance Development Commission, in their submission to the Committee, stated:

> *One dentist in private (solo) practice in Kalgoorlie wishes to retire. The practice has been advertised for sale, but to date there has been no interest. This dentist is a tenant of the locally owned health fund (GMF Health), which has indicated that it will assist financially to advertise the practice for sale. It is possible that if no purchaser can be found, the dentist may simply sell the equipment and 'walk away'.*
>
> *At another practice, one of the two dentists will be leaving Kalgoorlie…The principal has advertised for an Associate or Partner, but has no interest as yet. He believes that he may be able to get a series of locums to 'fill-in', but indicates that for continuity reasons this is far from ideal. He is considering building a brand new, luxury house or apartment (fully furnished, complete with pool and/or spa) in the hope of wooing dentists for either a long-term stay or on a working holiday.*[251]

Mr David Neesham, Director of Dental Services, made the following comments:

> *When private practices close, there is a good chance that they are not sustainable and viable. The owners have assets they want to sell, which means they could not be sold to anyone else otherwise they would have been sold. The Government would need to have a policy in those circumstances that a small community could have funding for part of a practice, as opposed to the practice at Newman, for example, which was originally a full-time practice. The bloke who owned that practice sold it to another fellow; he then obviously had difficulty making it work. He was then stuck with a fairly large asset that he could not get out of because he could not sell it. He eventually ran it as a part practice and continued a practice in Perth for a few years.*[252]

Mr Neesham further advised that the dentist continued to visit Newman on weekends, but eventually the service became non-viable and the dentist was forced to walk away from it, at which point Dental Services picked it up.

5.2.2.5.4 Public to private patient mix

Most dentists working in private practice in regional, rural or remote areas are actively encouraged to treat public patients through the CPDSS, a 'social obligation' that private dentists working in the city will not need to consider. Whilst the program may provide some financial

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250 Australian Dental Association (WA), Submission, 15 October 2001, p4.

251 Goldfields Esperance Development Commission, Submission, 12 October 2001, p6.

252 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p5.

viability, by giving 10 to 15 per cent guaranteed funding[253], the relative mix of private to public patients is an important consideration.

There is a cost to private dentists who treat public patients (through the CPDSS), as the fee schedule is considerably lower than the practitioner's normal fee for service. This discrepancy forces many private practitioners to limit the extent to which they participate in the CPDSS, and some opt not to participate.[254]

On the whole, private dentists practising in regional, rural and remote areas demonstrate a social conscience in relation to the treatment of public patients. However, it becomes "… *uneconomical to run a private practice when 25 per cent or 35 per cent of the practice's patients are on a public fee schedule.*"[255]

The following comments were made by Kununurra dentist, Dr Lars Moir, with regard to financial difficulties experienced by CPDSS participants:

> *… the monies to be contributed by the patient are often not forthcoming despite extensive accounting follow up. In may cases these costs will again be carried by the dentist in addition to receiving only 50% or 25% of the remuneration from a schedule of items which are already well below the average fee level.*[256]

Finding 25

Many factors detrimentally impact on the provision of dental care to country areas, including: the relatively high cost of delivering services; the inadequate remuneration offered to country dental professionals; a reluctance by dentists to leave major cities; a lack of professional support and development for country dental professionals; and the additional difficulties associated with owning and running a dental practice in a country town.

5.3 OTHER FACTORS THAT IMPACT ON OVERALL DENTAL CARE

5.3.1 Water fluoridation

Fluoridation of drinking water has been one of the greatest advances in combating dental caries amongst the general population and, in particular, amongst children. About 85 per cent of the Western Australian population currently have access to fluoridated water.[257] The remaining 15 per cent of the population, who do not have access to fluoridated water, reside in country Western Australia. Information supplied to the Committee by the Western Australian Water Authority

253 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p5.

254 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p19.

255 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p6.

256 Dr Lars Moir, Submission, 17 October 2001, p2.

257 Department of Health, Submission, 18 October 2001, p33.

indicates that approximately 115 regional, rural and remote communities do not have access to fluoridated water. [258]

The cost of fluoridating a town water supply was estimated at approximately $300,000 per water supply.[259] Once installed, a water fluoridation plant is extremely expensive to maintain. These high costs generally preclude communities of less than 3,000 people from having fluoridated water.[260]

Many country centres have access to more than one source of drinking water, making the cost of fluoridation prohibitive. As advised by Mr David Neesham, Director of Dental Services:

> *In the old days Bunbury was opposed to fluoridation on economic grounds. I did not realise Bunbury had 11 water services. It would have broken the council to fluoridate those facilities. I do not know whether that was the reason for not fluoridating. It is certainly logical when one knows that fluoridation is extremely expensive and an authority has 11 different water sources.*[261]

Suzanne McKechnie from the Department of Health advised the Committee:

> *We are aware that only about 85 per cent of the Western Australian population have access to fluoridated water. That is a major public health initiative, and providing access to fluoridated water in other areas poses a particular challenge for us.*[262]

Evidence presented to the Committee indicates that those regions of Western Australia that have little or no access to regular dental services also have little or no access to fluoridated water. Therefore the disadvantage caused by lack of fluoridation is often compounded by a lack of access to dental services.

Finding 26

The Western Australian communities that are most disadvantaged in terms of access to dental services often do not have access to fluoridated water, compounding their level of disadvantage.

258 Information supplied by the Water Corporation (WA), Bulk Water and Wastewater Division, January 2002.

259 Steele L, Pacza T and Tennant M, 2000, pp22-28.

260 *Ibid.*

261 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p12.

262 Suzanne McKechnie, General Manager, General Health Purchasing, Transcript of Evidence, 12 November 2001, p2.

The Committee recommends that the **Department of Health** facilitate an improvement in the delivery of dental services to regional, rural and remote areas through a range of measures.

Recommendation H2

A comprehensive cost-analysis should be performed to assess the projected lifetime costs, both economic and social, of poor long-term dental health compared to the costs of providing fluoridated water to small rural and remote communities. The analysis should also explore alternative means of supplementing fluoride intake in rural and remote communities.

CHAPTER 6 ADEQUACY AND COST-EFFECTIVENESS OF PUBLIC SECTOR DENTAL PROGRAMS IN REGIONAL, RURAL AND REMOTE AREAS

6.1 PUBLIC SECTOR DENTAL PROGRAMS

The Department of Health allocates more than $45 million for the provision of oral health services to financially and geographically disadvantaged residents of Western Australia. Of this allocation, over $13 million is invested in services to rural and remote locations.[263] These services include general services (community dental clinics, mobile and itinerant dental units), specialist services, admitted patient services and School Dental Services. Subsidised community general services are also provided through private practitioners who participate in the Country Patients Dental Subsidy Scheme (CPDSS). Planning for the above dental services is undertaken in conjunction with Dental Services.

Development of oral health educational materials, distribution of information about oral health to the community and health decision makers and input into the training of other health professionals is coordinated by Dental Services' Dental Health Education Unit.

Oral health education and promotion strategies are well-developed for school children and special groups (e.g. teachers, infant health nurses, nurse education, etc) but are poorly developed for the general adult population and certain disadvantaged groups.

A trial is currently under way to provide oral health information for all groups using the World Wide Web. Individual dental health education is also provided for patients in the community and School Dental Services as required.[264]

Fluoridation of public water supplies is an important public health initiative that has led to greatly improved oral health for most West Australians over the past 30 years. The impact of water fluoridation was considered in detail in Chapter 5.

The adequacy of public sector dental programs in regional, rural and remote WA can be judged by a number of criteria, including:

- the oral health status of persons who rely on public sector dental programs in comparison to those who are able to privately fund their dental care; and
- the range and quality of available services.

6.1.1 Australians living in non-urban locations

The AIHW published a report in September 1999 that examined oral health and access to dental care in rural and remote areas of Australia. The report compared rural and remote residents with urban residents and further distinguished Health Cardholders (i.e. persons eligible for public

263 Department of Health, Submission, 18 October 2001, p34.

264 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp12-13.

dental services) from non-Health Cardholders. There were striking differences between cardholders and non-cardholders in both rural and remote communities (see Table 6.1 below).

Table 6.1

Oral Health and access to dental care for cardholders and non-cardholders in rural and remote Australia, 1994-1996.[265]

Oral Health Index	Rural		Remote	
	non-card holder	card holder	non-card holder	card holder
Edentulism (complete tooth loss)*	40.2 %	55.8 %	36.6 %	46.4 %
Dental visit in last year	54.0 %	50.1 %	47.1 %	40.7 %
Usually visit for a dental problem	55.4 %	64.9 %	58.1 %	69.0 %
Difficulty with a $100 dental bill	8.8 %	30.9 %	7.3 %	45.7 %
Extractions in the last year (mean number)	0.21	0.39	0.24	0.60

* In adults aged 65 years and over.

These data, although not specific to Western Australia, highlight the fact that residents of rural and remote locations who rely on public dental services have poorer oral health, as indicated by the higher mean number of extractions in the last year, and are more likely to visit a dentist for a dental problem. It should be noted that this dichotomy between cardholders and non-cardholders was also observed in urban locations, suggesting that public sector dental programs are inadequate, regardless of location.

Finding 27

People in rural and remote communities who rely on public dental services have poorer oral health and access to dental services than people who can afford to privately fund their dental treatment.

6.1.2 Western Australians living in non-urban locations

There is a paucity of available data relating specifically to the oral health status of people who live in rural and remote regions of Western Australia. CRROH was established within the Faculty of Medicine and Dentistry at the University of Western Australia (UWA) in 2001. Its development was one of the key outcomes of a review into "*Public provision of dental services in Western Australia and its relationship with the University of Western Australia*".[266] One of the key objectives of CRROH is to address the lack of research data related to the oral health of rural and remote people. The primary focus of CRROH is to "*research and develop strategies to address the significant unmet need for rural and remote oral health care.*"[267]

A five-year contract was put in place between the Department of Health and UWA for the establishment and operation of CRROH, with outputs to be reviewed on a yearly basis. One of

265 AIHW Dental Statistics and Research Unit, 1999d, pp1-3.

266 Faculty of Medicine and Dentistry, University of Western Australia, Submission, 12 October 2001, p1.

267 Centre for Rural and Remote Oral Health, http://130.95.206.71/wsdocs/crroh/mission.html, 8 September 2001.

the specific tasks to be undertaken during the first two years of operation is the measurement of oral health status by population groups and by health region in Western Australia. Whilst this project cannot assist with the short-term crisis in dental services in rural and remote areas, it would be expected to have some long-term benefits. Other CRROH initiatives over the next two to five years are also expected to impact on dental services in regional, rural and remote areas in the long-term.

Dental Services annually report an index of the oral health status of financially disadvantaged people in the 35 to 44 year age group who access Government subsidised services. This index measures the effectiveness of strategies designed to reduce the number of decayed, missing or filled teeth (DMFT) per person. In Western Australia, the index has shown a decrease in DMFT for this patient population from 15 to 13.7 over the period 1995/96 to 2000/01.[268] It should be noted that this index applies to all people in the 35 to 44 year age group, and a separate value is not available in relation to rural and remote areas.

6.2 PUBLIC SECTOR DENTAL PROGRAMS

The cost-effectiveness of dental services in regional, rural and remote areas can be assessed by comparing with similar services elsewhere, and by examining the relative costs of various options for delivering the same service.

6.2.1 The School Dental Service

The first School Dental Service (SDS) in WA commenced in 1926. In its current form, the SDS has developed since 1973 to provide comprehensive general care for all enrolled school children from preschool to Year 11 (and to Year 12 in some remote areas). Population growth, coupled with the progressive addition of secondary school years to the coverage of the SDS, has resulted in the number of enrolled children rising steadily from 121,000 in 1980 to almost 250,000 in 2000.[269] About 90 percent of eligible primary school children and 65 percent of eligible high school children participate in the program.[270]

6.2.1.1 The Western Australian SDS model

The SDS model in Western Australia uses both dentists and dental therapists. The cost of the service is kept low, because the bulk of diagnoses and treatments are performed by dental therapists. The dental therapist will perform a wide range of tasks, including examination, caries detection, treatment of caries in permanent and deciduous teeth, extraction of deciduous teeth, radiographs, impressions, local anaesthetic and pulpotomies.[271] Children are seen by a therapist for their check-up, the therapist decides on treatment required, and in most instances the therapist will perform the required treatment. If a child needs to have a permanent tooth extracted, or needs to be referred to an orthodontist, the dentist will attend to them.[272]

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268 Department of Health, Submission, 18 October 2001, p34.

269 *Ibid*, p36.

270 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp12-14.

271 Susan Binet, Dental Therapy and Hygiene Association (WA), Transcript of Evidence, 12 November 2001, p3.

272 *Ibid.*

6.2.1.2 Performance of the SDS

The overall success of the SDS is reflected in the dental health status of school children in terms of the striking reduction in dental disease over time: in 1968 more than 95 per cent of 12-year-olds had permanent tooth dental caries compared with only 37 per cent in 2000.[273] Dental health of West Australian school children compares favourably with international benchmarks.[274] Much of the decline in dental disease has been attributed to the preventive activities of the SDS.[275]

The Office of the Auditor General evaluated the performance of the SDS in 1995.[276] The report noted that the cost per enrolled child decreased in real terms from $145 in 1980/81 to $57 in 1994/95. The cost per child in 2000/01 was $65.70.[277]

These improvements allowed the SDS to extend the service progressively to additional school years and to increase the interval between checkups for children with a low risk of tooth decay without additional funding.

The estimated value of the service delivered per dollar expenditure (in real terms) was $1.47 in 1994.[278] At today's rate, the value is about $2.00 for every dollar of expenditure.[279] In Scandinavia, which has a different model of service provision, expenditure is between $150 and $250 per child per annum, four or five times more than in Western Australia.[280]

6.2.1.3 SDS staffing issues

Despite the striking cost-effectiveness and ongoing success of the SDS, Dental Services advises that there has been increasing difficulty recruiting dental therapists over the past three to five years. The service has had to recruit therapists from interstate and New Zealand to maintain care levels. Some towns, particularly in the Northwest region, have experienced disruptions to service during this time.

Undoubtedly there are many factors that contribute to the difficulty in attracting and retaining therapists to work in the SDS, but one factor that is likely to have some bearing on the decision of dental therapists to seek employment in the private rather than in the public sector, is the marked disparity in salaries between the two. Therapists in the private sector can earn up to 50 per cent more than their public sector counterparts.[281] Salary levels in rural and remote locations are on a par with those in urban locations, a factor that would likely make rural and remote postings even less appealing for therapists seeking employment.

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273 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p12.

274 Department of Health, Submission, 18 October 2001, p36.

275 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp12-14.

276 Office of the Auditor General, 1995, pp10-17.

277 Perth Dental Hospital and Community Dental Services, Submission, 12 November 2001, p6.

278 *Ibid.*

279 Perth Dental Hospital and Community Dental Services, Submission, 18 February 2002, p2.

280 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p2.

281 Susan Binet and Jennine Bywaters, Dental Therapy and Hygiene Association (WA), Transcript of Evidence, 12 November 2001, p3.

As of November 2001, 11 fixed or mobile centres were closed due to a lack of staff, leading to disruptions to service for some 20,000 school children.[282] Several submissions indicated that school dental services in the local area had experienced considerable disruption in recent times.

In general, comments about the SDS were positive, although a small number of submissions highlighted inadequacies in the service:

- The Shire of Chittering indicated that the current sporadic visits do not allow for meaningful dental care where follow-up work is required; [283]
- A resident from Mingenew advised the Health Consumers' Council that the SDS visits Mingenew on a yearly basis, but that on some occasions Mingenew has missed out;[284]
- The Shire of Yalgoo advised of significant disruptions to the SDS, with a three year gap between 1997 and 2000, during which children received no dental treatment; [285] and
- The Mullewa Health Services Board of Management advised that schools in the area were usually serviced second yearly by a mobile dental van, but that there would be no service in 2001 due to staffing and resource problems.[286]

Finding 28

The School Dental Service is a successful, cost-effective program that provides access to preventive and restorative dental care for all Western Australian school children. However, due to staffing difficulties, children in some rural and remote communities have experienced varying degrees of disruption to services.

6.2.2 Community dental services

6.2.2.1 Model of service provision

In regional, rural and remote locations, publicly funded general dental care is accessed either through public clinics (fixed, mobile and itinerant) or through a scheme that offers subsidised private care, the Country Patients Dental Subsidy Scheme (CPDSS). Comprehensive details on community, mobile and itinerant dental units, and on private practitioners who participate in the CPDSS are listed in Chapter 4.

In general, public dental services are available in large regional centres, as well as in rural and remote communities. The model of service provision depends on the size of the population and its level of demand. Each region is assessed individually to ensure the most cost-effective service delivery model is employed, and the assessment is ongoing, to make allowances for changing

282 Dental Therapy and Hygiene Association (WA), Submission, 12 November 2001, p1.
283 Shire of Chittering, Submission, 5 October 2001, p1.
284 Health Consumers' Council, Submission, 2 October 2001, p4.
285 Shire of Yalgoo, Submission, 4 October 2001, p1.
286 Mullewa Health Services Board of Management, Submission, 26 November 2001, p2.

population demographics over time. Mr David Neesham, Director of Dental Services, advised the Committee:

> *In the past we serviced basically everything essentially from Moora north where there are now a lot of private practices. We have moved out of Broome and Kununurra where there are now viable and ongoing private practices. The best and most economical service for government is not to have a government service. Our philosophy is that a single practitioner is a better arrangement than a private practice in the public service. … The public service is providing that service in other places such as Derby, Fitzroy Crossing and so on …*[287]

Mr Neesham also indicated that in remote locations, where there are no private practices, patients who are not eligible for publicly funded dental care would be treated in public clinics, although they will pay 100 percent of the fee.[288]

6.2.2.2 Gaps in community dental services

The Committee was advised that there are a number of areas where services are inadequate:

- Visiting services to the smaller remote communities in the Kimberley, Pilbara, Goldfields and Murchison;
- Permanent services in Exmouth, Port Hedland, Newman, Ravensthorpe and Halls Creek;
- Locations where there is no public dental service and a private practitioner does not participate in the CPDSS, such as Karratha and Wagin; and
- Locations where a private practitioner has withdrawn from providing a service, such as Southern Cross and Boyup Brook.[289]

As with the SDS, one of the greatest impediments to providing adequate dental services for adults in rural and remote regions relates to recruitment and retention of dental staff. As indicated by Mr Neesham, inadequate salaries may again play a major role in the problem:

> *The present system has meant that dentistry was caught up in public sector salaries that are totally inadequate for professional dentists; ridiculous is the best way to describe them.* [290]

Mr Neesham qualified that the salaries offered in the public sector are inadequate for experienced dentists, as opposed to new graduates, for whom they are appropriate.

In contrast to the few submissions that indicated inadequacies in the SDS, numerous submissions highlighted inadequacies in public dental services for adults in regional, rural and remote WA:

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287 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p6.

288 *Ibid*, p13.

289 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p8.

290 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p6.

- The Shire of Yalgoo indicated that there was a three-year gap, between 1997 and 2000, during which there was no access to dental services in the region. Although four visits were scheduled for 2001, the fourth visit was cancelled because of a lack of dentists willing to service the area. The submission also highlighted some of the problems the Shire has experienced with the dental caravan, which is towed from one town to the next by local government officers who have little or no training in such tasks. There have been instances where the caravan has not arrived before the dental staff, and in one instance it arrived without the keys to unlock it;[291]

- The Perenjori Shire Council considered it impossible to comment on the adequacy and cost-effectiveness of public sector dental programs as "*there are none*";[292]

- The Geraldton Health Service indicated that while Geraldton has sufficient dental support through private dentists and a community dental clinic, the wider Midwest and Murchison regions are poorly serviced;[293]

- The Mullewa Health Services Board of Management advised that second yearly visits do not provide for adequate follow-up and monitoring, and limit the nature of dental care able to be provided;[294]

- The Shire of Exmouth indicated that there has been a very interrupted service since 1999. The submission highlighted the fact that more than 100,000 people visit Exmouth each year, some of whom will spend upwards of three months in the community. There are no provisions for these visitors;[295]

- The Shire of Laverton indicated that apart from twice yearly visits from a mobile dental clinic, access to dental services within the Shire are non-existent;[296]

- Dr David Dunn, Medical Director of Bega Garnbirringu Health Services, indicated that the unmet needs of Aboriginal people in the Goldfields are enormous and although the current visiting dental service is a good start, it is inadequate;[297]

- The Shire of Ngaanyatjarraku indicated that dental services within the Shire's boundaries are almost non-existent. Although remuneration of up to $5000 per week has been offered in the past, there is little interest in the position;[298]

- The Goldfields Esperance Development Commission advised the Committee that while the waiting list for non-urgent treatment is around three to four

291 Shire of Yalgoo, Submission, 4 October 2001, p1.
292 Perenjori Shire Council, Submission, 15 October 2001, p1.
293 Geraldton Health Service, Submission, 1 November 2001, p1.
294 Mullewa Health Services Board of Management, Submission, 26 November 2001, p2.
295 Shire of Exmouth, Submission, 27 September 2001, p2.
296 Shire of Laverton, Submission, 28 September 2001, p3.
297 Bega Garnbirringu Health Services Aboriginal Corporation, Submission, 4 October 2001, p2.
298 Shire of Ngaanyatjarraku, Submission, 9 October 2001, p1.

weeks in private practices, patients have a wait of approximately nine months at the Boulder Dental Clinic;[299] and

- Ms Jane Mitchell, Practice Manager of an Esperance dental surgery advised that the situation in Esperance is critical, where eligible public patients receive services through two of the three private practices, and all residents must wait for 8 to 12 months for non-urgent treatment, and patients in pain often face waits of up to several weeks.[300]

Finding 29

Public dental services for adults are largely inadequate in many regional, rural and remote communities throughout the State. Residents face limited services, lengthy waiting times and frequent disruptions to services.

6.2.3 The Country Patients Dental Subsidy Scheme

A significant component of community dental care in rural and remote areas of the State is provided through private practitioners who participate in the CPDSS. Dental care for eligible patients is provided using the Department of Veterans' Affairs fee schedule. The subsidy is the equivalent of what would be available to metropolitan public patients. The patient pays the participating dentist the remainder of the fee. There is a cost to the private dentist, as the fee schedule used by Dental Services is usually less than the practitioner's normal fee for service.[301] This forces many private practitioners to limit the degree to which they participate in the CPDSS and some do not participate at all.

All regional centres and most large country towns have a private dental service. The majority of practitioners who participate in the CPDSS are remote from a public dental clinic, however, in some large regional centres, where the public clinic has an extensive waiting list, private practitioners participate to a limited degree (see Chapter 4 for a list of participating private practitioners).

