

VICTORIA

Auditor General
Victoria

Community dental services

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AUDITOR GENERAL
VICTORIA

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Legislative Assembly
Parliament House
MELBOURNE

Sir

Under the provisions of section 16 of the *Audit Act* 1994, I transmit my performance audit report on *Community dental services*.

Yours faithfully

J.W. CAMERON
Auditor-General

31 October 2002

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Foreword

Dental health has a significant impact on people's general health and wellbeing, and on the economy in terms of lost productivity through absences from, or reduced activity at, work. As the population ages, data show that older Australians are retaining more natural teeth but that their oral health needs are becoming more complex.

As with many publicly-funded health programs, a large proportion of the population is eligible to use community dental services: approximately one-third of adults are eligible, but only a minority of them do so. This could be a matter of choice or the result of resource limitations.

These issues and shortages in the public oral health work force are putting the public dental system under stress. Our examination of community dental services identified large waiting lists and long waiting times for eligible people wanting to access the Community Dental Program, and that recall periods for children accessing the School Dental Service were not being met for children with low oral health risk. Because of demand for emergency treatment, services were found to be delivering a greater proportion of emergency care than planned, leading to a reduced provision of general dental care and preventive activity.

While exposure to fluoride has been found to improve the oral health status of children, there are significant centres of population within Victoria where the water supply remains unfluoridated. Given the stresses on the public dental system, it is timely to encourage debate on the merits of increasing the fluoridation coverage of the Victorian population, so that the incidence and cost of dental disease can be reduced over the long-term.



J.W. CAMERON
Auditor-General
31 October 2002

Part 1

Executive summary

INTRODUCTION

1.1 The Department of Human Services has policy and program responsibility for public dental health in Victoria. The Victorian public dental service system aims to provide community dental services to all school children up to Year 8, concession card holders and their dependents primarily through the Community Dental Program and the School Dental Service.

1.2 The Department funds Dental Health Services Victoria (DHSV), an independent statutory body, to provide community and school dental services across the State. Adult and youth community dental services are delivered through 6 DHSV-managed clinics, 58 contracted clinics in community centres and hospitals, and through private dentists who choose to participate in voucher schemes. Services for school children up to Year 8 are provided in 15 fixed-site clinics in schools, 19 clinics co-located with adult clinics and 31 mobile dental vans.

AUDIT OBJECTIVE AND SCOPE

1.3 The objective of the audit was to examine the economy, efficiency and effectiveness of community dental services in Victoria. The audit examined whether:

- access to community dental services meets the Government's objective of improving oral health for vulnerable groups, in particular, children and the disadvantaged;
- timely, efficient and effective community dental services are provided;
- funds (recurrent and capital) allocated to public dental services are distributed according to need; and
- an effective framework is in place to plan, manage, measure and monitor the effectiveness of community dental services at a Statewide and program level.

1.4 The audit examinations were largely undertaken within the Dental Health Unit of the Department of Human Services, Dental Health Services Victoria (DHSV), 5 DHSV-managed clinics and 8 community dental clinics managed by community health centres and rural hospitals.

AUDIT CONCLUSION

1.5 Around one-third of the Victorian population is eligible for public dental health services. However, during the audit we observed a service system under stress facing increasing demand pressure, leading to a mismatch between the Government's stated priority for oral health promotion and the mix of services being delivered. For example, in the Community Dental Program, emergency services are being provided to the detriment of preventive treatments and, in the School Dental Service, low risk children are waiting longer to receive preventive treatment. The strategic direction for public dental health should be revisited to ensure that it is appropriate to the achievement of the program objectives.

1.6 Effective access to treatment is inadequate for adults and youths. There are long waiting lists and waiting times especially for general care and the increasing focus of the Community Dental Program on emergency care indicates that the Program is struggling to provide sufficient attention to general care, placing additional pressure on future dental care needs. In contrast, the School Dental Service has provided good access for children, with better access for those families who can least afford private dental care and for high risk children. However, like the adult program, the School Dental Service is at risk of having to respond to emergencies for an increasingly narrow group of children, focusing on high risk children, with negative impacts on the long-term oral health of the community as a whole.

1.7 Public dental health services, with the exception of emergency care, are not being delivered on a timely basis. In the Community Dental Program, waiting times for both conservative (general) care and dentures are long and show a wide disparity across the State. For the School Dental Service, the number of school enrolments has consistently been growing, yet the number of completed courses of care has declined over the past 5 years and recall cycles for low risk children are getting longer.

1.8 Efficiency within clinics can be improved; it varies widely between clinics and has not been the focus of concerted action to date, either by clinics or by DHSV. The current concern is managing the increasing demand, especially for emergency treatment; a major issue for many clinics and one of the greatest impacts on whether they can meet service aims.

1.9 Infection control requires higher priority in clinics. Performance is uneven across clinics, as a result of work force issues, jurisdictional issues around the management of non-DHSV clinics and the physical conditions in clinics.

1.10 Conditions in some clinics, particularly the dental vans, need improvement. The progressive decommissioning of the School Dental Service mobile vans will address some problems, but continued investment in capital improvements and equipment, with an emphasis on occupational health and safety, and clinical requirements, is required in community dental clinics.

1.11 Many of the difficulties experienced in accessing and delivering community dental services are related to Victoria's oral health work force shortage. While the Department and DHSV have developed a range of initiatives to address oral health work force shortages, more co-ordination and specific actions are needed. These include increasing the training rate for oral health workers, encouraging private dentists to participate in an expansion of voucher schemes or to provide services on a sessional basis using public facilities, if this is cost-effective, and widening the role and scope of practice of dental auxiliaries.

1.12 Many of the problems with service delivery are symptomatic of the need for substantial improvement in program management. The Department and DHSV have divergent understandings and expectations of their roles and responsibilities. This is particularly so for DHSV's purchasing role, including its approach to ensuring quality services are provided by all clinics.

1.13 We do not know if resource allocation currently maximises the capacity of the Community Dental Program to meet its objectives. Partly due to poor data availability, resourcing of clinics has not been determined with reference to the actual cost of service delivery, and decisions on whether to provide treatments in-house, or through voucher schemes, have not been made on the basis of an assessment of relative cost-effectiveness.

1.14 The program information reported, both externally and internally, is relevant, appropriate and fairly represents performance in terms of the numbers of outputs delivered. However, information reported by the Department focuses on outputs and therefore is not sufficient for reporting on achievements against the public dental health objectives, for which it is ultimately responsible.

1.15 Some pressures on community dental services are a product of the ageing population and the fact that older Australians are retaining more teeth. While older people have more natural teeth than in the past, considerable previous incidence of disease and poor oral health makes the dental care needs of these older people more complex. However, data show better oral health status for younger generations. In particular, data show that the oral health status of children in fluoridated communities is clearly better than that of children in non-fluoridated communities.

1.16 Despite this evidence, and a wide body of research that indicates improved oral health outcomes in fluoridated areas, there remain communities within Victoria, inhabited by large populations, where the water supply is unfluoridated. For example, the major regional centres of Geelong, Ballarat and Wodonga remain unfluoridated due to local resistance to the practice in the 1980s. Both the Department and Dental Health Services Victoria have undertaken initiatives to encourage the uptake of fluoridation throughout the State. However, the failure of some communities to take this proven preventive action means that the burden of the poorer oral health status of people in those communities, who are eligible to use public dental health services, may be disproportionately borne by the remainder of the State.

AUDIT FINDINGS

Service access

Level and prioritisation of access

1.17 For the Community Dental Program, at December 2001 there were 185 290 people on the waiting list for general dental care, with an average waiting time of 22 months. At the same date, there were 25 085 people on the waiting list for prosthetics (dentures) with an average waiting time of 24 months. (*paras 3.7 and 3.9*)

1.18 There was an increase of around 31 per cent in the number of individuals who received emergency care between 1997-98 and 2001-02, compared with an increase of around one per cent in the number of individuals who received general care over the same period. This focus on emergency care is opposite to that reflected in Community Dental Program targets, and is preventing sufficient attention to general care and placing additional pressure on future dental care needs. (*paras 3.15, 3.16 and 3.19*)

1.19 For the School Dental Service, the Statewide participation rate has increased from 37 per cent in June 1997 to 52 per cent in June 2002. Eighty per cent of child dependents of concession card holders use the Service, compared with 31 per cent of children of non-concession card holders. This indicates that the most economically disadvantaged children are accessing the Service more. (*paras 3.23 to 3.24*)

1.20 The School Dental Service recall cycle target of 12 months for high risk children has been achieved, but the targets for low risk children were not achieved over the past 5 years, with the gap between actual and target increasing over the period. The Service is appropriately placing priority on high risk children, but at the expense of low risk children. (*para. 3.29*)

Impact of co-payments on service access

1.21 School Dental Service participation rates among concession card holders have returned to pre-co-payment levels (80 per cent). Participation rates among non-concession card holders have shown some recovery, but they remain comparatively low (31 per cent). (*para. 3.42*)

1.22 One long-term adverse impact of the co-payment policy on the Community Dental Program has been a reduction in acceptance rates for an offer of care from the waiting list. This suggests that access to public dental care by concession card holders has been impeded by the introduction of co-payments. (*para. 3.43*)

Regional access

1.23 There is uneven use by adults, youth and children of community dental services between regions, the reasons for which we could not establish. (*para. 3.53*)

1.24 Data for the Community Dental Program show that the eligible population is less likely to be receiving services in the Eastern Metropolitan region (around 9 per cent) and the Gippsland region (around 10 per cent), and more likely in the Grampians region (15 per cent) and the Western and Northern regions (almost 14 per cent). (*para. 3.49*)

1.25 School Dental Service participation rates vary significantly between regions, from 40 to 67 per cent. The relatively low participation rates being achieved in the Barwon (43 per cent), Eastern Metropolitan (40 per cent) and Southern Metropolitan (48 per cent) regions may, in part, reflect the use of private dentists. (*para. 3.52*)

Service delivery

Timeliness

1.26 Despite some improvement in the year to December 2001, Community Dental Program targets for the maximum variation in waiting times across the State for both conservative and prosthetic (denture) services were still not met. Targets for average waiting times for restorative care and dentures have not been met in 4 of the past 5 years. However, the gap has reduced over the last 3 years, partly as a consequence of increased targets. (*paras 4.5 and 4.6*)

1.27 All 11 of the 13 clinics visited which were required to maintain waiting lists described factors that impact on their ability to manage them and to meet waiting list targets. These almost universally covered staffing, e.g. shortages of dentists and other professionals, and funding, e.g. inadequate funding to attract and retain a sufficient number of staff to the clinics. Also noted was the increasing number of emergency cases and the impact they have on the ability to treat people on the waiting lists. (*para. 4.10*)

Efficiency

1.28 There are wide variations in the efficiency of clinics, as measured by the number of individuals treated per chair, across clinics and across regions. Reasons for the variations could include differences in work force numbers; clinic set-up, i.e. the number of chairs in the clinic; the number and characteristics of patients seeking treatment; the relative complexity of treatment needs, appointment length and management; and the work practices of staff. (*para. 4.13 and 4.20*)

1.29 Insufficient attention has been given to the issue of service efficiency at a system level as the current concern for DHSV is managing the increasing demand for emergency treatment. (*para. 4.21*)

Effectiveness

1.30 Over the past year, 4 major infection control breaches were reported to DHSV, all of which have been dealt with appropriately. (*para. 4.26*)

1.31 Our examinations in clinics identified some non-compliance with standard precautions such as hand washing and the use of protective clothing to reduce cross-infection, decontamination, cleaning, sterilisation and storage of procedural instruments. We also observed, in some clinics, a lack of infection control audits and infection control consultants to determine compliance with policies and procedures, and to advise on infection control and universal precautions to address non-compliance. The specific matters raised in the assessments did not represent a significant immediate risk to public health. The assessments made have been reviewed and discussed with DHSV management and we are satisfied that DHSV will take appropriate action, within the limits of the physical environment of clinics, to address the concerns raised. (*paras 4.26 to 4.27*)

1.32 Differences in interpretation of the Health Service Agreement between DHSV and the Department have meant that DHSV had exercised less oversight of infection control practice in non-DHSV clinics, compared with its own-managed clinics. (*para. 4.31*)

1.33 The physical environment of some clinics was found to be deficient, i.e. not sufficient to support contemporary dentistry practice or to enable appropriate layout of facilities to protect sterile environments. The new and/or refurbished clinics were found to provide significantly improved facilities. The progressive decommissioning of the School Dental Service vans will address some problems identified, as will continued investment in equipment. (*paras 4.33 and 4.40*)

1.34 Funding for equipment for the 3 years to June 2003 for both the Community Dental Program and School Dental Service reflected the priority areas of clinical and occupational health and safety. A project commenced by DHSV in 2001 to develop an equipment replacement program for DHSV clinics and the School Dental Service will be helpful in informing the capital budget process and allocating resources, and needs to be completed at an early stage. The benefits of this initiative would be enhanced if the project was expanded to enable development of a Statewide equipment replacement strategy. (*paras 4.36, 4.37, 4.41 and 4.42*)

1.35 We were advised that delays in repair of equipment in rural clinics can result in clinic closure until repairs are completed. However, as response times are not accurately recorded, we were unable to identify the extent of this problem. (*para. 4.45*)

Work force

Victoria's oral health work force

1.36 There is currently an oral health work force shortage in Victoria. The shortage is not uniform, being most problematic in rural areas and in the public sector. This shortage is exacerbated in the community dental services by high attrition rates. Within its own clinics, DHSV has experienced attrition rates of 40 per cent for dentists over the past 3 years; and 14 per cent and 19 per cent, respectively, for dental therapists and dental assistants in the School Dental Service in 2001. (*paras 5.5 and 5.10*)

1.37 Approximately one-third of the adult population is eligible for public dental services, but only 10 per cent of dentists work in, or for, public dental services while almost all dental therapists work in the public sector. The number of vacancies for the Community Dental Program and School Dental Service are substantial, and both dentist and dental therapist vacancy rates are higher in rural than metropolitan regions. (*paras 5.7 and 5.9*)

1.38 During site visits, clinic managers reported that most new staff recruited into the community dental service were new graduates with limited experience. This placed additional demands on existing clinic staff, in particular the “lead dentist”, for supervision and mentoring, but also in terms of having to undertake the more complex and emergency cases. (*para. 5.12*)

Addressing public sector oral health work force issues

1.39 The Department advised that it has had ongoing discussions with The University of Melbourne about increasing the number of places for domestic students, modifying the intake criteria to include aptitude and interest in dentistry as well as academic grades, and relaxing restrictions on local fee-paying students. There have also been discussions about raising the profile of public dentistry in the School of Dental Science, increasing the number of places in dental therapy, and providing scholarships for dental therapy graduates to join the public sector. (*paras 5.24 and 5.27*)

1.40 In June 2002, a multi-employer collective agreement offering salary increases and an improved career structure was presented to dentists. However, finalisation of the agreement was very protracted and the outcome is such that public dentistry remains more poorly paid, relative to private dentistry. (*para. 5.33*)

1.41 In Victoria in 2000-01, 15 per cent of public dental patients were treated by private dentists under the 3 voucher schemes. The voucher schemes were used more extensively in some clinics and in rural regions, suggesting the potential for greater utilisation of private dentists if additional funding for these Schemes is available and they prove to be cost-effective. (*paras 5.36 and 5.39*)

1.42 There is scope for expanding the role of dental assistants in the public sector beyond chair-side support. The Department has committed to discussions with the Dental Practice Board of Victoria and the conduct of trials to investigate whether dental auxiliaries can, with increased training, provide additional cost-effective dental care under supervision of a dentist. However, specific action has yet to occur. (*paras 5.45 and 5.47*)

Program management

Roles and responsibilities

1.43 There were differing understandings and expectations about roles and responsibilities at 2 levels: first, between the Department and DHSV regarding operational issues; and second, around DHSV's role as the purchaser of community dental services from other entities. These matters are impacting on the way in which the 2 agencies interact with the service system, e.g. the way in which DHSV engages with non-DHSV clinics in relation to standards setting, infection control and complaints handling, and the degree of accountability to the Department required of DHSV. (*para. 6.6*)

Strategic planning

1.44 The most recent strategic plan for dental health in Victoria was released by the Department in 1995, prior to the establishment of DHSV. Given the difficulties faced by public dental services, the strategic direction for public dental health should be revisited to ensure that it is appropriate to the achievement of the program objectives. (*paras 6.9 and 6.10*)

1.45 The Department advised that capital planning for the health sector as a whole occurs on an ongoing basis to inform the annual budget process. However, our visits to clinics revealed that the standard of facilities is a significant issue with many of the older clinics and mobile vans, and the equipment available is in need of an upgrade to meet current occupational health and safety and infection control requirements. We, therefore, believe the current approach to capital provision, including the preference for integration of dental health services with primary health services, should be revisited. *(paras 6.16 and 6.17)*

Resource allocation

1.46 After a substantial increase for the Community Dental Program in 1999-2000, there have been only small increases in government funding for community dental services, i.e. from \$11.3 million to \$13.6 million for the School Dental Service and from \$33.3 million to \$36.2 million for the Community Dental Program between 1999-2000 and 2001-02. During the same period, co-payments have decreased marginally for the School Dental Service, and by \$1.1 million for the Community Dental Program. Meanwhile, waiting lists for the Community Dental Program have continued to grow and the target recall cycle for the School Dental Service has not been met. *(para. 6.24)*

1.47 We were unable to conclude on whether the resource allocation model for the Community Dental Program adequately allocates resources to need due to the lack of data on the oral health needs of adults. For the School Dental Service, the data are better, but the recall cycle targets need to be reviewed and the means of resource allocation to regions may mean that children in unfluoridated areas, who might be expected to have poorer oral health, will receive a greater share of more expensive treatment resources. Expert advice provided to audit indicated that fluoridation of such areas would be more cost-effective. *(paras 6.26 and 6.27)*

1.48 The process of developing the funding rate and clinic budgets is complex and results in delays to the finalisation of clinic budgets and Funding and Service Agreements. Revising the rate annually is an inefficient use of resources. *(paras 6.30 and 6.32)*

1.49 Dental funds allocated to community dental clinics did not provide for agency management overheads, e.g. salaries of senior management of the facility, human resource management costs and payroll services. The impact was unable to be costed but is less significant for DHSV clinics because they have the benefit of management support from DHSV regional managers working in clinics, and from DHSV's central administration in Melbourne. *(paras 6.33 to 6.35)*

1.50 As this audit was being completed, the Department advised that it will be reviewing the funding systems for services provided under the Community and Youth Dental Programs and the School Dental Service, to test the effectiveness and efficiency of the current funding requirements. The draft Terms of Reference cover some, but not all, of the issues relating to funding rates and the funding formula identified in the audit. *(para. 6.38)*

1.51 While voucher schemes provide a means of service provision when public dental staff are not able to meet the demand, neither the Department, nor DHSV determines the appropriate level of usage of the schemes on the basis of their relative cost-effectiveness. Indeed, it is not possible for the relative cost-effectiveness to be assessed because the necessary systems and information to identify the true cost of treatments provided by DHSV or non-DHSV clinics are not available. (*para. 6.42*)

Accountability and monitoring

1.52 Performance information provided in the *Budget Papers* and the Department's *2000-01 Annual Report* comply with the performance reporting requirements of the Financial Management Act and are relevant to the departmental objectives, are appropriate for the reporting of the outputs delivered, and are capable of fairly representing performance in this regard, i.e. how many services were delivered, the service mix delivered and the timeliness of service delivery. Improvements could include reporting on the quality of the care delivered and how that care contributed to better oral health status in the community, and comparative data on the relative quality of oral health services delivered. (*paras 6.50 and 6.51*)

1.53 Performance information reported by DHSV addressed both performance measures of outputs, as well as oral health outcomes. Its *Quality of Care Report* would be improved if information presented on safety of care, i.e. infection control and occupational health and safety, addressed the standards in all dental clinics, rather than only DHSV clinics. (*paras 6.54 to 6.59*)

1.54 The reporting requirements for DHSV under the Health Service Agreement are extensive. Some inappropriately focus on operational issues, rather than on providing relevant information to inform the Department's policy development role, and to enable it to monitor the effectiveness and efficiency of DHSV's management of the service system. (*paras 6.62 to 6.64*)

1.55 The Funding and Service Agreements in 2002-03 will include some clinical quality indicators for the first time, e.g. the number of unplanned returns following emergency care, the number of re-treatments following restorative care and the numbers of dentures remade. Action has also been taken on other indicators related to completion of patient's medical history and dental charting. (*para. 6.66*)

RECOMMENDATIONS

<i>Paragraph number</i>	<i>Recommendation</i>
Service access	
3.59	We recommend that the Government address the increasingly low levels of effective access to public dental services. This will require either a reduction in the eligibility for, and/or nature of, service offerings or increased resourcing, or both.
Service delivery	
4.77	We recommend that DHSV undertake a review of the efficiency of clinics to establish the reasons behind the varied performance achieved, and to develop strategies for improving the efficiency of service delivery, commencing with improved monitoring and benchmarking of dental clinics.
4.78	We recommend that DHSV increase its provision of ongoing support and training for staff of all dental clinics, particularly for critical practice issues and areas of non-compliance and inconsistent practice such as infection control.
4.79	We recommend that: <ul style="list-style-type: none"> • investment in equipment continues to emphasise occupational health and safety and clinical requirements; • an audit of equipment (other than that funded through minor works) be undertaken to enable development of an equipment replacement strategy for the entire service system; and • a review of the efficiency of the DHSV workshop be undertaken in response to criticisms of slow response times and excessive cost.
Work force	
5.56	We recommend that a work force database be developed and maintained by DHSV to enable accurate and ongoing monitoring of the oral health work force for the School Dental Service and the Community Dental Program, including both DHSV and non-DHSV clinics.
5.57	We recommend that the Department, in collaboration with DHSV, the major educational providers and other key stakeholders, such as the professional bodies and the Commonwealth and other State Governments, take strategic action to address the current and future shortages in the oral health work force, including: <ul style="list-style-type: none"> • immediate and long-term initiatives to increase the supply of oral health workers, targeting areas of greatest need including the public sector and rural regions; • a review of the potential for widening the role and scope of practice by dental auxiliaries, as a means of addressing the increasing demand for dental services; and • specific initiatives aimed at improving the perception of public dentistry and the quality of the work environment in order to attract a greater number of oral health graduates and to increase the re-entry and retention of experienced oral health workers.

RECOMMENDATIONS - continued

<i>Paragraph number</i>	<i>Recommendation</i>
Program management	
6.72	<p>We recommend that:</p> <ul style="list-style-type: none"> • The Statewide strategy for public dental health be reviewed to ensure that priorities for dental health are being properly identified and met, and that responsibilities for policy and operational activities are appropriately assigned and understood between the Department and DHSV. Specifically, DHSV as a purchaser of community dental services must ensure required standards are met, regardless of whether services are delivered by DHSV or non-DHSV clinics; • A Statewide service plan be developed by DHSV, including a re-assessment of the appropriateness of the service planning principles in place, and whether the location and scale of dental clinics established are meeting the needs of the eligible population; • The dental health capital plan be revisited to determine the appropriateness of the current approach to capital provision for dental services, i.e. promoting the integration of dental health services with primary health services; and • The Department and DHSV support, and participate in, national initiatives aimed at collecting data on the oral health of adults including data relating to the oral health of, and services used by, adults receiving treatment through public dental services.
6.73	<p>We recommend that:</p> <ul style="list-style-type: none"> • The Terms of Reference for the Department's proposed review of the funding formula be expanded to include consideration of the matters regarding the funding rates and funding formula raised by this audit; and • A clinical costing study be undertaken and appropriate systems introduced at DHSV, to ensure the costs of service delivery are adequately identified and clinics are equitably funded to meet those costs, while incorporating incentives for efficient service provision. Such information would ensure a more rigorous basis for decisions on whether to provide services in-house, through contracted clinics or through the voucher schemes.
6.74	<p>We recommend that external reporting by the Department be expanded to address achievements against program objectives, and that reporting by DHSV to the Department under the Health Service Agreement provide sufficient relevant information to the Department to inform its policy development role, and to enable it to monitor the effectiveness and efficiency of DHSV's management of the service system, including both DHSV and non-DHSV managed clinics.</p>

RESPONSE provided by the Chief Executive, Dental Health Services Victoria

The stated objective of the audit was to examine the economy, efficiency and effectiveness of community dental services in Victoria. DHSV was supportive of the audit objectives and believes the scope of the audit was sufficient to adequately address these objectives.

Twelve overall conclusions were drawn from the audit findings (paragraphs 1.5 to 1.16). DHSV agrees with each of these overall audit conclusions and believes they highlight the majority of issues currently facing public dentistry.

In relation to the audit finding and conclusions, 2 of the conclusions of the report were unfortunately not highlighted in the recommendations. These conclusions relate to the premise that water fluoridation of regional Victoria may be a more cost-effective way of improving oral health than allocating more resources to treat the higher prevalence of dental disease in populations living in non-fluoridated areas (paragraphs 1.15, 1.16, 1.47, 2.17 and 2.18). DHSV strongly supports the extension of water fluoridation in appropriate concentrations to those areas of regional Victoria currently non-fluoridated. There is a considerable body of evidence demonstrating that water fluoridation is the most effective, socially equitable and safe method to prevent dental caries.