The Committee was advised that Dental Services staff continually interact with local private practitioners to ensure continuation of the CPDSS and with orthodontists who participate in the Orthodontics Subsidy Scheme, because the support of these practitioners is vital to continuation of the schemes.[302]

Loss of practitioners from the CPDSS generally results in significant loss of service and/or increased cost of care for financially disadvantaged persons. There are a number of towns where practitioners do not participate and the community is disadvantaged.[303]

299 Goldfields Esperance Development Commission, Submission, 12 October 2001, pp3-4.
300 Jane Mitchell, Practice Manager, Hugh Sharpe's Dental Surgery, Esperance, Briefing, 21 November 2001.
301 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p19.
302 *Ibid*, p3.
303 *Ibid.*

6.2.3.1 Criticisms of the CPDSS

Several submissions to this inquiry have criticised the operation of the CPDSS. The ADA (WA) made the following comments:

> *At the current time, the waiting time for authorisation for commencement of treatment is approximately two and a half months and increasing rapidly. The scheme also seems to have some administrative complexities that create problems. For example, when the patient also has ancillary cover with their Health Fund in addition to being eligible for CPDSS support, paperwork can become complex and confusing for patients. Members have expressed frustration with the system, questioning its overall value.*
>
> *A serious criticism of the CDPSS is the restricted range of dental services covered. There appears to be no provision for preventive treatments and there is no scope for periodontal treatment apart from emergency relief of pain. This must be viewed with great concern considering the enormous impact which gum diseases have on the rate of adult tooth extraction and so on the state of general health.* [304]

Dr Lars Moir, a private dental practitioner in Kununurra, made the following criticisms about the CPDSS:

> *… the present government subsidy system places a very significant administrative load onto the rural clinic, which is carried by the sole practitioner as costs in office time.*
>
> *The time taken to process government subsidy forms (fill out all details, chase income statements from various departments, then assess the approved item numbers to be claimed, work out what level of subsidy is to be used and finally work out the patient contribution and expected subsidy) is often inordinately large in relation to the amount of actual dental work that is done. Further to this, the monies to be contributed by the patient are often not forthcoming despite extensive accounting follow up. In many cases these costs will again be carried by the dentist in addition to receiving only 50% or 25% of the remuneration from a schedule of items which are already well below the average fee level.*
>
> *It should not be surprising to find that anything other than minimal or immediate relief care is provided. Rural dentists will actively disassociate themselves from providing services under the government system because in many cases they end up paying to provide the service. This obviously has a direct effect on the level of public health.*
>
> *The present system appears not to supply a full comprehensive dental care as much as restrict treatment options and provide financial, time and communicative obstacles to patients, dentists, staff and indeed the central administrative centre in Perth.* [305]

Dr Moir's comments were supported by the Upper Great Southern Primary Health Service:

> *The subsidy scheme as provided by private dentists is (and has been for years) in urgent need of review. Dentists say that the fees paid are considerably lower than their normal practice fees and that they have two debtors to deal with compared to one for their private patients. It is hard to decide which debtor is the more problematical to deal with - the government or the health care card holder/low-income earner. Some of them deal with the low-income earner*

304 Australian Dental Association (WA), Submission, 15 October 2001, p8.

305 Dr Lars Moir, Submission, 17 October 2001, pp2-3.

> *by demanding money up front. This may preclude some from accessing the service with the consequent detrimental effect on their dental health. The government paper work is onerous and the government takes too long to pay.*[306]

Dental Services suggested that consideration should be given to increasing the subsidy to private practitioners in certain remote locations, to acknowledge the additional costs involved in operating a practice in those locations:

> *This could be a 10 percent increase in regional and larger rural towns, and 20 percent in small rural and remote towns. The co-payment by the patient in those locations would be maintained at the present level with Dental Services paying the additional costs.*[307]

The Department of Health indicated in their submission to this inquiry that an additional $1 million per annum has been committed to the CPDSS in rural locations in 2001, supplementing the existing $1.5 million per annum that is already invested in this scheme.[308] The large increase in allocated funding would suggest that the Department recognises that there are current inadequacies in the system.

Finding 30

There are numerous criticisms of the Country Patients Dental Subsidy Scheme, including: the lengthy waiting time for processing of authorisation for commencement of treatment; the restricted range of dental procedures that it covers; the difficulties dentists encounter in recovering patient contributions; and the large disparity between the fees paid by the CPDSS and the fees that private practitioners would normally charge.

6.2.4 The Commonwealth Dental Health Program

The Commonwealth Dental Health Program (CDHP), which co-existed with State programs, ran from July 1994 to December 1996 in Western Australia. About $10 million per annum was allocated to WA to provide a limited range of treatment free of charge to Health Care Cardholders.

Funding from the CDHP was used to support care through government clinics and private practice. That care was up to $100 per annum for emergency care or $400 per annum for general care. The principal objectives of the CDHP were to direct dental care received by adult Health Cardholders from emergency to general dental care, extraction to restoration and treatment to prevention.[309] Approximately 400,000 West Australians, 100,000 living in rural and remote areas, were eligible for the program.

306 Upper Great Southern Primary Health Service, Submission, 11 October 2001, p2.
307 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p19.
308 Department of Health, Submission, 18 October 2001, p2.
309 AIHW Dental Statistics and Research Unit, 1997a, p1.

6.2.4.1 Impact of the CDHP on oral health

A report released by the AIHW in 1997 evaluated the impact of the CDHP on oral health during its initial 24 months. The report found that, despite some limitations, since the introduction of the CDHP, eligible Health Card holders who had received public-funded dental care:

- Received fewer extractions and more fillings;
- Reported less frequent experience of toothaches;
- Visited more frequently for dental care;
- Waited a shorter time for a check-up; and
- Were more satisfied with the dental care they received.[310]

In a submission to the Senate Community Affairs Reference Committee Inquiry into Public Dental Services, the Western Australian Department of Health noted that an effect of the program was to move people away from emergency care to the restorative focus of the program, as people were encouraged to try to retain their teeth and maintain their dental health.[311]

6.2.4.2 Abolition of the CDHP and its impact on oral health

The CDHP was abolished in December 1996. Its abolition has had a profound impact on the dental health of low-income and disadvantaged people. The major effects have been an increase in public dental waiting lists and waiting times and an overall deterioration in oral health. According to the Department of Health, *"… the Western Australian Government does not have sufficient resources to meet the increased demand for dental services following the withdrawal of the CDHP"*.[312]

The specific rural outcomes associated with the loss of the CDHP in Western Australia are:

- A reduction in the number of eligible people from 100,000 to 65,000;
- A significant reduction in services to rural and remote people with family incomes of $22,000 or less, the majority of these people now being forced to seek care at the full private fee;
- A significant increase in waiting times (from an average of three months to nine months);
- An expectation of tooth retention and ongoing preventive care that is unable to be met;
- Funds not available for new services to developing communities; and

310 AIHW Dental Statistics and Research Unit, 1997a, p 2.

311 Report of the Senate Community Affairs Reference Committee, 1998.

312 *Ibid.*

- Funds not available to provide services where private practitioners have ceased in country towns.[313]

Wirraka Maya Health Service made the following comments about specific effects of cessation of the CDHP on their clients:

> *Because its emphasis was on those with least ability to pay and with fewest options, the CDHP was an important part of the safety net in health services. Many of the clients of the CDHP were Aboriginal people from isolated communities and those in greatest need: people on low incomes who had limited access to dental care and few options for care.*
>
> *Termination of the scheme has created significant disadvantage. This is regrettable, especially given that it was clearly meeting a demonstrated need. With its abolition, access to preventive dental care for such people was made even more problematic and in the remote communities of the Pilbara has become virtually non-existent.*[314]

The DTHA (WA) echoed the above comments:

> *A public dental health scheme for adults is poorly lacking in rural and remote areas. The abolition of the Commonwealth Dental Health Program in 1996 has made a largely inadequate public dental system worse.*[315]

Recent steps taken by the Department of Health will go some way to addressing the deficiencies in public dental services caused by the cessation of the CDHP:

> *… the recent investment of $4 million per annum to extend the eligibility for Government subsidised dental care will ensure that a higher proportion of the financially disadvantaged population will have access to this service.*[316]

Finding 31

Abolition of the Commonwealth Dental Health Program (CDHP) has had a profound impact on low-income earners in country Western Australia, including: a large reduction in the number of people who are eligible for public dental treatment; a significant increase in waiting times and a shift from preventive to emergency dental treatment patterns.

6.2.5 Admitted patient services

The issue of access to public hospitals for dental procedures under general anaesthesia is considered in detail in Chapter 4. There is abundant evidence from residents, dental practitioners and service providers to indicate that admitted patient services for dental procedures in regional, rural and remote areas are inadequate. As stated by Dental Services:

313 National Rural Health Alliance submission to the Senate Community Affairs Reference Committee Inquiry into Public Dental Services, 1998.
314 Wirraka Maya Health Services Aboriginal Inc., Submission, 16 October 2001, p3.
315 Dental Therapy and Hygiene Association (WA), Submission, 5 October 2001, p2.
316 Department of Health, Submission, 18 October 2001, p34.

> *An inequity exists in regional Western Australia for general dentists accessing regional hospitals for the treatment of patients under general anaesthesia. In many regional centres both private and public dentists are unable to have patients admitted to public hospitals for dental care. If the only hospital in the location is a public hospital, patients have no alternative but to travel to a major population centre, often Perth, to access cover under general anaesthesia. This is not only costly in terms of travel and time, but also causes discontinuity in the provision of care by the local practitioner. Where access to hospitals is possible, dental cases are generally considered to be of low priority often resulting in country patients having to wait unreasonably long periods for dental care.*
>
> *The current policy for access to public hospitals is restrictive and inconsistent. There is no clear direction and it is in urgent need of review. Policies vary between different public hospitals and in recent years access restrictions have resulted in significant loss of services to regional and country WA.*
>
> *A policy allowing guaranteed access to anaesthetic sessions for accredited public dentists and private dental practitioners is needed. Where a patient meets the criteria for public assisted dental care then the patient should be admitted as a public patient and receive hospital support free of charge. This is now Government policy, although lack of access to hospital facilities limits the value of the policy. Other patients requiring dental care should be admitted as private patients and meet all hospital costs.* [317]

Mr David Neesham, Director of Dental Services, further advised the Committee that the necessity for patients to travel to Perth to access inpatient dental services is "*more expensive and less satisfactory*".[318]

The ADA (WA) expressed concern about both the lack of admitting rights to public hospitals and hospital policies with regard to access to beds for dental procedures:

> *An area of major concern to this Association is the lack of admitting rights (beds) for general anaesthetic facilities in rural and remote area hospitals. It is recognised that the Health West has recently amended its policies, so that public patients may be funded for dental treatment. Nevertheless local hospitals' policies, with respect to access to beds, has nonetheless prevented many patients, public or private, from obtaining the necessary treatment where hospitalisation is involved. As indicated earlier, a visiting service by an oral surgeon to Kalgoorlie is in jeopardy as the hospital has declined to allow the oral surgeon's access to its wards. The situation in both Bunbury and Busselton is similarly critical, despite the recent policy change. This Association has been told that, in some cases, funding made available for dental cases has been diverted by hospitals for use in other areas.*[319]

The Department of Health advised the Committee that Regulation 10 (model-by law 10) of the *Hospitals (Administration of Public Hospitals) Regulations 1940* (WA) precludes dental practitioners from admitting patients to public hospitals. Assistance from a medical practitioner is required for inpatient dental services in order to administer the general anaesthetic, and it is therefore the medical practitioner who usually admits the patient.[320] The Department of Health

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317 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p4.

318 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p9.

319 Australian Dental Association (WA), Submission, 15 October 2001, p7.

320 Department of Health, Submission, 18 October 2001, p45.

advises that the impact of this legislation is minimal, however the Committee has been advised of instances in which anaesthetists have refused to admit public patients for dental procedures.[321]

6.2.6 Specialist services

Specialist services in regional, rural and remote areas are largely inadequate and costly. Of the six dental specialties (oral surgery, orthodontics, periodontics, endodontics, prosthodontics and paedodontics) only oral surgery and orthodontics appear to be available locally to non-metropolitan residents.

Dental Services has provided a visiting orthodontic service to the large regional centres of Bunbury, Albany and Kalgoorlie-Boulder for a number of years. This program was recently changed to a subsidy scheme based on local orthodontists in these locations. This model of care is being extended to a number of rural and remote communities throughout the State (see chapter 4).

With regard to oral surgery, Dental Services stated:

> *Apart from a service to Bunbury, persons who need specialist oral surgical care in country WA generally have to travel to Perth for this treatment.*
>
> *Much basic oral surgery can be provided by experienced general dentists but better access to public hospital general anaesthetic sessions would facilitate this.*[322]

The ADA (WA) advised that there is no economic incentive for dental specialists to commence a visiting service to rural or remote areas. Such visiting services are more often undertaken as a community service than as a financially viable project. Factors such as clinical and personal time given up to travelling, travel costs, additional administrative costs, handling of appointments and accounts from a distance, and clinical responsibility of handling emergencies are strong disincentives to continuation of such schemes.[323]

Finding 32

Most country residents have very limited access to specialist dental services in their local area.

6.2.7 Patient Assisted Travel Scheme

The Patient Assisted Travel Scheme (PATS) provides assistance to country residents who are required to travel more than l00km in order to attend specialist appointments. By all indications, the scheme is very costly and largely unavailable for dental treatments.

Historically, PATS provided assisted transport for country patients for emergency medical treatment. Services that are eligible for PATS are generally restricted to "*dental treatment*

321 Dianne Mantell, Director of Nursing, Kalgoorlie Regional Hospital, Briefing, 21 November 2001.
322 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p26.
323 Australian Dental Association (WA), Submission, 15 October 2001, p5.

covered by an item in the Commonwealth Medicare Benefits for the treatment of cleft lip and palate."[324]

In 1997, dental patients under eight years of age with extensive and urgent treatment needs requiring a general anaesthetic not able to be provided locally also became eligible to access PATS, with the proviso that a government dentist confirmed that the case fell within the guidelines.[325] This strategy improved access to dental care for young dental patients. Whilst extending this strategy to other categories of dental patients requiring urgent, extensive dental care could be used to improve country patients' access to specialist care, it would be costly.

The Department of Health released a discussion paper on the PATS scheme in September 2001 as part of a review into future directions of the program. Whilst acknowledging the inequity in access to dental services for people living in rural areas, the paper notes that the cost of extending PATS to cover dental (and allied health) services would be enormous and would need to be made at the expense of limiting those people who are eligible for PATS.[326]

The ADA (WA) made the following criticisms of the PATS scheme:

> *…the PATS is hamstrung by significant limitations and administrative complexities. Some regional areas report that access to visiting specialists is very difficult because of the very long waiting lists for consultation. In this event patients may have to travel to Perth for a specialised treatment in spite of a visiting specialist consulting within their own regional centre. It appears that some use of funding to entice the visiting specialist to extend their services in the regional centres well may offset this dilemma and provide better access to specialist care, with a more effective use of government funding.*[327]

Finding 33

The Patient Assisted Travel Scheme (PATS), which aims to provide assistance to country residents who are required to travel more than 100km to see a specialist, is very costly and largely unavailable for dental treatments.

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324 Department of Health, 2001, p8.

325 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp25-26.

326 Department of Health, 2001, p7.

327 Australian Dental Association (WA), Submission, 15 October 2001, p7.

The Committee recommends a stronger State commitment to delivery of dental services to regional, rural and remote areas of the State, particularly with regard to adult dental services.

Recommendation S4

The State should assign a higher priority to the allocation of Commonwealth health funding into dental services.

Recommendation S5

Increased funding should be made available to facilitate the delivery of more extensive specialist dental services to regional, rural and remote areas of the State.

The Committee recommends that the **Department of Health** facilitate an improvement in the delivery of dental services to regional, rural and remote areas through a range of measures.

Recommendation H3

In consultation with Dental Services, a comprehensive review of the Country Patients Dental Subsidy Scheme should be undertaken with a view to streamlining administrative aspects of the program and reducing the waiting time for authorisation to commence treatment.

CHAPTER 7 THE ROLE OF AND INTERACTION BETWEEN GOVERNMENT ORGANISATIONS, TRAINING INSTITUTIONS, PRIVATE PRACTITIONERS AND PROFESSIONAL BODIES IN THE PROVISION OF DENTAL SERVICES TO REGIONAL, RURAL AND REMOTE AREAS

This chapter considers the role of and interaction between key groups involved in the provision of dental services. Section 7.1 briefly describes the role of each of the organisations and groups involved in the provision of dental services. Section 7.2 considers key steps in the provision of dental services, from training of dental personnel to recruitment and retention of dental professionals through to delivery of services.

7.1 KEY GROUPS INVOLVED IN THE DELIVERY OF DENTAL SERVICES

7.1.1 Government organisations

7.1.1.1 Department of Health (WA)

The Department of Health's role in the provision of dental services to rural and remote areas is to *"determine and secure the required services at the right volume, quality and price"*.[328] The Department is responsible for policy development and planning for service delivery, contract negotiations with provider organisations and monitoring of the appropriateness and quality of the services being provided. The Department of Health established an Oral Health Program in 2000/01 to provide a coordinated approach to the provision of inpatient and outpatient oral health service delivery in Western Australia. Funds are allocated for services based on outputs delivered.[329]

The Department of Health advised the Committee that over the last 12 months it has been developing a centralised oral health database containing information on all outpatient oral health service provision in WA. The database is expected to assist in determining demand for services and planning for future services. The information will be supplied by all providers of Government funded dental services.[330]

The Department of Health, in partnership with the University of Western Australia, recently established the Oral Health Centre of Western Australia (OHCWA) next to the QEII Medical Centre. The Centre was jointly funded by the Department of Health and the University at a cost of $38 million and began operation in January 2002. Collaboration between the Department of Health and UWA also extends to the establishment of CRROH. The establishment and operation of CRROH is covered by a five-year contract between the Department of Health and UWA.[331]

328 Department of Health, Submission, 18 October 2001, pp37-38.
329 *Ibid.*
330 *Ibid.*
331 *Ibid.*

7.1.1.2 Perth Dental Hospital and Community Dental Services

The Perth Dental Hospital and Community Dental Services (Dental Services) is the Government oral health services provider. Planning for services in rural and remote locations involves a close liaison between the Department of Health Purchasing Section and Dental Services.

Dental Services recently established an initiative with Curtin University whereby a group of dental therapists receive a small scholarship and a reduced higher education contribution charge in exchange for a commitment to undertake two years of country service upon graduation. The program began in 2000 with eight students commencing the two-year course. At a cost to Dental Services of $50,000 per annum, the investment is relatively small for a potentially significant return. As in the past, Dental Services provides much of the training. The first graduates recently completed the course, and Dental Services are confident that this initiative will go some way to addressing the ongoing shortage of dental therapists in rural and remote locations.[332]

Dental Services liaise closely with a number of organisations (e.g. Department of Education, Department of Immigration, ADA (WA), the University of Western Australia, Dental Assistants Association, Dental Nursing Australia, Government Employees Housing Authority, Aboriginal Medical Services) as well as private practitioners to ensure effective ground level delivery of dental services in rural and remote locations.[333]

7.1.1.3 Department of Education

In most country centres visited by a mobile dental van, the van is parked at the local primary school. The vans access facilities at the schools such as electricity, telephone lines and waste.

The Education Department cleaners clean the vans, and the fixed clinics. Education Department staff (particularly teaching staff) are involved in organising children to attend SDS clinics.

There is close cooperation between Dental Services regional staff and the Education Department in the development of Dental Services facilities, which are frequently located on or near school campuses.[334]

7.1.1.4 Government Employees Housing Authority

In major regional locations dental staff are housed in Government Employees Housing Authority houses or units. Rental in some regional centres is prohibitively expensive and this incentive is used to help attract staff to such areas.

Dental Services continues to pay rent for houses in regional locations even during vacant periods. If the option for housing in a location lapses, it is very difficult to regain that option when the need arises.[335]

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332 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p3.

333 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp15-20.

334 *Ibid.*

335 *Ibid.*

7.1.1.5 Department of Immigration

The Department of Immigration allows restricted work visas for dentists to work in specific locations. Where possible these dentists are placed in remote locations. A close liaison between Dental Services and the Department of Immigration facilitates the recruitment of overseas dentists for employment in rural and remote areas.[336]

7.1.1.6 Hospitals in regional centres

Fixed dental clinics are better recognised by patients if located in the grounds of local hospitals. By being on the hospital grounds, local residents can find the clinic easily and referrals to the dental clinic can be organised when required.

Dental Services liaises with regional hospitals to ensure maintenance and cleaning of the dental clinics and also during the planning and building phases of any new developments.[337]

7.1.1.7 Community Nurses

Community nurses in rural and remote areas play an important role in assisting residents to access dental treatment. The nurses act as liaison for the dental team, especially where the service is not permanent in the town. The nurse also alerts residents to the timing of dental visits and maintains a list of residents who need treatment.

In remote communities, community nurses assist dental staff to obtain medical histories of patients and consent for treatment of children.[338]

7.1.1.8 Aboriginal Medical Service

The Aboriginal Medical Service (AMS) delivers a limited dental service in Kalgoorlie and Carnarvon. In conjunction with CRROH, these services have recently been extended from two days per month to five days per month (10 visits per annum). New visiting dental services are proposed for AMSs in Geraldton, Roebourne, Warburton and Wiluna.[339] CRROH is responsible for identifying dental practitioners to provide services at these centres and coordinating the services on a fly-in fly-out basis.[340]

Dental Services advised the Committee that there is informal communication between AMS staff and local and regional dental staff in remote areas, but this could be improved.[341]

7.1.2 Training institutions and programs

7.1.2.1 The Oral Health Centre of Western Australia (OHCWA)

The establishment of OHCWA was a key recommendation of a 1997 review into "*Public Provision of Dental Services in Western Australia and its Relationship with the University of Western Australia*". The Review Committee found that the existing campus at the Perth Dental

336 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p17.
337 *Ibid*, p15.
338 *Ibid*, p16.
339 Department of Health, Submission, 18 October 2001, pp8-31.
340 *Ibid*, pp4-5.
341 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p16.

Hospital was no longer capable of supporting an effective, best practice teaching and training program as the facilities were *"outdated, inefficient and geographically isolated from the other health sciences and the University mainstream."* [342]

OHCWA will provide the teaching functions, the specialist services and some of the general practice dental services that, until recently, were provided through the Perth Dental Hospital. Its program will incorporate the training of dentists (including dental specialists), dental technicians and prosthetists, dental therapists, dental hygienists and dental chair assistants. The integrated academic programs will allow dental students to train alongside dental hygienists, therapists and other dental auxiliaries.

As advised by the ADA (WA):

> *… the School of Oral Health Sciences at UWA has not had any previous role in the provision of remote and rural dental health care, nor in specific training of dental students with a view to encouraging practise in rural and remote areas. However, in 2002, the new curriculum will offer final year students clinical outplacements into private or government clinics. Facilities are being developed for use of both of these types of practice in rural and regional areas and possibly remote areas. The Australian Dental Association has been involved in discussions with the School and in the recommendation of practitioners to provide the clinical guidance and mentorship to the students.*[343]

The original planning of OHCWA was based on the premise that additional clinics would be built. However, the number of clinics to replace the Perth Dental Hospital has fallen short.

Dental Services advised the Committee that four temporary dental chairs had been established in mobile clinics to help address the temporary shortfall. A further eight chairs are expected to be operating at the Warwick clinic as of July 2002, and an additional 10 chairs should be operating by August 2002 when the Morley clinic is complete.[344]

The waiting list at Perth Dental Hospital at the time of closure was 4,500. These patients were moved to OHCWA and metropolitan clinics. Dental Services advised that the waiting list is expected to increase until Warwick and Morley clinics are fully operational.[345]

The Committee has received conflicting evidence as to whether the overall service output from OHCWA and the eight metropolitan clinics will be greater than the combined output from Perth Dental Hospital and clinics. The Department of Health advised that there would be an additional 30 dental chairs when OHCWA and all clinics are eventually operational. Based on Department of Health planning benchmarks of 800 procedures per annum per chair, this represents an additional 24,000 procedures per annum.[346] By contrast, Dental Services advised the Committee that the Perth Dental Hospital and metropolitan clinics provided 213,500 items of treatment and that no change was expected in this figure with the shift to OHCWA.[347]

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342 Department of Health, Submission, 18 October 2001, p38.

343 Australian Dental Association (WA), Submission, 15 October 2001, p10.

344 Perth Dental Hospital and Community Dental Services, Submission, 18 February 2002, p1.

345 *Ibid*, p2.

346 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Transcript of Evidence, 12 November 2001, p8.

347 Perth Dental Hospital and Community Dental Services, Submission, 18 February 2002, p2.

Finding 34

The Oral Health Centre of Western Australia (OHCWA) began operation in January 2002, replacing the Perth Dental Hospital. The waiting list at Perth Dental Hospital at the time of closure was 4,500. This number is expected to increase until all metropolitan clinics are fully operational in the second half of 2002.

7.1.2.2 Dental Training Program

The Dental Program is administered by the University of Western Australia. The previous curriculum was a four-year course, with students entering after completing one year of an undergraduate science course. The last two years of the four-year program were intensely clinical, although there was no outplacement component.

Recent changes to the dental curriculum are expected to impact favourably on the ongoing shortage of dentists in rural and remote areas of the State. The new curriculum began in 1998. It is a five-year program, with the fifth year on an outplacement basis, whereby students are placed under supervision in various locations including OHCWA and the community dental service clinics.[348]

During the outplacement year, students will be practising dentists four days a week. The first intake under the new curriculum completed their fourth year in November 2001.[349]

The Faculty of Medicine and Dentistry at UWA advised the Committee that of the 38 final year dental students, 15 have taken up the opportunity of rural placements in 2002. The students are not obliged to undertake placements in remote or rural locations. They are given the option of a private practice setting or rural placement.[350]

The planned locations of the outplacements include Busselton, Esperance, Kalgoorlie and Carnarvon. Students are also expected to be placed in AMS dental clinics in Wiluna, Warburton, Roebourne and Geraldton as the new clinics are established during 2002.[351]

Outplacements are of three weeks duration. In addition to spending three weeks in a rural practice, students who elect to take up a rural placement will participate in 'Rural Week', which will include Dongara, Collie, Moora, Katanning and Bridgetown in 2002.[352] Rural Week is coordinated by CRROH, in conjunction with local governments and local health service providers. The principal objectives of the program are to expose students to rural lifestyles and to introduce them to some of the health and other issues that rural residents face. Dental students are participating for the first time in 2002. All dental and medical students participate in Rural Week during the first year of their training. Fifth year medical and dental students accompany the first year students, acting as mentors. The students undertake a case study of a sub-group of residents, previously identified by CRROH academics. The sub-groups being targeted in 2002 include

348 Professor John McGeachie, Head, School of Dentistry, University of Western Australia, Transcript of Evidence, 12 November 2001, p2.
349 *Ibid*.
350 Faculty of Medicine and Dentistry, University of Western Australia, Submission, 28 February 2002, p1.
351 *Ibid.*
352 *Ibid.*

Aboriginal communities, Moslem meatworkers, adolescents and aged people. The students are expected to meet with their designated group, as well as others in the community, and gather information in relation to life in a rural community, and how this may impact on the health of those they study. [353]

Two other important changes in the dental training program are also expected to have a favourable long-term impact on the number of practising dentists in rural and remote locations. The total intake of students has increased and the selection process has been altered to encourage students from rural and remote locations and of Aboriginal descent to enter into the program.

In the past, between 20 and 25 dental students have been accepted into the program each year. That number has been increasing slowly in response to a recognised shortage of trained dentists. The intake is now made up of around 25 local students and a minimum of four rural students. The program also aims to recruit two Aboriginal students, giving a total of around 30 or 31 students. A number of overseas fee-paying students are also accepted into the program, taking the total to around 40 students.[354]

The University is hopeful that the total intake of dental students will increase to 50 over the next few years. OHCWA was built with future training needs in mind, allowing for an annual intake of up to 50 dental students.[355]

The demographic of the dental student intake is also expected to change in the next five years to include more rural and Aboriginal students. As in other programs, such as the medical course, the University will ultimately attempt to recruit one-quarter to one-third of dental students from rural areas. The rationale behind this strategy is evidence from elsewhere in Australia and around the world suggesting that although there is no guarantee that students will return to rural and remote areas, there is an increased likelihood that they will do so.[356]

The process by which students from rural areas are recruited begins in Year 10. The University makes contact with principals of country high schools to ascertain whether they have any students who have the potential to study medicine, dentistry or health sciences. The students are provided with information, and a small group are brought to Perth during the midyear break during Year 10. Contact is maintained over the next two years and then in Year 12 the students go through the new selection process. Selection is based on TEE score, the undergraduate medical admission test and an interview, with an equal weighting for each component. The cut-off level on each of the components is reduced for rural and Aboriginal students in order to improve their chances of being accepted into the program.[357]

Professor Louis Landau, Executive Dean of the Faculty of Medicine and Dentistry, advised the Committee that when the active recruitment of country students began a few years ago, most country principals did not reply because they did not think they had any students who could

353 Leanne Coombe, Education Officer, Centre for Rural and Remote Oral Health, Personal Communication, 5 April 2002.

354 Professor Louis Landau, Executive Dean, Faculty of Medicine and Dentistry, University of Western Australia, Transcript of Evidence, 12 November 2001, p2.

355 *Ibid*.

356 *Ibid*.

357 *Ibid*, p9.

compete with students educated in metropolitan high schools. However, since this initiative began, the number of interested rural students has almost doubled each year.[358]

Despite the increasing interest, the University recognises that further progress is necessary in promoting dentistry as an occupation and as a profession, because in general the numbers are still just enough to attract students into the discipline. It is hoped that sending current students to rural high schools will help students to understand what dentistry is, what the opportunities are and to encourage them to enrol.[359]

The recent changes to the dental program at UWA are expected to have some impact on the long-term availability of practising dentists and the strategy should be commended. The University, together with OHCWA and CRROH, are well-positioned to assess the ongoing oral health needs of the rural community and to take appropriate measures to ensure continuing services in these areas.

The above strategies are unlikely to have a significant impact on the current dental crisis in many rural and remote areas of the State. As highlighted by Dental Services, there will be a five to six year lag before new graduates become available, therefore an increase in the number of students will not address the immediate problem.[360]

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The University of Western Australia has made a number of recent changes to the dental program, including an increase in the total dental student intake, the inclusion of an outplacement year and the targeted recruitment of rural and Aboriginal students. These measures are expected to have some long-term impact on the shortage of dentists in rural and remote areas of the State, however, other measures will also be needed. Changes to the dental program are unlikely to address the current dental crisis.

7.1.2.3 Dental Therapists and Hygienists Training Programs

Therapist training was originally undertaken at the Mt Henry Therapy Centre, but later transferred to Curtin University. Beginning in 2002, therapists and hygienists will train at OHCWA.

Prior to 1996 only dental therapists were trained. In 1997 a dental hygienist course was introduced, and the dental therapist course was abolished. During the period when only hygienists were trained, the SDS offered placements that were part of a bridging course, so that hygienists could gain the necessary training to work in the SDS. However, few hygienists accepted this opportunity and as a result the supply of dental therapists in the SDS decreased progressively.[361] As indicated in Chapter 4, there is currently a shortage of dental therapists in the SDS in rural and

358 Professor Louis Landau, Executive Dean, Faculty of Medicine and Dentistry, University of Western Australia, Transcript of Evidence, 12 November 2001, p3.

359 *Ibid*.

360 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p21.

361 Johanna Korczynskyj, Dental Therapy and Hygiene Association (WA), Transcript of Evidence, 12 November 2001, pp3-4.

remote locations. In recognition of this shortfall, the dental therapist course re-commenced in 2000.

At present there is an annual intake of eight dental therapy and 18 dental hygiene students.[362] The students undertake a two-year associate degree, the first year of which is combined. Dental therapists are trained to work specifically in the SDS, whilst hygienists will work almost solely in the private sector. Dental therapists are no longer being trained to work in adult dental care, as this role has been superseded by hygienists.

The Dental therapy students are being trained as part of an initiative undertaken by Dental Services and Curtin University (see section 7.1.1.2).[363]

7.1.2.4 Dental Assistants Association and Dental Nursing Australia

These training groups have a correspondence component to their courses so that dental clinic assistants can be working in regional areas and access formal training to complement the 'on the job' training they receive from the employer. Clinical placements are arranged in public dental clinics to assist this training program. Untrained Dental Services staff are encouraged to undertake the Dental Clinic Assistant course by correspondence.[364]

Dental Nursing Australia also has full and part time courses for students in the Bunbury and Mandurah regions. Students on this program are accommodated in public clinics for their clinical placements.[365]

7.1.2.5 Centre for Rural and Remote Oral Health

The Centre for Rural and Remote Oral Health is a Centre within the faculty of Medicine and Dentistry at UWA. It commenced operation in mid 2001 and is funded by the Department of Health. The key objectives of CRROH are to:

- Facilitate the effective delivery of oral health care in remote Aboriginal communities;
- Provide a network of support for remote oral health workers;
- Promote oral health and its relations to general health;
- Give support to remote health workers in oral health;
- Promote oral health practice in remote areas as a viable occupational option;
- Facilitate ongoing oral health research into issues of importance to rural and remote communities; and

362 Russ Kendall, Head, Department of Dental Hygiene and Therapy, OHCWA, Personal Communication, 29 January 2002.

363 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p3.

364 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp17-18.

365 *Ibid.*

- Provide support for the ongoing development of Best Practice principles for the provision of remote oral health care.[366]

The projected operating budget for CRROH in 2002 is $1.2 million. Funding has been allocated as follows: 60 per cent for clinical services; 15 per cent for research; 13 per cent for education; and 12 per cent for support/administration. An additional $0.4 million has been allocated in 2002 to develop the new dental clinics in county AMSs.[367]

CRROH's research will focus on current issues in oral health in rural and remote regions and the strategies that can be applied to address some of these issues. One of the first research projects that CRROH has started moving towards is to analyse practitioner and work force issues in rural and remote Western Australia. Although some statistical information is available through the AIHW, there is currently little specific information on the Western Australian rural dental workforce.

CRROH is also assisting with encouraging specialist services to visit rural and remote areas. As part of this initiative, an oral surgeon travelled to Carnarvon in September 2001 to provide oral surgical care. This program is expected to continue and to be expanded to other regions that currently do not have access to oral surgery.[368]

CRROH will also play an important role in outplacement of final year dental students in rural and remote locations. A number of rural clinical schools are currently being developed in centres around the State that will provide outreach programs to help expose dental students to rural areas. The intention is to establish rural clinical schools with hi-tech infrastructure in Kalgoorlie, with arms at Esperance, Geraldton, Port Hedland, Broome and Derby. From those centres, the outreaches will go to places including Fitzroy Crossing and Halls Creek.[369] These schools are expected to be operational by 2004.

CRROH is not without its critics, as evidenced by the following comments of the ADA (WA):

> *We are aware of the establishment of a Centre for Remote and Rural Oral Health. Despite a study of this organisation's publications, this Association is not able to discern the way in which it is planning to provide clinical services. It has attracted significant funding but it is difficult to understand its role. We understand that CRROH is in discussions with the UWA Dental School, but there has been no discussion with this Association or, to our knowledge, with our members.*
>
> *The research that it proposes to carry out would seem to us to be readily available from the Australian Institute of Health and Welfare's Dental Statistics & Research Unit in South Australia.*[370]

366 Centre for Rural and Remote Oral Health, http://130.95.206.71/wsdocs/crroh/mission.html, 26 February 2002.

367 Faculty of Medicine and Dentistry, University of Western Australia, Submission, 28 February 2002, p2.

368 Dr Marc Tennant, Director, Centre for Rural and Remote Oral Health, Transcript of Evidence, 12 November 2001, p4.

369 Professor Louis Landau, Executive Dean, Faculty of Medicine and Dentistry, University of Western Australia, Transcript of Evidence, 12 November 2001, p6.

370 Australian Dental Association (WA), Submission, 15 October 2001, p10.

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It is expected that the Centre for Rural and Remote Oral Health will play an important role in improving the delivery of dental services to rural and remote areas of the State, through a combination of carefully targeted clinical and research strategies.

7.1.3 Private practitioners

7.1.3.1 Dental practitioners

Private practitioners have an important role to play in the provision of dental services to both private and public patients. Statistics collated by AIHW indicate that there were 913 practising dentists in Western Australia in 2000. Of these, 146 practised mainly outside the Perth metropolitan area. Overall, approximately 85 per cent of dentists operated in private practice, although there is no available information as to whether this figure is comparable in metropolitan and non-metropolitan locations.[371]

In many rural and remote locations, the only access to public dental care is through private dentists who participate in the Country Patients Dental Subsidy Scheme (CPDSS). There is a cost to the private dentist in participating in the scheme, as the fee schedule used by Dental Services is usually less than the practitioner's normal fee for service.

Under the Orthodontic Subsidy Scheme, patients in regional centres are able to access subsidised specialist care without the added expense of travel or adding to the burden of the Patient Assisted Travel Scheme. A number of orthodontists have already established, or plan to establish, private practices in regional centres to treat regional patients.

7.1.3.2 Medical practitioners

Medical practitioners are involved in two aspects of dental care. First, pursuant to Regulation 10 of the *Hospitals (Administration of Public Hospitals) Regulations 1940* (WA), patients who are undergoing dental procedures in a public hospital must be admitted by a medical practitioner. Therefore, dental practitioners who wish to admit patients to public hospitals are only able to do so with the assistance of a medical practitioner. The Committee has been informed that this arrangement has led to access problems in several regional centres, including Kalgoorlie[372] and Bunbury.[373]

Second, medical practitioners are also, on occasion, involved in provision of pain relief in emergency dental situations. This situation arises when patients, who are in extreme pain, are either unable to access or unable to afford dental treatment. Dr Catherine Moore, a medical practitioner at the Banksia Medical Centre in Esperance, advised the Committee that patients regularly present to Esperance doctors with dental abscesses and other painful conditions as the

371 Information supplied by the Australian Institute of Health and Welfare, February 2002.

372 Dianne Mantell, Director of Nursing, Kalgoorlie Regional Hospital, Briefing, 21 November 2001.

373 Australian Dental Association (WA), Submission, 15 October 2001, p7.

wait to see a dentist is too long. Other patients cannot afford dental treatment and are prepared to settle for pain relief until their affected tooth '*literally drops out*'.[374]

The 1998 Report of the Senate Community Affairs Reference Committee into Public Dental Services noted that people visited their doctor for pain relief when they had toothache because prescription pain-killers are cheaper than those bought over the counter.[375]

Medical practitioners are only able to treat the symptoms of dental problems, and in most cases patients will ultimately require dental treatment.

7.1.4 Professional bodies

7.1.4.1 The Dental Board of Western Australia and the Australian Dental Council

Overseas-trained dentists who gain their dental qualifications in Ireland, New Zealand or UK, may be registered by the Dental Board of Western Australia. All other dentists with foreign qualifications must pass a qualifying exam conducted by the ADC under the auspices of the National Office of Overseas Skills Recognition before being registered by the Dental Board of Western Australia.[376] This examination is a quality control exercise that results in a small number of foreign-trained dentists being registered each year.

Historically, dentists from countries in North America and Europe, South Africa and Singapore have a high success rate with the ADC exam.[377] In 1994, approximately 14 per cent of practising dentists in Australia gained their initial qualifications overseas, about 60 per cent of these being from Ireland, New Zealand or UK.[378]

7.1.4.2 The Australian Dental Association

The Australian Dental Association (ADA) is a professional association for dental practitioners. The aim of the Association is *"encouragement of the health of the public and the promotion of the art and science of dentistry"*.[379] Membership of the ADA is voluntary, and over 90 per cent of practising dentists are members Australia-wide. In Western Australia, more than 800 of the 913 practising dentists are ADA members.[380] There are 143 members of the ADA whose main practice is in a rural or remote location.[381]

7.1.4.3 The Dental Therapy and Hygiene Association

The Dental Therapy and Hygiene Association of Western Australia is a professional association. It began about 30 years ago as the Dental Therapy Association, and amalgamated with the WA Association of School Dental Therapists in 1996. The main objectives of the Association is to

374 Dr Catherine Moore, Submission, 26 September 2001, p1.
375 Report of the Senate Community Affairs Reference Committee, 1998.
376 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p20.
377 *Ibid.*
378 AIHW Dental Statistics and Research Unit, 1997b, p8.
379 Australian Dental Association, http://www.ada.org.au, 24 January 2002.
380 Dr Nicholas Boyd, President, Australian Dental Association (WA), Transcript of Evidence, 12 November 2001, p1.
381 Correspondence from Dr Nicholas Boyd, President, Australian Dental Association (WA), 16 November 2001.

"provide ongoing education for members and to act as a social network to enable members to keep in touch with what is happening in the private and public sectors." [382]

The association has approximately 120 members, from a pool of some 400 dental therapists and hygienists registered in Western Australia. The membership base is predominantly made up of therapists, with only 20 hygienists. Membership is skewed toward metropolitan members, with about 25 per cent of members working outside the metropolitan area.[383]

7.2 KEY STEPS IN THE PROVISION OF DENTAL SERVICES TO REGIONAL, RURAL AND REMOTE AREAS

7.2.1 Training dental personnel

The first step in provision of dental services is the training of an adequate number of suitably qualified dental personnel. There are numerous aspects of this process that must be considered with regard to the eventual delivery of trained professionals to regional, rural and remote areas. Many organisations, in addition to the primary training institutions, can play an important role in ensuring that an adequate supply of suitably qualified professionals are available for recruitment to country locations.

7.2.1.1 Recruitment of students

There is ample evidence from around Australia and throughout the world to indicate that students from a non-urban background are more likely to choose to work in non-urban locations after attaining their professional qualifications. For this reason it is critical that students from rural and remote locations are actively encouraged to undertake training in oral health.

A number of organisations can play a role in recruitment of students into oral health programs.

The Faculty of Medicine and Dentistry (UWA) should play a central coordinating role in ensuring that students in country schools are made aware of the opportunities available to them in dentistry. The Faculty has made a number of positive changes aimed at increasing the intake of students from rural and Aboriginal backgrounds in recent years, however, a number of simple steps could be implemented to make information more accessible for country students:

- The link to the CRROH website is buried in the UWA and Faculty websites. It should have a prominent place on the Faculty website, where both current and prospective students can access information specifically relating to rural oral health issues;

- Information specific to students from rural or Aboriginal backgrounds is also scattered on several web pages. It would be useful to have a prominent link on the Faculty home page where country and Aboriginal students could easily access comprehensive information on entry requirements and selection procedures relating specifically to them; and

382 Jennine Bywaters, Dental Therapy and Hygiene Association (WA), Transcript of Evidence, 12 November 2001, pp1-2.

383 *Ibid.*

- There is no information on the Faculty website specifically targeted at year 10 students. Easily accessible information on the Faculty website would go hand in hand with the direct approach through the schools in creating awareness and promoting opportunities in dentistry to country students.

CRROH can be involved at ground level, visiting schools to promote careers in oral health, and advising students of the special dispensations that apply to country students in relation to entry requirements. Face to face contact with students will likely have a greater impact than indirect contact via the school. CRROH have indicated their intention to travel to schools for this purpose and this plan should be implemented as soon as possible.

The Department of Education, through teachers in country high schools, could play an active role in promotion of careers in oral health. Teachers have served as a conduit for information in the past. By visiting the schools, teachers may be encouraged to play a more active role in encouraging students to undertake careers in health, particularly in oral health.

The School of Dental Therapy and Hygiene (based at OHCWA, administered by Curtin University) does not currently have a program whereby prospective students from country schools are actively encouraged to enrol in dental therapy and hygiene. The recent initiative in conjunction with Dental Services to provide scholarships in exchange for a commitment to work in a rural or remote location is a positive step, however, active recruitment of prospective students from country schools, should also be pursued. As the dental therapy and hygiene courses are now co-located with the dental course at OHCWA, it should be easy for the School of Dental Therapy and Hygiene to tap into existing resources to implement such a scheme.

Local governments have a vested interest in ensuring the continuing supply of dental professionals in their region. To this end, it would be appropriate for local governments to also play an active role in raising awareness of training opportunities and promoting careers in oral health. This involvement could be through providing some financial assistance for training institutions to visit local schools.

7.2.1.2 Developing an appropriate curriculum and selection process

Recent changes in the selection process for dental students are positive. Steps should be taken to ensure that the proportion of rural and Aboriginal students accepted into the dental program reaches the desired level of one-quarter to one-third as quickly as possible.

Recent changes in the dental curriculum, with a greater emphasis on community oral health issues, are progressive. Ongoing assessment and modification of the dental curriculum should be undertaken to meet the changing oral health needs of the West Australian population. Practitioners in the field, through both Dental Services and the ADA (WA) could make a valid contribution to this process. With ongoing financial support from the Department of Health, CRROH is also well positioned to provide an ongoing assessment of the dental service needs of rural and remote Western Australia.