The report notes that dental caries (decayed teeth) is the most prevalent health condition in Australians (paragraph 2.3) and yet it is a preventable disease. Given the key findings and conclusions of the report, many of which relate to the worsening mismatch between the increasing demand for public dental services and the decreasing supply of an oral health work force, particularly in the public sector, effective and efficient means of decreasing the incidence and prevalence of oral disease must be actively pursued. This would include significantly increasing the population coverage of water fluoridation in Victoria.

The audit makes 9 recommendations in relation to improving the performance of community dental services. DHSV's response to each of these recommendations is outlined in the relevant Parts of this report.

RESPONSE provided by the Secretary, Department of Human Services

The Department of Human Services would like to thank the Auditor-General for conducting the performance audit of Community Dental Services. Community Dental Services provide essential primary dental care to disadvantaged Victorians and it is vital that they are provided efficiently and effectively. The Department will carefully consider the issues raised in the audit report.

While acknowledging that some actions can and should be undertaken, a number of recommendations relate to the total available resources for public dental care. The Commonwealth Government's withdrawal of funding from this area has created a problem for Victoria and all other States. Under the Commonwealth Dental Health Program, Victoria received \$27 million annually, which allowed more timely care to be offered to concession card holders. The cessation of this Program in January 1997 has caused waiting times to blow out despite the additional resources the State Government has committed.

A total of \$35.55 million of additional resources has been allocated over 4 years from 1999-2000 to improve oral health for Victorians. More than 20 000 extra concession card holders were treated in 2001-02, a 13 per cent increase since 1998-99. Over 600 000 visits are now made to public dental clinics each year, including school dental services for children. Regular preventive services have been extended to disadvantaged adolescents under the new Youth Dental Program. Almost 13 000 adolescents received care under this Program in 2001-02. Co-payments for dentures have been reduced to a maximum of \$100, a significant reduction from the \$180 fee which previously applied.

RESPONSE provided by the Secretary, Department of Human Services - continued

Prevention of dental disease is being tackled through broader health promotion initiatives. The Victorian Oral Health Promotion Strategy launched in 2000 is being implemented through community health agencies, the dental industry, professional associations and educational institutions. Sixteen projects have been funded, and more are planned for this year. As indicated in the audit report, the extension of water fluoridation to rural communities will have the largest impact on improving oral health. The Minister for Health has encouraged water authorities to engage their communities in discussions about fluoridation and, where there is community support, to introduce this key public health measure.

New community dental clinics have been built so that people can access dental care closer to where they live. Over the last 3 years, 14 new clinics have been established, incorporating a total of 82 dental chairs. Seven of the new clinics were built in rural and regional Victoria, with the other 7 being developed mainly in the outer metropolitan areas of Melbourne. An additional 11 dental chairs were placed in 3 existing clinics. During the next 12 months, 2 new clinics will be built, providing an additional 10 public dental chairs. A new state-of-the-art Royal Dental Hospital will open early 2003. At a cost to the State Government of \$32.8 million, the Hospital will be the centre of excellence for teaching, specialist care and research.

Shortages of dentists and dental therapists are a problem in all Australian States, mainly in rural areas. Victoria was the first State to commission a comprehensive workforce report to investigate dental services supply and demand, and public dental recruitment, and retention issues ("Victorian Oral Health Services Labour Force Planning, January 2002"). The Department has identified 23 recommendations for improving public dental sector recruitment and retention and is progressively implementing these. A Dental Workforce Project has been established with a Reference Group to provide an integrated and strategic approach. The Victorian Government is providing extra resources to encourage dentists and dental therapists to work in rural public clinics, is funding 24 dental therapy training places in 2003, and has funded an interstate and overseas recruitment campaign. It is a Commonwealth responsibility to finance university training, and the Commonwealth will be encouraged to fund more places for dental professionals.

Although there are waiting times for non-urgent care, urgent needs are addressed. Emergency care is generally available within 24 hours, and people with urgent denture needs are given priority. In areas with high demand and a shortage of public dentists, private dentists are subsidised to treat public patients.

The Department is concerned about the perception of lack of clarity of the roles and relationships between the Department and DHSV, and between DHSV and community dental agencies. DHSV was established to "improve the planning, integration, co-ordination and management of public dental health services" (Victorian Department of Health and Community Services, "Future Directions in Dental Health in Victoria", August 1995). The Department has always been clear that DHSV, as a purchaser of community dental services, must ensure that required standards are met regardless of whether services are delivered by DHSV or non-DHSV clinics. The Department also supports the recommendation to use the Health Service Agreement as a mechanism to clearly outline and make DHSV accountable for its system-wide role.

It is important to recognise that strategic planning in the oral health sector has continued to evolve since "Future Directions" and has been articulated in the "Oral Health Promotion Strategy, 2000"; the Strategic Plan for Continuous Quality Improvement in Dental Public Health Services, 2000; the "Victorian Oral Health Services Labour Force Planning Report, 2002"; the "Geriatric Dentistry Action Plan, 2002"; and in departmental-wide plans and reports. An essential principle has been the integration of oral health promotion and care with both general health promotion and the provision of other primary care services. For this reason, it is essential that any Statewide service planning that DHSV undertakes must be in partnership with the Department and local primary health care services.

RESPONSE provided by the Secretary, Department of Human Services - continued

The Department does have concern with the presentation and interpretation of some of the data. The concerns are presented in the relevant Parts of the report.

In conclusion, the Department will, as a matter of priority, work with DHSV to consider the recommendations and develop actions to respond.

The Department would like to record its appreciation of the co-operative approach taken by the Auditor-General's Office in conducting this performance audit.

Part 2

Introduction

THE ORAL HEALTH OF VICTORIANS

2.1 This audit examines Victoria's public dental health services, with a focus on community dental health services delivered through the Community Dental Program and the School Dental Service. In particular, the audit examined:

- access to community dental services;
- delivery of those services by clinics in rural and metropolitan regions;
- issues relating to the recruitment and retention of the public oral health work force; and
- the framework for planning, managing and monitoring community dental services.

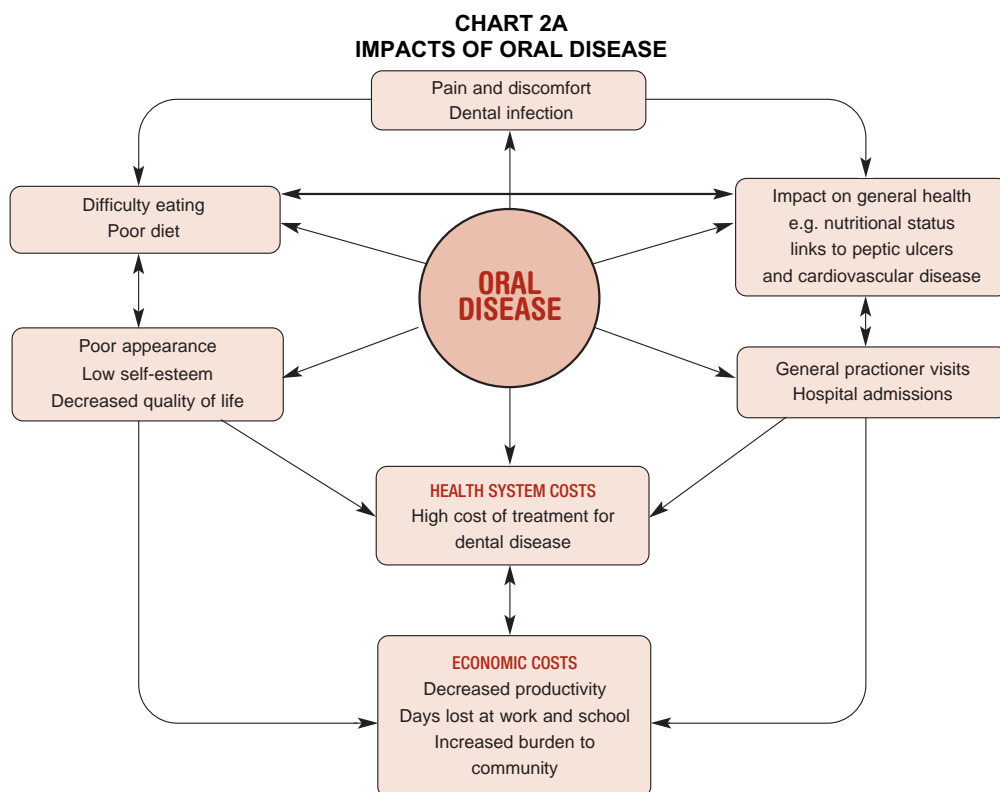
2.2 A complete description of the audit's objectives, scope and methodology are provided in Appendix A of this report.

2.3 Oral diseases are estimated to be among the most prevalent diseases in the community, with dental caries (decayed teeth), edentulism (loss of all teeth) and advanced periodontal (gum) disease being the 1st, 3rd and 5th most prevalent health conditions in Australians, respectively¹.

2.4 Poor oral health may cause people to avoid social interaction and personal contact, reducing their quality of life. Patterns of oral health and disease also indicate that personal and behavioural factors impact on dental health outcomes, and that particular population groups have a greater vulnerability to poor oral health status². Chart 2A illustrates the impact of oral disease on productivity.

¹ Australian Institute of Health and Welfare, Australia's Health 2000, Canberra, pp. 46-7, 2000.

² Australian Health Ministers' Conference, Steering Committee for Oral Health Planning, *Oral Health of Australians, National planning for oral health improvement*, South Australian Department of Human Services, August 2001.



Source: Victorian Department of Human Services, *Promoting Oral Health 2000-2004, Strategic Directions and Framework for Action*, 1999.

Oral health status of Victorians

Children

2.5 The oral health of Australian children is relatively good when compared with that of adults. However, data gathered as part of the Child Dental Health Survey, Australia, 1998³ showed that Victorian children:

- Had the highest mean number of deciduous dmft⁴ among 5 to 6 year olds in Australia - 1.47 compared with the national average of 0.97. Victoria was one of only 3 States with a mean dmft greater than one (the other States being Queensland and the Northern Territory); and

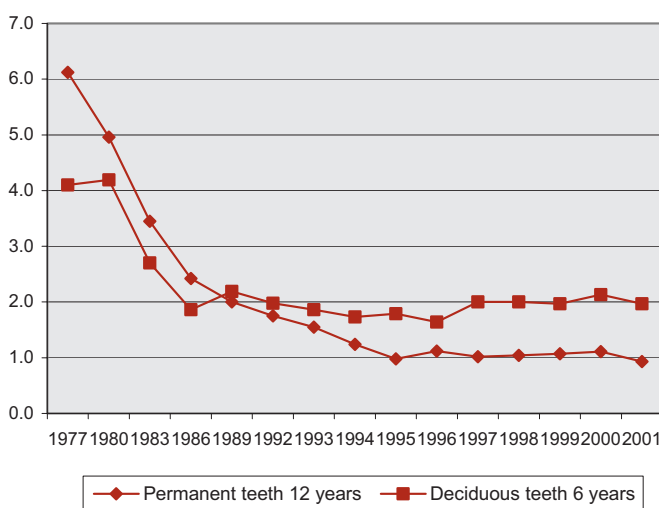
³ JM Armfield, KF Roberts-Thomson and AJ Spencer, *The Child Dental Health Survey, Australia, 1998*, AIHW Cat. No. DEN 88, Australian Institute of Health and Welfare Dental Statistics and Research Series No. 24, 2001.

⁴ The number of *permanent* teeth with dental decay experience (decayed, missing and filled teeth) is represented by the acronym “DMFT”, while the number of *deciduous* teeth with dental decay experience is represented by the acronym “dmft”. The dmft score of 5 to 6 year olds is an internationally accepted indicator of oral health.

- Had the highest mean number of missing teeth among 5 to 6 year olds - 0.12 compared with the national average of 0.06. Victoria was the only State with a mean number greater than 0.10⁵.

2.6 Despite the higher level of dental caries for Victorian children, Chart 2B shows that over the past 25 years there has been a significant decrease in the prevalence of dental decay in Victorian 6 to 12 year olds.

CHART 2B
TEETH AFFECTED BY DENTAL DECAY
VICTORIAN 6 TO 12 YEAR OLDS
(average no. of affected teeth)



Source: Australian School Dental Scheme and the Child Dental Health Survey, Victoria 1999, AIHW Cat. No. DEN 87.

2.7 The Child Dental Health Survey, Victoria, 1999⁶ revealed that:

- there was significant variation in caries experience in both deciduous and permanent teeth across regions⁷;
- clinically-detectable caries in deciduous teeth were lowest in the 4 metropolitan regions of the State, and highest in the Grampians region;

⁵ Care should be taken in interpretation of this information, however, as these data are derived from users of school dental services and could be biased by differences in the way services are delivered between States. For example, the 52 per cent of Victorian children who use the School Dental Service are likely to be at higher risk of caries than those who do not use the Service.

⁶ Australian Institute of Health and Welfare Dental Statistics and Research Unit, *The Child Dental Health Survey, Victoria 1999*, AIHW Cat. No. DEN 87, 2001.

⁷ For administrative and program management purposes, the Victorian Department of Human Services divides the State into 9 operational regions, comprising 4 metropolitan regions (Western Metropolitan, Northern Metropolitan, Southern Metropolitan and Eastern Metropolitan) and 5 rural regions (Loddon Mallee, Hume, Grampians, Gippsland and Barwon).

- rural regions had higher mean scores for deciduous missing and filled teeth: Grampians had the highest score (3.20) and Eastern Metropolitan had the lowest (1.45); and
- the rural-urban disparity also existed for permanent caries experience: Loddon Mallee had the highest mean DMFT (1.73) and Northern Metropolitan had the lowest (0.90).

Adults

2.8 The key indicators typically used for adult oral health are the percentage of edentulous (i.e. those without teeth) among 65+ year olds and DMFT among 35 to 44 year olds. Clinical data on oral health of adult Australians and Victorians are sparse, but the oral health of Victorians in these age groups is worse than for the Australian population. For example, the 1999 National Dental Telephone Interview Survey revealed the percentage of edentulous Victorians aged 65 or over as 40.1 per cent compared with 33.4 per cent for Australia.

2.9 Data for 35 to 44 year old public dental patients, collected through the Adult Dental Programs Survey 1995-96, indicated that the mean DMFT among that group was 12.5 for Victoria and 13.4 for Australia, i.e. on this measure the Victorian adult population appears to have slightly better oral health.

RISK FACTORS AND STRESSORS CURRENTLY FACING PUBLIC DENTAL SERVICES

Children

2.10 Four key risk factors facing public dental care in Australia have been identified. They particularly affect school-based dental services, and have the potential to deteriorate the relatively good oral health of children⁸. These “real or emerging problems” identified for school dental services are:

- existing pockets of children at high risk of dental disease;
- inequalities in access to school-based dental care across States and Territories, with Victorian and NSW children the most affected in Australia;
- capital stock at the end of its working life, with the need for reinvestment to maintain safety and quality of care; and
- resources being thinned and stretched across greater numbers of children, to the extent that quality of care as judged by parents, children, and providers may be diminishing.

⁸ AJ Spencer, *What options do we have for organising, providing, and funding better public dental care?* Australian Health Policy Institute at The University of Sydney, Commissioned Paper Series 2001/02, 2001.

Adults

2.11 For a large portion of the adult population, the investment that has been made in school dental services for children's oral health is not followed by a commensurate investment in maintenance during adulthood. Approximately one-third of adults are eligible to use community dental services but only a small minority of eligible adults do so. We recognise that this could be a matter of choice or the result of resource limitations. The numbers accessing the private sector are not known.

2.12 The problems identified for adult community dental services are:

- low use by the eligible population, raising concerns about lack of any dental services for many adults, or the hardship faced by others in purchasing private dental services;
- the high percentage of users whose use of community dental services is limited to emergency care, and the limited scope of treatment received, especially the high number of extractions performed;
- the lack of emphasis in the community dental services on maintenance of teeth and prevention of oral disease or its recurrence;
- the lack of higher level services for patients with special needs; and
- the lack of continuity of dental care as reflected in the absence of recall or incremental programs.

2.13 An additional risk to the service system relates to characteristics of patients who are eligible for public dental services. Compared with patients accessing private dental care, public patients tend to:

- have poorer levels of oral health and greater rates of complete tooth loss;
- have more recent experience of oral health problems;
- be older, have lower education levels and are more likely to be retired or unemployed; and
- be from a non-English speaking background, particularly those accessing care in community health centres.

2.14 In general, such patient-related factors are likely to make the provision of dental services in the public sector more difficult than in the private sector⁹.

⁹ JM Lewis, AC Campain and FAC Wright, *Adult dental services in Melbourne: accessibility and client satisfaction*, Community Dental Monograph Series No. 9.

Work force

2.15 The ability to recruit and retain a clinical work force is also a stressor facing public dentistry. Adult community dental services are experiencing a shortage of dentists, while School Dental Services are experiencing a shortage of dental therapists, dentists and dental assistants. This is discussed in Part 5 of this report. Dental service provision in the Australian context is predominantly private practice-based. The public sector is competing with the private sector for a limited supply of clinical staff and traditionally has had difficulty recruiting.

Fluoridation of the water supply

2.16 Water fluoridation was first introduced to Australia in Beaconsfield in Tasmania in 1953, and now covers two-thirds of the Australian population¹⁰. Water is not the only source of fluoride but it is considered beneficial due to its ready ability to be controlled, absence of consumer compliance issues, and the fact that the amount of fluoride received is in constant but very small quantities. All capital cities in Australia, excluding Brisbane, have implemented water fluoridation at varying concentrations depending on climate and geography. Outside metropolitan areas there is often no water fluoridation.

2.17 The Australian Institute of Health and Welfare Dental Statistics and Research Unit cites fluoride as “*the keystone to the prevention of caries in Australia*”¹¹. Data from the Victorian School Dental Service clearly shows a decline in dental caries from the early 1980s or even late 1970s, particularly in metropolitan Melbourne where water fluoridation was introduced in 1977.

2.18 Table 2C containing data from the Victorian School Dental Service shows that a higher percentage of Victorian children in fluoridated communities are decay-free or have no decay experience across all age groups, than those in non-fluoridated communities. The absolute benefit ranges from 0.95 dmft for 3 to 5 year olds to 0.27 DMFT for 12 to 14 year olds.

¹⁰ AJ Spencer, *Time trends in exposure to optimally fluoridated water supplies among Australian adolescents*, Community Dental Oral Epidemiol 12:1-4, 1984.

¹¹ Australian Institute of Health and Welfare Dental Statistics and Research Unit, *Australia's Oral Health and Dental Services*, AIHW Cat. No. DEN 13, 1998.

TABLE 2C
VICTORIAN CHILDREN'S DECAY EXPERIENCE (a),
DMFT AND dmft (b),
1996-97

Age group (years)	No caries experience (per cent)		Caries experience (mean number of teeth)	
	Fluoridated communities	Non-fluoridated communities	Fluoridated communities	Non-fluoridated communities
3-5	64.9	50.3	1.35	2.30
6-8	51.5	39.8	1.74	2.57
9-11	39.7	28.3	1.67	2.39
12-14	43.1	33.8	1.01	1.28

(a) Based on children using the School Dental Service: fluoridated communities – sample population 15 775; non-fluoridated communities – sample population 8 064.

(b) DMFT relates to caries experience in the permanent or secondary teeth (usually used for age groups 12 years and older) and dmft relates to the deciduous teeth (used for age groups younger than 12). In this table, the index used for children 3 to 11 years is dmft and for 12 to 14 year olds is DMFT.

Source: National Health and Medical Research Council, *Review of Water Fluoridation and Fluoride Intake from Discretionary Fluoride Supplements*, 1999, based on data provided by Dental Health Services Victoria.

2.19 The above data show the oral status of children in fluoridated communities to be clearly better than that of children in non-fluoridated communities. Despite this evidence, and a wide body of research that indicates improved oral health outcomes in fluoridated areas, there remain communities within Victoria, inhabited by large populations, where the water supply is unfluoridated. For example, the major regional centres of Geelong, Ballarat and Wodonga remain unfluoridated due to local resistance to the practice in the 1980s. Chart 2D provides an illustration of the distribution of fluoridation throughout the State.

CHART 2D
DISTRIBUTION OF FLUORIDATION IN VICTORIA (a)



(a) Water fluoridation status in Victorian population centres greater than 5 000 people, 2002.

Notes:

* Portland is naturally fluoridated: no fluoride is added to the drinking water supply, fluoride levels are generally lower than optimal fluoridation level.

** Optimally fluoridated water contains approximately 1 milligram of fluoride for every litre of water.

Source: Map prepared by GISCA, Adelaide University, May 2002.

2.20 The Government has encouraged Water Authorities to engage their communities in discussions about fluoridation and, where there is community support, to introduce this key public health measure. Both the Department of Human Services and Dental Health Services Victoria have undertaken initiatives to encourage the uptake of fluoridation throughout the State. However, the failure of some communities to take this proven preventive action means that the burden of the poorer oral health status of people in those communities, who are eligible to use public dental health services, is disproportionately borne by the remainder of the State.

PUBLIC DENTAL SERVICES IN VICTORIA

2.21 A number of oral health studies show that the socially disadvantaged visit dentists less frequently than the rest of the community, are more likely to have teeth extracted rather than filled and are less likely to get preventive care¹². Governments have taken a role in providing public dental care to the poorer sections of the community. In Australia, persons eligible for adult public dental care are generally holders of concession cards, such as the unemployed and aged pensioners. Primary school-aged children, predominantly, are also recipients of public dental services through the School Dental Service.

2.22 In Australia, approximately 15 per cent of dental services for adults are provided publicly. Faced with increasing demand, public adult dental services in Australia see it as desirable to give priority to:

- acute emergency dental needs;
- the socially, physically and psychologically disadvantaged, and disabled; and
- people with combinations of greater needs and propensity for oral health gains¹³.

Delivery framework

2.23 The Rural and Regional Health and Aged Care Services Division of the Department of Human Services has responsibility for the full range of health and aged care services in rural and regional Victoria. The Division also has policy and program responsibility for a range of programs, including public dental health for which the Division's Dental Health Unit is accountable.

2.24 Dental Health Services Victoria (DHSV) was established in 1996 through the amalgamation of the Royal Dental Hospital of Melbourne, the School Dental Service and the Community Dental Program. The Department funds DHSV under a Health Service Agreement to manage the provision of community and school dental services across the State.

2.25 The Victorian public dental service system aims to provide community dental services to all primary school children, concession card holders and their dependents through:

- the Community Dental Program, including:
 - adult dental services and the Youth Dental Program, which are provided in public dental clinics managed by DHSV or contracted to community health centres or hospitals; and

¹² S Ziguras and C Moore, *Improving the dental health of people on low incomes*, Brotherhood of St Laurence and the Australian Council of Social Service, April 2001.

¹³ AJ Spencer, *op. cit.*, 2001.

- 3 schemes which provide vouchers for provision of services by private dentists: the Victorian Emergency Dental Scheme, the Victorian General Dental Scheme and the Victorian Denture Scheme;
- the School Dental Service, which is provided through fixed-site and co-located clinics and mobile dental vans; and
- several small programs targeted at special needs groups, including the Gerodontic Program, special needs projects and pre-school dental services.

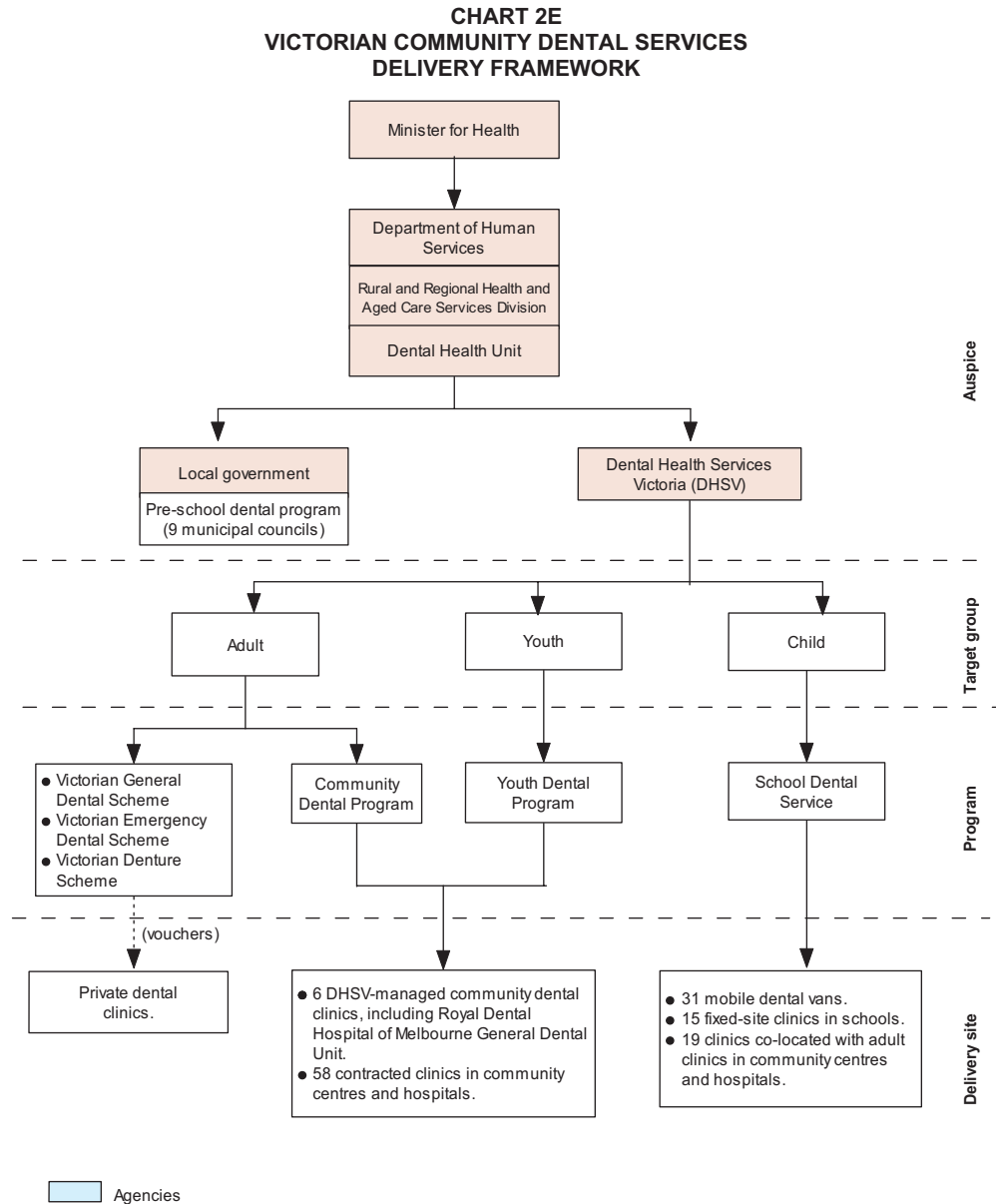


Adult and youth dental services are provided in public dental clinics.