7.2.1.3 Provision of scholarships in exchange for commitment to practise in a rural or remote location

Perusal of the UWA website indicates that there are currently no scholarships available to dental students either from a rural background, or who make a commitment to take up a country posting

upon graduation. Two dental scholarships, to the value of $1,000 per annum, are offered Australia-wide by the ADA to students of Aboriginal and Torres Strait Islander background.[384]

In stark contrast, there are numerous scholarships offered to medical students from a rural background, or who make a commitment to take up a country posting upon graduation. Of the seven types of medical scholarships listed on the UWA website, three are specifically offered to students who agree to work in a rural or remote community, one is available only to country students, one is preferentially offered to country students and one is available only to Aboriginal and Torres Strait Islander students. The scholarships include:

- John Flynn Scholarship Scheme – federally funded scheme enabling medical students to undertake a placement in a rural or remote community for a minimum of two weeks each year for four years. Up to 150 scholarships worth an average of $2,500 per annum are offered each year;

- Medical Rural Bonded (MRB) Scholarships – The scholarships are attached to 100 new medical school places throughout Australia each year. The scholarship of $20,440 per annum (2002 value, indexed annually) is tax exempt and not subject to a means test. The scholarship is provided for the duration of the medical degree in exchange for a commitment to practise in rural areas of Australia for six years upon completion of basic medical training; and

- Rural Australia Medical Undergraduate Scholarship Scheme (RAMUS) – RAMUS is a national scheme providing rural students with a scholarship to assist with accommodation, travel and living expenses incurred whilst studying medicine. The scholarships are valued at $10,000 per annum, and both new and existing students are eligible to apply.[385]

The Federal Government and other organisations clearly recognise the benefit of providing scholarships as an incentive to attract health professionals to rural and remote areas. Medical Rural Bonded Scholarships were introduced as part of the Federal Government's Regional Health Strategy, an initiative aimed at delivering more doctors and better services to regional and rural communities.[386]

The shortage of dental practitioners and auxiliaries in rural and remote Australia is comparable to the shortage of medical practitioners. Provision of scholarships for dental students would help to deliver more dentists and better dental services to regional, rural and remote communities. In line with the scholarships available to medical students, two types of scholarship should be offered to dental students: one that is available only to students from rural or Aboriginal communities; and a second that is offered to students who undertake to work in a rural or remote community for a predetermined period of time after graduation. The latter scholarship should offer a higher stipend, in recognition of the student's future contribution to the community, by making a commitment to work in a rural or remote location. Country students would be eligible to apply for both types of scholarship.

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384 University of Western Australia, http://admissions.uwa.edu.au/scholarships/prospective_scholarships.html, 24 January 2002.

385 *Ibid*.

386 Commonwealth Department of Health and Aged Care, http://www.health.gov.au/workforce/medbondschol/index.htm, 24 January 2002.

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The Federal Government and other organisations clearly recognise the benefit of providing scholarships as incentives to attract doctors to rural and remote areas. Although the shortage of dental professionals in rural areas is comparable to the shortage of doctors, there are few scholarships offered to dental students.

7.2.1.4 Adequate intake of students from rural and remote locations

The shortage of dental personnel in rural and remote communities is a consequence of an overall under-supply. The majority of dental professionals seek employment in capital cities and major regional centres. Given the relative abundance of positions in urban locations, there is no need for dental professionals to seek employment in non-urban areas. The relative under-supply of dentists and dental auxiliaries in non-urban areas is largely a consequence of insufficient students being trained over the past five to ten years.

Evidence from the AIHW suggests that more than three-quarters of practising dentists in Western Australia gained their initial qualifications from the University of Western Australia.[387] As the major 'supplier' of dentists in this State, the University has an obligation to ensure that an adequate number of dentists are trained to meet the needs of the population.

As advised by the University, the intake of dental students is being progressively increased toward a target of around 50 students per year. In consultation with CRROH, Dental Services, the Australian Dental Association (WA), local governments and regional development commissions, the University should take immediate steps to determine whether the time frame for the proposed increase in dental student intake is appropriate. The projected changes in demographics of both dental practitioners and of the population should be considered in this regard.

With regard to dental auxiliaries, Dental Services advised that school dental therapists, the primary personnel category in the SDS, have a skewed age distribution.[388] Around 40 per cent of all therapists currently employed in the SDS will reach retirement age during the next ten years, a factor that could lead to an extreme therapist shortage. Dental Services, however, is confident that the eight replacement therapists currently being trained each year will circumvent any future problems. This situation should be monitored closely over the next few years, in consultation with local governments and the DTHA (WA).

7.2.1.5 Student outplacements in regional, rural and remote communities

Experience suggests that the percentage of new graduates prepared to consider a rural practice increases after a rural or regional outplacement.[389]

With the inception of CRROH, there is potential for placement of dental students in rural and remote locations to lead to long-term improvements in the supply of dentists to these areas. However, two important issues must be given the utmost priority if students are to be encouraged to return to the country upon graduation. First, students must be placed in rural and remote

387 AIHW Dental Statistics and Research Unit, 1997b, p8.

388 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p11.

389 Australian Dental Association (WA), Submission, 15 October 2001, p18.

communities for a sufficient time to gain a full appreciation of the lifestyle. Second, it is imperative that every attempt is made to ensure that students are integrated into the local community, and receive all the support they need, both professionally and socially, in order to make their time in the country an enjoyable and rewarding experience. CRROH, in conjunction with UWA and local practitioners, should act as a 'life-line' during this time, providing all aspects of professional support for students. Local governments should play an active role in assisting students adjust to life in their new community.

7.2.2 Attraction and retention of dental professionals

The next step in provision of dental services to regional, rural and remote areas is the attraction and retention of appropriately qualified dental professionals. As with training, there are numerous issues to be considered with regard to attraction and retention of personnel, and many individuals and organisations can play an important role in this process.

7.2.2.1 Attraction of dental professionals to regional, rural and remote communities

The Committee has been advised that there are numerous communities throughout the State that have had considerable ongoing difficulty recruiting dental staff. At present there is no financial incentive to encourage dental professionals to work in rural and remote communities. Salary levels for dental officers employed by Dental Services are comparable for country and city postings.

Professional associations, such as the ADA (WA) and DTHA (WA) should play a more active role in encouraging their members to take up postings in rural and remote communities. Training institutions (OHCWA) could play an active role in this process by promoting a greater awareness amongst students of oral health issues in non-urban communities, and by highlighting career opportunities in these communities.

7.2.2.2 Provision of adequate accommodation

Suitability of accommodation can be a major consideration in the attraction and retention of dental staff. Access to suitable rental accommodation in regional centres can present problems because of competing demand from other sectors. Accommodation in rural and remote locations is often substandard.[390]

Councillor Mary Smith from the Shire of Ravensthorpe informed the Committee that dentists recruited to work in the Shire of Ravensthorpe are provided with a modern house, but management of the property can be problematic. Although a local contractor is employed to maintain the property, the service is coordinated through Dental Services in Perth, which can lead to difficulties.[391]

7.2.2.3 Integration into the local community

Fear of social isolation, relocation of family, separation from family and friends and major lifestyle changes are just some of the many social factors that discourage dental practitioners from moving to rural and remote communities.

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390 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p25.

391 Councillor Mary Smith, Shire of Ravensthorpe, Briefing, 21 November 2001.

Local governments, Dental Services and professional associations should play a very active role in assisting dental professionals to become integrated into the local community.

7.2.2.4 Professional support and mentoring

Lack of adequately trained chairside assistants and isolation from colleagues are two of the many professional issues that discourage dental personnel from taking posts in rural and remote communities.

As advised by the Australian Dental Association (WA):

> *… the running of a general dental practice in a regional, rural or particularly a remote location is very much more complex than running the same practice in a metropolitan location. The first point always made by country practitioners is the almost total lack of trained chairside staff. To provide a high standard of dental care, adequate training of all members of the dental team is essential.*[392]

The ADA (WA) further advised that the shortage of qualified chairside assistants has been partly relieved by the recent establishment of a regional training program for chairside assistants in Bunbury, but other regional centres continue to experience a dearth of personnel who are suitable for 'on the job' training.[393]

Many practitioners, particularly new graduates, are reluctant to take up country posts where they will be the sole practitioner. One of their major concerns is that they will forego the benefit of mentoring by more experienced practitioners and the support that can be provided by colleagues.

A mentoring system should be established, whereby established private practitioners and senior dental officers in Dental Services play an active role in providing professional guidance and support to new graduates who take up country postings. Dental Services and the ADA (WA) should approach senior practitioners to take on the role of mentors.

Dental Services and the Department of Health have an obligation to dental professionals working in the public sector to ensure that they have access to adequately trained dental assistants, adequate facilities and equipment and appropriate technology to minimise the risk of professional isolation. Professional associations such as ADA (WA) and DTHA (WA) could provide a network of support to ensure that their members working in rural and remote communities have access to appropriate professional support and mentoring.

7.2.2.5 Ongoing professional development

The perception and fear of professional isolation is a major impediment to new graduates seeking employment in rural and remote areas. It is felt that isolation from professional peers and specialist consultants is a great handicap to their professional development. Opportunities for professional development can be restricted for country practitioners, and travel to the metropolitan area to participate in ongoing education is often costly.[394]

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392 Australian Dental Association (WA), Submission, 15 October 2001, p4.

393 *Ibid.*

394 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p25.

Dental Services, the Department of Health, ADA (WA) and DTHA (WA) have an obligation to ensure that dentists in rural and remote communities do not feel professionally isolated. These organisations should act as a 'life-line' to country practitioners. Practitioners working in country areas should be given the same opportunities for professional development as practitioners in urban practices. A number of measures would assist with this objective:

- Ready access to information to assist with diagnoses and treatments, e.g. via the Internet;
- Ready access to a network of professional support and advice, again the Internet could be a useful medium;
- Time each year to allow for further education; and
- Financial assistance with travel for the purposes of professional development.

Finding 38

There are numerous impediments to the attraction and retention of dental professionals in country areas, including: lack of adequate accommodation; difficulty integrating into the local community; lack of educational opportunities for family; and lack of professional support and ongoing professional development.

7.2.3 Matching the oral health needs of the community with dental services

The final step in the process of providing dental services to regional, rural and remote areas is to match the oral health needs of the community with an appropriate model of service delivery.

7.2.3.1 Assessment of oral health needs

One of the key objectives of CRROH over the next two years is to construct a comprehensive picture of the oral health needs of Western Australians living in rural and remote locations. The ADA (WA) contend that this information is readily available through the AIHW Dental Statistics and Research Unit at Adelaide University.

The AIHW has provided the Committee with information relating to dental professional statistics in WA, but whilst the available information provides some insight into the dental workforce in this State, it is not exhaustive. The information is based largely on questionnaires conducted between 1997 and 2000. It compares Western Australia to other States and Territories, and is limited to an assessment of practising status, age and sex distribution, university/country of initial qualification, main area and type of practice, pattern of hours worked, specialty areas of practice and geographic distribution (by statistical division).

Whilst AIHW has previously published information comparing urban to non-urban locations with regard to oral health status and level of dental services, there are no specific data comparing different regions of Western Australia. There are several areas where research data are currently scarce. CRROH can fill this gap.

With ongoing financial support from the Department of Health, CRROH is well positioned to assess the oral health needs of Western Australians living in rural and remote locations. The

Department of Health has an obligation to the West Australian population to ensure that CRROH delivers its research outcomes in a timely and cost-effective manner, and that these research outcomes are quickly translated into improved oral health services in this State.

Dental Services, local governments, dental and other local health practitioners have an important subsidiary role to play in compiling a comprehensive picture of the oral health needs and status of West Australians.

7.2.3.2 Provision of appropriate dental services

Given the size of Western Australia, and the highly unequal distribution of the population, finding an appropriate model for optimal delivery of dental (and other) services is an onerous task.

The Department of Health determines both the level and, to some extent, the breakdown of funding. Dental Services oversees the delivery of most patient services, with the exception of admitted patient services, which is negotiated directly between the Department of Health and regional health services.

The Committee was advised that the Department of Health allocates funding on the basis of past level of activity and demand for services in a particular region.[395] The target allocation is negotiated between the Department of Health and regional health services. Once the allocation has been negotiated, there is an expectation on the part of the Department of Health that the health service will meet the service activity.[396] Whilst funding is provided for a certain number of dental procedures as part of the activity profile for each health service, health services have the flexibility to determine how they will meet dental procedures.[397] Funding earmarked for dental procedures can be redirected, at the discretion of the regional health service, to other areas. As explained by Ms Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health:

> *…hospitals operate on the basis of a clinical priority system for planned procedures. The clinical urgency of a dental procedure would be evaluated alongside of that of other elective surgery, for example. Given the criteria of those services, it would be unusual for a dental procedure to be required within 30 days, which would make it an urgent procedure, rather than a procedure that would be required in the 30 to 90 day range … I would rate dental surgery as being a non-urgent procedure.* [398]

There may be some variation from the negotiated target, however, the Department of Health has not identified any health service that has significantly underachieved its target activity level for dental procedures,[399] although the Committee has received evidence that this may in fact occur.[400] The Department of Health has in place an internal auditing system, whereby random records are

395 Department of Health, Submission, 2 January 2002, p1.

396 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Briefing, 13 March 2002.

397 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Transcript of Evidence, 12 November 2001, p3.

398 *Ibid.*

399 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Briefing, 13 March 2002.

400 Information provided by Bunbury Regional Hospital, February 2002.

scrutinised to ensure that service activity volumes are consistent with negotiated activity targets, although it is not clear to the Committee whether the current monitoring system is adequate.

The Committee has also been advised of problems relating to admitting anaesthetists in some regional hospitals. The specialist anaesthetist recently refused to admit public dental patients to Kalgoorlie Regional Hospital.[401]

Given that approximately 85 per cent of West Australian dentists work in private practice, it can be assumed that the majority of dental services are delivered by private dental practitioners. The choice to establish a practice or to take over an existing practice in a rural or remote community rests solely with the private practitioner - he or she cannot be directed to do so.

The ADA (WA) asserts that it encourages its members to practise in country locations. However, there is no compulsion to do so, and whilst there is a reasonable supply of dental work in Perth, few dentists are willing to work in the country. On purely economic grounds, a dentist is unlikely to establish a practice in an area with a population of less than 4,000 people.[402]

In general, Dental Services monitors the ongoing oral health needs of rural and remote communities, tailoring the delivery of public services to complement services available in private practices. As advised by Mr David Neesham, Director of Dental Services, as the population in regional and remote communities continues to grow, private practices have been established and Dental Services have moved out in order to make the private practices more viable.[403]

The principle of complementing existing private practices with public dental services is sound, both economically and in terms of service provision. However, there are clearly locations where services are inadequate.

7.2.3.3 Community education and health promotion

There is evidence from submissions and from the AIHW reports to suggest that people living in rural and remote communities assign a lower priority to dental health than do people living in urban locations. It is not clear whether people living in rural and remote communities assign a lower priority to dental care because they have reduced access to services. Any sub-group of the community that does not consider oral health a high priority is at risk of poor long-term oral health.

Community education and oral health promotion are important strategies to increase the perceived need of individuals and the community for good oral health. As advised by Dental Services, oral health education and promotion is well developed for school children, through the SDS, and the overall oral health status of school children in this State would suggest that the strategies are working well. However, oral health promotion strategies targeted at the general adult population are poorly developed.[404]

A trial is currently underway to provide oral health information on the Internet. This is a positive step, however, a large proportion of the adult population does not have access to the Internet.

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401 Dianne Mantell, Director of Nursing, Kalgoorlie Regional Hospital, Kalgoorlie, Briefing, 21 November 2001.

402 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p3.

403 *Ibid*, p6.

404 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp13-14.

Oral health education and promotion strategies are necessary to increase the perceived need for good oral health in rural and remote communities, and to ultimately improve oral health. Dental Services should develop strategies targeted at adults in rural and remote communities. Local health practitioners, such as dentists, community nurses and general practitioners could be recruited to assist with oral health promotion and education.

7.2.3.4 Notification of services and advice about financial assistance

A number of submissions indicated that residents of rural and remote communities are often poorly advised of the timing of visits by mobile dental units.[405, 406] Many residents are also unaware of their potential eligibility for public dental care.[407]

Every effort should be made by Dental Services to publicise the dates of visiting services, and to ensure that the information is broadly disseminated throughout the local community. Including information on the Dental Services website and creating a recorded message that is accessed through the Dental Services general enquiries line could assist with this process. Local governments could also assist with this process by, for example, sending information to residents with rate notices. Local newsletters are another useful medium for dissemination of information. Residents should be advised of proposed dates of dental visits in the following year, given a contact phone number and provided with information with regard to eligibility for public dental care.

Finding 39

Advice about the timing of dental visits, and eligibility for subsidised or publicly funded dental care is not well publicised in some rural and remote communities.

7.2.3.5 Participation in CPDSS

A considerable proportion of public dental services provided in rural and remote locations are provided through the CPDSS. Of the 146 dentists practising outside the Perth metropolitan area, 67 (46 per cent) participate in the CPDSS. Whilst at first glance, this would appear to be a relatively low participation rate, it should be borne in mind that of the 79 dentists who do not participate in the CPDSS, some will work in the public sector and others will work in areas where private and public dental services co-exist, therefore eliminating the need to participate. By and large, participation appears to be reasonable, despite the administrative complexities of the scheme.

Both Dental Services and the ADA (WA) appear to play an active role in encouraging private practitioners to participate in the CPDSS. There may also be a role for local governments in this regard. The University of Western Australia, through CRROH, could assist by helping to develop a sense of community conscience in dental students during training.

405 Shire of Laverton, Submission, 28 September 2001, p4.
406 Shire of Ravensthorpe, Submission, 21 November 2001, p1.
407 Council on the Ageing, Submission, 5 October 2001, p5.

7.2.3.6 Facilities and equipment

Working with inadequate facilities and equipment and difficulty with servicing and replacement of broken equipment are major problems for dental practitioners working in rural and remote communities.

The ADA (WA) advised the Committee that difficulty obtaining service for critical items of equipment is a major problem for rural practitioners. Difficulty in obtaining good service for equipment in the city is well-recognised, and in remote areas it is almost impossible. The waiting time for service can be some months.[408]

Dental Services advised the Committee of a number of factors that affect the delivery of dental services to rural and remote areas:

- Field portable equipment is costly to purchase and maintain. It is more susceptible to damage or loss during transportation;
- The adequacy and availability of buildings in which to set up equipment and practise dentistry varies greatly in small communities;
- The range of dental procedures that can be provided using portable equipment is limited to basic and emergency care; and
- Security of equipment in fixed and mobile clinics is an important consideration where facilities are not staffed all year round.[409]

Finding 40

Dental practitioners working in rural and remote areas must often deal with inadequate facilities and equipment.

The Committee recommends a stronger State commitment to delivery of dental services to regional, rural and remote areas of the State, particularly with regard to adult dental services.

Recommendation S6

Dental scholarships should be established to ensure the delivery of more dentists and better dental services to regional, rural and remote areas of Western Australia. Two types of scholarship should be offered: one that is available only to students from rural or Aboriginal communities; and a second that is offered to students who undertake to work in a rural or remote community for a predetermined period of time after graduation.

408 Australian Dental Association (WA), Submission, 15 October 2001, p4.

409 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p24.

The Committee recommends that the **Department of Health** facilitate an improvement in the delivery of dental services to regional, rural and remote areas through a range of measures.

Recommendation H4

Careful monitoring of the clinical, teaching and research activities of the Oral Health Centre of Western Australia and the Centre for Rural and Remote Oral Health should be undertaken to ensure that the training and research focuses of these facilities do not detrimentally impact on delivery of clinical services, particularly to country areas.

Recommendation H5

In consultation with Dental Services and the Australian Dental Association (WA), a mentoring system should be established, whereby new dental graduates in regional, rural and remote communities are assigned a mentor who will play an active role in professional support and development, as well as assisting with integration into the local community.

Recommendation H6

In consultation with Dental Services, the Department should take immediate measures to improve dissemination of information about visiting dental services and eligibility for publicly funded treatment in regional, rural and remote communities.

CHAPTER 8 THE IMPACT OF PROFESSIONAL AND LEGAL RESTRICTIONS ON PROVISION OF DENTAL SERVICES TO REGIONAL, RURAL AND REMOTE AREAS

8.1 REGULATIONS GOVERNING THE PROVISION OF DENTAL SERVICES IN WESTERN AUSTRALIA

The dental workforce is made up of dentists and a number of dental auxiliaries including dental therapists, hygienists, prosthetists and technicians. The range of dental services each of these dental professionals can provide in Western Australia is largely governed by two Acts, the *Dental Act 1939* and the *Dental Prosthetists Act 1985*.

8.1.1 Dentists

Dentists are regulated by the *Dental Act 1939* (WA). Section 44 of the Act sets out the criteria that must be satisfied for registration as a dentist in Western Australia. In relation to qualifications, an applicant must have:

- a qualification in dental surgery or dental science from any University of the United Kingdom, Ireland, New Zealand or Australia and be entitled to registration as a dentist in the country where the qualification was granted; or
- for other overseas qualifications, a Certificate of Dentistry from the Australian Dental Council.[410]

An applicant must also be resident in the State at the time of the application for registration or have taken up residence in the State within six months of registration being granted (s. 44(3)).

It is an offence for a dentist to allow a health practitioner other than those listed under section 55(1)(d) to assist or take part in any act of dentistry. The practitioners listed are; dentist; dental therapist; dental hygienist; dental attendant; dental prosthetics student acting under the direction of a dentist as a requirement for obtaining a qualification prescribed for the purposes of the *Dental Prosthetists Act 1985;* medical practitioner or registered nurse.[411]

The Act vests the Dental Board of Western Australia with two principal statutory functions:

- Registration - the Board is responsible for determining who may be registered as a dentist in Western Australia by reference to criteria that are contained in the Act; and
- Discipline - the Board is authorised to inquire into complaints about dentists and to apply disciplinary sanctions where grounds for action set out in the Act are established at an inquiry.[412]

410 *Dental Act 1939*, s44.
411 *Dental Act 1939*, s55.
412 *Dental Act 1939*, ss17-33.

The *Co-opted Medical and Dental Services for the Northern Portion of the State Act 1951* (WA) enables medical practitioners and dentists who are employed by the Commonwealth (for example in the armed forces) to be co-opted to practise in the northern part of the State. A practitioner so co-opted may lawfully practise medicine or dentistry, as the case may be, notwithstanding that he or she has not complied with the State registration requirements. The northern part of the State is defined as that portion of the State north of the twenty-second parallel of south latitude.[413]

8.1.2 Dental hygienists, dental therapists and school dental therapists

In Western Australia dental hygienists, dental therapists and school dental therapists are regulated under the *Dental Act 1939.* As with dentists, the Dental Board of Western Australia is responsible for the registration and discipline of dental hygienists, dental therapists and school dental therapists.

These dental auxiliaries are restricted in the activities they may perform. They also have no right of private practice (r.22F, *Dental Board Rules 1973).*

8.1.2.1 Dental hygienists and dental therapists

Sections 44B and 44C of the *Dental Act 1939* set out the criteria that must be satisfied for registration as dental therapists and hygienists in Western Australia. In relation to qualifications, a person must have completed a course of study and professional practice and training as a dental therapist/hygienist approved by the Board. If training was completed more than five years before applying for registration, the person must also have current knowledge and skills in dental therapy at a level approved by the Board.[414]

Pursuant to section 50A of the Act, a dental therapist may undertake the acts of dentistry specified in Parts 1, 2, 4, 5 and 6 of Schedule 2.[415] With appropriate training, a dental therapist may also undertake the activities specified in Part 3 of Schedule 2.

Pursuant to section 50B of the Act, a dental hygienist may undertake the acts of dentistry specified in Parts 1 and 6 of Schedule 2. With appropriate training, a dental hygienist may also undertake the activities specified in Parts 2 and 3 of Schedule 2.