School Dental Service mobile dental vans visit schools to treat children.

2.26 Chart 2E shows the structure under which community dental care is provided throughout Victoria.



Note: The chart details the framework for delivery of community dental services. A range of other public dental services are provided by Dental Health Services Victoria, including specialist and emergency services through the Royal Dental Hospital of Melbourne.

Source: Victorian Auditor-General's Office.

Funding

Commonwealth

2.27 In the past, the Commonwealth Government played a direct role in the provision of public dental care through:

- The Australian School Dental Scheme, introduced in 1973 to maximise the oral health of children irrespective of their family's social circumstances and recognising the dependency children have on others to enable them to access dental services. (Public dental health services for Australian children began after World War One, but were limited until the late 1960s, when school-based dental programs began.); and
- The Commonwealth Dental Health Program introduced initially as an emergency scheme in January 1994 and expanded to include general care in July 1994.

2.28 In 1981, the Commonwealth rolled funding for school dental services into block funding for community health provided to State Governments. Widespread Commonwealth funding of dental health was withdrawn in 1997 with the cessation of the Commonwealth Dental Health Program. However, the Commonwealth Government has continued to play a direct role in the provision of dental care for veterans, indigenous persons, the armed services, some in-patient services under Medicare and dental care related to a cleft lip/palate scheme. These groups make up 3 per cent of all public dental care¹⁴.

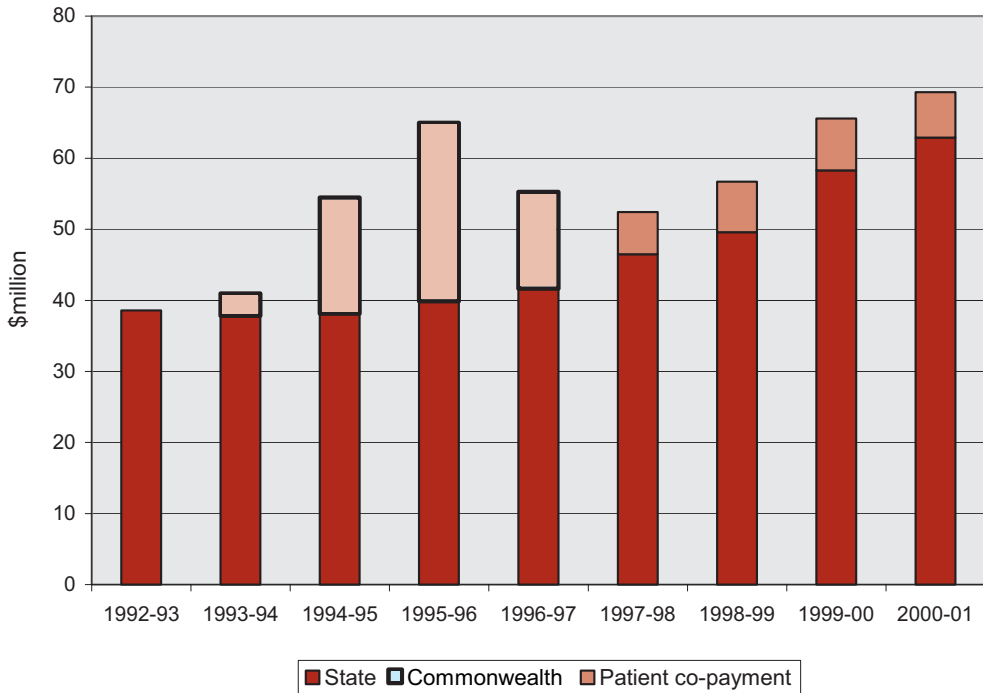
State

2.29 Chart 2F shows that Victoria's public dental health budget has incrementally increased since the withdrawal of Commonwealth funding in 1997 and that now, with the inclusion of funds generated from co-payments¹⁵, i.e. patient contributions to the cost of their dental treatment, is (in unadjusted terms) slightly above the level reached in 1995-96.

¹⁴ AJ Spencer, *op. cit.*, 2001.

¹⁵ Co-payments were introduced in Victoria in April 1997 and apply to all adult concession card holders, i.e. Pensioner Concession Card holders or their adult dependents, and Health Care Card holders and their adult dependents. Co-payments do not apply to emergency and general care provided to concession card holders under 18 years of age, or card holder dependents under 18, or to care provided to patients by undergraduate students in any community clinic including the Royal Dental Hospital of Melbourne. People from special needs groups, and individuals with a mental illness or intellectual disability, are also exempt from co-payments. The co-payments range from 9 to 25 per cent of the scheduled fee.

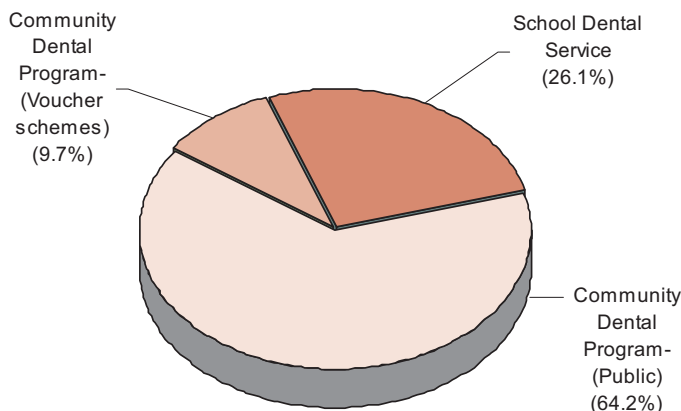
CHART 2F
TRENDS IN VICTORIAN PUBLIC DENTAL HEALTH FUNDING,
BY SOURCE
 (\$million)



Source: Department of Human Services.

2.30 In 2001-02, \$83.1 million was budgeted by Parliament for the Dental Health Output Group (\$84 million 2002-03). Of that amount, \$63.5 million was provided by the Department of Human Services to DHSV, of which \$55.9 million funds clinics or private providers for the direct provision of community dental services under the Community Dental Program and the School Dental Service. Chart 2G shows the distribution of the funds for community dental services.

CHART 2G
COMMUNITY DENTAL SERVICES,
FUNDS PER PROGRAM,
2001-02
 (per cent)



Note: Co-payments relating to the 3 voucher schemes are included in the public Community Dental Program component, as they were not separately identified in the data provided.

Source: Department of Human Services.

2.31 In 2001-02, community dental clinics treated 171 934 patients representing a 13 per cent participation of eligible adults, youth and pre-school children, while 110 072 children were treated under the School Dental Service. The overall participation rate at 30 June 2002 for the School Dental Service was 52 per cent including an 80 per cent participation rate among children of concession card holders.

Oral health promotion

2.32 In 1999, the Government introduced its strategy for oral health, *Promoting Oral Health 2000-2004: Strategic Directions and Framework for Action*. The goal of the strategy is to “prevent and control oral disease and [to] promote oral health amongst the Victorian population”¹⁶.

2.33 The oral health promotion strategy was made up of several “action plans” that identified key interventions, organisations and partnerships that would help develop effective oral health promotions. The action plans covered the following areas:

- “community education and skills development in oral health promotion to develop improved oral health knowledge, attitudes and behaviours of all Victorians;
- development of environments which are supportive of good oral health;
- facilitation of adequate and appropriate access to fluoride;

¹⁶ Victorian Department of Human Services, *Promoting Oral Health 2000-2004: Strategic Directions and Framework for Action*, December 1999.

- *facilitation of, and support for, the continued development of oral health research and surveillance; and*
- *development of the oral health promotion capacity of the oral health and community workforce, to enhance oral health promotion practice in the mainstream primary health care and community support system*¹⁷.

2.34 The strategy lists a number of desired oral health outcomes, namely:

- reduced incidence of dental caries (decay);
- reduced incidence of oral cancers;
- reduced incidence of periodontal diseases;
- reduced incidence of oral trauma; and
- the realisation of social and emotional health and wellbeing associated with improved oral health.

2.35 A key component of this strategy is the provision of dental services to those individuals unable to access such services from private dentistry and seen to be at risk.

Special needs programs

2.36 In *Promoting Oral Health 2000-2004: Strategic Directions and Framework for Action* the Department of Human Services identified facilitating access to dental services for vulnerable and disadvantaged groups as a priority. These groups include:

- people with a mental illness;
- people living in supported residences;
- the homeless;
- people using drug and alcohol treatment programs and those on methadone programs;
- people with disabilities;
- Aboriginals and Torres Strait Islanders;
- people who are home-bound, including those in residential aged care facilities;
- people with HIV/AIDS;
- new arrivals to Victoria under refugee or special humanitarian programs; and
- young people.

2.37 A relatively small but increasing number of individuals participate in special needs programs. Individuals with special needs may also access dental services through the Community Dental Program.

¹⁷ Victorian Department of Human Services, *Promoting Oral Health 2000-2004: Strategic Directions and Framework for Action*, December 1999.

Part 3

Service access

INTRODUCTION

3.1 In this Part of the report, we assess whether access to community dental health services meets the Government's objective of improving the oral health for vulnerable groups, in particular children and the disadvantaged. Our assessment is informed by analysis of Statewide data and findings from our examinations of 13 selected public dental clinics. The issues addressed include:

- eligibility;
- level and prioritisation of access;
- impact of co-payments on service access; and
- regional access to services.

ELIGIBILITY

3.2 A large proportion of the population are eligible to use public dental services:

- The eligible population for the Community Dental Program is all holders of concession cards (both Pensioner Concession Cards and Commonwealth Health Care Cards) and their dependents (excluding those covered under the School Dental Service). In 2001-02, this eligible population was 1 357 949, of which 87 per cent were adults and 13 per cent youth and pre-school children. The eligible population remained relatively stable over the period 1997 to 2002; and
- The eligible population for the School Dental Service, i.e. those children enrolled in school years Prep to Year 8, was 479 337 in June 2002. Between June 1997 and June 2002, this eligible population increased by approximately 12 per cent.

3.3 Our examinations at the 13 clinics visited revealed that recipients of services in the Community Dental Program and School Dental Service were eligible to receive those services.

LEVEL AND PRIORITISATION OF ACCESS

3.4 There are no agreed community standards against which the level of access to a public dental health program can be compared. There are also very few data on oral health status, particularly for adults, which can be used to measure dental care needs. However, we did expect to see:

- An acceptable or increasing proportion of the eligible population accessing services. However, the proportion accessing services is only a broad indicator of demand for treatment, as individuals or parents may choose to use alternative providers for their own or children's dental care, or choose not to use dental services at all. This is a particular issue for the School Dental Service because its eligible population does not differentiate in its service access requirements, i.e. it includes families who are not concession card holders, some of whom can presumably afford private dental care; and

- Short waiting lists and waiting times for services¹.

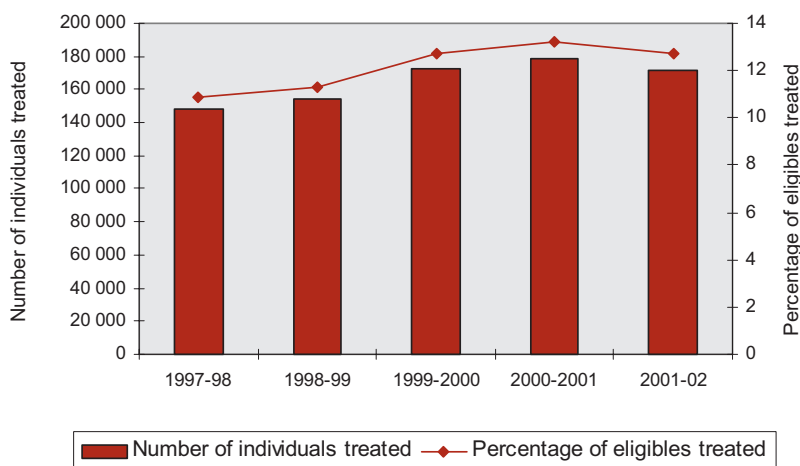
3.5 In community dental services, as with all health services, the important issue for prioritisation is the balance between provision of emergency care and general care, to enable an appropriate level of early intervention and prevention. If this balance was being appropriately managed, we would expect to see waiting times that reflect the severity of need in emergency cases, while at the same time maintaining reasonable waiting times for general care.

Community Dental Program

Level of access

3.6 In 2001-02, approximately 13 per cent of the 1.36 million eligible people were treated under the Community Dental Program. Chart 3A shows that from 1997-98 to 2001-02 the number of individuals treated under the Community Dental Program increased from 147 754 to 171 934, or by approximately 14 per cent, and the percentage of the eligible population treated increased from 11 per cent to 13 per cent².

**CHART 3A
COMMUNITY DENTAL PROGRAM,
INDIVIDUALS TREATED**



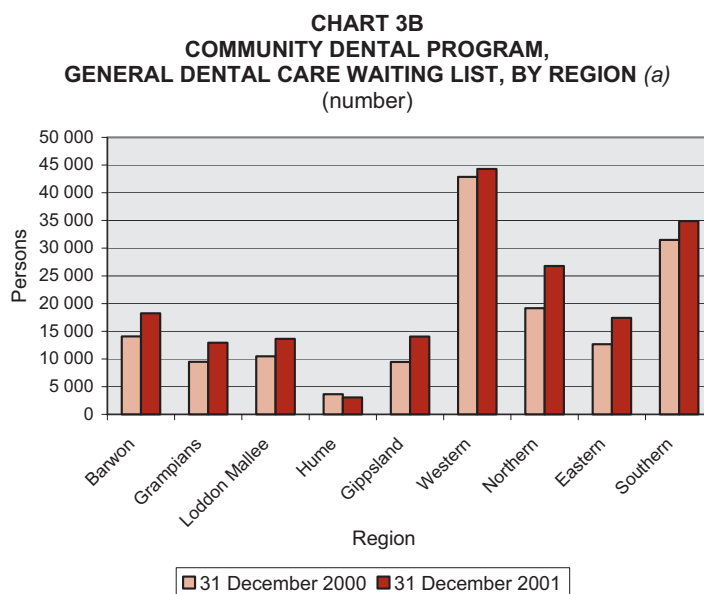
Source: Dental Health Services Victoria.

¹ Waiting times are defined by the length of time that the person at the top of the list has been waiting for treatment.

² Unless otherwise stated in this report, figures for the Community Dental Program include eligible adults, as well as youths treated under the Youth Dental Program as the majority of youths receive treatment through community dental clinics.

3.7 Waiting lists³ and waiting times in the Community Dental Program are very long. At December 2001, there were 185 290 people on the waiting list for general dental care, compared with 153 297 people at December 2000, an increase of 21 per cent over one year. This translates to an average waiting time, across the State, of 22 months for general dental care.

3.8 Chart 3B shows general dental care waiting lists across regions. Analysis of the data indicates that the waiting lists of rural clinics grew at a faster rate (31 per cent) than those of metropolitan clinics (16 per cent) during 2001.



(a) "Region" indicates location of dental clinics not residential region of persons on the waiting list.

Note: Western region includes the Royal Dental Hospital of Melbourne General Dental Unit.

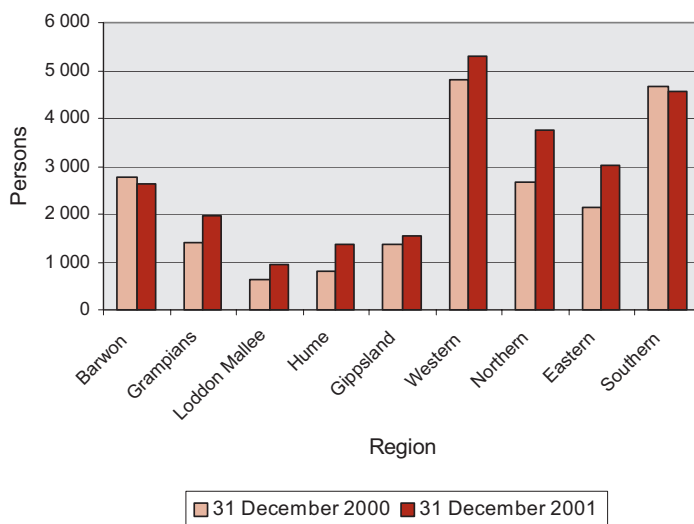
Source: Dental Health Services Victoria.

3.9 At December 2001, there were 25 085 people on the waiting list for prosthetics (dentures) under the Community Dental Program compared with 21 278 at December 2000, an increase of 18 per cent over the year. This translates to a waiting time of 24 months for prosthetics at December 2001.

3.10 As shown in Chart 3C, overall growth was similar for rural (20 per cent) and metropolitan clinics (18 per cent).

³ Two waiting lists are maintained: the conservative dentistry waiting list, for "restorative", i.e. general dental care; and the prosthetics waiting list, i.e. for dentures. The conservative waiting list is a record of all dentate people (i.e. those having some natural teeth) who contact the clinic seeking treatment. The prosthetics waiting list is a list of all edentulous people (i.e. those having no natural teeth) who contact the clinic seeking dentures or dentate people removed from the conservative list who require dentures or denture relines.

CHART 3C
COMMUNITY DENTAL PROGRAM PROSTHETIC WAITING LIST
BY REGION (a)
 (number)



(a) "Region" indicates location of dental clinics not residential region of persons on the waiting list.

Note: Western region includes the Royal Dental Hospital of Melbourne General Dental Unit.

Source: Dental Health Services Victoria.

3.11 In summary, the Community Dental Program has long waiting lists and waiting times. In combination, this indicates that the Program does not currently provide adequate access to treatment for the eligible population.

Priority of access

3.12 Under the Community Dental Program, the Department of Human Services has developed criteria for priority access to clients who:

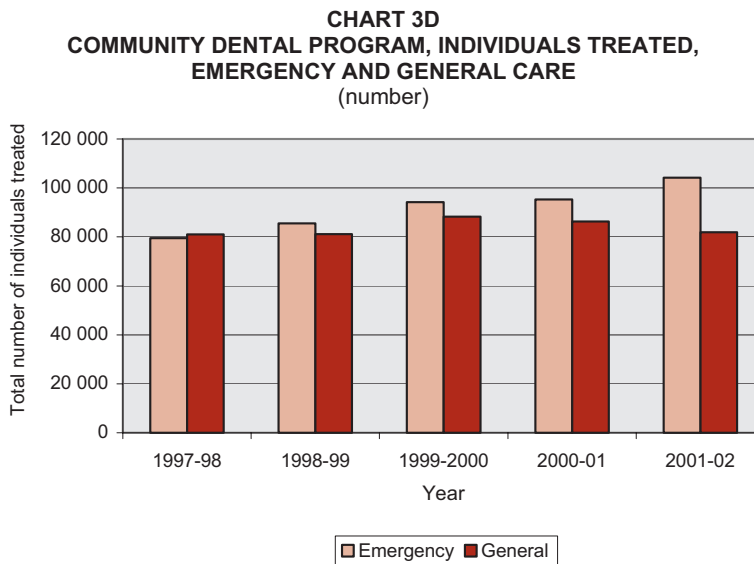
- report a need for emergency care (to be treated within 24 hours);
- are youths in Years 9, 10, 11 and 12 receiving treatment under the Youth Dental Program (to be given the next available appointment);
- require priority denture care according to established criteria (to be treated within 3 months).

3.13 These criteria are consistent with the objectives of the Program, and the policies and practices in place in clinics examined during the audit were consistent with the application of these criteria. However, the criteria identify a very large proportion of eligible clients to be given priority and there is no specific guidance for clinics regarding the relative priority to be given between these groups. In practice, emergency cases are usually given priority over the other 2 groups.

3.14 For all other eligible individuals, there is no assessment of their need for dental care or oral health status at the time of seeking service. If not warranting emergency care, these individuals are placed on a waiting list from which they are offered service, in chronological order of their application for assistance.

Balance between emergency and general care

3.15 The proportion of individuals treated for emergency care is increasing over time. Chart 3D shows that there was an increase of around 31 per cent in the number of individuals who received emergency care between 1997-98 and 2001-02, compared with an increase of around one per cent in the number of individuals who received general care over the same period.



Source: Dental Health Services Victoria.

3.16 The State's annual *Budget Papers* set a target ratio for the mix of services between emergency and general courses of care. The target was 44:56 in 2000-01 and 48:52 for 2001-02⁴, i.e. the target was for fewer emergency courses of care to be delivered than general courses of care. The opposite is occurring. Anecdotal evidence gained through fieldwork indicates that emergency cases are becoming more of a burden on clinics, with a large change in the ratio between general and emergency care experienced over a short period of time. Metropolitan clinics, in particular, were experiencing greater demands for emergency care.

⁴ Victorian Department of Treasury and Finance, *Budget Paper No. 3*, 2000-01 and 2001-02.

3.17 All clinics visited had strategies in place to manage the demands of emergency and general care, including:

- classifying emergency patients through a triage process, and streaming them according to need (one clinic);
- allocating a certain number of emergency appointments per chair per day, and requiring patients to call the clinic at the beginning of each day and allocating appointments on a “first come, first served” basis (4 clinics);
- cancelling regular appointments if required, to ensure emergencies are allocated an appointment either on the same day, or at a later date, depending on urgency (one clinic); and
- if emergency appointments for the day are already filled, encouraging patients to call other dental clinics in the area (one clinic), or making a list of patients as they call and allocating them to any cancellations throughout the day (one clinic).

3.18 All but one of the 13 clinics monitored their management strategies and they were generally satisfactory.

3.19 The increasing focus of the Program on emergency care and the increased waiting times for general care indicate that the Program is struggling, and that the need to focus limited resources on emergency care is preventing sufficient attention to general care and placing additional pressure on future dental care needs.

3.20 This situation may be overstated to some extent: the long waiting times that exist for both general dental care and for dentures create an incentive for patients awaiting general care to bypass the waiting list process by exaggerating the urgency of their needs in order to obtain immediate access to treatment.

3.21 Guidelines are in place to assist clinics assess emergency needs. However, assessment can be quite subjective and it can be difficult to determine genuine emergency cases. In all but one of the clinics visited, non-clinically trained reception staff assessed the nature of an emergency call. Two clinics visited indicated that it was difficult to determine “true” emergency cases. The current guidelines could be improved to prevent potential “queue jumping” by some individuals who are aware of the criteria that will secure an emergency appointment. This appears to particularly apply to the criteria of discomfort or pain.

3.22 In an effort to address the difficulty in identifying true emergency cases and to improve the balance between emergency and general care, the New South Wales Department of Health, Oral Health Branch and the Australian Institute of Health and Welfare Dental Statistics Research Unit, are currently evaluating the trial of a triage system, known as the Priority Oral Health Program, which prioritises patients seeking dental care. Upon contact with a clinic, a patient is assigned a priority code, representing the maximum waiting time for an assessment, based on their “subjective need”. This is determined from responses to questions about the current level of trauma, pain, social impact and socio-economic status. At the time of assessment, a dentist assesses and records the patient’s oral health status and validates the priority code originally assigned to the patient, thus providing a measure of “objective need”. This determines if the patient requires emergency treatment and if so, the waiting time for treatment. It is anticipated that this approach will assist in improved resource planning, access to care and health outcomes. The results of this evaluation have yet to be released.

School Dental Service

Level of access

3.23 The Statewide participation rate⁵ in the School Dental Service has increased from 37 per cent in June 1997 to 52 per cent in June 2002. Over the same period the number of individuals treated annually under the School Dental Service has decreased by 14 per cent.

3.24 Eighty per cent of child dependents of concession card holders use the School Dental Service, compared with 31 per cent of children of non-concession card holders. This indicates that the most economically disadvantaged children are accessing the Service more.

3.25 About one-third of children are supplementing their use of public dental services with visits to private dentists. A survey of Victorian parents on their use of the School Dental Service⁶ found that:

- 9.2 per cent of those surveyed indicated that the child/children of the household did not attend any dental service providers (private or public), the principal reason being given that the child/children did not require any treatment; and
- of the 90.8 per cent of respondents who indicated the child/children had visited a dental provider, 54.3 per cent used the School Dental Service, 65.6 per cent used a private dentist, 11.8 per cent used a dental service at a community health centre, and 9.4 per cent used a hospital dental service.

⁵ As the School Dental Service operates on a target recall cycle of 12 months for children with high dental care needs and 24 months for those with low needs, the coverage is expressed in terms of a participation rate rather than a straight comparison of numbers eligible with numbers treated.

⁶ Wallis Consulting, *The School Dental Service Telephone Survey*, unpublished findings, 2002. A total of 1 600 households were surveyed, where there was one or more children aged between 5 and 14 years who attended school in the following Department of Human Services regions: Grampians (n = 400); Loddon Mallee (n = 400); Northern Metropolitan (n = 400); and Southern Metropolitan (n = 400).

3.26 While some use of both the School Dental Service and a private dental provider may be “double-dipping” for general dental care, much of the use of a private dental provider could be for more specialised services, e.g. orthodontic consultation and treatment. This would be an appropriate pattern of use of services⁷.

3.27 Relevant respondents were asked about their reasons for not using the School Dental Service for their child/children. The following reasons were given (ranked in order of frequency of response, from greatest to least):

- the timing was not convenient;
- wanted to go to a familiar dentist;
- child is too old/too young to attend school;
- dependent on child’s needs;
- emergency assistance was required;
- couldn’t get in/service not available;
- concerns about quality of care or service;
- unaware of service; and
- covered by private health care/could not afford it.

3.28 There is no waiting list for general care in the School Dental Service, as children are scheduled to receive care when the Service is either available at their school or when they are recalled as part of the strategy for children identified as being at high risk. Pressure on access to the School Dental Service is evidenced by the length of time before a child is recalled for general dental care (called the recall cycle). The targets are for every eligible child with high risk to be seen once every 12 months, and a child with low care risk to be seen once every 24 months.

3.29 Table 3E shows data on the target and actual recall cycle achieved for the School Dental Service. For high risk children the target of 12 months recall cycle has been achieved, but for low risk children the targets were not achieved in any of the periods presented, with the gap between actual and target increasing over the period. The Service is appropriately placing priority on high risk children, but at the expense of low risk children.

⁷ JH Allister, AJ Spencer, DS Brennan, *Provision of orthodontic care to adolescents in South Australia: The type, the provider and the place of treatment*, Australian Dental Journal, Volume 41, No. 6, 1996, pp. 405-10.

TABLE 3E
RECALL CYCLE FOR SCHOOL DENTAL SERVICE,
TARGET COMPARED WITH ACTUAL
 (months)

<i>Year</i>	<i>High risk target</i>	<i>High risk actual</i>	<i>Low risk target</i>	<i>Low risk actual</i>
1997-98 (a)	12	12	24	26.2
1999-2001 (b)	12	12	24	31.6
2001-02 (c)	12	12	24	32.1

(a) At December 1998.

(b) At July 2001.

(c) At July 2002.

Note: DHSV advised that data to measure actual performance against recall cycle targets are not collected every year. The table, therefore, shows achievement against targets at irregular intervals.

Source: Dental Health Services Victoria.

3.30 A shortfall in the number of dental therapists limits the capacity of the School Dental Service to deliver the number of completed courses of care implied by the target recall cycle. Table 3F shows the number of completions that would be required to meet the recall cycle and the shortfall which occurred in 2000-01 and 2001-02.

TABLE 3F
SCHOOL DENTAL SERVICE, COURSES OF CARE

<i>Period</i>	<i>Courses of care</i>		<i>Shortfall</i>
	<i>To meet recall cycle</i>	<i>Completed</i>	
2000-01	138 884	107 290	31 594
2001-02	137 235	110 072	27 163

Source: Dental Health Services Victoria.

3.31 In summary, the School Dental Service provides relatively good coverage of its eligible population, with better coverage for those families who can least afford private dental care and for high risk children. However, the targets for provision of care to low risk children are not being met and the gap is increasing. Almost one in 10 families choose not to use any dental service for their children. These families may not be making sound decisions based on an accurate assessment of their child's oral health.

Priority of access

3.32 DHSV advised (but data was not available to test) that the School Dental Service gives priority of access to children:

- with high dental needs (based on past caries experience and clinical judgement of the operator);
- who are less likely to access appropriate care in the private sector; and
- with emergency needs.

Balance between emergency and general care

3.33 DHSV advised that the recording of emergency courses of care in clinics is not always accurate. However the proportion of children receiving emergency care appears to be increasing over time.

3.34 The School Dental Service focuses on general dental care. This is to be expected given the nature of children's oral health needs and the importance of preventive dental care for children. However, like the adult program, the School Dental Service is at risk of having to respond to emergencies for an increasingly narrow group of children, with negative impacts on the long-term oral health of the community.

IMPACT OF CO-PAYMENTS ON SERVICE ACCESS

3.35 A number of Australian jurisdictions either have, or are introducing, co-payments (Australian Capital Territory, South Australia, Tasmania and Western Australia) for public dental health services⁸. In Victoria, co-payments were introduced in April 1997 partly in response to the abolition of the Commonwealth Dental Health Program and apply to all adult concession card holders and to adult dependents of concession card holders.

3.36 It is generally accepted that the introduction of co-payments, while producing a revenue stream for the dental service, has depressed the demand for public dental care by about one-third⁹. For example, in South Australia, co-payments from secondary school children were associated with a decrease in enrolment for dental care from 76.3 per cent to 52.1 per cent of students between 1995 and 1996. Few of those who initially dropped out returned to school-based dental care, and those that dropped out were primarily from higher income households with private dental insurance. There were, however, small numbers of those who dropped out who were from low income households without dental insurance and did not use dental care in the subsequent 2 years^{10,11}.

⁸ Refer to Appendix B of this report for further details.

⁹ AJ Spencer, *What options do we have for organising, providing, and funding better public dental care?* Australian Health Policy Institute at The University of Sydney, Commissioned Paper Series 2001/02, 2001.

¹⁰ JH Allister, AJ Spencer, D Burrow and, C Bull, *Access to dental care by secondary school students after the introduction of a capitation scheme by the School Dental Service*, Department of Dentistry, Adelaide University and the South Australian Dental Service, 1996.

¹¹ JH Allister, AJ Spencer, A Chartier, *Access to dental care two years after the introduction of a capitation scheme for secondary school students in the School Dental Service in South Australia*, Department of Dentistry, Adelaide University and the South Australian Dental Service, 1998.

The Victorian experience

3.37 In Victoria, co-payments do not apply to emergency and general care provided to concession card holders under 18 years of age, or card holder dependents under 18; or to care provided to patients by undergraduate students in any community clinic including the Royal Dental Hospital of Melbourne. People from special needs groups, and individuals with a mental illness or intellectual disability, are also exempt from co-payments.

3.38 Table 3G shows the co-payments that apply to Victorian community dental services.

TABLE 3G
VICTORIAN COMMUNITY DENTAL SERVICE CO-PAYMENTS

<i>Service type</i>	<i>Co-payment</i>
Emergency	\$20 flat fee (both during and after hours).
General restorative	15 per cent of the 1998 Department of Veterans Affairs fee ¹² . Minimum of \$20 and maximum of \$80 per course of care.
General prosthetic	20 per cent of the 1998 Department of Veterans Affairs fee. Minimum of \$20 and maximum of \$100.
Specialist	25 per cent of the Department of Veterans Affairs fee. Minimum of \$20 (no maximum fee).
School Dental Service (a)	\$25 per child per course of care. Maximum of \$100 per family per year.

(a) Co-payments only apply to children who are not dependents of concession card holders.

Source: Dental Health Services Victoria program guidelines.

3.39 We expected that co-payments would be:

- set at a level and implemented in a way which does not unreasonably restrict access to services; and
- administered equitably, with consideration given to ensuring access for those who genuinely cannot pay.

¹² Department of Veterans Affairs Local Dental Officer (DVA LDO) rate is set by that Department for payment of dental services provided to veterans under Commonwealth programs. It is commonly used in the States and Territories as a benchmark for fees.

3.40 A number of reviews have been conducted into the effects of co-payments in Victoria^{13,14}. These reviews found that:

- The numbers of patients added to the waiting lists for treatment increased following an initial decline in the first 6 months after co-payment introduction;
- The proportion of patients from the waiting list accepting an offer of care appeared to decline following the introduction of co-payments (although there was limited data to assess this);
- The proportion of appointments broken or cancelled steadily increased prior to and after the introduction of co-payments. Subsequent education to raise awareness of co-payments has resulted in improved attendance rates;
- The ratio of emergency to general care remained constant during the immediate period following co-payment introduction; and
- There was an increase in the number of services provided per patient for general care due to higher patient treatment needs.

3.41 The introduction of co-payments in 1997 had an initial effect on the level of participation in community dental services, particularly within the School Dental Service. Following the introduction of co-payments, participation rates for the School Dental Service fell from 64 per cent to 37 per cent¹⁵. This initial reduction in participation rates was much greater for non-concession card holders, from an estimated 52 per cent to 23 per cent, compared with concession card holders, from an estimated 83 per cent to 61 per cent.

3.42 In response, DHSV implemented a promotion program, which steadily lifted participation rates. The rates for the School Dental Service among concession card holders have returned to pre-co-payment levels (80 per cent). Participation rates among non-concession card holders have shown some recovery, but they remain comparatively low (31 per cent).

3.43 For the Community Dental Program, one long-term adverse impact of the co-payment policy has been a reduction in acceptance rates for an offer of care from the waiting list. This suggests that access to public dental care by concession card holders has been impeded by the introduction of co-payments.

¹³ M Whelan, *A Review into the Effects of Co-payment Introduction For Public Dental Care in Victoria: Final Report*, DHSV, Report No. 2, November 2001.

¹⁴ Australian Institute of Health and Welfare Dental Statistics Research Unit, *Evaluation of the impact of introduction of co-payments in public dental services: Interim Report Number 1*, April 1998; Australian Institute of Health and Welfare Dental Statistics Research Unit, *Evaluation of the impact of introduction of co-payments in public dental services: mailed questionnaire, Interim Report Number 2*, August 1998; Australian Institute of Health and Welfare Dental Statistics Research Unit, *Evaluation of the impact of introduction of co-payments in public dental services: Interim Report Number 3*, May 1999; Australian Institute of Health and Welfare Dental Statistics Research Unit, *Evaluation of the impact of introduction of co-payments in public dental services: Draft Report Number 4*, September 2000.

¹⁵ M Whelan, *A Review into the Effects of Co-payment Introduction For Public Dental Care in Victoria: Final Report*, DHSV, Report No. 2, November 2001.

3.44 Specialist advice provided to us indicated that, while participation rates may have rebounded, it is unclear whether the same people have returned, i.e. those who chose to disengage in 1997 due to the co-payment. The specialist advice is that it is unlikely to be the same people, who instead have moved away and may no longer receive treatment either in the public or private sector. This perception has yet to be tested through research.

Administration of co-payments

3.45 In certain circumstances co-payments may be waived or exemption policies may apply. Guidelines have been issued to clinics regarding these situations and our discussions with management of the 13 clinics visited revealed that decisions to waive co-payments are made rarely and are in accordance with the guidelines.

RESPONSE provided by the Secretary, Department of Human Services

The report states that the introduction of co-payments has caused a reduction in acceptance rates for an offer of care. It is acknowledged that this may be one cause for some people, however, longer waiting times is a confounding factor. Physical movement of the concession card holder population, as well as loss of eligibility, become greater factors leading to lower acceptance rates.

REGIONAL ACCESS

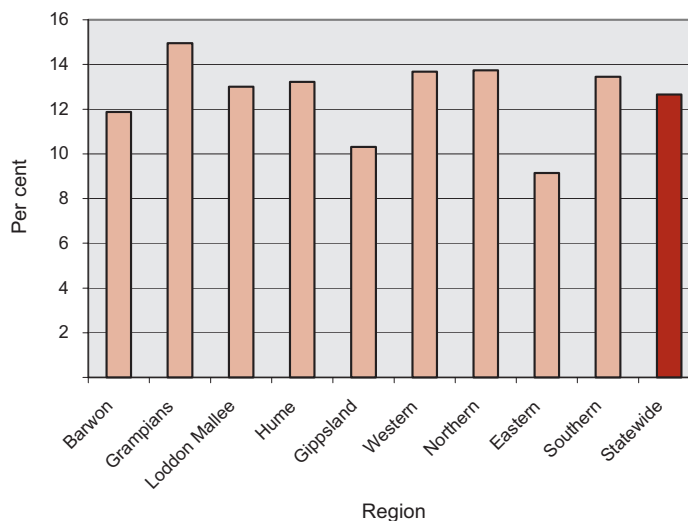
3.46 Public dental health services are provided across Victoria through a variety of clinics, for adults or children or both, and through mobile clinics for children.

3.47 School dental services and clinics traditionally have been developed in isolation of other health services, e.g. in the 1970s single or double-chair, fixed clinics were built. Where gaps in service were identified, mobile dental vans were employed. Recent years have seen the development of integrated care centres with co-located dental services including both community and school dental chairs and a reduced reliance on mobile dental vans as a key means of School Dental Service provision. To complement these arrangements, some school and community services provide dental services using a “hub and spoke” model, i.e. the service is based at a central location with dental staff providing outreach services at a designated school or population centre. The “hub and spoke” model provides access to, and continuity of, dental services to communities that may otherwise not have access to services.

3.48 We expected services to be located where they could best meet the needs of the population and for resources to be allocated in accordance with these needs.

3.49 Chart 3H shows the proportion of the Community Dental Program’s eligible population in each region who accessed the Program in 2001-02 and shows that the Eastern Metropolitan and Gippsland regions achieved the least coverage with around 9 per cent and 10 per cent respectively. The eligible populations for the Grampians region achieved the best coverage with 15 per cent, with the next best being the Western and Northern regions with almost 14 per cent coverage.

CHART 3H
COMMUNITY DENTAL PROGRAM,
PROPORTION OF ELIGIBLE POPULATION TREATED BY REGION (a),
2001-02
 (per cent)



(a) "Region" indicates location of dental clinics not residential region of persons treated.

Source: Dental Health Services Victoria.

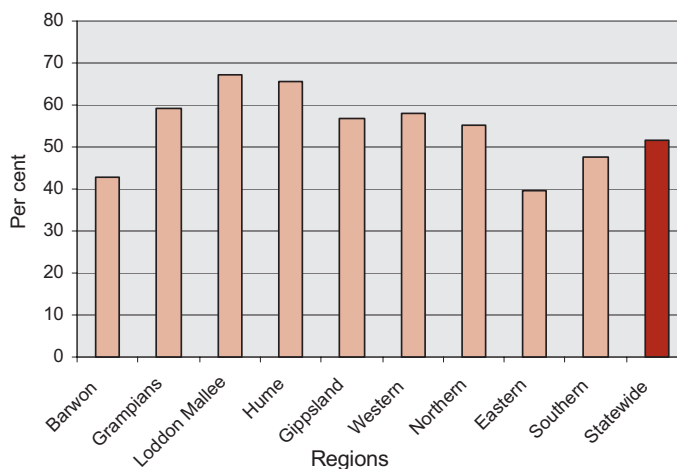
3.50 The provision of public dental services is also linked to the availability of dental staff, a particular issue in rural areas. Access overall, and for rural communities in particular, is aided by the use of private dentists through the 3 voucher schemes: Victorian Emergency Dental Scheme, the Victorian General Dental Scheme and the Victorian Denture Scheme.

3.51 Using data from 59¹⁶ community dental clinics for 2000-01, we examined the number of patients treated by community dental clinics compared with the number of patients who received treatment by a private dentist through the voucher scheme. Across the State, 15 per cent of patients were treated by private dentists through a voucher scheme, but patients in rural clinics were almost twice as likely to be treated by a private dentist than patients in metropolitan clinics (22 per cent compared with 12 per cent). Of the 59 clinics, 29 per cent issued vouchers for more than 20 per cent of individuals treated.

3.52 For the School Dental Service, Chart 3I shows that participation rates vary significantly between regions, from 40 to 67 per cent. The relatively low participation rates being achieved in the Barwon (43 per cent), Eastern Metropolitan (40 per cent) and Southern Metropolitan (48 per cent) regions may, in part, reflect use of private dentists.

¹⁶ Sixty community dental clinics operated over the entire 2000-01 year. However, while Great Dandenong operated at 2 sites, they are counted as a single clinic as separate data were not available for each site.

CHART 3I
SCHOOL DENTAL SERVICE, PARTICIPATION RATE,
BY REGION (a), AS AT 30 JUNE 2002
 (per cent)



(a) "Region" indicates region in which children are enrolled, not residential region.

Source: Dental Health Services Victoria.

3.53 Regional access to services, both for the Community Dental Program and School Dental Services, is uneven and the reasons not clearly known. We believe this aspect requires further research.

CONCLUSION

3.54 The Community Dental Program has long waiting lists and waiting times, suggesting that the Program does not currently provide an adequate level of access to treatment for the eligible population. The increasing focus of the Program on emergency care and the increased waiting times for general care indicate that the Program is struggling to provide sufficient attention to general care, placing additional pressure on future dental care needs.

3.55 The School Dental Service has provided relatively good access for its eligible population, with better access for those families who can least afford private dental care and for high risk children. Compared with the adult program, the School Dental Service is providing a greater focus on general dental care. This is to be expected given the nature of child oral health needs and the importance of preventive dental care for children.

3.56 However, the targets for provision of care to low risk children are not being met and the gap is increasing. Like the adult program, the School Dental Service is at risk of having to respond to emergencies for an increasingly narrow group of children, with negative impacts on the long-term oral health of the community. Also, almost one in 10 families choose not to use any dental service for their children. These families may not be making sound decisions based on an accurate assessment of their child's oral health.

3.57 The introduction of co-payments had an initial impact on the numbers of people accessing community dental services. After an initial decline, waiting lists for the Community Dental Program have now increased and a long-term adverse impact has been a reduction in acceptance rates for an offer of care from the waiting list. For the School Dental Service, participation rates for children of concession card holders have returned to pre-introduction levels, and for children of non-concession card holders have also shown some recovery. However, it is not clear whether those people who chose to disengage from public dental services in 1997 have returned.

3.58 Regional access to services, both for the Community Dental Program and School Dental Services is uneven and the reasons are not clearly known.

Recommendation

3.59 We recommend that the Government address the increasingly low levels of effective access to public dental services. This will require either a reduction in the eligibility for, and/or nature of, service offerings or increased resourcing, or both.

***RESPONSE** provided by the Chief Executive, Dental Health Services Victoria*

Para. 3.59

Dental Health Services Victoria (DHSV) agrees that there is room for improvement in access to public dental services, particularly for special needs groups and pre-school children. However, it should be noted that waiting lists and waiting times are often not the best indicators of unmet demand, given the well-documented phenomenon of supply-induced demand, latent demand and the lack of regular auditing of the waiting lists. DHSV would be pleased to work with the Department of Human Services and the Government to review the eligibility criteria for public dental services and the range of services offered to better target services. Furthermore, the evaluation of the triage system currently being trialed in New South Wales may provide some interesting results. While DHSV would welcome any additional resources allocated by the Government to public dental services, particularly given the projected increasing demand for dental services identified in the report (paragraph 5.15), this will only improve access if the work force shortages are overcome.

Part 4

Service delivery

INTRODUCTION

4.1 Demand for public dental services exceeds supply, placing substantial pressure on public dental clinics. Meeting the increasing demand for services was identified as a key challenge in Dental Health Service Victoria's *2001 Annual Report*. In this Part of the report, we assess whether community dental services are delivered in a timely, efficient and effective manner. The audit did not examine clinical decisions and practice, which are governed by the standards of the oral health professions. The service delivery issues addressed include:

- timeliness - the management of waiting lists and times;
- efficiency - dental chair management; and
- effectiveness - contributors to quality services including staffing, work practices, equipment, record-keeping, consumer rights and quality programs.

TIMELINESS

4.2 In an adequately resourced system, dental services will be provided in a timely manner if:

- waiting times for general dental and denture care are reasonable and/or decreasing, and the interval between the minimum and maximum waiting time for general dental and denture care is minimised and/or is decreasing across clinics;
- emergency care is provided promptly; and
- waiting lists are efficiently managed.

Community Dental Program

Waiting times

4.3 The Department of Human Services requires each community dental clinic to maintain an accurate waiting list to enable:

- priorities for services to be set;
- demand for services to be measured; and
- equity and fairness in the provision of care for eligible persons.

4.4 As discussed in Part 3 of this report, the Community Dental Program has long waiting lists and times. Each community dental clinic is required to report to Dental Health Services Victoria (DHSV) on its waiting lists by the 10th day of each month. The Department and DHSV use the waiting list data in planning and determining the allocation of public dental funds.

Performance against targets

4.5 The Health Service Agreement with the Department requires DHSV to minimise the variation in waiting times across the State for both conservative (restorative) and prosthetic (denture) services, and specifies the target maximum Statewide variation in waiting times for each waiting list. Table 4A shows that the target variation has been widened substantially between 2000 and 2001. Despite some improvement in the year to December 2001, the targets were still not met.

TABLE 4A
COMMUNITY DENTAL PROGRAM,
VARIATION BETWEEN LONGEST AND SHORTEST WAITING TIMES
(months)

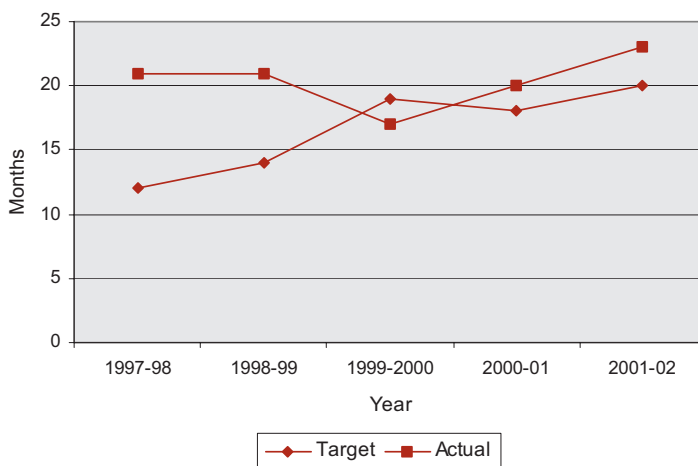
	Conservative		Prosthetic	
	2000	2001	2000	2001
Longest wait time	51.48	49.45	65.49	47.34
Shortest wait time	0	1.74	3.98	6.57
Variation	51.48	47.71	61.51	40.77
Target variation	6	24	12	24

Note: Waiting times are as at December in each year.

Source: Dental Health Service Victoria.

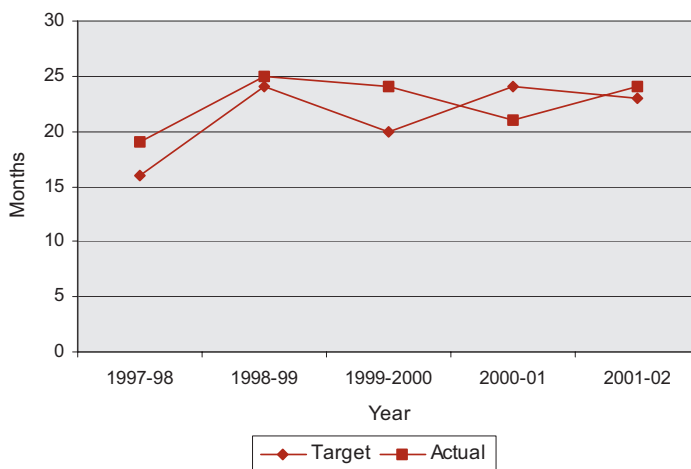
4.6 The Government's *Budget Papers* for each year publish output targets for average waiting times for restorative care and dentures (prosthetics). Charts 4B and 4C show that the targets have not been met in 4 of the past 5 years. However, the gap has reduced over the last 3 years, partly as a consequence of increased targets.

CHART 4B
DENTAL HEALTH OUTPUT GROUP,
WAITING TIME FOR RESTORATIVE CARE,
ACHIEVEMENTS AGAINST OUTPUT TARGETS



Source: *Budget Paper No. 3*, Department of Treasury and Finance, 1999-2000 to 2002-03, and Department of Human Services *Annual Report* 1997-98.

**CHART 4C
DENTAL HEALTH OUTPUT GROUP,
WAITING TIME FOR DENTURES,
ACHIEVEMENTS AGAINST OUTPUT TARGETS**



Source: Budget Paper No. 3, Department of Treasury and Finance, 1999-2000 to 2002-03, and Department of Human Services *Annual Report* 1997-98.

4.7 In summary, the data show that the Community Dental Program is not providing services on a timely basis with actual waiting times of 23 months for restorative care and 24 months for dentures during 2001-02.