Sections 50A and 50B of the Act apply to dental therapists and dental hygienists who are employed by a dentist, or in a hospital, a university or tertiary educational authority, or the Department of Health. [416]

Dental hygienists and dental therapists work under the direction and control of a dentist. Pursuant to sections 50C and 50F of the *Dental Act 1939* and rules 22F(3) and 22F(4) of *Dental Board Rules 1973*, the following restrictions apply:

- a dentist must examine the patient before the treatment commences and within six months after the treatment;
- a dentist must remain available for consultation during the treatment;

413 Department of Health, Submission, 18 October 2001, p41.

414 *Dental Act 1939*, ss.44B and 44C.

415 Schedule 2 of the *Dental Act 1939* is contained in Appendix Five. Reproduced by permission of the copyright owner, the State of Western Australia.

416 Department of Health, Submission, 18 October 2001, p42.

- a dental therapist or dental hygienist must not commence treatment unless they have a written instruction from a dentist as to the treatment they are to provide; and

- a dentist is prohibited from employing more than 2 (or the equivalent of 2) dental therapists or dental hygienists.[417]

8.1.2.2 School dental therapists

The School Dental Service was established under section 337A of the *Health Act 1911* (WA).

Section 44D of the *Dental Act 1939* sets out the criteria that must be satisfied for registration as school dental therapists in Western Australia. As with dental therapists and hygienists, a person must have completed a course of study and professional practice and training as a school dental therapist approved by the Board. Persons who completed their course of study more than five years before registering, may be granted registration if their current knowledge and skills in school dental therapy are at a level approved by the Board.[418]

Pursuant to section 50D of the Act, a school dental therapist may undertake the acts of dentistry specified in Parts 1, 2, 4 and 7 of Schedule 2. With appropriate training a school dental therapist may also undertake the activities specified in Part 3 of Schedule 2.

School dental therapists may only work in the SDS and must work under supervision.

8.1.3 Dental prosthetists

Dental prosthetists are regulated under the *Dental Prosthetists Act 1985* (WA). The practice of dental prosthetics is limited to a person with a dental prosthetists licence (s.16). This does not apply to dentists, who are exempt from the operation of the *Dental Prosthetists Act 1985* (s.4). 'Dental prosthetics' is defined pursuant to section 3 as:

> *(a) the giving of advice to, or the attendance upon, a person for or in connection with, or in preparation for, the fitting, constructing, inserting, repairing, or renewing of full artificial dentures or mouth guards; and*
>
> *(b) the fitting, constructing, inserting, repairing, or renewing of full artificial dentures or mouth guards, but the fitting or inserting of an artificial denture or mouth guard shall not be taken to include any adjustment or alteration to the natural teeth or any tissue of the mouth.*[419]

The Act vests the Commissioner of Health with two principal statutory functions in relation to dental prosthetists:

- Licence - the Commissioner of Health is responsible for determining who may be licensed as a dental prosthetist in Western Australia by reference to criteria contained in the Act; and

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417 Department of Health, Submission, 18 October 2001, p42.

418 *Dental Act 1939*, s.44D.

419 *Dental Prosthetists Act 1985*, s3.

- Discipline - the Commissioner of Health is authorised to inquire into complaints about dental prosthetists and has the power to apply limited disciplinary sanctions when necessary.[420]

8.1.4 Dental technicians

Dental technicians are not currently regulated under an Act in Western Australia.[421]

The major functions of dental technicians include:

- Constructing full and partial dentures;
- Shaping metal or plastic plates for dentures;
- Mounting porcelain or plastic teeth in plates;
- Constructing metal clasps, inlays, bridgework and other aids; and
- Repairing dentures.

Dental technicians differ from dental prosthetists in two vital respects:

- Dental prosthetists have additional skills not held by dental technicians, and whilst dental prosthetists may undertake dental technician work, the reverse is not the case; and
- Dental prosthetists may deal directly with the public, whereas dental technicians are employed or contracted by registered dentists or registered dental prosthetists.[422]

In correspondence from the Australian Commercial Dental Laboratories Association (WA), the Committee was advised that lack of regulation and registration of dental technicians might pose a risk to public safety.

> *…if dental technicians are not regulated they are therefore not required to attain and maintain a level of competence which includes knowledge of infectious control, both the public and the operator, acting as a dental technician, will be put at risk.*[423]

The Association further commented:

> *At present there are no guidelines under the Dental Act or the Dental Prosthetists Act as to what actually constitutes a dental technician. This means that anyone can operate as a dental technician – notwithstanding that he may not have completed a recognised apprenticeship, or have worked under the direction of a qualified dental technician or dentist at any time.*
>
> *Currently dental technicians in Western Australia are trained through an apprenticeship*

420 *Dental Prosthetists Act 1985*, ss17-22 and ss24-29.

421 Department of Health, Submission, 18 October 2001, p44.

422 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Briefing, 20 March 2002.

423 Correspondence from Ian Warman, President, Australian Commercial Dental Laboratories Association (WA), 1 February 2002.

> *system and standards, until recently, have been below that of the rest of Australia …The "Diploma of Dental Technology" is at AQF level 5 and is in line with the rest of Australia but dental technicians trained in Western Australia are not recognised anywhere else in Australia because they are not registered.*[424]

The Australian Health Ministers' Advisory Council (AHMAC) Working Party on Mutual Recognition of Health Occupations in its review of dental technicians stated:

> *There are two possible ways by which a patient might be adversely affected by a dental technician's treatment. The first would be the effect of poorly constructed dentures on a patient's oral health. The second would be the transmission of infections from the dental technician to the patient via dentures or dental fittings.*
>
> *It is considered that these risks are minimal for the following reasons:*
>
> - *Both the quality and sterility of dental prostheses are the responsibility of the dental prosthetist or dentist, either of whom is required to be registered; and*
> - *There is no significant evidence of cases of harm to individuals through the work of dental technicians in those jurisdictions in which the occupation is not regulated.*
>
> *The public is adequately protected from possible adverse consequences of a dental technician's product because:*
>
> - *Dental technicians do not have direct contact with the public; and*
> - *The quality of the dental technician's work is the responsibility of practitioners who are required to be registered.*[425]

The Working Party concluded that the need for statutory regulation of dental technicians on public health and safety grounds had not been established.[426]

Ms Suzanne McKechnie, General Manager, General Health Purchasing, advised the Committee that the Department of Health's current stance on this matter is consistent with the AHMAC Working Party findings.[427] Ms McKechnie also advised that:

- Dental technicians are currently regulated in New South Wales, Queensland, South Australia and the Australian Capital Territory;
- Until recently, dental technicians were regulated in Victoria, but following a review of Dental Regulation Legislation, regulation was withdrawn because unregulated practitioners were considered to pose minimal risk to the public;
- Standards of academic qualification can be achieved without registration, as dentists and dental prosthetists can screen out unqualified practitioners; and

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424 Correspondence from Ian Warman, President, Australian Commercial Dental Laboratories Association (WA), 1 February 2002.

425 Australian Health Ministers' Advisory Council Working Party on Mutual Recognition of Health Occupations, 1993, pp8-9.

426 *Ibid*.

427 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Briefing, 20 March 2002.

- All dental technicians employed in the public sector have the necessary qualifications and training.[428]

8.1.5 Hospitals (Administration of Public Hospitals) Regulations 1940 (WA)

Regulation 10 (model by-law 10) of the *Hospitals (Administration of Public Hospitals) Regulations 1940* (WA) provides:

(1) No patient, except maternity cases, shall be admitted to a public hospital unless ordered by a medical practitioner. Provided that, in cases of emergency, the matron may admit any patient to the public hospital, but such cases shall be referred to a medical practitioner as early as possible after admission.

An implication of this Act is that dental practitioners can not admit patients to public hospitals. Therefore patients who are admitted to hospital for dental procedures under general anaesthesia must be admitted by a medical practitioner (e.g. anaesthetist).

8.1.6 Review of Western Australian Health Practitioner Legislation

In 2001, the Department of Health completed a review of Western Australian Health Practitioner Legislation, including the *Dental Act 1939* and the *Dental Prosthetists Act 1985*. In relation to dentistry the significant recommendations were:

- The *Dental Act 1939* and the *Dental Prosthetists Act 1985* will be merged into a single Act to regulate all dental practitioners;
- The current restriction of school dental therapists to the public sector will not be progressed to the new legislation;
- Dental prosthetists will be permitted to construct and fit partial dentures subject to meeting training requirements as approved by the Dental Board;
- The current restriction on the number of dental therapists and dental hygienists that may be employed by a dentist will not be progressed to the new legislation; and
- Current restrictions on ownership of dental practices will not be progressed to the new legislation.[429]

The State Government approved the review recommendations and legislation is currently being drafted. Amendments to legislation will result in the following changes in clinical practice:

- There will be no restriction on the number of dental hygienists and dental therapists employed by dentists;

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428 Suzanne McKechnie, General Manager, General Health Purchasing, Department of Health, Briefing, 20 March 2002.

429 Department of Health, Submission, 18 October 2001, p44.

- Dental Prosthetists (with appropriate training) will be able to provide partial dentures direct to the public; and
- School Dental Therapists will be able to undertake an expanded range of treatments on school children outside the SDS.[430]

8.2 THE DENTAL WORKFORCE

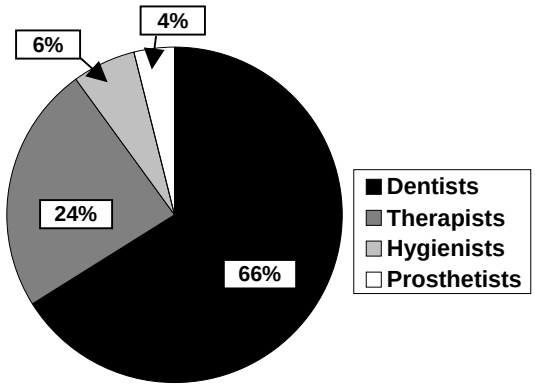
8.2.1 Workforce profile

The dental workforce is made up of dentists and dental auxiliaries. Figure 8.1 below shows the relative proportion of dentists to dental auxiliaries. In Western Australia, as with other States and Territories, dentists are the largest component of the dental workforce, followed by dental therapists, hygienists and then prosthetists.

When considering the supply of dental services, the role of auxiliaries is generally not included, partly because of the relatively low number of auxiliaries in comparison to dentists, and partly because auxiliaries cannot operate to the exclusion of dentists. In other words, the supply of dentists generally has the greatest impact on the overall provision of dental services.

Figure 8.1

Relative proportion of dentists and dental auxiliaries in the dental workforce in Western Australia. Data obtained from the AIHW.[431]



Finding 41

The supply of dentists has the greatest impact on the overall provision of dental services, partly because of the relatively low number of auxiliaries compared to dentists and partly because auxiliaries cannot operate to the exclusion of dentists.

430 Department of Health, Submission, 18 October 2001, p44.

431 Derived from information provided by the Australian Institute of Health and Welfare, February 2002. Based on surveys of registered dental professionals in 2000.

8.2.2 Roles of various dental practitioners

There is some common ground between the services provided by dentists and dental auxiliaries. In some instances, there is an overlap of services (where the auxiliary can be said to substitute for the dentist) and in other instances there is an additional volume of service (where the auxiliary can be said to complement the dentist). A schematic representation of the roles of various dental professionals is shown in Figure 8.2 below.[432]

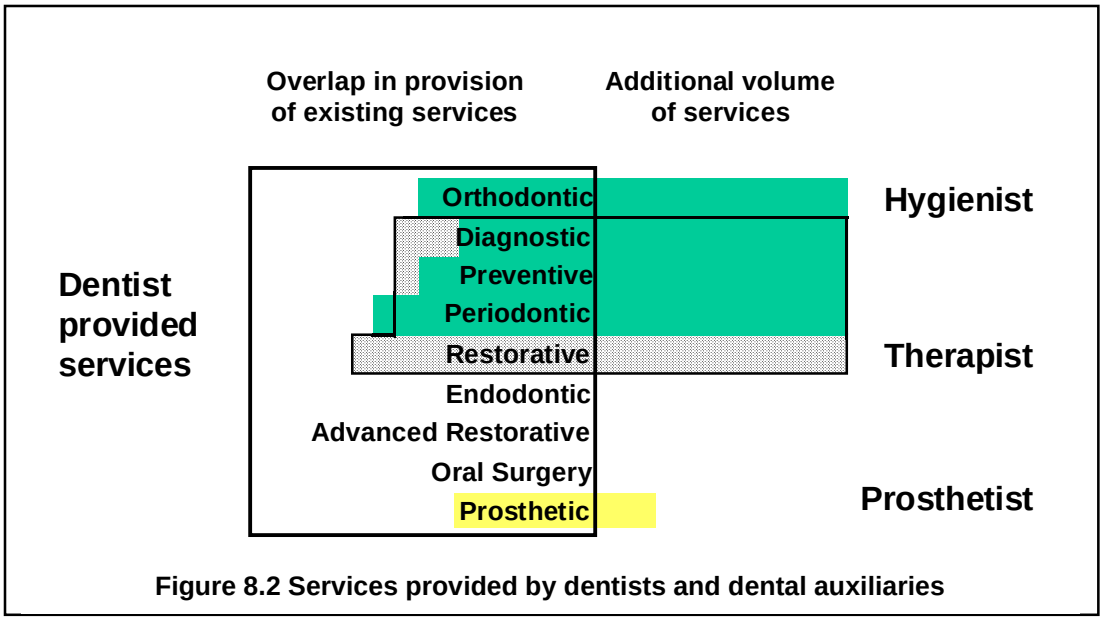


Figure 8.2 Services provided by dentists and dental auxiliaries

The range of services provided by dentists and dental auxiliaries are tightly regulated by the *Dental Act 1939* and the *Dental Prosthetists Act 1985*. Although dental therapists and hygienists are able to perform a wide range of services, pursuant to the *Dental Act 1939*, these services must be performed under supervision and following consultation with a dentist.

In practice, the level of supervision and consultation between therapists/hygienists and the dentist may be minimal. Consultation need not be face to face, it may be over the phone.[433] Technically, all diagnoses should be performed by a dentist. However, it is generally accepted that if a therapist is able to supply the dentist with a list of symptoms and if the therapist consults with the dentist to confirm the diagnosis, the treatment can be performed.[434]

The *Dental Act 1939* imposes certain clearly defined restrictions on dental therapists and hygienists. The DTHA (WA) provided the Committee with some examples of the types of procedures that therapists can and can not perform.

Therapists can:

- provide pain relief for adults where the pain is caused by a gum condition;

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432 Source: AIHW Dental Statistics and Research Unit, 1998b, p102.

433 Jennine Bywaters, Dental Therapy and Hygiene Association (WA), Transcript of Evidence, 12 November 2001, pp5-7.

434 *Ibid.*

- remove part of the nerve of an adult tooth;
- replace a tooth that has fallen out and splint teeth together;
- attach temporary replacement material to cover exposed dentine in a broken tooth; and
- adjust occlusions.

Therapists can not:

- drill into permanent teeth;
- perform surgical procedures;
- extract permanent teeth;
- prescribe antibiotics; and
- perform complex restorative work, (e.g. crowns).[435]

School dental therapists perform a different range of duties to those performed by dental therapists involved in adult dental care. Susan Binet of the DTHA (WA) informed the Committee of the range of duties performed by school dental therapists:

> *The duties that we perform are examination, caries detection, treatment of caries in permanent and deciduous teeth, extraction of deciduous teeth, radiographs, impressions, local anaesthetic and pulpotomies. Basically, the children come in for their check-up by the dental therapist, who decides on the treatment. The children come back for further visits, and the therapists do the treatment. If a child needs a permanent tooth extracted or referral to an orthodontist the dentist attends to them. However, generally a dental therapist provides their treatment.*[436]

Ms Binet further advised the Committee that school dental therapists have considerably more autonomy than dental therapists working in private practice, or in adult clinics. All children must be seen by a dentist at the initial examination and four-yearly thereafter, but generally the therapist runs the clinic and provides the whole treatment for a child.[437]

By the end of their school careers, most children have their full complement of adult dentition. However, the extensive range of duties described above can only be performed by school dental therapists whilst children are enrolled in the SDS. Beyond school age, many of the dental procedures once performed by school dental therapists can no longer be performed by dental auxiliaries such as therapists or hygienists.

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435 Johanna Korczynskyj and Jennine Bywaters, Dental Therapy and Hygiene Association (WA), Transcript of Evidence, 12 November 2001, pp5-8.

436 Susan Binet, Dental Therapy and Hygiene Association (WA), Transcript of Evidence, 12 November 2001, p3.

437 *Ibid.*

Finding 42

Pursuant to the *Dental Act 1939*, dental therapists, dental hygienists and school dental therapists can perform a wide range of dental procedures under supervision and following consultation with a dentist, however, in practice, the level of supervision and consultation may be minimal.

8.2.3 Recruitment profile for dentists

Dentists are recruited via three different pathways. The most common pathway is via graduation of Australian citizens or permanent residents from Australian universities. Alternatively, overseas-qualified dentists migrate to Australia under a range of skill, family re-union or refugee categories. Overseas-qualified dentists from the United Kingdom, Ireland and New Zealand gain access to practise under reciprocal registration agreements. Overseas-qualified dentists from all other countries are required to pass the ADC examinations.

By far the largest proportion of dentists (80-85 per cent) enters the workforce each year through graduation from Australian universities.[438] Dental course completions decreased from a high of 2.0 per 100,000 population in the early 1980s to a level of 1.0-1.5 per 100,000 by the mid 1980s. Completion rates have remained at this low level since that time.[439] The total number of newly graduated dentists to enter the workforce has been in the range of 200-250 in the last 10 years. University of Western Australia graduates account for around 10 per cent of the total number of new Australian graduates each year.

Recruitment of dentists through overseas migration has varied markedly in the past two decades, ranging from almost 0 to 1.0 per 100,000 population. Net migration from UK, New Zealand and Ireland usually accounts for less than 10 per cent of recruitment into the dental workforce.[440]

Dentists entering the workforce through ADC examination passes account for up to 10 per cent of the total annual recruitment.[441] Whilst the number of passes each year has remained relatively stable since the late 1980s, the number of applicants has varied markedly, as has the pass rate, which has varied between 35 per cent and 70 per cent.[442]

Finding 43

The majority of dentists are recruited into the dental workforce via graduation from Australian universities. A small number of overseas-qualified dentists also gain registration each year through reciprocal registration agreements, or by passing the Australian Dental Council (ADC) examinations.

438 AIHW Dental Statistics and Research Unit, 1998b, pp94-98.
439 *Ibid.*
440 *Ibid.*
441 *Ibid.*
442 *Ibid.*

8.2.4 Projected changes in the dental workforce in the coming years

Based on past figures, the DSRU prepared a series of projections on the dental workforce over the next 30 years. It was estimated that if recruitment and loss remained unchanged, the rate of dentists per 100,000 population would decrease from 43 in the early 1990s to approximately 30 in 2031.[443]

In 1992 the ADA Dental Health Services Committee established a future target of 36.8 dentists per 100,000.[444] The average rate of practising dentists in OECD countries was 56.6 per 100,000 population in 1994, 30 per cent higher than the rate in Australia at the time.[445] A rate of 36.8 practising dentists per 100,000 population would drop Australia from its already low standing of 19th of 24 OECD countries to 22nd on the list, ahead of only Turkey and Portugal.

Any reduction in the number of practising dentists would have the greatest impact in rural and remote communities. In Australia as a whole in 2000, the rate of practising dentists in non-capital locations was less than 60 per cent of the rate in capital cities. In Western Australia, the rate in non-capital locations was slightly lower, at just 52 per cent of the rate in Perth.[446]

Despite the well-recognised shortage of dentists throughout Australia, until recently, the website of the Australian Dental Association carried the following statement under the banner of *Dentistry in Australia*:

> *Opportunities for employment in the dental profession in Australia are extremely limited, as there is an over-supply of dentists in all States.*[447]

This statement is clearly at odds with the perceptions of consumers and service providers, and sends an inaccurate message to overseas dentists. Such a statement has the potential to discourage overseas-trained dentists from seeking work in Australia.

The ADA has as its aim "*the encouragement of the health of the public and the promotion of the art and science of dentistry.*" [448] The Association has a responsibility to the Australian public to ensure that its website provides an accurate reflection of the status of dentistry in Australia.

The ADA (WA) openly acknowledged in its submission to this inquiry that there is a shortage of dentists in Western Australia, and that rural and remote areas are worst affected.

The above statement was removed between 16 October and 9 November 2001, although it is not clear what prompted its removal.

443 AIHW Dental Statistics and Research Unit, 1998b, p100.
444 *Ibid*.
445 AIHW Dental Statistics and Research Unit, 1997b, p17.
446 Information provided by the Australian Institute of Health and Welfare, February 2002.
447 Australian Dental Association, http://www.ada.org.au/dentistry.htm, 16 October 2001.
448 Australian Dental Association, http://www.ada.org.au/dentistry.htm, 9 November 2002.

8.3 THE USE OF OVERSEAS-TRAINED DENTISTS

8.3.1 Gaining registration to work in Australia

Dentists with a Bachelor degree obtained from the United Kingdom or Ireland may have qualifications that are acceptable to Dental Registration Boards for immediate registration.[449]

Under the Trans-Tasman Mutual Recognition Arrangement (TTMRA) individuals registered or licensed to practise an occupation in New Zealand are entitled to practise the equivalent occupation in any Australian State or Territory and vice versa.[450]

If qualifications obtained overseas do not immediately meet Australian requirements, there are two options. The first is to complete an Australian dental degree course at an Australian university. The second option is to undertake the examination procedure conducted by the ADC.

8.3.2 The ADC examination process

Overseas trained dentists are eligible to undertake the ADC examination procedure if they have completed and passed a dental degree which included at least four years' full-time academic study at a university recognised by the ADC and are eligible for registration as a dentist in their country of training.

The examination procedure consists of three parts that must be taken sequentially:

- an Occupational English Test, which assesses reading, writing, speaking and listening skills;
- a Preliminary Examination - a multiple choice and short answer written examination designed to test the candidate's knowledge of the practice of dentistry and of clinical and technical procedures as they are practised in Australia; and
- a Final Examination - a clinical examination which is held over three to six days and examines conservative dentistry, treatment planning, oral surgery, oral diagnosis and radiology.[451]

Applicants are examined at the same level as that reached by recent graduates from Australian universities.

Candidates must pass the Occupational English Test before proceeding to the Preliminary Examination, which in turn must be passed before proceeding to the Final Examination.

The Occupational English Test and the Preliminary Examination may be taken at overseas venues or in any Australian State capital. The Final Examination is held only in Australia, usually twice a year. Candidates are allowed two attempts only at this Examination.[452]

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449 Australian Dental Council, http://www.dentalcouncil.net.au/noosr.html, 5 February 2002.
450 *Ibid.*
451 *Ibid*.
452 *Ibid*.

8.3.3 Western Australian proposal to the Australian Health Ministers' Conference, 1 August 2001

The possibility of introducing a scheme that utilises overseas-trained dentists to provide services in rural and remote locations was raised by Western Australia at the August 2001 Australian Health Ministers' Conference. The proposed scheme involves the restricted registration of dentists to provide services for a period of three to four years in a designated area of unmet need, in return for an alternative form of registration to the ADC examination process.