Management of waiting lists

4.8 Waiting lists play an important role in managing patient throughput, so it is important that processes are in place to ensure their accuracy and completeness. Eleven of the 13 clinics visited during the audit maintained waiting lists. The remaining 2 were School Dental Services, which are not required to maintain lists. Our discussions about management of waiting lists with clinic management and DHSV revealed a number of issues that raise questions about the reliability of the waiting list data, i.e.:

- Five of the 11 clinics undertook some form of auditing to determine whether the waiting lists were accurate measures of demand for services. Some clinics periodically sent out letters to persons listed asking them to confirm their continued interest in receiving treatment. Non-respondents were removed from the waiting list. Other clinics used a similar method when offering care to those at the top of the waiting list;
- The remaining 6 clinics waited until they were in a position to offer people treatment before removing any non-responders from a waiting list;
- Reasons for non-response from patients might include that the patient may have already received treatment from another clinic, or because of the transient nature of the target population some non-responders may have changed address and not updated their details with the dental clinic; and

- It is not possible to determine the extent of duplication on the waiting lists, i.e. people placing themselves on waiting lists at more than one clinic to increase their chances of receiving care earlier, as:
 - clinics do not have access to other clinics' waiting lists;
 - there are no established catchment regions which limit the pool from which a clinic can draw its patients; and
 - dental patients do not have unique identifiers, unlike patients in some other parts of the health care system, e.g. Medicare.

4.9 The DHSV *Community Dental Program Waiting List Strategy, October 2001* provides guidance to clinics for management of their waiting lists. However, it does not propose waiting list audits.

4.10 All 11 clinics described factors that impact on their ability to manage waiting lists and meet waiting list targets. These almost universally covered staffing, e.g. shortages of dentists and other professionals, and funding, e.g. inadequate funding to attract and retain a sufficient number of staff to the clinics. Also noted was the increasing number of emergency cases and the impact they have on the ability to treat people on the waiting lists. Six of the 11 clinics had received extra funding at some stage to assist with the reduction of their waiting lists.

School Dental Service

4.11 Demand continues to outstrip supply for the School Dental Service. The number of school enrolments continues to grow, with an increase of around 12 per cent from 1996-97 to June 2002¹, yet the number of completed courses of care declined by 14 per cent from 1996-97 to June 2002². The decline may be caused by an increase in emergency cases and a shortage of dental therapists employed by the School Dental Service. As discussed in Part 3 of this report, the recall cycle of 24 months for low risk children has not been achieved during the past 5 years.

EFFICIENCY

4.12 We expected that community dental services would be provided in an efficient manner if procedures and strategies are in place to ensure efficient management of dental chairs and compliance with these was high.

¹ Primary school enrolments increased from 429 970 in 1996-97 to 479 337 at June 2002.

² Completed courses of care under the School Dental Service declined from 128 346 in 1996-97 to 110 072 in 2001-02.

Dental chair management

4.13 Our analysis of data available showed that there are wide variations in the number of individuals treated per chair, across clinics and across regions. Table 4D shows that 30 (around half) of the clinics which operated over the entire 2000-01 year, treated between 601 and 1 000 individuals per chair during the period.

TABLE 4D
COMMUNITY DENTAL PROGRAM,
INDIVIDUALS TREATED PER CHAIR, 2000-01 (a)
 (number)

<i>Individuals treated per chair</i>	<i>Clinics</i>
Less than 100	1
101 to 200	5
201 to 400	5
401 to 600	5
601 to 800	16
801 to 1 000	14
1 001 to 1 200	7
1 201 to 1 400	5
1 401 to 1 600	1

(a) The data relate to the 60 community dental clinics that operated over the entire 2000-01 year. However, while Greater Dandenong operates at 2 sites, they are counted as a single clinic in the table as separate data were not available for each site.

Source: Dental Health Services Victoria.

4.14 Table 4E shows the variation in the number of individuals treated per chair across metropolitan and rural regions.

TABLE 4E
COMMUNITY DENTAL PROGRAM,
INDIVIDUALS TREATED PER DENTAL CHAIR,
BY REGION, 2000-01 (a)
(number)

<i>Region</i>	<i>Individuals treated per chair</i>
Metropolitan -	
Eastern Metropolitan	824
Northern Metropolitan	1 062
Southern Metropolitan	911
Western Metropolitan	549
Rural -	
Barwon	512
Gippsland	745
Grampians	549
Hume	949
Loddon Mallee	665

(a) The data relate to the 60 community dental clinics that operated over the entire 2000-01 year. However, while Greater Dandenong operates at 2 sites, they are counted as a single clinic in the table as separate data were not available for each site.

Source: Dental Health Services Victoria.

4.15 Table 4F shows that the size of a clinic was not in itself a guarantee of greater throughput, with clinics with one to 4 chairs treating more individuals per chair than larger clinics.

TABLE 4F
COMMUNITY DENTAL PROGRAM,
INDIVIDUALS TREATED PER DENTAL CHAIR,
BY CLINIC SIZE, 2000-01 (a)

<i>Number of chairs in clinic</i>	<i>Individuals treated per chair ranged -</i>		<i>Number of clinics in range</i>
	<i>From</i>	<i>To</i>	
1	129	1 409	10
2	26	1 240	20
3	316	1 222	9
4	152	1 172	15
5	722	722	1
6	831	831	1
8 or more	263	913	3

(a) The data relate to the 60 community dental clinics that operated over the entire 2000-01 year. However, while Greater Dandenong operates at 2 sites, they are counted as a single clinic in the table as separate data were not available for each site.

Note: There were no clinics with 7 chairs.

Source: Dental Health Services Victoria.

4.16 The Department advised that the output funding system, which provides for reimbursement to be made on the basis of the actual services provided, helps drive efficiency within clinics. We noted that the output funding model includes a funding formula on which the unit costs per item of service paid to clinics are based³. The funding formula applies a standard productivity benchmark to all clinics (in 2001-02, 2 benchmarks were used: one for rural clinics and one for metropolitan clinics). Data on the average productivity per dentist for 2000-01 reveal that actual productivity varied widely, as shown in Table 4G.

TABLE 4G
COMMUNITY DENTAL PROGRAM
AVERAGE PRODUCTIVITY PER FTE DENTIST,
2000-01 (a)(b)

<i>Average value of services produced per dentist in clinic</i> (\$)	<i>Clinics</i> (no.)
0 to 100 000	1
100 001 to 200 000	5
200 001 to 250 000	16
250 001 to 300 000	14
300 001 to 350 000	11
350 001 to 400 000	8
400 001 to 500 000	4
500 001 to 550 000	1

(a) Productivity based on 100 per cent of the DVA LDO fee for each item of service provided.

(b) The data relate to the 60 community dental clinics that operated over the entire 2000-01 year.

Note: FTE means full-time equivalent.

Source: Dental Health Services Victoria.

4.17 Similar to the data for the Community Dental Program, data on chair efficiency for the School Dental Service also indicates variation across regions, as shown in Table 4H.

³ The funding formula is discussed further in Part 6 of this report.

TABLE 4H
SCHOOL DENTAL SERVICE
CHAIR EFFICIENCY PER REGION, 2000-01
(number)

<i>Region</i>	<i>Chairs</i>	<i>Completed courses of care</i>	<i>Completions per chair</i>
Metropolitan -			
Western	15	16 135	1 076
Northern	21	17 660	841
Eastern	16	16 293	1 018
Southern	24	19 945	831
	76	(a) 71 071	935
Rural -			
Barwon	11	6 304	573
Grampians	10	4 761	476
Loddon Mallee	12	9 422	785
Hume	10	8 476	848
Gippsland	11	7 257	660
	54	36 220	671
Statewide	130	(a) 107 291	825

(a) The metropolitan total and Statewide figures for completions include 1 038 courses of care for children treated under special services.

Source: Dental Health Services Victoria.

4.18 Rather than chair efficiency, or the value of outputs produced, DHSV uses “time value units” as indicators of efficiency for the School Dental Service. The time value unit is a measure of output where each service item, e.g. a filling or check-up, is scored based on the average amount of time it takes to complete that service and taking into account its complexity. The time value unit for an operator is calculated by multiplying the item score by the number of items provided. Higher values per adjusted day⁴ indicate greater productivity.

4.19 Data on time value per adjusted day, on a per region basis, shows that performance is relatively consistent over the regions and has been over the past 5 years, as shown in Table 4I. The implication is that staff have achieved relatively equal levels of productive time across regions.

⁴ An adjusted day is an actual day less time spent travelling or on nursing duties.

TABLE 4I
SCHOOL DENTAL SERVICE,
VALUE PER ADJUSTED DAY, BY REGION
 (units)

<i>Region</i>	<i>1997-98</i>	<i>1998-99</i>	<i>1999-2000</i>	<i>2000-01</i>	<i>2001-02</i>
Barwon	5.3	5.5	5.2	5.2	6.0
Grampians	5.5	5.7	5.0	5.3	5.9
Loddon Mallee	5.2	5.7	5.0	5.3	5.9
Hume	5.4	5.9	5.3	5.5	5.5
Gippsland	5.6	6.6	6.1	5.7	6.2
Western	5.2	5.6	5.5	5.7	6.4
Northern	4.9	5.7	5.3	5.5	5.3
Eastern	5.2	5.4	5.3	5.0	5.1
Southern	5.3	5.5	5.1	5.4	5.5
Statewide	5.2	5.6	5.3	5.4	5.6
Target	5.4	5.1	5.7	5.4	5.6

Source: Dental Health Service Victoria.

4.20 The reasons for the variations in chair efficiency in both the Community Dental Program and School Dental Service could include differences in work force numbers; clinic set-up, i.e. the number of chairs in the clinic; the number and characteristics of patients seeking treatment; the relative complexity of treatment needs, appointment length and management; and the work practices of staff.

4.21 DHSV's analysis of efficiency issues tends to focus on DHSV clinics only. Insufficient attention has been given to the issue of service efficiency at a system level, as the current concern for DHSV is managing the increasing demand for emergency treatment. Two projects have been funded under the Department's Productivity Investment Fund⁵: an analysis of the potential productivity achievements from changing the ratio of dental therapists to dental assistants in school dental clinics from 2:1 to 1:1 (this is further discussed in Part 5 of this report), and implementation of electronic patient records in the Community Dental Program.

4.22 The increasing pressure of emergency demands and varying efficiency warrants analysis to more clearly identify and measure the drivers of efficiency across the service system. Dissemination to clinics of identified better practice could lead to improvements in efficiency; improvement in the management of treatment demands, both general and emergency; and improved system-wide performance.

⁵ The Productivity Investment Fund is intended to provide financial assistance to improve the efficiency of organisations in the human services' sector.

RESPONSE provided by the Secretary, Department of Human Services

The report states that “clinic efficiency has not been a focus of concerted action”. The Department refutes this. The Dental Program output funding system, applying to both school and community dental services, is recognised by DHSV and by other agencies as a major driver of efficiency, as reimbursement is made on the basis of the actual services that have been provided. The unit costs are based on published benchmarks for costs and productivity (clinical output per full-time equivalent dentist), which are reviewed each year against actual performance.

The report refers to the number of individuals treated per chair per year as a measure of efficiency, and observes that this varies greatly across the State. Because funding is provided for services, the number of services per chair is not a useful measure of efficiency, rather it reflects variations in supply. These variations may result from a shortage of dentists, or where only a part-time service is required to meet the community’s need. The Department will continue to work with DHSV and other public dental providers to establish more benchmarks for high quality, cost-effective and well-targeted service provision.

EFFECTIVENESS

4.23 Our expectation is that the community dental service would maximise outcomes for consumers when:

- There are sufficient and appropriately qualified and trained staff. Oral health work force issues are addressed in Part 5 of this report;
- There are safe and efficient work practices with appropriate quality assurance mechanisms, including the maintenance of high standards of infection control and occupational health and safety;
- Equipment is adequate and is appropriately distributed and maintained;
- Appropriate record keeping procedures and standards are in place and compliance with guidelines is high; and
- Consumer rights are acknowledged and upheld.

Infection control and occupational health and safety

4.24 A major area of risk for the Community Dental Program and School Dental Service is infection control and compliance with clinical procedures established to minimise the risk of the spread of infection. Infection control is a broad term encompassing all activities relating to the identification, management, control, monitoring and evaluation of infections. In the health environment, blood-borne infections (bacterial and viral) are the highest risk of contamination. Other modes of contamination include touch and the air through coughing.

4.25 Hepatitis B and C are viruses, both blood-borne, that can be fatal. In dentistry, these infections are of particular importance for both the patient and dental practitioners. High-speed drills can spray blood and saliva from the tooth, gums and the mouth creating conditions for virus transmission. Drills and handpieces, as well as needles and syringes, need decontamination prior to sterilisation, and sterilisation prior to re-using.

4.26 Over the past year, 4 major infection control breaches were reported to DHSV, all of which have been dealt with appropriately. However, our examination in clinics identified the following issues of concern:

- some non-compliance with standard precautions such as hand washing and the use of protective clothing to reduce cross-infection, decontamination, cleaning, sterilisation and storage of procedural instruments; and
- the lack of infection control audits and infection control consultants in some clinics to determine compliance with policies and procedures, and to advise on infection control and universal precautions to address non-compliance.

4.27 A summary of the detailed assessments made during the audit appears in Table 4J. The specific matters raised in the assessments did not represent a significant immediate risk to public health. They do, however, require a response in terms of staff training and support, provision of adequate equipment and physical clinical environment, and introduction of appropriate auditing processes. The assessments made have been reviewed and discussed with DHSV management and we are satisfied that DHSV will take appropriate action, within the limits of the physical environment of clinics, to address the concerns raised.



The autoclave is used to sterilise dental instruments, an important stage of effective infection control.

TABLE 4J
ASSESSMENT OF INFECTION CONTROLS, SELECTED CLINICS

Criterion	Clinic												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Does the clinic's infection control policy comply with DHSV policy?	J	J	J	I	I	I	I	I	J	J	J	J	J
Are there procedures in place for steriliser validation and monitoring?	J	J	J	I	I	I	I	I	J	J	J	J	J
Are autoclaves/sterilisers calibrated every 6 months?	J	I	J	I	I	I	I	I	J	I	J	I	J
Are quarterly audits on infection control policies and procedures undertaken?	J	I	I	J	J	I	I	I	I	I	J	J	J
Does the clinic have an infection control consultant?	J	I	J	I	J	I	I	I	J	J	I	I	J
Have audits been undertaken by infection control consultants?	J	I	J	I	J	J	J	J	J	I	J	I	J
Is the clinic accredited?(a)	J	J	J	I	I	J	J	I	J	J	J	J	I
Does the clinic have occupational health and safety policies?	J	J	J	J	J	J	J	J	J	J	J	J	J
Are clinic occupational health and safety policies consistent with those of DHSV?	J	J	J	J	J	J	J	J	J	J	J	J	J
Have there been any instances where occupational health and safety policies have been breached, resulting in an incident report being filed, over the past 3 financial periods?	J	I	I	I	I	I	I	I	I	I	J	J	I
Are clinic operations conducted in accordance with the infection control and sharps policies?	J	J	J	I	I	I	I	I	J	J	J	J	J
Does the clinic have infection control zones?	J	J	J	J	I	J	J	J	J	J	J	J	J
Are clinical zones identified?	J	J	J	J	I	I	I	J	I	J	J	J	J
Is everything in the operating field sterilised, decontaminated or discarded?	J	J	J	J	I	J	J	J	J	J	J	J	J
Is waste segregated?	J	J	J	J	J	J	J	J	J	J	J	J	J
Are instruments cleaned with detergent and warm water before sterilisation?	J	J	J	I	J	J	J	J	J	J	I	J	J
Does sterilisation involve using steam under pressure?	J	J	J	J	J	J	J	J	J	J	J	J	J

TABLE 4J
ASSESSMENT OF INFECTION CONTROLS, SELECTED CLINICS – continued

Criterion	Clinic													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Is there product traceability in sterilisations, including:														
• sterilisation identification number;	J	I	I	I	I	I	I	I	J	J	I	I	I	I
• date of sterilisation;	J	J	J	J	J	J	J	J	J	J	J	J	J	J
• cycle or load number;	J	I	I	I	I	I	I	I	J	J	I	I	I	I
• identification of operator?	J	J	J	J	J	J	J	J	J	J	I	I	I	J
Are procedures for loading and unloading of steriliser followed?	J	J	J	J	J	J	J	J	J	J	J	J	J	J
Are sterile items stored appropriately, to ensure sterility is maintained?	J	J	J	J	J	I	J	I	I	J	J	J	J	J

(a) Includes accreditation under Quality Improvement and Community Services Accreditation (QICSA) (one clinic accredited under this scheme), the Evaluation and Quality Improvement Program (EQIP) (6 clinics), both QICSA and Equip (one clinic) or ISO 9002 (one clinic).

Legend: J = yes

I = no

Source: Victorian Auditor-General's Office.

4.28 Our examinations showed marked differences in policy and practice in infection control across the 13 clinics subject to audit, whether managed by DHSV or not. The only discernable patterns between DHSV and non-DHSV clinics were:

- some differences in procedures regarding sterilisation and storage of instruments;
- accreditation: 7 of 8 non-DHSV clinics and 2 of 5 DHSV clinics were accredited; and
- quarterly infection control audits: all 5 DHSV clinics conducted quarterly infection control audits, while only one of the 8 non-DHSV clinics did so.

4.29 The findings of our audit, shown in Table 4J, were consistent with issues identified over the past 2 years by DHSV during infection control audits of DHSV and non-DHSV clinics. A March 2002 Infection Control Survey⁶ of 12 DHSV and non-DHSV clinics identified a number of inconsistencies in the management of infection control and sterilisation, and reported that DHSV's Infection Control Manual was deficient in some areas.

4.30 Lack of compliance and the poor implementation of infection control policies and practices present a risk for program and clinic managers, and point to a need for system-wide strategies to address the gaps in knowledge of infection control standards and protocols. We noted differences in practice in some clinics about reporting infection control breaches, again indicating a lack of understanding and/or knowledge of policies and procedures. There is a need for ongoing program support to all clinics and core practice staff in relation to critical practice issues, in the form of training and support for staff in policy and procedure development and/or revision.

4.31 DHSV advised that its Health Service Agreement with the Department restricts it from taking an active role in, and therefore responsibility for, ensuring current infection control standards were met in non-DHSV clinics. They referred to a requirement in the Agreement that they only undertake infection control audits when requested by clinics. The Department advised that it was unaware of this problem and that such a restriction was unintentional. DHSV needs to take responsibility for assuring compliance with infection control standards across all clinics.

Other impactors on infection control

4.32 Other issues that impact upon infection control practice in community dental services include:

- Reliance on dental assistants to manage the processing of instruments and management of sterilisation and the risk of inadequate preparation, training and ongoing support. These risks are greater in multi-chair clinics where infection control is the responsibility of a number of dental assistants;

⁶ HICMR Pty Ltd Infection Control Consultants, *Dental Health Services Victoria Infection Control Survey*, March 2002.

- The risk of inadequate maintenance of infrastructure, instruments and equipment; and
- Risks associated with restrictive physical work environments, particularly in the school dental mobile clinics.

4.33 The physical clinical environment can impact significantly on the occupational health and safety of dental staff. The physical environment of some clinics was found to be deficient, i.e. not sufficient to support contemporary dentistry practice or to enable appropriate layout of facilities to protect sterile environments. The new and/or refurbished clinics were found to provide significantly improved facilities.

RESPONSE provided by the Secretary, Department of Human Services

The report raises the issue of DHSV's role in assuring infection control standards in non-DHSV clinics from which they are purchasing. The Department-DHSV Health Service Agreement is clear that 'DHSV should ensure that agencies deliver the services in a manner and to a standard consistent with the policies and standards of the Department.' It is important to note that DHSV has assured the Auditor-General that they will deal with any risk to public safety.

Equipment

4.34 During our visits to the 13 clinics, we reviewed the equipment available against the Dental Practice Board of Victoria's⁷ *Requirements for Setting up a Dental Surgery* and the National Health and Medical Research Council's document *Infection Control in the Health Care Setting*. As could be expected, the newer clinics visited, i.e. those built and/or refurbished within the past 2 years, contained better equipment than the other clinics visited. For 2 of the remaining clinics, one was due to be rebuilt and expanded within months and, in the case of the Royal Dental Hospital of Melbourne, was due to move to new premises around April 2003.

4.35 Funding provided to community dental services for equipment and technologies during 2000-01 and 2001-03 is shown in Table 4K. This funding was over and above that provided to clinics under Funding and Service Agreements which includes, as part of the funding rate, an amount to cover purchase of items of equipment valued at less than \$2 000.

⁷ The Dental Practice Board of Victoria was established under the *Dental Practice Act* 1999 to undertake a number of activities, including registration of dental care providers; approval of courses and training which provides qualifications for dental care providers; regulating standards of practice of dental care providers; investigation of professional conduct or fitness to practice of registered dental care providers and registered dental students and to impose sanctions where necessary; promulgation of codes about the practice of dentistry; and issuing guidelines on specific matters including standards of practice of dental care providers.

TABLE 4K
EQUIPMENT AND TECHNOLOGIES,
MINOR WORKS FUNDING
(\$million)

<i>Program</i>	<i>2000-01</i>	<i>2001-03</i>
School Dental Service	495 840	1 433 107
Agencies (a)	509 808	867 816
Royal Dental Hospital of Melbourne General Dental Unit	301 345	151 373
DHSV clinics (a)	n.a.	45 747
Corporate services	286 324	416 240
Health Service Agreement variations	199 500	(b) 796 300
Total	1 792 817	3 710 583

(a) For 2000-01, data for both DHSV and non-DHSV clinics are included in the "Agencies" category. For 2001-02, "Agencies" refers to non-DHSV clinics only.

(b) In 2001-02, additional funding of \$1 890 700 was provided for DHSV major equipment replacement. Of this amount, \$1 094 400 is included in the relevant categories within this table. The balance of \$796 300 could not be allocated within the table as the information provided to audit was not sufficient to do so.

Source: Dental Health Services Victoria.

Prioritisation

4.36 Guidelines provide for priority to be given to the most urgent equipment needs, i.e. those that will ensure service provision is maintained in accordance with standards for infection control and occupational health and safety. Data for community dental services as a whole shows that occupational health and safety and clinical equipment received the greatest level of minor works funding in 2000-01: \$561 848 (35 per cent) and \$284 751 (18 per cent), respectively. For the 2 year period 2001-03, information technology (\$466 346 - 26 per cent) and occupational health and safety (\$446 694 - 24 per cent) have the greatest budgets.

4.37 Data for the School Dental Service shows that clinical and occupational health and safety equipment received the greatest amount of funding for 2000-01 (\$230 548). For the 2 year period 2001-03, these items were also among the major funded items of minor works with a budget of \$268 632 for clinical and occupational health and safety equipment.

Addressing need

4.38 DHSV guidelines state that "to promote equitable distribution of funds, priority setting will be undertaken according to need by clinic and region". Assuming a request for funding is directly related to a clinic's identified need, we reviewed data showing the proportion of funding requests which were not funded for 2000-01 and the 2001-03 period, as a broad indicator of the extent to which "need" is being met by the capital funding and whether the amount of funding provided was adequate. We found that the proportion of funding requested but not provided decreased from 38 per cent in 2000-01 to 16 per cent for 2001-03.

4.39 However, our visits to clinics during the audit identified a number of areas of deficiency and inconsistency surrounding infection control procedures, some of which were as a result of the condition of equipment and technologies used in the clinics, and poor clinical environments, particularly in the School Dental Service vans.

4.40 The progressive decommissioning of the School Dental Service vans will address problems identified above. However, continued investment in equipment, with a continuation of the current emphasis on occupational health and safety and clinical requirements should improve conditions in community dental clinics.

DHSV initiatives

4.41 In 2001, DHSV commenced an audit of all School Dental Service and Community Dental Program clinics, both DHSV and non-DHSV clinics, to determine the condition and age of dental equipment valued at \$2 000 and under. The audit was carried out to:

- assist in the annual review and preparation of minor works lists; and
- determine the availability of equipment, based on age and condition.

4.42 An audit of DHSV equipment (other than that funded through minor works) was completed in March 2002 as part of a project to develop an equipment replacement strategy for DHSV clinics and the School Dental Service. However, the project could not be finalised by the target of July 2002 and was rescheduled for completion by September 2002. We consider that this initiative, when completed, will be helpful in informing the capital budget process and allocating resources. The benefits of this initiative would be enhanced if the project was expanded to enable development of a Statewide equipment replacement strategy to inform the resource allocation and capital planning processes discussed in Part 6 of this report.

Maintenance and repairs

4.43 Equipment used in dental clinics is highly specialised, in some cases requiring repair by specialist technicians. DHSV operates a workshop in South Melbourne for repairing and maintaining equipment used in public dental clinics, for use by DHSV and non-DHSV clinics. Technicians from the workshop travel to rural areas to repair and maintain equipment, as necessary. Clinics may also choose to use private firms to maintain equipment where specialist expertise is available elsewhere.

4.44 Each of the 13 clinics visited used DHSV for the maintenance and repair of their dental equipment. However, some clinics located in hospitals also used hospital engineering departments where specific dental equipment expertise was not required.

4.45 We were advised that delays in repair of equipment in rural clinics can result in clinic closure until repairs are completed. However, as response times are not accurately recorded, we were unable to identify the extent of this problem. Some clinics suggested that the cost of maintenance and repairs by the DHSV workshop was too high.