Some key features of the proposal were:

- The scheme would provide restricted registration in rural and remote areas to overseas-trained dentists with qualifications that have a historically high success rate in dentist registration exams;
- The scheme would only apply to rural and remote areas and not metropolitan areas of need (as designated by the State Minister);
- In return for a period of three to four years of service in a designated area of need within the State, overseas-trained dentists would have access to an alternative form of registration to the ADC examination process;
- Assessment processes would have to be sufficiently rigorous to ensure consistency through mutual recognition arrangements;
- The employer would provide supervision and training;
- Dentists so registered would be given restricted registration, restricting them to work as dentists within an area of need for a minimum of three to four years;
- Once registered, the overseas-trained dentist would be able to seek permanent residency (after two years);
- Normal requirements for gaining residency would apply;
- During the course of the three to four years of service, a dentist may relocate to another designated area of need within the State;
- A contract of service would apply once the dentist has been registered under the scheme; and
- On satisfactory completion of the three to four years of service, the overseas-trained dentist would be eligible for unrestricted registration requirements.[453]

All Health Ministers from other States agreed to support the development of a nationally consistent scheme, similar to the Overseas-Trained Doctors Program. In addition, the Ministers directed the AHMAC to establish a working group to progress the development and implementation of the scheme.

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453 Australian Health Ministers Conference Agenda Item Number 4.8, Originator Western Australia, 2001.

8.3.4 Attitudes toward the use of overseas-trained dentists

The ADA (WA) is strongly opposed to the use of overseas-trained dentists to meet the current shortage of dentists in rural and remote areas of Australia. The Association is opposed on numerous grounds, amongst them: concerns about the standard of care that overseas-qualified dentists would be capable of providing; potential lack of professional indemnity cover for provisionally registered practitioners; the cost and complexity of reparative procedures to rectify any treatment of an inadequate standard; and concerns about the professional and personal backgrounds of applicants. Excerpts from the Association's submission follow:

> *It is imperative to emphasise that patients in rural and remote areas are entitled to a quality of dental care at least as high as that offered to their city counterparts. A compromise in this is totally unacceptable to the profession. The ADA (WA Branch) is of the firm opinion that under no circumstances should any attempt be made to adopt a two-tiered system of dental care in WA. Under no circumstances should rural and remote communities be forced to accept sub-standard dental care and so be treated as second class citizens.*
>
> *The concept of overseas-trained dentists who do not meet current Dental Board of WA standards being allowed to practise in rural communities is a dangerous one placing members of rural communities at real risk.*
>
> *The Dental Board of WA has set standards that it deems necessary to meet the needs of the State's citizens. To allow persons with lesser qualifications to carry out such procedures is an insult to rural communities and indeed can place their very lives at risk … State Dental Boards determine appropriate registration standards that are reflected in the Australian Dental Council's Qualifying Exam, which is held regularly to determine the fitness of overseas-qualified dentists to practise in Australia. Therefore, one is forced to ask why any overseas-trained dentist seeking such access to practise in Western Australia is not prepared to sit this examination. One must, consequently have reservations about his or her ability clinically, scientifically or in the fundamental area of communication skills.*
>
> *An important issue to be considered in this regard is the likely unavailability of professional indemnity cover for such practitioners under provisional registration provisions. Any dentist prepared to practise without professional indemnity is not only foolish, but also a very real danger to the community that he/she serves. The issue of legal responsibility for the actions of a sanctioned but only provisionally registered practitioner must be resolved before the commencement of any such program.*
>
> *A fact not widely appreciated in relation to dental care, is that remedial and reparative dentistry (following treatment of an inadequate standard) is very much more complicated than the original treatment. This is because of the irreversible and invasive nature of most aspects of dentistry. Consequently, the possibility of a major escalation of costs by utilising inadequately trained practitioners in remote areas must be very carefully appraised. The cost of any pain and suffering, of course, cannot be calculated.*
>
> *Should a scheme involving overseas-trained dentists be considered, this Association believes it be imperative that there be a number of opportunities to check on the credentials of the applicant's clinical and personal background. Such an applicant, we believe, should be willing to permit a full investigation of his personal background as well as his professional background and clinical experience. Details of his professional indemnity history should also be sought. It is very obvious that an appointment in a remote town in Western Australia could provide an opportunity for a person with a past that he/she wished to hide, to re-enter dental*

> *practice. The implications of this and its effect on the remote community could be catastrophic.*[454]

In general, other sectors of the Western Australian community gave in-principle support for the use of overseas-trained dentists.

Dental Services offered full support for the use of overseas-trained dentists. With regard to concerns about substandard dental care, Mr David Neesham, Director, made the following comments:

> *The possibility of a reduction in standards was raised. That is nonsense. We have a methodology that utilises the Australian Dental Council's assessment as the basis for recruiting these people. We could use the exam that overseas dentists have sat for the past 30 years as a basis to identify qualifications that are historically successful. That could be used to broaden the range of people we see working in this situation. We could set an 80 per cent pass rate at the first attempt at the ADC exam. Any qualification that met that requirement - as long as a reasonable number of dentists sat the exam - would be a reasonable basis. There is no way that that would diminish the standard of dental care. I know that point was made, but it is a fallacy.*[455]

The DTHA (WA) gave qualified support for the proposal, although expressing some reservations about competency of overseas-trained dentists.[456]

The Goldfields Esperance Development Commission made the following comments:

> *While insistence on 'professional standards' is appropriate, GEDC believes that those bodies regulating the dental profession in Australia should allow dentists with qualifications from selected overseas countries 'concessional right of practice' in certain rural and remote locations for a given period, on condition that those dentists undertake study towards the ADC conversion examination during that time. On passing the examination, and on completing the 'bonded term' in a rural/remote location, the dentist would then be eligible to work anywhere in Australia.*[457]

Finding 44

The Australian Dental Association (WA) is strongly opposed to the use of overseas-trained dentists to provide dental services in areas of unmet need in return for an alternative form of registration to the ADC exam. The Association's website actively promoted the view that "*Opportunities for employment in the dental profession in Australia are extremely limited, as there is an oversupply of dentists in all States*." Other sectors of the Western Australian community have given in-principle support for the use of overseas-trained dentists.

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454 Australian Dental Association (WA), Submission, 15 October 2001, pp10-15.

455 David Neesham, Director, Perth Dental Hospital and Community Dental Services, Transcript of Evidence, 12 November 2001, p7.

456 Dental Therapy and Hygiene Association (WA), Submission, 9 October 2001, p3.

457 Goldfields Esperance Development Commission, Submission, 12 October 2001, p13.

8.3.5 Experiences with an analogous program for overseas-trained doctors

The Overseas Trained Doctors Program has been operating in Western Australia since October 1999. The scheme was introduced to attract suitably qualified overseas-trained doctors to areas of rural and remote Western Australia that were experiencing problems in attracting or retaining doctors.

In return for agreeing to practise in a district of workforce shortage for five years, overseas-trained doctors are eligible for permanent residency and a Medicare provider number restricted to the agreed rural or remote location. At the end of the five years, these doctors are entitled to practise anywhere in Australia as a general practitioner (GP) and have access to Medicare.[458]

Overseas-trained doctors do not have to sit the Australian Medical Council exam if they have equivalent postgraduate qualifications allowing automatic membership of the Royal Australian College of General Practitioners (RACGP), or relevant experience as a GP that will allow them to become Fellows of the RACGP within two years.[459]

While both the State and the Commonwealth have an interest in the outcome of the program, the Western Australian Centre for Rural and Remote Medicine (WACRRM) at UWA coordinates all aspects of recruitment and retention of GPs.

For the doctor to be registered by the West Australian Medical Board under the scheme, a location must fall within an 'area of unmet need' as defined by the State Minister for Health. The location must also be within a Commonwealth 'district of workforce shortage'.[460]

Since the introduction of the Overseas Trained Doctors Program in Western Australia, 50 doctors have entered the scheme, with more than 40 currently working in rural locations around the State. With fewer vacancies now available for overseas-trained doctors, the recruitment process is more selective than was initially possible. Currently, only doctors who have post-graduate qualifications in general practice, or who have special skills that are needed in specific areas of the State are accepted.[461]

The Committee recommends a stronger State commitment to delivery of dental services to regional, rural and remote areas of the State, particularly with regard to adult dental services.

Recommendation S7

The Committee fully supports the use of overseas-trained dentists to alleviate the current shortage of dentists in regional, rural and remote areas of Western Australia, and encourages the State to take the necessary steps to expedite the implementation of this scheme.

458 West Australian Centre for Rural and Remote Medicine, http://www.wacrrm.uwa.edu.au/wacrrm.nsf/docs/4UK8SJ?OpenDocument, 5 February 2002.

459 *Ibid.*

460 *Ibid*.

461 *Ibid.*

CHAPTER 9 SPECIFIC COMMUNITY GROUPS WHO ARE AT RISK OF POOR LONG-TERM DENTAL HEALTH

Although all people living in regional, rural and remote areas of Western Australia are disadvantaged in terms of access to dental services, the Committee received evidence to suggest that a number of sub-groups within the community are at a greater disadvantage to others.

The groups considered to be at particular risk of poor long-term dental health are:

- Indigenous Australians;
- Low-income earners;
- Aged people; and
- Some children.

A variety of factors were considered to predispose these particular community groups to poor dental health.

9.1 INDIGENOUS AUSTRALIANS

The Committee received a total of 46 written submissions, 16 of which identified Indigenous Australians[462] as being at risk of poor long-term dental health.

Approximately 13 per cent of the total West Australian population live in rural or remote regions of the State. As documented in earlier chapters, all people living in non-urban locations are at a disadvantage to their urban counterparts due to reduced access to dental services. People of Aboriginal or Torres Strait Islander descent are at particular risk, simply by virtue of the fact that a disproportionately high number (65 per cent) reside in rural or remote regions of Western Australia.[463] In Australia as a whole, one in five Aboriginal people, compared with only one in one hundred non-Aboriginals, live in very remote locations.[464]

9.1.1 Oral health status of Indigenous Australians

Indigenous people, regardless of where they live, have poorer oral health than non-Indigenous people. Indigenous adults have a higher mean number of decayed teeth (3.56 compared to 1.94 for non-Indigenous adults) and are more likely than non-Indigenous adults:

- to be edentulous (16.3 per cent *versus* 10.9 per cent);
- to visit a dentist for a problem (63.7 per cent *versus* 49.7 per cent);

462 The term 'Indigenous' includes people of Aboriginal and Torres Strait Islander descent. The term 'Aboriginal' specifically refers to Aboriginal people or communities.

463 Steele L, Pacza T and Tennant M, 2000, pp22-28.

464 Australian Bureau of Statistics and Australian Institute of Health and Welfare, 2001, p16.

- to experience considerable difficulty paying a $100 dental bill (33.5 per cent *versus* 14.1 per cent);
- to suffer from periodontal disease (25.4 per cent *versus* 11.6 per cent); and
- to have received an extraction during their most recent dental visit (50.6 per cent *versus* 21.4 per cent).[465]

Oral health of Aboriginal children is poorer than that of non-Aboriginal children. At the age of five years, Aboriginal children have twice the number of dmft (decayed, missing or filled deciduous teeth) as non-Aboriginal children of the same age. This disparity continues until age eight, beyond which the progressive replacement of deciduous with permanent teeth reduces the number of deciduous teeth at risk for both groups. Beyond age seven, Aboriginal children have significantly more DMFT (decayed, missing or filled permanent teeth).[466]

Indigenous people are disadvantaged not simply because they are more likely to live in rural and remote communities, but because many facets of modern Indigenous Australian lifestyle increase the risk of poor oral health. Some of the factors that contribute to poor oral health in Indigenous communities are outlined below.

9.1.2 Poor nutrition

The traditional Aboriginal diet was generally high in complex carbohydrates, protein and micronutrients (vitamins and minerals) and low in sugar.[467] The switch to a 'European' diet has led to a dramatic increase in consumption of refined sugars and fat in many rural and remote Aboriginal communities. A diet rich in sugar products has long been known to promote the development of dental caries (decay).

Aboriginal people living in remote communities are at particular risk of poor nutrition. In comparison to larger rural towns and urban centres, there is an extremely limited range of foods stocked in remote community foodstores. Perishable goods such as dairy foods, fruit and vegetables are often in short supply.[468]

As a result of the limited range of nutritional foods available, the diet in remote Aboriginal communities tends to be high in energy and sugars, moderately high in fat and relatively low in complex carbohydrates, fibre and nutrients. Intake of fresh foods, particularly fruit and vegetables, is generally very low.[469]

A 1985 study of dietary patterns in Aboriginal children in the Kimberley showed that bread and damper (usually with butter, and often with jam or honey) together with tea (usually containing large quantities of powdered milk and sugar) were the most frequently eaten foods. Limited quantities of 'bush-foods' were eaten. Even in remote, traditionally oriented communities, foods purchased at the community foodstore (flour, sugar, sweets and fats) accounted for most of the energy intake. [470]

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465 AIHW Dental Statistics and Research Unit, 2000a, pp1-3.
466 AIHW Dental Statistics and Research Unit, 1998b, pp14-16.
467 National Health and Medical Research Council, 2000, p37.
468 *Ibid*, p59.
469 *Ibid*, p42.
470 *Ibid*, p43.

In 1982 an estimate of the sugar consumption of Groote Eylandters (a remote Aboriginal community in the Northern Territory) was 90kg per person per year, more than twice the Australian average.[471] Current data from Aboriginal communities following a traditional lifestyle corroborate these earlier findings, with the incidence of dental caries being considerably lower than in communities where mostly European foods are consumed. [472]

In addition to high dietary sugar intake, malnutrition is relatively common in Aboriginal children, making them susceptible to infections. Susceptibility to infection, coupled with poor oral hygiene, leads to a higher risk of periodontal disease. Widespread mild to moderate malnutrition in children has been documented in remote areas of northern Western Australia. In one study from the Kimberley region, 24 per cent of children had inadequate nutritional levels.[473]

High food prices also contribute to poor nutrition in remote communities. Costs for handling, freight and storage of goods are high. A 'market basket' survey compared the cost of a basket of food purchases for a family of five for two weeks in Perth and numerous regional centres. The cost in Perth was a little over $300, compared with $380-$580 in Kimberley community stores, a little under $500 in Pilbara and Ngaanyatjarra lands community stores and around $420 in a Goldfields community store.[474]

Consumption of alcohol and tobacco contribute to overall nutritional status. As well as a direct effect on nutrient intake, the use of alcohol and tobacco can direct substantial amounts of money away from the purchase of food. One study found that 50 per cent of resources spent in one remote Aboriginal community were on tobacco and alcohol.[475]

9.1.3 Low income

In addition to high food costs, low incomes contribute to the necessity for Indigenous people to spend a large percentage of their incomes on food. Increases in the Remote Area Allowance have not kept up with inflation. The allowance in the Kimberley region falls well short of the differential in food costs between that region and urban areas.[476]

In 1996, the median weekly income for Indigenous males aged 15 years and over was $189, compared with $415 for non-Indigenous males. Government payments were the main source of income for 54.9 per cent of the Aboriginal population, 8.5 per cent reported their main income was through the Community Development Employment Program and 10.7 per cent reported no income at all. [477]

A study in a central Australian Aboriginal community showed a close relationship between dietary quality and payday. Meat, fruit and vegetables were included in the diet after payday, but were usually absent for at least several days before the next payday.[478]

The combined effect of having a low income and living in a rural or remote location on oral health and access to dental services is addressed in further detail in section 9.2 below.

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471 Kailis DJ, 1982, pp25-30.
472 Martin-Iverson N, Pacza T, Phatouros A and Tennant M, 2000, pp17-20.
473 Gracey M, Spargo RM, Bottrell C, Hammond K, Mulholland K and Valentine J, 1984, pp506-508.
474 National Health and Medical Research Council, 2000, p58.
475 *Ibid*, p64.
476 *Ibid*, pp54-55.
477 *Ibid*.
478 *Ibid*, p43.

9.1.4 Lack of access to fluoridated water

Remote areas of Western Australia generally do not have artificial water fluoridation. For the many Aboriginal communities who live in remote areas, natural water fluoride levels are too low to offer protection against dental caries. There are some Aboriginal communities where caries prevalence is low, corresponding to areas where high levels of fluoride in the water have provided some protection.[479]

Communities in general are greatly disadvantaged by lack of access to fluoridated water. The overall impact of fluoride on oral health is addressed in further detail in Chapter 5.

9.1.5 Poor oral hygiene

The poor oral health status of Aboriginal people is partly attributed to a general lack of oral hygiene, such as not brushing teeth with fluoridated toothpaste after meals. Poor oral hygiene practices are generally attributed to a lack of awareness of the importance of good oral health.

A recent report by the Legislative Council Standing Committee on Estimates and Financial Operations identified lack of education and awareness of good oral health as a major contributing factor to the poor oral health of Aboriginal people in the Kimberley region. The report recommended that:

- Dental health education programs aimed at preventing dental disease, including dental health instruction and daily brushing, be implemented immediately; and
- The Department of Health expand existing school and community based health education programs to incorporate dental health education programs.[480]

9.1.6 Medical conditions and oral health

There are two medical conditions, diabetes mellitus and rheumatic fever, which significantly impact on the oral health of Indigenous communities.

9.1.6.1 Diabetes mellitus

Diabetes has the potential to significantly increase the risk of periodontal disease and dental caries. Epidemiological data suggest that prevalence of diabetes is between 10 and 30 percent among Indigenous adults, at least two to four times higher than that of the non-Indigenous population. The 1994 National Aboriginal and Torres Strait Islander Survey reported that diabetes was more prevalent in Indigenous people living in rural areas.[481]

A 1987 study in the Kimberley region reported that 8-19 per cent of Aborigines, compared with 2.3 per cent of non-Aborigines, suffered from diabetes.[482] A more recent study found that glucose tolerance improved and an average of 8kg was lost over a period of seven weeks in an Aboriginal community that reverted to a traditional lifestyle.[483]

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479 Martin-Iverson N, Pacza T, Phatouros A and Tennant M, 2000, pp17-20.

480 Report of the Standing Committee on Estimates and Financial Operations, 2000, p14.

481 Australian Bureau of Statistics, 1996, p6.

482 Gracey M and Spargo RM, 1987, pp200-204.

483 O'Dea K, 1991, pp258-264.

Within Aboriginal communities, diabetes occurs most commonly in people aged over 30 years. In some Aboriginal communities up to one in three people over the age of 35 have diabetes.[484]

9.1.6.2 Rheumatic fever

The rate of rheumatic fever amongst Australian Indigenous communities is one of the highest in the world. Rates of the disease in developed countries vary between 0.002 to 0.005 per 1,000 and in developing countries from 0.05 to 1.0 per 1,000. In Western Australia, estimates ranged from 2.3 to 3.5 per 1,000 amongst Aboriginal school children.[485]

Rheumatic fever is initiated by bacterial infections and can cause damage to the heart valves. In a person who has had rheumatic fever, bacterial endocarditis (inflammation of the inner layer of the heart) may arise from oral bacteria and can occur through dental procedures.[486]

The unusually high rates of rheumatic fever dictate that additional precautions must be taken by dental professionals working in Indigenous communities.

9.1.7 Cultural barriers

Lack of access to culturally appropriate health services can act as a barrier to Aboriginal people, particularly in remote communities. The willingness of Aboriginal people to access health services, including dental services, may be affected by such factors as community control of the service, the gender of health service staff, and the availability of Aboriginal staff, particularly where proficiency in spoken and written English is limited.[487]

Bega Garnbirringu Health Services, the Aboriginal community controlled health service in Kalgoorlie-Boulder, recently established a culturally appropriate dental health service. An Aboriginal healthworker works alongside the dentist and as well as providing clinical support, facilitates a culturally appropriate service by putting clients at ease and interpreting cultural issues and Aboriginal language, thereby assisting the dentist to relate to clients.[488]

Finding 45

Indigenous people are at risk of poor long-term dental health simply by virtue of the fact that they are more likely than non-Indigenous people to live in rural or remote communities. Many facets of modern Indigenous lifestyle further increase the risk of poor long-term dental health.

9.2 LOW-INCOME EARNERS

The Committee received six submissions that identified low-income earners in regional, rural and remote communities as being at risk of poor long-term oral health.

484 O'Dea K, 1991, pp258-264.
485 Patten BR, 1981, pp11-15.
486 Martin-Iverson N, Pacza T, Phatouros A and Tennant M, 2000, pp17-20.
487 Ivers R, Palmer A, January S and Mooney G, 1997.
488 Bega Garnbirringu Health Services Aboriginal Corporation, Submission, 4 October 2001, p16.

9.2.1 Oral health and access to dental services for low-income earners

There is a well-documented link between low income and poor oral health. A recent study by the AIHW Dental Statistics and Research Unit compared oral health and access to dental services for 'deprived' individuals (those who lived in the most disadvantaged areas and whose household income was below $20,000) and 'privileged' individuals (those who lived in affluent areas and whose household income exceeded $40,000). Striking differences were identified between the two groups of individuals (see Table 9.1 below).

Table 9.1

Oral health status, perceived needs and dental treatment patterns in deprived and privileged individuals. [489]

Oral health status, perceived needs and treatment patterns	Deprived	Privileged
Edentulous	31%	1%
Visited a dentist in the preceding 12 months	46%	69%
Usually visit a dentist less than once in two years	39-51%	5-16%
Mean number of extractions in preceding 12 months	0.6	0.2
Usually visit a dentist for a problem	70%	34%
Avoided a dental visit in the past 12 months due to cost	37%	14%
Have a lot of difficulty paying a $100 dental bill	37%	4%
Perceived need for a check-up at time of interview	22%	35%
Perceived need for treatment at time of interview	31%	18%

Possession of a government concession card is a useful index of income status. The AIHW, in its publication *Australia's Health 1996*, reported that for cardholders who used publicly funded dental services, only 65.9 per cent of those with problems and 47.5 per cent of those going for a check-up were seen within one month. By contrast, for non-cardholders who received private dental treatment, 96.4 per cent and 98.0 per cent were seen within one month for check-ups or problems respectively. Cardholders who were able to access private dental treatment (whether subsidised or not) were similar to non-cardholders. A wait of 12 months or more was reported by 6.2 per cent of cardholders with problems and 21.1 per cent of cardholders who were seeking a check-up. No non-cardholders or cardholders who accessed private treatment had to wait for 12 months or longer.[490]

9.2.2 Low income earners in regional, rural and remote locations

The above data do not distinguish between urban and non-urban dwellers. However, there is also evidence to suggest that living in rural and remote communities is a further impediment to good oral health for low-income earners. A recent report by the AIHW Dental Statistics and Research Unit compared access to dental care for urban and non-urban dwellers by way of telephone interviews. As well as reporting findings for a sample that was representative of the population as a whole, separate findings were reported for a sub-group of interviewees who possessed government concession cards.

Cardholders who lived in remote locations had poorer oral health and more problem-oriented visiting patterns than cardholders who lived in urban locations. In general, rural dwellers were

489 AIHW Dental Statistics and Research Unit, 2001b, pp1-3.

490 Australian Institute of Health and Welfare, 1996, p40.

intermediate between urban and remote dwellers. Specific differences are listed in Table 9.2 below.

Table 9.2

Oral health status and dental treatment patterns in Government concession cardholders living urban, rural and remote regions. [491]

Oral health status and treatment patterns	Urban	Rural	Remote
Visited a dentist in the preceding 12 months	55%	50%	41%
Last visited a dentist more than 5 years ago	12%	16%	17%
Had an extraction at most recent dental visit	20%	25%	29%
Received a filling at most recent dental visit	54%	50%	29%
Received a scale and clean at most recent dental visit	68%	53%	48%
Usually visit the dentist for a check-up	44%	35%	31%
Have a lot of difficulty paying a $100 dental bill	33%	31%	46%

These data clearly demonstrate that low-income earners in remote and rural communities have poorer oral health and more problem-oriented dental treatment patterns than low-income earners who live in urban areas.

Finding 46

Low-income earners are at risk of poor long-term oral health. Living in a rural or remote community further adds to the disadvantage experienced by low-income earners.

9.3 AGED PEOPLE

Many aged people are on low incomes, and are therefore subject to the disadvantages described for low-income earners. However, there are additional difficulties faced by aged people, particularly in rural and remote communities, that other community members may not have to deal with.

9.3.1 Oral health and access to dental services for aged people

The AIHW Dental Statistics and Research Unit examined oral health and access to dental services by age as part of the National Dental Telephone Interview Surveys (1994, 1995, and 1996). For the Australian population as a whole, the following figures were reported:

- 40.3 per cent of people aged 65+ were edentulous, compared to 14.2 per cent of people aged 45 – 64 and 1.8 per cent of people aged 25 – 44;
- People aged 65+ (61.6 per cent) and people aged 45 – 64 (61.0 per cent) were more likely than people aged 25 – 44 (53.5 per cent) to have visited a dentist in the previous 12 months; and

491 AIHW Dental Statistics and Research Unit, 1998a, pp39-50.

- People aged 65+ (27.5 per cent) were less likely than people aged 45 – 64 (48.0 per cent) or people aged 25 – 44 (40.0 per cent) to have private health insurance.[492]

The National Oral Health Survey of Australia 1987-88 revealed that dental caries and periodontal disease increased progressively with advancing age. People aged 65 and over had the highest DMFT Index, with an average of more than 20 affected teeth, and the highest Community Periodontal Index of Treatment Needs, with less than 20 per cent of people in this age-group having healthy gums, and more than 40 per cent showing evidence of advanced gum disease.[493]

A further breakdown of age data for people over 60 reveals that the percentage of people with complete tooth loss increases progressively with advancing age, whilst the percentage of people with private insurance decreases. Furthermore, more than one in four people aged 60+ with no natural teeth reported some difficulty when eating certain foods.[494]

9.3.2 Aged people in regional, rural and remote communities

Living in rural or remote communities further disadvantages aged people with regard to oral health and access to dental services. A comparison between aged people (65 years and over) in urban, rural and remote locations revealed a number of differences (see Table 9.3 below).

Table 9.3

Oral health status and dental treatment patterns of aged people living in urban, rural and remote locations.[495]

Oral health status and dental treatment patterns	Urban	Rural	Remote
Edentulous	37%	50%	43%
Visited a dentist in the preceding 12 months	65%	52%	44%
Last visited a dentist more than 5 years ago	9%	19%	19%
Usually visit the dentist for a check-up	52%	38%	34%
Had an extraction in the preceding 12 months	13%	13%	20%
Received a filling in the preceding 12 months	55%	57%	37%
Have private health insurance	30%	20%	23%
Have a lot of difficulty paying a $100 dental bill	13%	14%	31%

The Council on the Ageing identified three factors that contribute to aged people living in regional, rural or remote communities being at a greater disadvantage to other community members.

Aged people today do not have the advantage of having grown up with access to fluoridated water and preventive dental programs. A high proportion of this group is edentulous, but for those who have retained their own teeth, there is a higher level of need for dental services to maintain them.[496]

492 AIHW Dental Statistics and Research Unit, 1998a, pp14-24.
493 AIHW Dental Statistics and Research Unit, 1998b, p57.
494 AIHW Dental Statistics and Research Unit, 2000b, pp1-2.
495 AIHW Dental Statistics and Research Unit, 1998a, pp14-25.
496 Council on the Ageing, Submission, 12 November 2001, pp6-7.

Loss of mobility was also identified as a factor that disadvantages aged people living in regional, rural and remote communities. As people age, they are less likely to use their own cars. Lack of public transport in non-urban communities therefore poses a considerable barrier to accessing dental services.[497]

Reduced income was also cited as a significant impediment for aged people living in regional, rural and remote locations. In 1996-97, government pensions were the principal source of income for almost three-quarters of all households where the 'reference unit' was aged 65 or more. The Country Patients Dental Subsidy Scheme provides a 50 per cent subsidy for Pensioner Concession Card holders, and 75 per cent for those who also produce a statement of benefit from Centrelink. However, even the 25-50 per cent co-payment causes considerable difficulty for many pensioners.[498]

9.3.3 Aged people in residential care

There are 276 aged care facilities in Western Australia, with the capacity to house almost 12,000 people. Some 61 facilities, with around 1,700 available beds, are located in non-urban locations.[499]

Dental care is problematic for aged people living in residential care facilities, particularly those who are suffering from dementia and Alzheimer's disease.

The AIHW recently published a report on the status of oral health of nursing home residents in Adelaide.[500] Questionnaires were mailed to all practising dentists in Adelaide and to all Adelaide nursing home Directors of Nursing. Clinical inspections were also performed on a number of residents in seven randomly selected nursing homes.

The report highlighted some alarming trends in oral health status and in provision of dental care for nursing home residents. The questionnaire revealed the following findings:

- The level of interest in nursing home dentistry was low for the majority of dentists;
- Dental service provision to nursing home residents was low;
- Dentists preferred to treat residents at their dental practice;
- Dental professionals provided little educational assistance for nursing home staff; and
- Over 60 per cent of dentists had not received adequate training in nursing home dentistry.[501]

Clinical findings included:

- Over three-quarters of residents had dementia, 55 per cent had severe dementia;

497 Council on the Ageing, Submission, 12 November 2001, pp6-7.
498 *Ibid.*
499 *Ibid*, p9.
500 AIHW Dental Statistics and Research Unit, 1999e.
501 *Ibid*, pp2-3.

- There was a high prevalence of edentulism (66 per cent);
- Normative dental treatment needs were high but perceived needs of residents and their carers were low; and
- Mean DMFT was 23.7, with 18.9 missing teeth, 1.1 decayed teeth and 3.8 filled teeth.[502]

Providing dental care for nursing home residents, particularly those who are severely cognitively impaired, can be difficult. The most commonly reported difficulties were: residents not opening their mouth; not understanding directions; refusing oral care; kicking/hitting out during oral care; not being able to rinse/spit; and heads facing toward their chest so that carers could not access the mouth.[503]

A comparison of the clinical status of nursing home residents with data from a cohort of community-dwelling older adults of a similar age found that while DMFT scores were similar, the components of the DMFT index varied greatly between nursing home and community-dwelling older adults. Compared with community-dwelling older adults, nursing home residents had:

- 3.5 times more decayed teeth;
- one-third more missing teeth;
- less than half as many filled teeth;
- 5.5 times more retained roots; and
- a higher root caries index.[504]

To date there are no data comparing nursing home residents in urban and non-urban locations, however, if dentists in urban locations have a low interest in caring for nursing home residents, it is unlikely that dentists in non-urban locations will show a higher level of interest. Coupled with the fact that the rate of dentists in non-urban locations is considerably lower than in urban locations, nursing home residents in regional, rural and remote areas would be expected to be at a greater disadvantage to their urban counterparts.

Finding 47

Aged people living in rural or remote communities are at risk of poor long-term oral health. Aged people in residential care are at a greater disadvantage to aged people living in the community.

502 AIHW Dental Statistics and Research Unit, 1999e, p3.
503 *Ibid*, p5.
504 *Ibid*.

9.4 CHILDREN AT RISK

9.4.1 Children under five

Children become eligible for SDS care on enrolment in school, and uptake of this offer is around 90 percent. Before this age, there is no organised dental care for children except private dental practice and, for a small number of dependents of eligible persons, care through Dental Services. There is evidence that many parents do not seek care for infants until dental disease is established and has progressed to cause dental pain. Poor dental health in a section of this age group causes substantial morbidity among young children and treatment requires significant resources after five years of age.[505]

Children under the age of five years can be both anxious and uncooperative with regard to dental treatment. Generally, the younger the child, the more difficult he/she is to treat. A proportion of these children requires dental treatment under general anaesthetic. For those families who cannot afford to pay for private treatment, access to inpatient dental services through local public hospitals in rural and remote areas may be problematic. The alternative of travelling to Perth for treatment at Princess Margaret Hospital is often impractical.[506]

The 1999 Western Australian Child Dental Health Survey examined the oral health status of a random sample of children enrolled in the SDS. The study revealed that by age five, children had an average of 1.08 decayed deciduous teeth, and an average dmft of 1.47. [507] Caries experience in deciduous teeth was clinically evident in 40 per cent of five year old children, more than 10 per cent having four or more decayed deciduous and permanent teeth.[508] Although there has been a significant decrease in dmft in five-year-olds over the last two decades[509], these recent data clearly indicate that many children still experience dental caries before they enter the SDS.

For under fives living in regional, rural and remote areas of Western Australia, the situation may be exacerbated by factors such as:

- lack of access to fluoridated water;
- reduced access to private and/or public dental facilities; and
- reduced or no local access to inpatient dental services.

9.4.2 Adolescents

As well as under fives, high school children are at risk of poor long-term dental health. Whilst the uptake rate for primary school children in the SDS is close to 90 per cent, uptake for high school children is only 65 per cent.[510] The rate of uptake declines steadily from age 13 onwards.[511]

505 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p9.
506 Australian Dental Association (WA), Submission, 15 October 2001, p16.
507 AIHW Dental Statistics and Research Unit, 2001a, p6.
508 *Ibid*, p12.
509 AIHW Dental Statistics and Research Unit, 1998b, p11.
510 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp12-13.
511 AIHW Dental Statistics and Research Unit, 2001a, pp1-5.

It is not clear whether the reduced uptake in the SDS for high school aged children relates to a shift toward private dental care, or whether these children, rather than their parents, are increasingly taking responsibility for their own dental care, and are choosing not to continue with regular dental visits. As indicated by Dental Services:

> *There are indications that many older teenage children seek no dental care. This is unfortunate because they are at an age when many new teeth are at risk of dental disease. Strategies to encourage all teenagers and young adults to seek regular care would help consolidate the benefits they have received from the School Dental Service.*[512]

The 1999 Western Australian Child Dental Health Survey suggests that clinically detectable decay in permanent dentition increases with increasing age. The mean DMFT increased almost three-fold from 0.75 at the age of 12 to 2.03 in children 16 years and over.[513] By the age of 12, 44.9 per cent of children have some caries experience. By the age of 16, the incidence has increased to 57.8 per cent.[514]

As with under fives, oral health may be further compromised by lack of access to fluoridated water and reduced access to dental services for high school children living in regional, rural and remote areas of Western Australia.

9.4.3 Children with disabilities

Basic dental care is available to all school age children through the SDS, providing the child does not have a disability that limits his/her ability to sit in a chair and follow a dentist's instructions. For children with disabilities that prevent them from accessing dental care through the SDS, options are limited and often expensive.

The Committee received evidence from the parent of a child with multiple disabilities who, although able to attend his local school, is unable to receive the same basic dental care as his peers due to his inability to open his mouth and keep it open whilst the treatment is carried out. [515]

The parents were advised that the child could be referred through the Disability Services Commission to Princess Margaret Hospital for major dental procedures, although this service was not available for regular maintenance. The child could also have been referred, through Dental Services, for treatment either locally or in Perth, however, eligibility is income dependent. For these parents, the only viable option has been to pay for treatments to be carried out locally by a private dentist under general anaesthetic.[516]

In regional, rural and remote locations where inpatient dental services are limited or non-existent, children who must receive dental treatment under general anaesthesia are at great risk of poor long-term dental health. Parents who are ineligible for public treatment have little choice but to privately fund their child's treatment, an expensive exercise if even the most basic procedures must be carried out under general anaesthesia. Those parents who are eligible for publicly funded treatment, in many cases, must travel to Perth to access treatment because of the lack of locally available services.

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512 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p13.
513 AIHW Dental Statistics and Research Unit, 2001a, p7.
514 *Ibid*, p9.
515 Jenny Snape, Submission, 4 October 2001, p1.
516 *Ibid.*

In a study examining the dental needs of children in rural or outer metropolitan areas with intellectual disabilities, a number of barriers to regular dental check-ups were identified through parent surveys. The most common barriers were:

- Child's disability – 'tactile defensiveness' in the head and face region, gagging, limited attention span;
- Child's apprehension about visiting a dentist;
- Dental professional style/behaviour – professionals were generally unaware of the child's needs and appeared to be intolerant and impatient; and
- Physical distance to dental service – travelling to Perth for basic dental care for those who were unable to access care locally.[517]

Finding 48

Children under five, adolescents, and children with disabilities are at risk of poor long-term dental health.

9.5 OTHER AT-RISK COMMUNITY GROUPS

The Committee received evidence that a number of other community groups are at risk of poor long-term dental health:

- ***Recent immigrants***, especially from non-western cultures, are at risk because of a lack of knowledge. They come from cultures in which caries-risk dietary components are not frequently encountered; they lack traditions of tooth-brushing and oral hygiene; and they often have problems understanding health messages in English.[518]
- ***People with less education and in less skilled occupational groups*** experience a greater social impact of oral disease, and are more likely to be edentulous and to have teeth extracted.[519]
- ***People with mental illness*** are at risk of poor oral health due to the disabling nature of their illness, and due to the side effects of some medication used to treat mental illness.[520]
- ***People with disabilities***, particularly those who are severely disabled, require a general anaesthetic to carry out even quite basic dental procedures.[521] Access to

517 Linda Slack-Smith, Submission, 3 October 2001, pp17-22.
518 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, pp22-23.
519 Department of Health, Submission, 18 October 2001, pp46-48.
520 *Ibid.*
521 Australian Dental Association (WA), Submission, 15 October 2001, p16.

treatment for disabled people is therefore compromised, particularly in regional areas where inpatient services for public dental patients do not exist.

- ***People who do not have access to fluoridated water*** do not enjoy the protective benefits of fluoride. Even when town water is fluoridated, outlying residents often do not have access to town water and therefore rely on rainwater for drinking purposes.[522] In other cases, the town water is unpalatable, so people unwittingly avoid the fluoride in the town water supply by choosing to drink bottled or rainwater.[523]

- ***People living in remote communities*** are at particular risk of poor oral health. Dental care is capital intensive: dental equipment is expensive and heavy, so dental surgeries are generally not mobile. People have to travel to the dentist, not the other way around. In addition, artificially fluoridated water is not available in most remote communities.[524]

The Committee recommends that the **Department of Health** facilitate an improvement in the delivery of dental services to regional, rural and remote areas through a range of measures.

Recommendation H7

In consultation with Dental Services and the Centre for Rural and Remote Oral Health, oral health programs specifically targeting disadvantaged members of rural and remote communities should be established. The Committee has identified the following residents of regional, rural and remote communities as being at particular disadvantage with regard to long-term oral health:

- Indigenous people;
- Low-income earners;
- Aged people, particularly those in aged care facilities; and
- Children under five, adolescents, and children with disabilities.

522 Shire of Plantagenet, Submission, 12 October 2001, p2.

523 Councillor Mary Smith, Submission, 21 November 2001, p2.

524 Perth Dental Hospital and Community Dental Services, Submission, 9 October 2001, p23.

CHAPTER 10 OTHER MATTERS

10.1 SURVEY OF YEAR 11 STUDENTS IN COUNTRY HIGH SCHOOLS

10.1.1 Background

During its visit to Kalgoorlie in November 2001, the Committee had the opportunity to speak informally with a small group of Year 11 students from Eastern Goldfields Senior High. The students' responses to questions about intended post-secondary studies and their thoughts about returning to the Kalgoorlie-Boulder region after completing further studies prompted the Committee to extend this informal survey to a formal questionnaire style survey of a larger sample of Year 11 students from a number of secondary schools in regional, rural and remote locations throughout the State. With approval from the Department of Education (WA), a total of 950 students from 13 secondary schools were targeted (see Table 10.1 below).

Schools were selected to provide a broad cross-section of students from regional, rural and remote areas of the State. All school principals agreed to participate in the survey. The number of students targeted at each school was based on the number of enrolled Year 11 students in 2001. One hundred students were targeted from each of the larger schools, and 30 students were targeted from each of the smaller schools. A total of 545 students from 12 schools participated in the survey.

Table 10.1

Students targeted in Year 11 Student Dental Survey.

SCHOOL	NUMBER OF STUDENTS TARGETED	NUMBER OF RESPONDENTS
Albany Senior High School	100	No response
Broome Senior High School	30	35
Busselton Senior High School	100	56
Carnarvon Senior High School	30	9
Eastern Goldfields Senior High	100	45
Esperance Senior High School	100	42
Geraldton Secondary College	100	21
Hedland Senior High School	100	63
Katanning Senior High School	30	33
Manjimup Senior High School	100	82
Merredin Senior High School	30	21
Narrogin Senior High School	100	119
Tom Price Senior High School	30	19
TOTAL	**950**	**545**

The broad objectives of the survey were to provide the Committee with an indication of:

- The proportion of students attending country schools who have considered a career in health, particularly dental health;
- The likelihood of students returning to regional, rural and remote areas after completing tertiary studies in Perth or large regional centres;
- Factors that influence the decision of students to return or not to return to their hometown after completing tertiary qualifications;
- Whether there is active recruitment (e.g. by training institutions) of secondary students from regional, rural and remote areas into health training programs; and
- The level of student awareness and perceived importance of oral health.

10.1.2 Survey results

10.1.2.1 Intended studies after completing high school

Questions 1-3, 8 and 9 explored students intended post-secondary studies.

10.1.2.1.1 Question 1: Do you plan to undertake further studies after completing high school?

Of the 543 students (99.6 per cent) who answered this question, 375 (69.1 per cent) indicated that they intend to undertake further studies, 37 (6.8 per cent) indicated that they do not intend to undertake further studies and 131 (24.1 per cent) are undecided.

Students were instructed to proceed to Question 2 if they answered ‘yes’ to Question 1, or to proceed to Question 9 if they answered ‘no’ or ‘undecided’.

10.1.2.1.2 Question 2: What do you intend to study after completing high school?

A total of 384 students (70.5 per cent) responded to this question. The most popular career choices were computing/information technology (22 students, 5.7 per cent), engineering (16, 4.2 per cent), hospitality studies (14, 3.6 per cent) and teaching (14, 3.6 per cent). Ninety-five students (24.7 per cent) indicated that they had not yet decided what studies they would like to pursue after completing high school. Table 10.2 (below) shows a breakdown of responses.

None of the students who responded to this question indicated that they intend to undertake studies in dental health after completing high school.

Table 10.2

Intended career choices of a sample of Year 11 students attending regional, rural and remote high schools.

Career	Number of students	Career	Number of students
accounting	5	interior design	3
administration	6	Japanese language	1
advertising	3	journalism	6
aeronautics	4	landscape architecture	2
agribusiness	1	law	11
agricultural science	1	marine biology	4
aircraft maintenance	2	marketing	1
animal care	1	mechanics	5
architecture	1	media studies	1
art and design	1	medicine	11
arts	6	mining	1
beauty therapy	3	nursing	6
biotechnology	1	occupational therapy	1
business/commerce	5	panel beating	1
chef	5	pathology	1
chemistry	1	performing arts	3
child care	8	pharmacy	1
computing/information technology	22	photography	4
defence forces	8	physical education	8
dietetics	1	physiotherapy	1
drama	4	pilot	2
electronics	3	psychology	5
engineering	15	radio announcer	1
environmental engineering	1	science	5
environmental science	1	social work	1
equine management	1	sound engineering	1
flight attendant	1	sports development/management	2
forensic psychology	1	teaching	14
forensic science	2	tourism	3
gas and refrigeration	1	trade	1
graphic design	3	vet nursing	1
hairdressing	1	veterinary science	6
horticulture	2	working with disabled people	1
hospitality studies	14	zoology	1
industrial design	1	undecided	95

10.1.2.1.3 Question 3: Where (i.e. in which city or town) do you intend to study after completing high school?

A total of 386 students (70.8 per cent) responded to this question, more than two-thirds indicating that they intend to study in Perth (269, 69.7 per cent). A further 15 students (3.9 per cent) indicated that they intend to study in another capital city, and four students indicated their intention to study overseas. Only 41 students (10.6 per cent) indicated their intention to study locally or in another regional or rural centre. Fifty seven students (14.8 per cent) had not decided where they would study.

10.1.2.1.4 Question 8: Are you currently considering, or have you previously considered, a career in health (e.g. doctor, nurse, physiotherapist, dentist)? If yes, please provide details.

Of the 386 students who responded to this question, 282 (73.1 per cent) indicated that they had not and were not considering a career in health, while 104 (26.9 per cent) indicated that they were or had previously considered a career in health. Only four students indicated that they had previously or were currently considering a career in dentistry, three of whom came from one high school. None of these students listed dentistry as their intended study at Question 2, therefore it must be assumed that they have decided on an alternative study program. Table 10.3 lists the careers listed by those students who answered 'yes' to Question 8.

Table 10.3

Past or current career choices in health.

Career choice	Number of students
Physiotherapy	29
Medicine	27
Nursing	16
Dentistry	4
Psychology	4
Medical research	2
Occupational therapy	2
Pathology	1
Pharmacy	1
Other	4
Not specified	14

Finding 49

Of 545 Year 11 students living in regional, rural and remote areas of the State who completed a Student Dental Survey, none indicated that they intend to undertake studies in the field of dental health when they complete high school. Four students indicated that they have previously considered a career in dentistry.

10.1.2.1.5 Question 9: Are you aware of anyone having visited your school in the last 12 months to discuss training and/or career opportunities in health fields? If yes, please provide details.

Of the 529 students who responded to this question, 239 (45.2 per cent) answered 'no', 202 (38.2 per cent) answered 'unsure' and only 88 (16.6 per cent) answered 'yes'. Eighty students provided details of who had visited the school in the last 12 months (Table 10.4 below). Only a small number of the visitors appeared to be specific to health careers.

Table 10.4

Student recollections of visitors coming to the school in the preceding 12 months to promote training and career opportunities in health.