*The new Royal Dental Hospital of Melbourne is due to open in April 2003.
(Photograph courtesy of Dental Health Services Victoria.)*

Record keeping

4.46 Record keeping, particularly in relation to patient histories and dental charting, should be well maintained to enable continuity of care and to support efficient and effective service delivery, especially if there is a high turnover of clinical staff.

4.47 Nine of the 13 clinics visited during the audit had undertaken audits of their dental records, both as in-house exercises and as part of a recent DHSV project. The main aim of the audits was to confirm that records were kept in accordance with interim record keeping standards established by the Dental Practice Board of Victoria.

File audit

4.48 We undertook an audit of 958 randomly selected patient files across the clinics visited, to determine whether critical items of information were being recorded in patient records and to assess their level of compliance with interim record keeping standards prescribed by the Dental Practice Board. Table 4L, indicates areas where practice needs attention, and others where performance was generally good.

TABLE 4L
RESULTS OF FILE EXAMINATIONS, RECORDING OF PATIENT AND CLINICAL DATA
(per cent compliance)

Criterion	Percentage of sample meeting criterion		
	All clinics visited	Average for DHSV clinics	Average for non-DHSV clinics
Do records include patient's surname, given name, date of birth, gender, address, telephone, and details of parent/guardian for consent purposes (if required)?	86	90	83
Is there a medical history form on file?	71	80	64
Do records show evidence of initial charting of the mouth using an odontogram and text?	79	79	79
Do records use the <i>Federation Dentaire Internationale</i> (FDI) system of charting?	34	43	26
Do records include patient's periodontal status?	7	13	2
Are the records readable and able to be used by others?	94	92	95
For every appointment, is there at least the date, treatment and practitioner's name?	87	90	84
Does the patient's record include at a minimum: the presenting complaint, relevant history, clinical findings, diagnosis?	81	78	84
Do records include treatment options, with advantages and disadvantages?	17	16	18
Do the descriptions of the treatments provided include tooth code, surface of the tooth, materials used, Australian Dental Association item number, prosthetic appliances, and an update of the odontogram?	59	60	59
Do records include post-operative care instructions?	44	38	49
Do records detail any missed appointments?	26	28	23

Source: Victorian Auditor-General's Office.

4.49 These results show that there is a need for clear standards to be established across community dental services, for training for staff, and for monitoring to ensure the record keeping requirements are being met. The introduction of electronic records will greatly assist with this process.

Using EXACT for clinical record keeping

4.50 All dental clinics in Victoria use a software package called EXACT. The EXACT system was introduced to the Community Dental Program in October 1999. EXACT has several modules including a patient's module used for recording patient details, case notes, treatment history, course of care details, payments, receipts, appointments and external courses of care.

4.51 Currently, most clinics do not use all the features offered by EXACT: most clinics use it for clinic and chair management purposes, i.e. to keep patient demographic details, monitor waiting lists, track co-payments and provide reports to DHSV but do not use it to keep patient clinical records. Most clinics maintain paper files for their dental record keeping. Only 2 out of the 13 clinics visited had introduced EXACT for clinical record keeping, and had ceased using paper files. The staff interviewed in these clinics noted that the electronic records:

- had improved accuracy and completeness in dental record-keeping, as the system had mandatory fields that prevented the user from continuing if they had not been completed; and
- made information management simpler, as staff could run reports and easily gain management information from the system.

4.52 We were advised that the Royal Dental Hospital of Melbourne is moving to a paperless record system in 2003 which will set the standard for all public clinics across the State. DHSV has recently applied to the Department for funding to introduce electronic patient records in the School Dental Service to align that service with the systems being introduced in the Community Dental Program and the Dental Hospital.

Consumer rights

4.53 Providers delivering public dental services in Victoria are required to operate under the *Charter of Clients' Rights and Responsibilities for Public Dental Services*, an initiative of the Commonwealth Dental Health Program, applicable in all States and Territories. The Charter emphasises providing a high quality service to clients that is “*professional, courteous, and responsive to ... individual needs*”.

4.54 We found that all clinics visited either displayed the Charter or had information brochures available, although our survey of a small number of patients in the clinics⁸ revealed that less than one-third of the Community Dental Program patients responding had heard of the Charter.

Complaints handling

4.55 The *Dental Health Program Service Standards and Guidelines* require DHSV clinics and dental clinics in hospitals (but not clinics in other locations) to submit complaints data to the Office of the Health Services Commissioner to meet the requirements of the *Health Services Act* 1987. To assist with the reporting and the handling of complaints within its clinics, DHSV has developed a policy *Managing Client Complaints* with which the clinics are expected to comply. The objective of the policy is to “ensure complaints are adequately and promptly investigated and dealt with fairly and confidentially”. We found that 11 (5 DHSV and 6 non-DHSV clinics) of the 13 clinics had policies consistent with DHSV’s policies.

4.56 We found that while 10 of the 13 clinics visited gave patients information on how to make complaints, practices for dealing with complaints were varied and generally poor, e.g.:

- Only 2 clinics recorded details of complaints onto a complaints database. The other 11 indicated that they did not track complaints, especially informal complaints that were diffused “on the spot”. As a result, these clinics are unable to monitor issues raised to determine if there are any trends or recurring issues. Some of these clinics recorded complaints on individual patient records to ensure staff handling future appointments were aware of the matters;
- Only 2 clinics stated that they reported on complaints to DHSV. DHSV clinics pass copies of letters responding to complaints to DHSV Head Office. However, non-DHSV clinics advised that they do not routinely report on either formal or informal complaints, or provide any information on issues that are being raised. They reported on an ad hoc basis, if the complaint was considered “serious enough”; and
- Only one of the 13 selected clinics was found to comply with DHSV procedures for recording, monitoring and responding to patient complaints.

4.57 The ad hoc manner in which complaints were dealt with is a concern. The lack of recording and reporting through the DHSV-established complaints mechanisms reduces the ability to identify matters that could lead to systemic improvement and increases the likelihood that complaints will be handled inappropriately and escalated unnecessarily. There is a need to ensure all DHSV clinics are aware of, and comply with, established complaints policies and procedures. For non-DHSV clinics, similar arrangements for reporting of major complaints as apply to DHSV clinics should be put in place through the Funding and Service Agreements.

⁸ A total of 101 surveys were completed; 73 of which related to the Community Dental Program and 28 to School Dental Services (completed by parents).

Quality of service delivery

Department of Human Services

4.58 In 1998, the Department of Human Services published a discussion paper *People first in public dental services – assuring quality care* which drew on material related to local and international initiatives to improve the quality of dental services. In 1999, a Quality Reference Group was established by the Department to support and advise the Government on the continuous quality improvement of public dental services.

4.59 In 2000, the Department developed the *Strategic Plan for Continuous Quality Improvement in Dental Public Health Services*, in collaboration with DHSV and agencies. It includes 5 major goals:

- service user responsiveness;
- staffing and physical resources quality;
- quality assurance standards and monitoring;
- safety and adverse event management; and
- quality improvement processes.

4.60 We examined progress against the activities identified in the Plan for each of these goals and found that of those scheduled for completion up to the time of preparation of this report, most had been achieved within the time frames specified. These mostly focused on setting up frameworks and processes. Of the remaining matters listed on the Plan, it was significant that changes to the requirements relating to the key areas of quality assurance over infection control and occupational health and safety, and dental-specific accreditation, were still to be completed, with June 2003 as the timeframe for completion. Responsibility for completion of these activities was shared between the Department and DHSV.

4.61 We note that quality initiatives are now being co-ordinated within the department-wide *Quality in Services* project which has a focus on improving the quality systems of services the Department delivers and/or funds.

Dental Health Services Victoria

4.62 The Health Service Agreement between the Department and DHSV requires DHSV to ensure that clinics are committed to continuous quality improvement. We found that DHSV had undertaken a number of quality initiatives, including:

- Establishing a Quality Committee in August 2000 in compliance with requirements under the *Health Services Act* 1988 and the Health Service Agreement. A major task of the Committee was the development and implementation of a quality plan for DHSV;
- Introducing clinical quality indicators related to:
 - taking of patient medical histories and medical charting, in 2001; and

- the number of patients returning for re-treatment of the same problem within 28 days after emergency care and the number of dentures remade within 12 months, for inclusion in Funding and Service Agreements for clinics from 2002-03.

The Department's Quality Reference Group worked with DHSV in the development of the clinical quality indicators required under the Health Service Agreement;

- Working towards attainment of recognised external accreditation under the Evaluation and Quality Improvement Program (Equip) of The Australian Council on Healthcare Standards (ACHS) by September 2003; and
- Developing and implementing the *DHSV Quality Plan 2002-03*, a strategic framework highlighting the key principles, processes and outcomes that DHSV embraces as part of its commitment to quality improvement. The quality plan, developed in May 2002, complements the Department's strategic quality plan by ensuring that effective and accountable systems are in place to monitor and improve the safety, quality and effectiveness of services provided by DHSV.

4.63 The key areas of focus for the DHSV Quality Plan are:

- safety;
- technical quality;
- service quality;
- clinical risk management;
- clinical governance; and
- evidence-based oral health.

4.64 Our assessment of progress against tasks identified in the Plan showed that all items scheduled for completion, at the time of preparation of this report, had been achieved.

Ongoing professional development

4.65 We expected that, as a professional responsibility to patients, all staff employed in public dental clinics would undertake appropriate training and continuing professional development to enable them to provide the best quality of care to patients. This is particularly important in the areas of clinical practice and oral health promotion and given the nature of the public dental health work force, as discussed in Part 5 of this report. Postgraduate and advanced training by public dentists may also reduce referrals to specialists and improve dentist job satisfaction. We note that there are no continuing professional development requirements for dentists as part of the registration process.

4.66 The current funding model for clinics provides for 5 days of professional development per staff member per year. This includes continuing education for dentists, in-house training days or reimbursement to attend relevant conferences.

4.67 DHSV offers all public dental staff, i.e. those employed by DHSV as well as those from non-DHSV clinics, the opportunity to attend regional and central forums that include education seminars and other training opportunities. The seminars cover both program management issues, e.g. budgets, information technology, new programs, record keeping, introduction of the clinical quality indicators, and clinical practice, e.g. new materials, oral surgery technique updates and radiography. In 2001-02, DHSV held its major annual seminar, which was repeated across regional areas to ensure that as many staff as possible could attend. Intra-regional seminars are also held usually once or twice a year.

4.68 DHSV also offers training to School Dental Service staff through a clinical review process introduced in early 1999. In addition to assessing the quality and appropriateness of the clinical care delivered, the clinical review process allows DHSV to identify common areas for targeted staff development and continuing education. For example, in 2000, dental officers and therapists requested training in orthodontics, medical history management, and radiology as their highest priorities for continuing education. As a result, these topics were included in the 2001-02 continuing education program for DHSV staff.

4.69 Twelve of the 13 clinics visited had professional development and continuing education programs in place. In many cases, course fees were subsidised for dentists, and other staff were able to attend internal and external courses on a range of topics. Dental therapists returning to work at the School Dental Service undertook theoretical and practical retraining programs.

4.70 Training in clinics covered:

- regular CPR training (staff attended at 11 clinics, and one was shortly to run training);
- various relevant dental practice regulations and codes of conduct (9 clinics); and
- cultural awareness training (4 clinics), and working with interpreters (2 clinics).

CONCLUSION

4.71 Community dental clinics face a challenge to deliver timely, efficient and effective services because of the difficulty in recruiting and retaining staff, and the pressure of increasing demand, particularly for emergency services.

4.72 For the Community Dental Program, waiting times for both conservative and restorative lists show a wide disparity across the State, although there were some improvements over the year to December 2001. For the School Dental Service, the number of school enrolments has consistently been growing, yet the number of completed courses of care has declined over the past 5 years and recall cycles for low risk children are increasing. These data show that services are not being delivered on a timely basis.

4.73 Efficiency within clinics varies widely and has not been the focus of concerted action to date either by clinics or by DHSV. The current concern is managing the increasing demand, especially for emergency treatment, a major issue for many clinics and one of the greatest impacts on whether they can meet service aims.

4.74 In regard to infection control, performance is uneven across clinics. Some of the differences are a product of work force issues, some due to jurisdictional issues around the management of non-DHSV clinics, while others are due to physical conditions in clinics.

4.75 Our visits to clinics revealed that the conditions in some, particularly the dental vans, were in need of improvement. The progressive decommissioning of the School Dental Service vans will address problems identified above. Continued investment in capital improvements and equipment, with an emphasis on occupational health and safety and clinical requirements, should improve conditions in community dental clinics.

4.76 The standards of record keeping were found to be inconsistent. However, the introduction of the electronic recording systems should assist. Complaints handling practices were also inconsistent.

Recommendations

4.77 We recommend that DHSV undertake a review of the efficiency of clinics to establish the reasons behind the varied performance achieved, and to develop strategies for improving the efficiency of service delivery, commencing with improved monitoring and benchmarking of dental clinics.

4.78 We recommend that DHSV increase its provision of ongoing support and training for staff of all dental clinics, particularly for critical practice issues and areas of non-compliance and inconsistent practice such as infection control.

4.79 We recommend that:

- investment in equipment continues to emphasise occupational health and safety and clinical requirements;
- an audit of equipment (other than that funded through minor works) be undertaken to enable development of an equipment replacement strategy for the entire service system; and
- a review of the efficiency of the DHSV workshop be undertaken in response to criticisms of slow response times and excessive cost.

RESPONSE provided by the Chief Executive, Dental Health Services Victoria

Para. 4.77

Dental Health Services Victoria (DHSV) agrees with the premise that a greater focus is required on clinic efficiency and that the percentage utilisation of dental chairs is one of several appropriate measures to facilitate this assessment. The data presented in the report are extremely interesting although it does not appear that any allowance has been made for the significant impact of differing vacancy rates for dental officers across the Community Dental Program and dental therapists across the School Dental Service. Nevertheless, it would be possible to establish a benchmark in both the Community Dental Program and the School Dental Service for the number of individuals treated/completions per chair per annum. DHSV undertakes to establish benchmarks and monitor performance against the benchmark both in services provided by DHSV and those purchased through Community Dental Program agencies in the 2002-03 Funding and Service Agreements. This information will then be used for informing and sharing of best practice across the sector.

RESPONSE provided by the Chief Executive, Dental Health Services Victoria - continued

Para. 4.78

DHSV would be pleased to increase its provision of ongoing support and training for staff of all dental clinics within the boundaries of DHSV's role as defined, agreed and funded by the Department of Human Services. DHSV agrees that its role is to ensure compliance of the sector with critical practice issues. This will be facilitated by clearly specified compliance requirements for agencies in the 2002-03 Funding and Service Agreements for practices such as infection control, complaints handling and clinical record keeping. In DHSV's opinion, this should not impinge on an agency's clinical governance responsibility. It should be noted that the introduction of electronic dental records across the community dental service will greatly facilitate some of these compliance issues through more consistent and sophisticated data collection and reporting.

Para. 4.79

DHSV agrees with the recommendation that investment in equipment continues to emphasise occupational health and safety and clinical requirements. Furthermore, DHSV agrees that an equipment replacement plan is needed across the public dental sector. This plan should form part of the dental capital plan as discussed in recommendation 6.72. The DHSV workshop collects data manually on response times and will introduce an automated solution to ensure response times are efficiently reported on a periodic basis. Furthermore, these response times will form part of the expected service standard (service charter) between agencies and the DHSV workshop from 2003-04, as will the cost for repairs and maintenance. Agencies will then be able to objectively assess and benchmark the DHSV workshop against other service providers prior to contracting.

RESPONSE provided by the Secretary, Department of Human Services

Paras 4.13 to 4.21

The report states that "clinic efficiency has not been a focus of concerted action". The Department refutes this. The Dental Program output funding system, applying to both school and community dental services, is recognised by DHSV and by other agencies as a major driver of efficiency, as reimbursement is made on the basis of the actual services that have been provided. The unit costs are based on published benchmarks for costs and productivity (clinical output per full-time equivalent dentist), which are reviewed each year against actual performance.

The report refers to the number of individuals treated per chair per year as a measure of efficiency, and observes that this varies greatly across the State. Because funding is provided for services, the number of services per chair is not a useful measure of efficiency, rather it reflects variations in supply. These variations may result from a shortage of dentists, or where only a part-time service is required to meet the community's need. The Department will continue to work with DHSV and other public dental providers to establish more benchmarks for high quality, cost-effective and well-targeted service provision.

Part 5

Work force

INTRODUCTION

5.1 This Part of the report:

- analyses the oral health work force;
- discusses factors that impact on the work force and trends; and
- identifies and evaluates work force initiatives undertaken by the Department of Human Services and Dental Health Services Victoria (DHSV).

VICTORIA'S ORAL HEALTH WORK FORCE

5.2 Within Victoria, and across Australia, dentists make up about 75 per cent of the oral health work force. Their clinical work is supported and supplemented by dental auxiliaries, including dental therapists, dental hygienists, prosthetists (formerly advanced dental technicians) and a number of dental specialist groups. Dental hygienists, dental therapists and prosthetists play an important role in the delivery of public dental services. While also part of the oral health work force, dental assistants and dental technicians do not provide direct clinical care.



A dentist and dental assistant providing dental care.
(Photograph courtesy of Dental Health Services Victoria.)

5.3 Table 5A provides details of the Victorian oral health work force, including the number of practitioners, their training requirements and annual training intake numbers. This information illustrates that the oral health work force is quite small, estimated to be just over 8 000 people, about one-quarter of whom are dentists.

**TABLE 5A
VICTORIAN ORAL HEALTH WORK FORCE COMPOSITION, ROLES AND TRAINING**

Position	Role (a)	Number practising			Training	Annual intake
		Total	Private	Public		
Dentists	Provide a wide range of preventive, diagnostic and restorative services, including scaling, providing crowns and bridges, and extractions.	(b) 2 204	1 908	296	Most dentists practising in Victoria have a 5-year Bachelor of Dental Science (BDS) from The University of Melbourne. Degrees are also available from one university in New South Wales, South Australia, Western Australia, Queensland and New Zealand.	2002 intake: 62 students. 2003 intake (estimated): 64 students.
Dental therapists	Provide dental care for persons up to and including 18 years of age, and on the prescription of a practising dentist, for persons between the ages of 19 and 25 years of age. Services include provision of oral health advice, preventive treatments including placement of dental sealants, taking of radiographs, fillings and extractions. Dental therapists may also provide a number of orthodontic procedures under the supervision of a dentist.	(c) 124	-	124	A 2-year Diploma of Oral Health Therapy (The University of Melbourne) for dental therapists and dental hygienists. The majority of dental auxiliary educational programs in other States of Australia and New Zealand are now becoming degree courses.	2002 intake: 15 dental therapy students (9 are State-funded), plus one student undertaking the dental hygienist to dental therapist course. 2003 intake (estimated): 25 students.
Dental hygienists	Provide a defined range of preventive dental care under the prescription and supervision of a dentist. This includes cleaning and scaling of teeth, and oral health education. Dental hygienists may also work in aged care facilities without the supervision of a dentist.	(d) 53	53	-	Refer above.	2002 intake: 6 dental hygienist students, plus 3 students undertaking the dental therapist to dental hygienist conversion course. 2003 intake (estimated): 6 students.

TABLE 5A
VICTORIAN ORAL HEALTH WORK FORCE COMPOSITION, ROLES AND TRAINING – continued

Position	Role (a)	Number practising		Training	Annual intake
		Total	Public		
Dental prosthetists	Practice as independent dental providers in the supply and fitting of full and partial dentures, as well as crowns and bridges.	(e) 234	n.a.	Under the Health Training package, Australian National Training Authority, a prosthetist must complete a Level 6 Certificate (Advanced Diploma of Dental Prosthetics). An Advanced Diploma will commence in 2003 at the Royal Melbourne Institute of Technology University (RMIT University) (with both off-job tuition and on-job training), probably taking at least 18 months from commencement.	2003 intake: a maximum of 16 places may be offered in the Advanced Diploma course.
Dental technicians	Provide laboratory services and manufacture and repair appliances (e.g. dentures, bridges, crowns) to the prescription of dentists and dental prosthetists.	n.a.	n.a.	A Level 4 Certificate course, offered by RMIT University, is required. A Diploma of Bridging Course (Diploma in Dental Health Works) is also offered by RMIT University for qualified dental technicians to upgrade to Level 5 Certificate.	2002 intake: 37 students. 2003 intake (estimated): 25 to 30 students. 2002 intake: 65 students. 2003 intake (estimated): 20 students.
Dental assistants	Provide direct chair-side assistance to dentists, dental therapists and hygienists. Their primary responsibilities are infection control and radiography.	(f) 5 466	n.a.	It is not compulsory to complete a formal training program to work as a Dental Assistant in Victoria, but RMIT University provides a 12-month, 390 hour traineeship course, with a mix of on-the-job and off-job training, culminating in a Level 3 Certificate in Dental Assisting. Higher-level qualifications are available for dental radiography, oral health education and assistance during general anaesthesia and conscious sedation.	2002 intake: 300 students. 2003 intake (estimated): 450 students.

(a) The roles presented in this table are those following the recent changes to the Dental Practice Board of Victoria Code of Practice effective as at August 2002. These changes are detailed in paragraph 5.14 of this report.

(b) Number of practicing dentists in the public sector includes those employed by Community Dental Services, the Royal Dental Hospital of Melbourne, the defence forces and tertiary institutions; Australian Institute of Health and Welfare, Dental Statistics Research Unit, *National Dental Labour Force data collection*, unpublished data, 2000.

(c) Australian Institute of Health and Welfare, *Dental Therapist Labour Force, 1997*, Dental Statistics Research Unit Newsletter, Vol. 10, No. 2 1999, Cat. No. DEN 51.

(d) Australian Institute of Health and Welfare, *Dental Hygienist Labour Force, 1997*, Dental Statistics Research Unit Newsletter, Vol. 10, No. 1 1999, Cat. No. DEN 49.

(e) Australian Institute of Health and Welfare, *Dental Prosthetists Labour Force, 1998*, Dental Statistics Research Unit Newsletter, Vol. 10, No. 3 1999, Cat. No. DEN 52.

(f) Australian Institute of Health and Welfare, Dental Statistics Research Unit, *Longitudinal Study of Dentists' Practice Activity, 1998-1999*: Number of dental assistants is estimated from the number of practising dentists in the year 2000 multiplied by the mean number of dental assistants per dentist (i.e. 2.48).
n.a. means data not available.
Source: Victorian Auditor-General's Office.

5.4 Table 5B shows the distribution of clinical staff for the Community Dental Program and the School Dental Service.

TABLE 5B
COMMUNITY DENTAL SERVICE STAFF, BY PROGRAM, AVERAGE FTE, 2001-02
(number)

<i>Program</i>	<i>Dentist</i>	<i>Dental therapist</i>	<i>Dental assistant</i>	<i>Dental technician</i>	<i>Prosthetist</i>	<i>Total</i>
Community Dental Program -						
Royal Dental Hospital of Melbourne General Dental Unit	13.9	0.0	11.0	0.2	1.5	26.6
DHSV clinics	15.7	0.0	17.6	1.7	0.4	35.4
Non-DHSV clinics	121.2	(a) 1.7	(a) 146.6	(a) 7.5	(a) 3.3	280.3
Total	150.8	1.7	175.2	9.4	5.2	342.3
School Dental Service	14.8	87.1	88.8	n.a.	n.a.	190.7
Statewide	165.6	88.8	264.0	9.4	5.2	533.0

(a) As at October 2002.

n.a. means not applicable.

FTE means full-time equivalent.

Source: Dental Health Services Victoria.

WORK FORCE TRENDS

Work force shortages

5.5 Public dental services in Australia and in Victoria are experiencing significant recruitment and retention problems, resulting in widespread work force shortages. This is having an adverse effect on the delivery of services. Without timely intervention, the current work force problems are projected to increase. The shortage is not uniform, being most problematic in rural areas and in the public sector.

Rural areas

5.6 Table 5C shows the rates of practising dentists, dental therapists, hygienists, prosthetists and assistants per 100 000 population for metropolitan and rural Victoria. It is evident that there is a marked variation in the availability of dentists between metropolitan and rural areas, with the majority working in capital cities. In contrast to dentists, therapists and hygienists, the availability of prosthetists is higher in rural areas.

TABLE 5C
ORAL HEALTH WORK FORCE,
BY GEOGRAPHIC REGION OF MAIN PRACTICE LOCATION (a)
(rate per 100 000 population)

<i>Work force</i>	<i>Total number</i>	<i>Metropolitan</i>	<i>Rural Victoria</i>
Dentists (b)	2 204	52.4	29.9
Therapists (c)	124	3.7	2.3
Hygienists (d)	53	1.3	0.9
Dental assistants	(e) 5 466	(f) n.a.	n.a.
Prosthetists (g)	234	4.9	5.2

(a) Practising dental personnel per 100 000 estimated resident population. Relates to all practitioners, i.e. public and private sector.

(b) Australian Institute of Health and Welfare, Dental Statistics Research Unit, National Dental Labour Force data collection, unpublished data, 2000.

(c) Australian Institute of Health and Welfare, *Dental Therapist Labour Force, 1997*, Dental Statistics Research Unit Newsletter, Vol. 10, No. 2 1999, Cat. No. DEN 51.