Visitors to school	Number of students
General career expo or careers advisers	21
UWA medical student or other speaker	16
Defence Forces personnel	9
Medical practitioner	4
Visit to local hospital/ visit by local hospital representative	4
Unspecified health professionals	3
Nurse	3
Health care teacher	2
TAFE representative	2
James Fitzpatrick (doctor, Young Australian of the Year, 2001)	1
Belmont City College (unspecified representative)	1
Curtin University (unspecified representative)	1
Other	13

Finding 50

Of the 545 survey respondents, only 16.6 per cent indicated that someone had visited their school in the preceding 12 months to promote career opportunities in health related fields. Sixteen students indicated that a University of Western Australia medical student had visited, and twelve students indicated that a local doctor or other health professional had visited. None of the respondents recalled being visited by a dentist, dental student or other representative from a training institution promoting careers in oral health.

10.1.2.2 Returning to the country after completing training/study

Questions 4-7 examined the factors that influence students' decisions to return to the country after completing their post-secondary study or training.

10.1.2.2.1 Question 4: If you intend to study in a capital city or major regional centre, do you think you would like to return to your current place of residence upon completion of your tertiary studies?

Of the 386 students (70.8 per cent) who responded to this question, almost half (177, 45.9 per cent) indicated that they were undecided, 129 (33.4) indicated that they would not like to return to their current place of residence and only 80 (20.7 per cent) indicated that they would like to return to their current place of residence.

Finding 51

Of the 386 survey respondents (70.8 per cent) who intend to undertake further studies after completing high school, 69.7 per cent intend to study in Perth or another capital city. Most students are either undecided (45.9 per cent) or do not intend to return to their place of residence (33.4 per cent) after completing further studies.

10.1.2.2.2 Question5: If you answered yes to question 4 above, what factors have influenced your decision to return to your current place of residence?

Of the 81 students who responded to this question, most cited family and/or friends as the most important factor to influence their decision to return to their current place of residence. Table 10.5 below shows a breakdown of reasons given for wanting to return to current place of residence.

Table 10.5

Reasons for wanting to return to current place of residence.

Reason cited	Number of students
Family and/or friends	48 (59.3%)
Lifestyle	14 (17.3%)
Affinity for town	12
Employment	4
Unsure	2
Family business	1

10.1.2.2.3 Question 6: If you answered no to question 4 above, what factors have influenced your decision not to return to your current place of residence?

Of the 147 students who responded to this question, more than half cited a lack of job opportunities as the most important factor to influence their decision not to return to their current place of residence. Table 10.6 below shows a breakdown of reasons given for not returning to current place of residence.

Table 10.6

Reasons for not wanting to return to current place of residence.

Reason cited	Number of students
Lack of job opportunities	80 (54.5%)
Dislike of town	43 (29.3%)
Seeking a change	6
Desire to travel	3
Unsure	3
Family moving	3
Other	9

10.1.2.2.4 Question 7: What, if anything, would encourage you to return to your current place of residence, or to work in another rural or remote community?

Of the 283 students who responded to this question, family and/or friends followed by job opportunity were the most commonly cited factors that would encourage students to return to their current place of residence. Almost one in ten students indicated that nothing would encourage them to return to their current place of residence. Table 10.7 below shows a breakdown of factors that may encourage students to return to their current place of residence.

Table 10.7

Factors that may encourage students to return to their current place of residence.

Factor	Number of students
Family and/or friends	83 (29.3%)
Job opportunity	79 (27.9%)
Lifestyle	45
Nothing	26
Money	19
Improved facilities in town	13
Unsure	10
Other	8

Finding 52

For those survey respondents who intend to return to their place of residence after completing further studies, family and/or friends is the most commonly cited reason (59.3 per cent). For students who do not intend to return to their place of residence, lack of employment opportunities (54.5 per cent) is the most commonly cited reason.

10.1.2.3 Awareness and perceived importance of oral health

Questions 10-12 examined student dental visiting pattern and perceived importance of oral health.

10.1.2.3.1 Question 10: When did you last visit the School Dental Service?

A total of 539 students (98.9 per cent) responded to this question. More than sixty per cent of students indicated that they have visited the School Dental Service some time during the last two years (Table 10.8 below).

Table 10.8

Student visits to the School Dental Service or private dental professionals.

Most recent dental visit	School Dental Service	Private dental professional
Less than one year ago	59 (11.0%)	82 (15.7%)
One to two years ago	274 (50.8%)	189 (36.3%)
More than two years ago	106 (19.7%)	77 (14.8%)
Never	61 (11.3%)	58 (11.1%)
Unsure	39 (7.2%)	115 (22.1%)

10.1.2.3.2 Question 11: When did you last visit a private dentist or other dental practitioner (eg orthodontist, dental therapist etc.)?

A total of 521 students (95.6 per cent) responded to this question. More than fifty per cent of students indicated that they have visited a private dental practitioner some tine in the last two years (Table 10.8 above).

10.1.2.3.3 Question 12: How important do you consider oral hygiene (e.g regular tooth `brushing, healthy diet etc.) and dental health?

A total of 521 students (95.6 per cent) responded to this question, more than ninety per cent indicating that they consider oral health to be extremely or quite important (see Table 10.9 below).

Table 10.9

Perceived importance of oral health.

Perceived importance	Number of students
Extremely important	272 (52.2%)
Quite important	220 (42.2%)
Not very important	8 (1.5%)
Not at all important	6 (1.2%)
Unsure	15 (3.9%)

Finding 53

Most survey respondents consider oral health and hygiene to be extremely (52.2 per cent) or quite (42.2 per cent) important. Only 11.0 per cent of students had visited the School Dental Service in the last 12 months, and 50.8 per cent last visited one to two years ago. Approximately 52 per cent of students visited a private dental practitioner some time in the last two years.

10.1.3 Concluding remarks

10.1.3.1 Careers in oral health and other health areas

Almost one in every five students who participated in this survey indicated that they had or were currently considering a career in health, however, less than one student in every hundred indicated that they had considered a career in dental health. Of the four students who indicated that they had considered dentistry, none indicated that this was their current career preference. The survey clearly indicates that dentistry is not a popular career choice amongst students attending country high schools.

10.1.3.2 Likelihood of returning to local area after gaining post-secondary qualifications

Almost three out of every four students who intend to undertake post-secondary studies/training indicated that they would do so in Perth or another capital city. Only one in five students indicated that they would like to return to their hometown after completing their studies. For those students who did not believe that they would return home, one in two cited a lack of job opportunities as the main reason. On the other hand, three out of ten students indicated that a suitable job opportunity would encourage them to return to their hometown.

Whilst it is disappointing to note that most country high school students do not want to return to their home town after attaining qualifications, it is encouraging to find that many would be willing to return if presented with a suitable job opportunity.

10.1.3.3 Active recruitment of country students into health fields

Surprisingly, only one out of five students indicated that they were aware of someone having visited their school in the preceding 12 months to discuss career opportunities in health fields. Professor Louis Landau, Executive Dean of the Faculty of Medicine and Dentistry, University of Western Australia, informed the Committee of a program whereby students and other speakers from the Faculty visit country schools to promote awareness of career opportunities in medicine, dentistry and health science. Only sixteen students indicated that students or other speakers from the University of Western Australia had visited them. All of these students attended one of three high schools – Narrogin, Manjimup and Eastern Goldfields.

It is somewhat disappointing to note that these sixteen students represent only a very small proportion (6.5 per cent) of the 246 students from Narrogin, Manjimup and Eastern Goldfields High Schools who completed the survey, suggesting that the UWA visit had little impact on the majority of students at these schools. On a more positive note, it is encouraging to find that all of

the students who indicated that they had considered a career in dentistry, and forty per cent of those who indicated that they had considered a medical career, went to one of these three schools. The UWA program has the potential to attract country students into careers in dentistry, but the maximum impact can only be achieved by including all country schools in the program.

10.1.3.4 Awareness and perceived importance of oral health

Although only 333 students (61.8 per cent) visited the School Dental Service in the preceding two years, of the 167 students who did not, 52 indicated that they visited a private practitioner during this time. Therefore, more than seventy per cent of students had a dental visit in the past two years. For the nearly thirty per cent of students who did not visit a dentist in the last two years, this may have been due to lack of access to dental services or it may have been by choice.

Despite the fact that only seventy per cent of students visited a dentist in the last two years, more than ninety-four per cent of students perceive oral health to be important.

The Committee recommends a stronger State commitment to delivery of dental services to regional, rural and remote areas of the State, particularly with regard to adult dental services.

Recommendation S8

To assist in the implementation of Recommendation S6, a formal program should be established to increase awareness of and promote career opportunities in oral health amongst city and country high school students. The program should be coordinated by the Department of Health in consultation with the Department of Education and the University of Western Australia.

APPENDIX ONE

WRITTEN SUBMISSIONS RECEIVED

Date	Name	Position	Organisation
24-Sept-01	Ms Andrea Hickert	Manager, Nutrition Services	Bunbury Primary Health Services
26-Sept-01	Dr Catherine Moore	Medical practitioner	Banksia Medical Centre
26-Sept-01	Wayne Clark	Registrar	Dental Board of Western Australia
26-Sept-01	Peter Bradbrook	Chief Executive Officer	Shire of Boddington
26-Sept-01	C. Ricciardi	Director, Health and Building	Shire of Greenough
27-Sept-01	Kerry Graham	Chief Executive Officer	Shire of Exmouth
28-Sept-01	Murray Brown	Chief Executive Officer	Shire of Laverton
02-Oct-01	Kirsten Estcourt	Project Officer	Health Consumers' Council
03-Oct-01	Michael Whitaker	Chief Executive Officer	City of Bunbury
03-Oct-01	Dr Linda Slack-Smith	Senior Lecturer	School of Dentistry
03-Oct-01	Dr Linda Slack-Smith	Senior Lecturer	School of Dentistry
03-Oct-01	Terry Dyer	Chief Executive Officer	Shire of Ravensthorpe
04-Oct-01	Jenny Snape		
04-Oct-01	Peter Fitzgerald	Chief Executive Officer	Shire of Broomehill
04-Oct-01	Warren Olsen	Chief Executive Officer	Shire of Yalgoo
04-Oct-01	Dr David Dunn	Medical Director	Bega Garnbirringu Aboriginal Health Services
05-Oct-01	Ken Marston	Policy Officer	Council on the Ageing (WA) Inc.
05-Oct-01	Mark Hook	Chief Executive Officer	Shire of Shark Bay
05-Oct-01	Lyn Phillips		
05-Oct-01	Ray Hooper	Chief Executive Officer	Shire of Chittering
05-Oct-01	Jennine Bywaters	Dental Therapist	Dental Therapy and Hygiene Association (WA)
09-Oct-01	John Bowler MLA	Member for Eyre	
09-Oct-01	Gary Tuffin	Chief Executive Officer	Shire of Ngaanyatjarraku
09-Oct-01	Michael Archer	Chief Executive Officer	Shire of Esperance
09-Oct-01	David Neesham	Director	Perth Dental Hospital and Community Dental Services
11-Oct-01	Dr David McDonald	Oral surgeon	Busselton Dental Clinic
11-Oct-01	Sean Conlan	Primary Health Manager	Upper Great Southern Primary Health Services
11-Oct-01	Dr Anthony Lepere	Dental anaesthetist	
12-Oct-01	Bill Mason	Senior Projects Officer	Goldfields Esperance Development Commission
12-Oct-01	Prof. Louis Landau	Executive Dean	Faculty of Medicine and Dentistry (UWA)
12-Oct-01	Douglas Josif	General Manager	Ngaanyatjarra Health Service
12-Oct-01	Dr Ragbir Singh Rikhraj		
12-Oct-01	Rob Stewart	Chief Executive Officer	Shire of Plantagenet
15-Oct-01	Dr Nick Boyd	President	Australian Dental Association (WA)
15-Oct-01	Barry Thompson	Chief Executive Officer	Shire of Perenjori
16-Oct-01	Lillias Bovell	Policy Manager	Western Australian Municipal Association
16-Oct-01	Dr Linda Slack-Smith	Senior Lecturer	School of Dentistry
16-Oct-01	Dr Linda Slack-Smith	Senior Lecturer	School of Dentistry
16-Oct-01	Dr Linda Slack-Smith	Senior Lecturer	School of Dentistry

Date	Name	Position	Organisation
16-Oct-01	Julie Walker	Director	Wirraka Maya Health Service
17-Oct-01	Lars Moir	Dental practitioner	Kununurra Wyndham Dental Clinic
18-Oct-01	Prof. Bryant Stokes	Acting Commissioner for Health	Department of Health
24-Oct-01	Ken Fisher	Acting Director	Peel Development Commission
01-Nov-01	Kim Snowball	General Manager	Geraldton Health Service
12-Nov-01	Dr David McDonald	Oral surgeon	Busselton Dental Clinic
12-Nov-01	Alex Walker	Board member	Council on the Ageing
12-Nov-01	David Neesham	Director	Perth Dental Hospital and Community Dental Services
12-Nov-01	Jennine Bywaters	Dental Therapist	Dental Therapy and Hygiene Association (WA)
12-Nov-01	Dr Ragbir Singh Rikhraj		
15-Nov-01	Ian Fletcher	Chief Executive Officer	City of Kalgoorlie-Boulder
21-Nov-01	Wendy Duncan	Project Officer	Shire of Esperance
21-Nov-01	Mary Smith	Councillor	Shire of Ravensthorpe
26-Nov-01	Wayne Kelly	Health Services Manager	Mullewa Health Services Board of Management
02-Jan-02	Suzanne McKechnie	General Manager Purchasing Division	Department of Health
12-Feb-02	Dr Anthony Lepere		
12-Feb-02	Jennine Bywaters	Dental Therapist	Dental Therapy and Hygiene Association (WA)
18-Feb-02	David Neesham	Director	Perth Dental Hospital and Community Dental Services
28-Feb-02	Prof. Louis Landau	Executive Dean	Faculty of Medicine and Dentistry
25-Mar-02	Suzanne McKechnie	General Manager Purchasing Division	Department of Health

APPENDIX TWO

WITNESSES TO HEARINGS

Date	Witness	Position	Organisation
12-Nov-01	Dr David McDonald	Oral Surgeon	
12-Nov-01	Prof Louis Landau	Executive Dean	Faculty of Medicine and Dentistry, University of Western Australia
12-Nov-01	Dr John McGeachie	Head, School of Dentistry	Faculty of Medicine and Dentistry, University of Western Australia
12-Nov-01	Dr Marc Tennant	Director	Centre for Rural and Remote Oral Health, University of Western Australia
12-Nov-01	Alex Walker	Board member	Council on the Ageing (WA) Inc.
12-Nov-01	Dr Nick Boyd	President	Australian Dental Association (WA)
12-Nov-01	David Neesham	Director	Perth Dental Hospital and Community Dental Services
12-Nov-01	Dr Anthony Lepere	Oral Surgeon	
12-Nov-01	Suzanne McKechnie	General Manager, General Health Purchasing	Department of Health
12-Nov-01	Clory Carrello	Purchasing Manager, General Health Purchasing	Department of Health
12-Nov-01	Susan Binet	School Dental Therapist	Dental Therapy and Hygiene Association of WA
12-Nov-01	Jennine Bywaters	Dental Therapist	Dental Therapy and Hygiene Association of WA
12-Nov-01	Helene Platell	Dental Therapist	Dental Therapy and Hygiene Association of WA
12-Nov-01	Johanna Korczynskyj	Dental Therapist	Dental Therapy and Hygiene Association of WA
12-Nov-01	Dr Ragbir Rikhraj	Overseas-trained dentist	

APPENDIX THREE

BRIEFINGS HELD

Intrastate Briefings

Date	Name	Organisation	Location of Briefing
12-Sep-01	David Neesham, Director	Perth Dental Hospital and Community Dental Services	Perth
21-Nov-01	Wendy Duncan, Project Officer	Shire of Esperance	Kalgoorlie
21-Nov-01	Mel Bell, Vice Chairman	Esperance Health Board	Kalgoorlie
21-Nov-01	Jane Mitchell, Dental Therapist	Hugh Sharpe's Dental Surgery, Esperance	Kalgoorlie
21-Nov-01	Mary Smith, Councillor	Shire of Ravensthorpe	Kalgoorlie
21-Nov-01	Douglas Josif, Manager	Ngaanyatjarra Health Service	Kalgoorlie
21-Nov-01	Maimie Butler, Member	Health Council Advisory Committee, Ngaanyatjarraku community	Kalgoorlie
21-Nov-01	Gary Lye, Board member	Goldfields Esperance Development Commission	Kalgoorlie
21-Nov-01	Catherine Shepherd, Deputy Principal	Eastern Goldfields Senior High School	Kalgoorlie
21-Nov-01	Dianne Mantell, Director of Nursing	Kalgoorlie Regional Hospital	Kalgoorlie
21-Nov-01	David Dunn, Medical Director	Bega Garnbirringu Aboriginal Health Service	Kalgoorlie
21-Nov-01	Sue Berry, School Dental Therapist	South Kalgoorlie Dental Clinic	Kalgoorlie
13-Mar-02	Suzanne McKechnie, General Manager, General Health Purchasing	Department of Health	Perth
20-Mar-02	Suzanne McKechnie, General Manager, General Health Purchasing	Department of Health	Perth

APPENDIX FOUR

YEAR 11 STUDENT SURVEY

PARENT/STUDENT INFORMATION AND CONSENT FORM

YEAR 11 STUDENT SURVEY

The Education and Health Standing Committee is currently conducting an inquiry into the *Adequacy and Availability of Dental Services in Regional, Rural and Remote Western Australia*. As part of its inquiry, the committee is conducting a questionnaire survey of Year 11 students. Information obtained from the survey will be used to help the committee make recommendations to improve dental services in regional, rural and remote Western Australia.

The survey comprises 12 multiple-choice questions and should take approximately 5-10 minutes to complete. It is expected to provide valuable information on the following issues:

- the proportion of students who have considered a career in health, particularly dental health;
- the likelihood of students returning to regional, rural and remote areas after studying in Perth or large regional centres, and the factors that influence their decision;
- student awareness and perceived importance of oral health; and
- whether secondary students from regional, rural and remote areas are being actively recruited (e.g. by training institutions) into health training programs.

Whilst the focus of the survey is on dental health, it is important that a wide range of students, including those who do not intend to undertake tertiary studies, complete the survey.

Your child is one of approximately 1,000 students from a number of non-metropolitan secondary schools throughout the state who have been chosen to participate in this survey. Participation is not compulsory, and your child will not be disadvantaged in any way if he or she declines to participate.

If you have any concerns or would like further information, please contact the Legislative Assembly Committee Office on 9222 7494.

Please tear at dotted line and return to school

I have read the information above and any questions I have asked have been answered to my satisfaction. I consent to my son/daughter _____ participating in this survey, realising he/she may withdraw at any time. I agree that the research data gathered for this survey may be published, provided my son/daughter is not identifiable.

Parent signature _____ Date _____

Student signature _____ Date _____

YEAR 11 STUDENT DENTAL SURVEY

This is an anonymous questionnaire. Please ensure that you do not write your name, or any other comments that will make you identifiable, on the attached. By completing the questionnaire you are consenting to take part in this research. As such you should have read and signed the information and consent form, as it explains fully the intention of this survey.

1. Do you plan to undertake further studies after completing high school?

Yes ☐ No ☐ Undecided ☐ (Place tick in appropriate box)

IF YOUR ANSWER TO THE ABOVE QUESTION WAS 'YES' PLEASE PROCEED TO **QUESTION 2**.

IF YOUR ANSWER TO THE ABOVE QUESTION WAS 'NO' OR 'UNDECIDED', PLEASE PROCEED TO **QUESTION 9**.

2. What do you intend to study after completing high school?

_____

3. Where (i.e. in which city or town) do you intend to study after completing high school?

_____

4. If you intend to study in a capital city or major regional centre, do you think you would like to return to your current place of residence upon completion of your tertiary studies?

Yes ☐ No ☐ Undecided ☐ (Place tick in appropriate box)

5. If you answered **yes** to question 4 above, what factors have influenced your decision to return to your current place of residence?

_____

_____

6. If you answered **no** to question 4 above, what factors have influenced your decision not to return to your current place of residence?

_____

_____

7. What, if anything, would encourage you to return to your current place of residence, or to work in another rural or remote community?

_____

_____

_____

8. Are you currently considering, or have you previously considered, a career in health (e.g. doctor, nurse, physiotherapist, dentist)?

Yes ☐ No ☐ (Place tick in appropriate box)

If yes, please provide details _____

_____

_____

9. Are you aware of anyone having visited your school in the last 12 months to discuss training and/or career opportunities in health fields?

Yes ☐ No ☐ Unsure ☐ (Place tick in appropriate box)

If yes, please provide details _____

_____

_____

_____

_____

10. When did you last visit the School Dental Service?

Less than one year ago ☐

One to two years ago ☐

More than two years ago ☐

Never ☐

Unsure ☐

11. When did you last visit a private dentist or other dental practitioner (eg orthodontist, dental therapist etc.)

Less than one year ago ☐

One to two years ago ☐

More than two years ago ☐

Never ☐

Unsure ☐

12. How important do you consider oral hygiene (e.g regular tooth brushing, healthy diet etc.) and dental health?

Extremely important ☐
Quite important ☐
Not very important ☐
Not at all important ☐
Unsure ☐

Thank you for taking the time to complete this survey. The information you have provided will be used to help make recommendations to improve the delivery of dental services to regional, rural and remote areas of Western Australia.

APPENDIX FIVE

DENTAL ACT 1939, SCHEDULE 2 [525]

[Sections 50A, 50B and 50D]

Part 1
Core Acts

1. Instruction in, and organization and supervision of, plaque control routine.
2. Recording of periodontal indices.
3. Dental prophylaxis.
4. Topical application of fluorides.
5. Application of desensitizing agents.
6. Application of plaque control agents.
7. Polishing and recontouring of restorations.
8. Application of fissure sealants to teeth.
9. Removal of calculus.
10. Application and removal of periodontal packs.
11. Dental radiography.
12. Taking of impressions for all purposes other than final impressions for all prosthetic procedures.
13. Application and removal of rubber dam.
14. Removal of sutures.

Part 2
Local Analgesia Acts

15. Administration of local dental analgesia.

[525] Schedule 2 of the *Dental Act 1939* is reproduced by permission of the copyright owner, the State of Western Australia.

Part 3
Orthodontic Acts

16. Placement of metallic or non-metallic separators.

17. Preparation of teeth for orthodontic banding.

18. Orthodontic band selection.

19. Attachment selection.

20. Placement of arch wire fixation.

21. Removal of ligatures.

22. Removal of arch wire fixation pins.

23. Removal of arch wires.

24. Routine checking for loose bands and broken appliances and re-cementing of loose bands.

25. Removal of bands.

26. Removal of attachments.

27. Removal of orthodontic cement.

Part 4
Dental Therapy Acts

28. Extraction by forceps of deciduous teeth under local analgesia.

29. Emergency treatment of pulp exposure.

30. Preparation and restoration of cavities in deciduous and permanent teeth of preschool and school children by direct placement materials.

Part 5

31. Restoration of prepared cavities in permanent teeth in adults by direct placement materials.

Part 6

32 Root planing.

Part 7

33. Caries detection.

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