(d) Australian Institute of Health and Welfare, *Dental Hygienist Labour Force, 1997*, Dental Statistics Research Unit Newsletter, Vol. 10, No. 1 1999, Cat. No. DEN 49.

(e) Number practising estimated from Australian Institute of Health and Welfare work force activity survey of dentists.

(f) Data on rates of dental assistants for metropolitan and rural Victoria are not available.

(g) Australian Institute of Health and Welfare, *Dental Prosthetists Labour Force, 1998*, Dental Statistics Research Unit Newsletter, Vol. 10, No. 3 1999, Cat. No. DEN 52.

Source: *Australian Dental Association Survey, 2000*, Australian Institute of Health and Welfare Newsletter.

Public dentistry

5.7 As shown in Table 5A, until recently, the majority of dentists, and all hygienists, worked in the private sector, while all dental therapists worked in the public sector¹. The number of vacancies for the Community Dental Program and School Dental Service are substantial. Both dentist and dental therapist vacancy rates in Victoria are higher in rural than metropolitan regions, as shown in Table 5D. DHSV was able to provide only limited data on the length of time that dentist positions had been vacant in both rural and metropolitan clinics. For the Community Dental Program, most rural positions had been vacant between 6 to 12 months, compared with less than 4 months in metropolitan clinics. For the School Dental Service, most dentist positions had been vacant between 3 to 8 months.

¹ As the notes for Table 5A indicate, the data relate to a range of periods from 1997 to 2000. We were advised that at the time of preparing this report there is a 0.6 FTE dental hygienist and around 5 FTE dental prosthetists working in the Victorian public sector. We were also advised that between 5 and 10 dental therapists currently work in the private sector on a part-time basis.

**TABLE 5D
COMMUNITY DENTAL PROGRAM AND SCHOOL DENTAL SERVICE,
DENTIST AND DENTAL THERAPIST VACANCIES AS AT AUGUST 2002,
BY REGIONAL GROUP**

Program and regional group	Dentists				Dental therapists			
	Planned FTE (no.)	Actual FTE (no.)	Vacancy FTE (no.)	Vacancy (per cent)	Required FTE (a) (no.)	Actual FTE (no.)	Vacancy FTE (no.)	Vacancy (per cent)
<i>Community Dental Program (b) -</i>								
Metropolitan	112.1	98.4	13.7	12.2	n.a.	n.a.	n.a.	n.a.
Rural	55.8	39.7	16.1	28.9	n.a.	n.a.	n.a.	n.a.
Statewide total	167.9	138.1	29.8	17.7	n.a.	n.a.	n.a.	n.a.
<i>School Dental Service -</i>								
Metropolitan	9.4	7.8	1.6	17.0	72.5	54.1	18.4	25.4
Rural	5.5	3.6	1.9	34.5	45.5	32.8	12.7	27.9
Statewide total	14.9	11.4	3.5	23.5	118.0	86.9	31.1	26.4

(a) Required FTE means the FTE needed to meet a 12 month:24 month recall cycle.

(b) Community Dental Program data includes both DHSV and non-DHSV clinics.

n.a. means not applicable.

FTE means full-time equivalent.

Source: Dental Health Services Victoria.

5.8 DHSV advised that information on vacancy rates for dental assistants was not collected, but was estimated to be small. Similarly, no information was collected on vacancy rates for prosthetists, with only 5 FTE prosthetists currently employed in the public sector.

Characteristics of the public sector oral health work force

5.9 Approximately one-third of the adult population is eligible for public dental services, but only 10 per cent of dentists work in, or for, public dental services². While this is partly as a result of the available funding for public dentist positions, the level of vacancies implies relatively low interest in public dentistry as a career.

5.10 We were advised that not many dentists choose to work in the public sector after graduation (possibly less than 5 or 6 per year) and that, of those who choose to work in the public sector, many move out to the private sector within a few years. DHSV identified attrition rates for its own clinics of:

- 40 per cent for dentists over the past 3 years; and
- 14 per cent and 19 per cent, respectively, for dental therapists and dental assistants in the School Dental Service in 2001³.

² Australian Health Minister's Advisory Council Steering Committee for National Planning for Oral Health, *Oral Health of Australians: National planning for oral health improvement, Final Report*, South Australian Department of Human Services, 2001.

³ DHSV proposal to the Department of Human Services' Productivity Investment Fund, April 2001.



A dental therapist employed in the School Dental Service prepares to X-ray her patient's teeth. (Photograph courtesy of Dental Health Services Victoria.)

5.11 Poor retention of public sector oral health workers has been attributed to dissatisfaction with the quality of the working environment, including:

- Limited potential for skill and professional development, including lack of a defined career path for all clinical occupation groups and poor access to training;
- Limitations on public dentistry work, including the preponderance of emergency work, limited range of procedures which are permitted to be undertaken, and in some cases less modern facilities (notably older mobile dental vans) and techniques;
- Additional demands placed on dentists, including the supervision and monitoring of the clinical work of junior staff and dental therapists;
- Lower wages than are available in the private sector. A new graduate dentist can earn 20 per cent or more in the private sector⁴. This is likely to become a bigger issue too for dental therapists, following recent legislative changes that permit them to work in the private sector. Anecdotally, this may already be occurring on a limited basis, e.g. full-time dental therapists in the School Dental Service moving to concurrent part-time employment in the private and the public sectors. All managers in clinics visited during the audit reported increasing pressure from staff, especially dentists, for conditions comparable with those in the private sector; and

⁴ The starting salary for a new graduate dentist in the recently adopted multi-employer collective agreement is \$44 000. The Department advised that the average starting salary for new graduates (private and public sector combined) was \$55 000, with some graduates being offered up to \$100 000 in rural areas.

- Concerns regarding the perceived poor image of public dentistry. We were advised that dentistry is, and has always been, private practice-based and the undergraduate course content emphasises the importance of private practice. This differs from medicine where the “best doctors” may be attached to public hospitals. The perception is not the same in dentistry and the good opportunities, including income, ability to provide a large range of service delivery types, control of own practice and future career, are perceived to be in the private sector.

5.12 The consequence of these factors is that, compared with the private sector, the public sector oral health work force has a greater proportion of young and inexperienced staff and of older staff, especially dentists, as well as a greater proportion of overseas trained dentists. During site visits, clinic managers reported that most new staff recruited into the community dental service were new graduates with limited experience. This placed additional demands on existing clinic staff, in particular the “lead dentist”, for supervision and mentoring, but also in terms of having to undertake the more complex and emergency cases. Clinic and program managers stated that they increasingly had to recruit dental practitioners from overseas.

5.13 This profile implies a work force which is potentially less productive, and in need of comprehensive supervision, training and professional development. Shortages in the oral health work force now and in the future will impact more severely on the public sector. We observed clinics with excellent and modern facilities that were unable to be fully utilised due to the inability to allocate sufficient numbers of dentists.

Training and regulatory changes

5.14 Recent changes in the training and regulatory framework are likely to impact on the projected gap between demand for oral health workers and the capacity to supply the Victorian oral health work force, including:

- The introduction of degrees for dental therapists and dental hygienists in other States, making the Diploma of Oral Health Therapy offered at The University of Melbourne less attractive and increasing leakage of the potential dental therapists and dental hygienists work force away from Victoria;

- Recent changes to the legislation and codes that govern the practice of dentistry by dental therapists and dental hygienists in Victoria, i.e. *The Dental Practice Act 1999* and the Dental Practice Board of Victoria Code of Practice⁵. These changes have important implications for the delivery of public dental services as:
 - Dental therapists are no longer restricted to providing dental services to pre-school, primary and secondary school-age children, but can now, within parameters of education and experience, provide dental care for persons up to and including 18 years of age and, on the prescription of a practising dentist, for persons between the ages of 19 and 25 years of age. No age restriction applies to the provision of a number of orthodontic procedures by dental therapists;
 - Dental therapists are no longer limited to practice in the public sector, but can also work in private dental practice provided they follow the Code of Practice above. This is likely to have the greatest impact on the delivery of dental care through the School Dental Service, with practising dental therapists moving into the private sector and new graduates now having the option of commencing employment in the private sector. We were advised that at the time of finalising this report, there are an estimated 10 dental therapists currently working part-time (around 5 FTE) in the private sector; and
 - Dental hygienists can now work in aged care facilities without the supervision of a dentist; and
- The lateral entry training program offered at The University of Melbourne which enables dental therapists to train as hygienists and vice versa. This increases the potential for leakage of dental therapists to the private sector to be employed as dental hygienists. Anecdotal evidence suggests that the higher salaries available to dental hygienists in the private sector will play a significant role in any movement away from the public sector.

Future trends

5.15 The information presented in this section draws heavily upon data collection and research undertaken by the Australian Institute of Health and Welfare Dental Statistics and Research Unit (DSRU). In 1999, the Department of Human Services contracted DSRU to conduct a Victorian Oral Health Services Labour Force Planning Review. Key findings from this review of the projected demand for, and supply of, dental services through to 2010 were:

- A high and growing demand for dental services associated with:
 - A 7.7 per cent increase in the Victorian population;
 - A 15 per cent increase in the proportion of the dentate population (65 years and older);

⁵ Dental Practice Board of Victoria Code of Practice: *Practice of Dentistry by Dental Hygienists and Dental Therapists*, August 2002.

- An increase of between 11 per cent and 38 per cent in the demand for dental visits. (It is estimated that 20 per cent of this demand will be among persons eligible for public dental services. Demand among the eligible population will increase by 32.3 per cent, compared with a 22.8 per cent increase among the non-eligible population); and
- Increasing services per visit, which will result in a higher increase in the number of services provided; and
- Slow increases in supply of all elements of the oral health work force of between 5.6 per cent and 11.2 per cent to 2010 (using medium and high recruitment projections, respectively), with expected growth in supply being least for prosthetists and dentists. This is the result of slower than required growth in the rate of training and increasing loss of oral health workers through attrition due to the ageing of the dental and prosthetist work force.

5.16 The projected shortage in all elements of the oral health work force relates to quite small absolute numbers - the projected gap by 2010 is 524 dentists, 14 hygienists, 28 therapists and 61 prosthetists. The University of Melbourne and the Royal Melbourne Institute of Technology University revealed that this projection is considered to be conservative, probably underestimating the severity of future shortages.

ADDRESSING PUBLIC SECTOR ORAL HEALTH WORK FORCE ISSUES

5.17 The issues affecting the public sector oral health work force can be addressed through attention to 6 broad areas:

- increasing the supply and retention of public sector oral health workers;
- increasing the use of private dentists and prosthetists;
- increasing productivity;
- increasing supervision, training and professional development;
- changing the responsibilities in the oral health work force; and
- reducing the demand for dental services.

5.18 The Department and DHSV have proposed a number of initiatives in these areas, which are discussed and assessed below. The Department is also participating in a National Advisory Committee on Oral Health which is considering work force planning issues from a national perspective.

Increasing the supply and retention of public sector oral health workers

Supply initiatives

5.19 Increased supply of public sector oral health workers could be achieved through:

- increasing the intake of oral health students;
- increasing the proportion of oral health workers who choose a career in public dentistry; and
- recruitment of interstate or overseas trained dentists.

Increasing the intake of oral health students.

5.20 Demand for the limited number of training places at the School of Dental Science at The University of Melbourne exceeds supply. Evidence of this is the high ENTER⁶ and UMAT⁷ scores for selection for dental training, which never approach the lower levels of the cut-off range, e.g. we were advised that the ENTER of those accepted is usually greater than 98.

5.21 To address the shortage of dentists projected in the Victorian Oral Health Services Labour Force Planning Review would require a substantial increase in the current training rate. The Department provides funding for the training of 8 dental therapists per year and advised that further funds have been approved for training up to 18 additional dental therapists commencing in 2003.

5.22 The School of Dental Science recognises and supports increased student intake as a key long-term solution to bridging the increasing gap between demand and supply of oral health workers, and considers it feasible that the training rate could be increased, with support from the Commonwealth and State Governments. However, Commonwealth Government funding restrictions limit the number of available Commonwealth-funded university places. Given the considerable demand, more places could be offered to local fee-paying students. However, there are restrictions on their intake set by the Commonwealth Government.

⁶ ENTER or Equivalent National Tertiary Entrance Rank is a percentile ranking showing an applicant's comparative placement in their VCE age group in that year on the basis of their VCE studies.

⁷ UMAT refers to the Undergraduate Medicine and Health Sciences Admission Test. All applicants for the Bachelor of Dental Science and the Diploma of Oral Health Therapy courses at The University of Melbourne, who are Australian or New Zealand citizens or Australian permanent residents, are required to undertake the UMAT to be eligible for selection.

5.23 The University also provides dental places for international students, under arrangements determined by the Commonwealth which are less restrictive than those which apply for domestic fee-paying students. We were advised that for the past 3 to 4 years, the intake of overseas dental students has been consistent at approximately 16, i.e. about 25 per cent of the total annual intake. However, only 9 to 10 of these students complete the course. The main reasons for dropping out (not wanting to continue with the course or failure) are the same as for local students. Many of those who do complete are lost to the local work force after graduation, due to their inability to work in Australia without a work visa.

5.24 The Department advised that it has had ongoing discussions with The University of Melbourne about increasing the number of places for domestic students, modifying the intake criteria to include aptitude and interest in dentistry as well as academic grades, and relaxing restrictions on local fee-paying students.

5.25 Increasing the intake of oral health students is one means of increasing the work force supply. The impact will not be immediate because there is a time lag between the establishment of training positions and new graduates joining the work force, although for hygienists, therapists and prosthetists the training requirements are shorter compared with those for dentists.

Increasing the proportion of oral health workers who choose a career in public dentistry

5.26 A small proportion of oral health workers (except for dental therapists) choose a career in public dentistry. As part of the Oral Health Services Labour Force Planning Review, panel discussions were held with a small group of final year dental students at The University of Melbourne. On the positive side, the students saw the public sector providing a training ground for a later move into private practice. They considered public sector practice provided a broad range of clinical experience, exposure to experienced clinical mentors and clinical guidance, as well as job security and fulfillment of social justice convictions. However, on the negative side, students viewed the public sector as offering *second-rate* dentistry, i.e. restricted autonomy with limited treatments and materials, limited ability to specialise, as well as limited salary packages and career pathways.

5.27 The Department and The University of Melbourne have discussed raising the profile of public dentistry in the School of Dental Science, increasing the number of places in dental therapy, and providing scholarships for dental therapy graduates to join the public sector. The rotation of students through community dental clinics, particularly in rural areas, as part of their training, has been proposed as a means of introducing students to the community dental and rural environment, and increasing the likelihood that they will return to regional areas once trained. To this end, the Department is holding discussions at present about increasing the number of dedicated student chairs in community dental clinics in the Hume and Eastern regions.

Recruitment of interstate or overseas trained dentists

5.28 Around 30 overseas dentists qualify to practice in Victoria each year. The Department advised that it is having discussions with immigration officials to streamline entry requirements for dentists trained in the United Kingdom, Ireland and New Zealand, whose qualifications are accepted for registration in Victoria. Further, as a long-term strategy, the Department is holding discussions with the Dental Practice Board about the appropriateness of the registration criteria for qualified dentists from other countries. At present, overseas trained dentists must undertake an examination conducted by the Australian Dental Council.

5.29 The Department advised that, for the medical work force, overseas trained doctors are permitted to practice in rural areas under supervision and with restrictions on the range of services provided. While a similar initiative could be considered to attract overseas dentists, attention would need to be paid to how adequate supervision can be provided by a work force which is already in need itself of comprehensive supervision, training and professional development.

Retention initiatives

5.30 DHSV has set as one of its key priorities, the development of *One DHSV*, a package of human resource and communication initiatives, including continuing education, career-pathing, rural placement options and remuneration reviews. One of the expected benefits of this package is increased attraction and retention of dental professionals.

5.31 Many of these work force strategies are focused on developing the role of dental therapists through:

- Developing a certified agreement and a new classification structure;
- Providing continuing education sessions;
- Implementing an annual clinical review process;
- Providing flexible working hours;
- Providing re-training programs to enable dental therapists to re-enter the work force. The dental therapist work force is largely female, and consequently experiences high attrition rates in the childbearing years. The Department has funded a dental therapist retraining course to encourage re-entry of dental therapists to the work force. Since 1999, 24 dental therapists have completed the course. Applicants are screened for suitability for retraining and future employment;
- Enhancing the mentoring role of senior dental therapists by involving them in the clinical review process;
- Advertising for dental therapists both interstate and internationally; and

- Implementing a work-value study for dental therapists, funded by the Department. The present 2:1 service delivery model for the School Dental Service (i.e. sharing a single dental assistant between 2 dental therapists) has been identified as one reason for Victoria's inability to attract and retain dental therapists in the School Dental Service⁸. We were advised by DHSV that the model has resulted in staff dissatisfaction and morale problems, with associated infection control and occupational health and safety issues. The aim of the study is to determine the relative efficiencies of the 2:1 and a 1:1 model.

5.32 To understand staff concerns and encourage staff retention, DHSV is assisting its own clinics to undertake staff satisfaction surveys and, in 2001, introduced exit interviews for its own clinical staff. The results are used to assist work force planning and management. Within DHSV an annual performance management program for all DHSV employees has recently been introduced.

5.33 Increased retention of oral health workers also requires attention to remuneration and career structure. In June 2002, a multi-employer collective agreement offering salary increases and an improved career structure was presented to dentists. However, finalisation of the agreement was very protracted and the outcome is such that public dentistry remains more poorly paid, relative to private dentistry.

5.34 In 2001-02, DHSV received \$352 959 from the Department for rural work force initiatives. This funding was intended to assist attraction and retention of staff to public dental services in rural areas, and initiatives are to be commenced in 2002-03.



Retention of dentists is essential to addressing shortages in the public oral health work force.
(Photograph courtesy of Dental Health Services Victoria.)

⁸ Victorian Department of Human Services, *Victorian Oral Health Services Labour Force Planning Review*, a report by the Australian Institute of Health and Welfare Dental Statistics and Research Unit, January 2002.

Increasing the use of private dentists and prosthodontists

5.35 Contracted-out dental care, i.e. providing vouchers for private practitioners to deliver publicly-funded dental care, is becoming more common across all Australian States and Territories⁹. This is seen as a necessary adjunct to direct public provision because of the difficulties in recruiting sufficient staff for public clinics. The viability of such a strategy requires the relative costs of publicly-funded private or public provision to be at least similar and private dentists to be willing to participate in the schemes.

5.36 In Victoria in 2000-01, 15 per cent of patients were treated by private dentists under the 3 voucher schemes, and in 6 clinics private dentists treated more than 30 per cent of patients. Unfortunately, costing data is inadequate to determine accurately whether private schemes are a cost-effective option. However, privately delivered services do appear to be more expensive than those delivered in public facilities, as discussed in Part 6 of this report.

5.37 Private dentists are, in general, reluctant to fully participate in the publicly-funded private schemes due to the high demand from their existing private patients; the limited scope of services that can be delivered; the high rate of broken appointments; and the scheduled fees paid for those services.

5.38 Despite this attitude, there is a reasonable level of private dentist participation in the Victorian Emergency Dental Scheme and the Victorian General Dental Scheme. A 2001 survey of all private dentists conducted by DHSV found that, of the 42 per cent of dentists who responded to the survey, over 70 per cent had participated in either Scheme and over 82 per cent were satisfied with the Schemes. This participation is, however, variable between regions and in terms of numbers of patients serviced.

5.39 As indicated in Part 3 of this report, clinics in rural regions issued nearly twice as many vouchers for private dentist treatment as those in metropolitan regions. This suggests the potential for greater utilisation of private dentists if additional funding for these Schemes are available and they prove to be cost-effective.

5.40 In summary, encouraging private dentists and other private sector oral health workers to join full-time public dentistry is unlikely to significantly address the work force shortage. However, if DHSV is able to justify its cost-effectiveness, private dentists could be encouraged to participate in an expansion of the voucher schemes, and private dentists could be encouraged on a sessional basis to address the shortage. For circumstances where there is excess chair capacity, DHSV is currently developing a private practice policy allowing limited rights to private practice which would enable dentists to treat private patients in public clinics at full cost recovery. This has yet to be finalised, but may encourage more dentists to treat public patients at least part of the time in public clinics.

⁹ Australian Health Minister's Advisory Council Steering Committee for National Planning for Oral Health, *Oral Health of Australians: National planning for oral health improvement, Final Report*, South Australian Department of Human Services, 2001.

Increasing productivity

5.41 The projected trend toward longer dental visits, coupled with an increase in the number of services per visit may reduce the number of visits required per patient in future. However, this is unlikely to greatly reduce the gap between the supply of work force resources and demand for dental services. Productivity improvements will require changed responsibilities in the oral health work force or increased training and professional development, as discussed below.

Changing the responsibilities in the oral health work force

5.42 Changes in disease patterns over recent decades, notably the decrease in caries in children and adolescents, the decrease in tooth loss and edentulism in adults, and the ageing population with its increasingly complex dental care needs, has resulted in calls to review both the current pattern of utilisation of the work force and the skills mix¹⁰. The shaded areas in Table 5E show the services traditionally provided by dentists which could potentially be provided by dental auxiliaries.

**TABLE 5E
SUPPLIERS OF DENTAL SERVICES**

<i>Services provided by dentists</i>	<i>Potential providers of these services</i>
Orthodontic (partial)	Dental hygienist
Diagnostic Preventive Periodontic	Dental hygienist or Dental therapist
Restorative	Dental therapist
Endodontic Advanced restorative Oral surgery	
Prosthetic	Prosthetist

Source: Based on a schematic by the Australian Institute of Health and Welfare Dental Statistics and Research Unit.

¹⁰ L Baltutis and M Morgan, *The Changing Role of Dental Auxiliaries: A Literature Review*, Australian Dental Journal, Volume 43, No. 5, 1998, pp. 354-8.

5.43 A number of benefits could result from greater utilisation of dental auxiliaries in the supply of dental services, for example:

- Dental auxiliaries can provide many services at a lower cost than dentists, without loss of quality¹¹. Three studies have shown high quality in low-technology services, such as the application of fissure sealants, when delivered by auxiliaries. A 10-year study¹² showed no variation in the quality of procedures performed by an auxiliary and those performed by a dentist. Research has also shown a possible increase in cost effectiveness when a dental auxiliary is added to an existing team of dentist and chair-side assistant. Other studies have shown increases in cost-effectiveness ranging from 30 to 80 per cent in the delivery of simple, uncomplicated tasks^{13,14};
- The shorter training courses for auxiliaries compared with dentists facilitate more rapid adjustment of the work force to the changing needs of the eligible population; and
- Freeing up of dentists from providing low-technology services would enable them to concentrate on the provision of specialised, high technology treatments.

5.44 Some specific actions arising from the Victorian Oral Health Services Labour Force Planning Review¹⁵, which could be taken to maximise the contribution of auxiliaries in the public sector include:

- employing dental hygienists in non-traditional public sector settings such as aged care facilities; and
- increasing involvement of prosthetists, rather than dentists, in the provision of prosthodontic services to an increasingly ageing subgroup of the population, most of who are eligible for public dental services.

5.45 While dental assistants are not involved in the direct delivery of dental services, there is scope for expanding their role in the public sector beyond chair-side support. Discussions with RMIT University revealed that one such area is oral health promotion, where dental assistants could be effectively employed to work with the elderly in aged-care facilities.

¹¹ L Baltutis and M Morgan, *The Changing Role of Dental Auxiliaries: A Literature Review*, Australian Dental Journal, Volume 43, No. 5, 1998, pp. 354-8.

¹² CW Douglass and KO Cole, *Utilization of dental services in the United States*, Journal of Dental Education, 43, 1979, pp. 223-8.

¹³ CW Douglass and J Lipscombe, *Expanded function dental auxiliaries: potential for the supply of dental services in a national dental program*, Journal of Dental Education, 43, 1979, pp. 556-7.

¹⁴ K Koerner, *Dynamic transition in dentistry: expanded functions for auxiliaries*, Journal of Public Health Dentistry, 31, 1971, pp. 123-41.

¹⁵ Victorian Department of Human Services, *Victorian Oral Health Services Labour Force Planning Review*, a report by the Australian Institute of Health and Welfare Dental Statistics and Research Unit, January 2002.

5.46 Within the medical profession, a team approach to health care delivery is widely accepted. Adoption of a similar model within the dental profession would help to ensure that the wide range of skills within the oral health work force is effectively used. The incorporation of all dental training within the new Dental Hospital from 2003 will help to facilitate a greater appreciation for the different roles and skills across all dental professions.

5.47 The Department has committed to discussions with the Dental Practice Board regarding the role of dental auxiliaries and dental assistants, and the conduct of trials to investigate whether dental auxiliaries can, with increased training, provide additional cost-effective dental care under supervision of a dentist. However, specific action has yet to occur.

Increasing supervision, training and professional development

5.48 Supervision, training and professional development not only aids quality service delivery but can be a means of broadening the skill set of some parts of the oral health work force to enable this transfer or widening of duties. As noted above, the public sector oral health work force has a high proportion of young and inexperienced staff and of older staff, especially dentists, as well as a high proportion of overseas trained dentists. The demands for supervision, training and professional development are therefore high.

5.49 The Department is to engage a consultant for a Primary Health Work Force project to develop strategies for all primary health staff. Grants are also provided by the Department to encourage best practice approaches. In 2001-02, of 8 grants awarded for oral health, 2 were focused on professional development. Currently, one community dentist is undertaking a placement at the Royal Dental Hospital of Melbourne to receive advanced clinical training and there are ongoing discussions with DHSV regarding the potential to expand this opportunity.

Reducing the demand for dental services

5.50 The projected growth in demand for dental services is derived from projections of the current structure and approach to provision of dental services. The Department has put in place some strategies to reduce that demand, focusing on oral health promotion and prevention activities. More controversial strategies could include extension of fluoridation, changing community expectations of the frequency of dental visits and limiting eligibility for, and access to, public dental services. The Department is considering specifying guidelines on appropriate recall intervals for general and school dental care.

CONCLUSION

5.51 There is currently an oral health work force shortage in Victoria. The shortage is not uniform, being most problematic in rural areas and in the public sector. This shortage is exacerbated in the community dental services by high attrition rates. Within its own clinics, DHSV has experienced attrition rates of 40 per cent for dentists over the past 3 years; and 14 per cent and 19 per cent, respectively, for dental therapists and dental assistants in the School Dental Service in 2001.

5.52 While the Department and DHSV have developed a range of initiatives to address oral health work force shortages, both acknowledge that these have not involved a co-ordinated approach and many initiatives have not yet resulted in specific actions.

5.53 In the short-term, one means of addressing the shortage could be through encouraging private dentists to participate in an expansion of the voucher schemes, or to provide services on a sessional basis using public facilities. However, the cost-effectiveness of this approach must be examined.

5.54 In the longer-term, shortages in the oral health work force will impact more severely on the public sector. There is potential to widen the role and scope of practice by dental auxiliaries, as a means of addressing the increasing demand for public dental services.

5.55 Compared with private dentistry, the public dental work force has a high proportion of young and inexperienced staff and of older staff, especially dentists, as well as a high proportion of overseas trained dentists. This work force is potentially less productive, and in need of comprehensive supervision, training and professional development.

Recommendations

5.56 We recommend that a work force database be developed and maintained by DHSV to enable accurate and ongoing monitoring of the oral health work force for the School Dental Service and the Community Dental Program, including both DHSV and non-DHSV clinics.

5.57 We recommend that the Department, in collaboration with DHSV, the major educational providers and other key stakeholders, such as the professional bodies and the Commonwealth and other State Governments, take strategic action to address the current and future shortages in the oral health work force, including:

- immediate and long-term initiatives to increase the supply of oral health workers, targeting areas of greatest need including the public sector and rural regions;
- a review of the potential for widening the role and scope of practice by dental auxiliaries, as a means of addressing the increasing demand for dental services; and
- specific initiatives aimed at improving the perception of public dentistry and the quality of the work environment in order to attract a greater number of oral health graduates and to increase the re-entry and retention of experienced oral health workers.

RESPONSE provided by the Chief Executive, Dental Health Services Victoria

Para. 5.56

Dental Health Services Victoria (DHSV) agrees with this recommendation. Information on work force will be included in the minimum dataset requirements from agencies in the 2002-03 Funding and Service Agreements.

Para. 5.57

DHSV agrees with this recommendation:

- DHSV would be pleased to collaborate with the Department of Human Services and other key stakeholders on the first dot point of the recommendation;
- DHSV would be a keen participant in a funded trial to investigate the potential widening of the scope of practice of dental auxiliaries;
- A number of specific initiatives have been implemented over the past 6 years or are well underway to improve the perception of public dentistry and the quality of the work environment. These include:
 - the redevelopment of the Royal Dental Hospital of Melbourne due for commissioning in April 2003;
 - opening of 22 new community dental clinics;
 - commissioning of 52 new dental chairs in the School Dental Service;
 - progressive implementation of electronic dental records across the Royal Dental Hospital of Melbourne and the Community Dental Program with a proposal to extend to the School Dental Service;
 - establishment of an oral health promotion unit at DHSV;
 - new certified agreements for dentists, specialists and dental therapists with defined career structures and professional development;
 - recruitment to several professor/director positions at the Royal Dental Hospital of Melbourne to provide clinical leadership;
 - progress towards quality accreditation of services at DHSV by late 2003;
 - appointment of a corporate communication manager at DHSV to raise the external profile of public dentistry;
 - proposed establishment of a private operating theatre at the new Royal Dental Hospital of Melbourne; and
 - organisation restructure at DHSV to separate purchasing and provision functions and to streamline the management of services; and
 - Review of public dental funding and purchasing systems to appropriately focus rewards and incentives on improving clinical outcomes.

However, DHSV recognises that more work still needs to be done in this area to improve the attraction and retention of dental professionals. One such area is a jurisdictional obstacle that appears to prevent a "level playing field" existing between hospital and non-hospital agencies in the recruitment and retention of staff. The Fringe Benefits Tax (FBT) legislation differentiates between hospital and non-hospital Public Benevolent Institutions (PBIs). A hospital PBI has a FBT Capping Threshold of \$17 000 while a non-hospital PBI has a FBT capping threshold of \$30 000. Currently, 2 dentists working within a Community Health Centre (one employed by DHSV's School Dental Service and the other by the Community Health Centre) under the same salary arrangements would have differing take home pays resulting from the application of the FBT capping threshold. The jurisdictional obstacles preventing equitable remuneration needs to be resolved across the public dental work force. One solution would be to assess hybrid community/hospital organisations as non-hospital PBIs to allow the \$30 000 capping threshold to apply. DHSV would be prepared to support any submission to the Australian Taxation Office in this regard.

Part 6

Program management

INTRODUCTION

6.1 Fundamental to program management and the achievement of efficient and effective service delivery are:

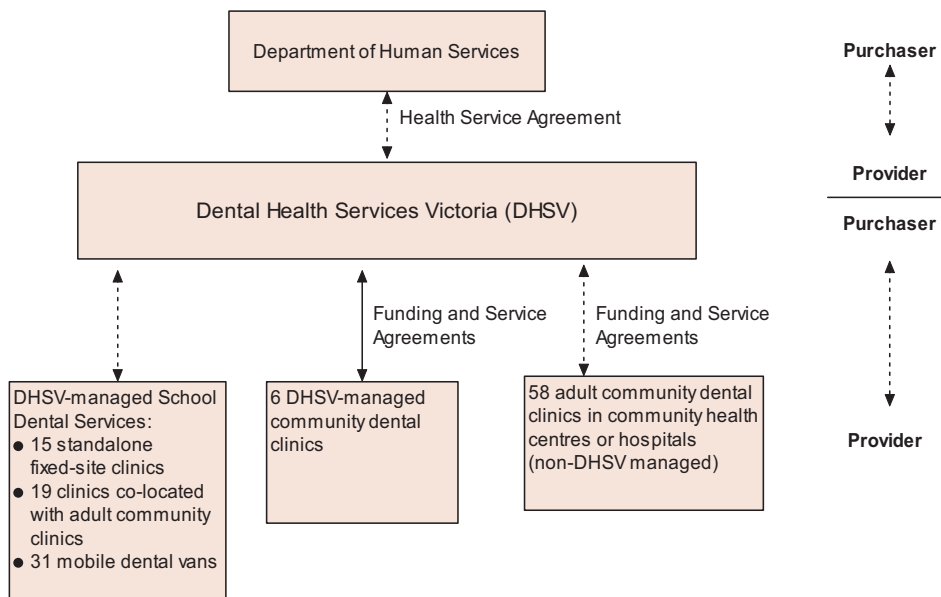
- the establishment of roles and responsibilities which are understood, are appropriately and clearly allocated between organisations and individuals, and are taken up by those parties;
- strategic planning which provides a clear vision and a framework for service delivery;
- resource allocation which reflects the strategic priorities of the program and maximises the capacity of the program to meet its objectives;
- service delivery which provides services to the eligible population efficiently, effectively and on a timely basis; and
- accountability and monitoring through the reporting of performance information that is relevant, appropriate and fairly represents performance, and the use of that information to improve future program performance.

6.2 During the audit we examined each of these components to determine whether an effective framework is in place to plan, manage, measure and monitor the effectiveness of community dental services. The results of our examinations, apart from those relating to service delivery, are presented in this Part of the report. Our findings from examinations of service delivery by public dental clinics are presented in Part 4 of this report.

ROLES AND RESPONSIBILITIES

6.3 Chart 6A shows the relationships between organisations involved in delivering community dental services in Victoria.

**CHART 6A
COMMUNITY DENTAL SERVICES,
ORGANISATIONS AND RELATIONSHIPS**



Source: Victorian Auditor-General's Office.

6.4 The Department of Human Services is responsible for oral health policy development and oversight of community dental services. Dental Health Services Victoria (DHSV) is an independent statutory body responsible for the management of the service delivery system through its own clinics or, as a contract manager, through clinics managed by community health centres or hospitals.

6.5 Under the established organisational framework, and consistent with the principles of the purchaser/provider model, the Department's role should relate to policy and oversight of the Health Service Agreement with DHSV, and DHSV should be responsible for implementing that contract, i.e. ensuring that agreed volumes of community dental services are provided and that services rendered meet quality standards.

6.6 We found that there were differing understandings and expectations about roles and responsibilities at 2 levels: first, between the Department and DHSV regarding operational issues, and second, around DHSV's role as the purchaser of community dental services from other entities. These matters are impacting on the way in which the 2 agencies interact with the service system, e.g. the way in which DHSV engages with non-DHSV clinics in relation to standards setting, infection control and complaints handling, and the degree of accountability to the Department required of DHSV.

6.7 We believe the arrangements under the framework should be reviewed to:

- clearly distinguish between policy and operational activities, and ensure that they are appropriately assigned between the Department and DHSV;

- ensure a common understanding between the 2 agencies of DHSV's role as a purchaser of community dental services, and of the Department's expectations of that role, particularly ensuring that required standards are met regardless of whether services are delivered by DHSV or non-DHSV clinics; and
- ensure accountabilities under the Health Service Agreement provide sufficient information to enable the Department to monitor DHSV's effectiveness as a contract manager and a provider of community dental services.

6.8 Acknowledging the need for greater consistency of service delivery across all clinics, the board of DHSV restructured the organisation on 16 September 2002. We believe that the new structure, if appropriately managed and resourced, has the potential to address a number of service delivery issues that our audit has identified.

STRATEGIC PLANNING

6.9 The most recent strategic plan for dental health in Victoria was released by the Department in 1995, prior to the establishment of DHSV. The plan has not been revisited and there is no intention to do so. The Department considers that strategic planning for the health system as a whole caters adequately for dental health.

6.10 During the audit we observed a service system under stress facing increasing demand pressure, leading to a mismatch between the Government's stated priority for oral health promotion and the services being delivered. For example, in the Community Dental Program, emergency services are being provided at the cost of preventive treatments and, in the School Dental Service, low risk children are waiting longer to receive preventive treatment. The strategic direction for public dental health should be revisited to ensure that it is appropriate to the achievement of the program objectives.

6.11 DHSV developed a 2001 to 2004 strategic plan addressing issues of access to services, quality improvement, management and achievement of improved dental health outcomes, but the plan was restricted to its own services.

Service planning

6.12 Service planning involves the review of service locations in response to changing community needs, which may result in identification of a requirement for additional capital resources or to close, downgrade or modify existing services to meet those needs.

6.13 The Department has undertaken a number of service planning activities in specific locations and developed principles for service planning for public dental services, addressing:

- design standards;
- access, including hours of operation and geographic proximity to the eligible population;

- a preference for co-location of services and decreasing reliance on mobile vans, for school dental services;
- cost-effectiveness of clinics;
- ratios of resources to numbers of eligible population; and
- the provision of education and experience for the oral health work force across a variety of settings.

6.14 Given the importance of service planning, DHSV should develop a Statewide service plan. DHSV should have the flexibility to propose alternative service delivery models in order to best meet its operational responsibilities under the Health Service Agreement.

Capital planning

6.15 The DHSV Dental Capital Plan, the first State dental capital plan, was released in 1997. The Department did not formally adopt the Plan, because of the major recurrent funding implications. However, some aspects were subsequently taken up by the Department, including the development of a new dental hospital to be opened in 2003. In 1999, DHSV undertook a revision of the Plan, making projections to 2006.

6.16 The Department advised that capital planning for the health sector as a whole occurs on an ongoing basis to inform the annual budget process. However, our visits to clinics revealed that the standard of facilities is a significant issue with many of the older clinics and mobile vans, and the equipment available is in need of an upgrade to meet current occupational health and safety and infection control requirements.

6.17 We, therefore, believe that the current approach to capital provision, including the preference for integration of dental health services with primary health services, should be revisited. This will provide the opportunity to assess:

- the appropriateness of the service planning principles in place;
- whether the location and scale of dental clinics established are meeting the needs of the eligible population; and
- whether priorities for dental health are being properly identified and met.

6.18 We recognise that having a capital plan will not ensure that resources will be provided to meet that plan. However, it will provide a strong basis for future budget submissions.

6.19 In summary, our audit has identified that operational demands on the community dental service system are, in effect, reducing the priority of promotion and prevention strategies. It is timely to revisit the Statewide strategy for public dental health. Service planning principles should also be reassessed to determine whether they provide the best solutions to the continuing problems in service access and delivery, and whether they adequately address the capital needs for the service system into the future.

RESOURCE ALLOCATION

Available budget

6.20 In 2001-02, \$83.1 million was appropriated by Parliament to the Dental Health Output Group, a 5 per cent increase on the prior year. Table 6B shows a breakdown of that budget.

**TABLE 6B
DENTAL HEALTH OUTPUT GROUP,
BUDGET ESTIMATES, 2001-02**

<i>Item</i>	<i>\$</i>	<i>per cent</i>
Dental Health Output Group total output cost (a)	83.1	100.0
Applied as follows -		
Capital assets charge (b)	5.6	6.7
Depreciation (b)	5.4	6.5
Long service leave (c)	1.6	1.9
Departmental program management costs (including Dental Health Unit) (d)	1.4	1.7
Patient co-payments (e)	4.2	5.1
Service purchasing -		
Dental Health Services Victoria	63.5	76.4
Local government (Pre-school Dental Program)	0.2	0.2
Insurance	0.4	0.5
Overprovision in budget (f)	0.8	1.0
Total application of funds	83.1	100.0

(a) Refer *Budget Paper No. 3*, Department of Treasury and Finance, 2001-02. This amount includes cash and non-cash items.

(b) The asset base on which this amount is calculated is an estimate of DHSV assets and assets of the reporting entities to which DHSV on-passes funding.

(c) Long service leave budget estimate provides coverage for staff of DHSV and of reporting entities to which DHSV on-passes funding.

(d) Departmental costs include attributed costs of administering the Dental Health program within the Rural and Regional Health and Aged Care Division and the attribution of other central costs such as the Ministers, Departmental Secretary, Corporate Support, Portfolios Services etc.

(e) This amount is based on an estimate of revenue to be collected from patient co-payments from hospital clinics during the year. The Department of Human Services and Dental Health Services Victoria fund the net costs of services. The total cost is adjusted by the revenue and costs of collecting co-payments which are retained by the agency.

(f) The budget estimate for the Output Group was overstated by this amount when the budget was dissected into 3 new Output Groups. This amount should have been applied to either the Aged and Home Care or Primary Health Output Group.

Source: Department of Human Services.

6.21 As the table shows, \$12.6 million or 15 per cent was budgeted for non-cash items: capital assets charge, depreciation and long service leave, for DHSV and other agencies involved in the delivery of public dental health services. These overheads represent a substantial proportion of the Output Group costs.

Resources for service delivery

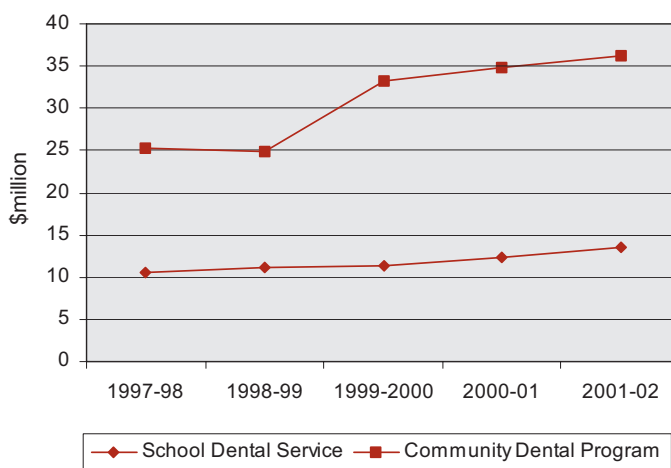
6.22 Table 6B shows that \$63.5 million was provided for delivery of public dental services by DHSV. In addition, \$6.2 million (budget \$4.2 million for clinics in hospitals) was collected in co-payments. Of this combined amount (i.e. \$69.7 million), \$55.9 million was used for delivery of community dental services, as follows:

- \$35.9 million to dental clinics for the Community Dental Program;
- \$5.4 million for vouchers for private providers under the Victorian Emergency Dental Scheme, Victorian General Dental Scheme and the Victorian Denture Scheme; and
- \$14.6 million for the School Dental Service.

6.23 The balance of the funds (around \$13.8 million) was allocated to clinical education support; training, development and research; and service support, as well as specialist dental care and the Pre-school Dental Program.

6.24 Chart 6C shows the trend in funding for the Community Dental Program and the School Dental Service for the 5 years to 2001-02. After a substantial increase for the Community Dental Program in 1999-2000, there have been only small increases in the government funding levels for community dental services, i.e. from \$11.3 million to \$13.6 million for the School Dental Service and from \$33.3 million to \$36.2 million for the Community Dental Program between 1999-2000 and 2001-02. During the same period, co-payments have decreased marginally for the School Dental Service and by \$1.1 million for the Community Dental Program, while waiting lists for the Community Dental Program have continued to grow and the target recall cycle for the School Dental Service has not been met.

CHART 6C
STATE GOVERNMENT FUNDING OF COMMUNITY DENTAL SERVICES (a)
 (\$million)



(a) The data for the Community Dental Program include the Victorian Emergency Dental Scheme, Victorian General Dental Scheme and the Victorian Denture Scheme.

Source: Department of Human Services.

RESPONSE provided by the Secretary, Department of Human Services

The report states that the \$12.6 million non-cash items (Capital Assets Charge, depreciation and long service leave) currently retained by the Department from the Dental Output Group budget of \$83.1million “is a substantial proportion of Output Group costs”. The Capital Assets Charge (CAC) is not reflected in the operations of the relevant agencies but remains as an expense of the Department.

The concept of the CAC is based on receiving an allocation (as part of appropriation) equivalent to 8 per cent of the written-down value of entity non-current physical asset, and paying 8 per cent on actual entity asset values thereby creating an incentive to reduce or remove surplus or under performing assets. In practice, this theory is not generally relevant to the Department or its portfolio.

The majority of the assets controlled by the Department are land and buildings used for service delivery. The acquisition and disposal of such assets is strategically made on operational/client service capacity grounds; any associated financial incentives such as a CAC are secondary issues.

In the hospital system the concept of CAC is even more difficult as the CAC is based on entity assets, including assets generated by hospital business units (cafeteria, pathology, car park, etc.) and by private sources such as donations and special funds. Given this basis, the CAC is obviously not passed on to each hospital, but paid centrally equivalent to the budget.

Allocating the budget for service delivery

6.25 The Department determines the resource allocation principles for the Community Dental Program and the School Dental Service, and sets Statewide targets for those Programs. DHSV is responsible for negotiating budgets with both DHSV and non-DHSV clinics, using models that apply the resource allocation principles.

Are the allocation models appropriate?

6.26 To determine whether the resource allocation models are appropriate, we considered whether they allocated resources to areas of greatest need. For the School Dental Service the considerable data available about the oral health status of children means that services can be relatively well targeted. However, concerns are that:

- The 12 month (high risk children) to 24 month (low risk children) recall cycle has been in place since 1994 and is not being met for low risk children. Given the changing oral health status of children, it might be timely to review the appropriateness of this target. The current system of recall could be compared, for example, with a model that focuses on personalised recall based on individual needs, i.e. an individual's assessed oral health risk, which could result in fewer visits to the dentist for low risk patients, reducing costs and the opportunity for unnecessary clinical interventions. It is possible that a more sophisticated recall system would initially increase costs, but with a potentially positive longer-term impact on health outcomes and reduction in costs; and
- Allocation on the basis of oral health status by region means that children in unfluoridated areas, who might be expected to have poorer oral health, will receive a greater share of more expensive treatment resources. Expert advice provided to audit indicated that fluoridation of such areas would be more cost-effective.

6.27 The appropriateness of the resource allocation model for the Community Dental Program (including the voucher schemes, i.e. the Victorian Emergency Dental Scheme, the Victorian General Dental Scheme and the Victorian Denture Scheme) is more difficult to determine due to the lack of data on the oral health needs of adults. In the absence of these data, the numbers of eligible population in local areas and waiting list numbers are used as the basis for allocating resources. We believe these to be crude indicators of demand, and poor indicators of the need for treatment. For example, some eligible persons may, in fact, use private dental practitioners and have little demand for public dental care; some persons wait-listed may be less in need of treatment; and wait-list management policies may mean that the lists include persons who, due to changed circumstances, no longer meet the eligibility criteria, (we found no evidence that people other than those who were eligible actually received services). As a result, we are unable to conclude on whether the resource allocation model for the Community Dental Program is appropriate.

RESPONSE provided by the Secretary, Department of Human Services

The report states that a conclusion on the adequacy of the resource allocation model can not be made due to the lack of data on the oral health needs of adults. While agreeing with the recommendation that further oral health status data should be collected, as indeed is occurring with DHSV's participation in the National Dental Program Survey, considerable data on the oral health of concession card holders does exist. It is clear that this group has poorer oral health than the general community.

Resource allocation in the Community Dental Program does focus on need through the priority given to emergency care, priority dentures and special needs projects. The Department will review the public dental triaging project currently being undertaken in New South Wales to determine its relevance to Victoria.

Funding rates

Community Dental Program

6.28 Clinics are funded under the Community Dental Program for the number of services they provide. Each item of service is multiplied by a "funding rate" which is a percentage of the Commonwealth's Department of Veterans Affairs Local Dental Officer (DVA LDO) rate unit price and, along with population statistics and data on a clinic's productivity, is used to determine the total funding to be paid by DHSV to a clinic.

6.29 The funding rate is set annually by the Department of Human Services based on material prepared by DHSV. The rate is set on a per clinic basis under a formula that takes into account the clinic's assumed total salaries and other costs, estimated co-payment revenue, and a standard productivity benchmark.

Timeliness and efficiency of the process

6.30 The process of developing the funding rate and clinic budgets is complex and delays between the Department and DHSV in finalising the rate result in delays to the finalisation of clinic budgets and Funding and Service Agreements. Clinics advised that this means that their budgets may not be finalised for some months after the commencement of the financial year, making it difficult to effectively manage their resources.

6.31 Table 6D shows the funding rates for the 5 years to 2001-02.

TABLE 6D
COMMUNITY DENTAL PROGRAM,
FUNDING RATES (a)
(per cent)

Type of care	1997-98	1998-99	1999-2000	2000-01	2001-02
Emergency restorative	61.7	51.1	51.1	53.7	53.0
Emergency prosthetic	65.3	56.1	56.1	58.7	58.0
General restorative	61.7	52.4	52.4	56.6	56.0
General prosthetic	65.3	57.4	57.4	61.6	61.0
Emergency and general - overall	62.4	52.8	52.8	55.6	57.2

(a) The funding rate is expressed as a percentage of the DVA LDO rate per item.

Source: Department of Human Services.

6.32 The table shows that the changes in funding rates for most years have been minimal. The only substantial change in rate occurred in 2000-01, following a significant change in the DVA LDO rate some 2 years earlier. We believe that the level of precision and effort involved in revising the rate annually is an inefficient use of resources. A major review of the funding rates should be carried out less frequently, with interim annual adjustments for cost increases. Adjustments could then coincide with changes in key cost drivers such as the certification of new work place agreements, increases in salary awards or significant changes in the DVA schedule.

Shortcomings of the formula

6.33 Historically, clinics delivering the Community Dental Program were established in existing community health services or regional hospitals that were funded through other government health programs and had their own funded management infrastructures in place. Therefore, dental funds provided to community dental clinics did not provide for agency management overheads, e.g. salaries of senior management of the facility, human resource management costs and payroll services.

6.34 Over time, funding constraints and productivity requirements across the public sector have meant that the ability of other programs to support the overheads of community dental services has been eroded. The pressures of managing waiting lists, ensuring that standards and procedures are in place and complied with, meeting the accountability requirements of the Department and DHSV, and managing their work force, mean that the management of these services is complex.

6.35 The impact is less significant for DHSV clinics because they have the benefit of management support from DHSV regional managers working in clinics, and from DHSV's central administration in Melbourne. DHSV does not have a costing system that enables the full cost of delivering its services to be identified. In the absence of such a system, the exact value of the benefit (cost) for DHSV (non-DHSV) clinics could not be determined.

6.36 We were advised that a review of overheads in agencies across the health portfolio has been underway for around 2 years and will identify overheads for the dental program. No decision has been made on whether such overheads will continue to be considered part of the budget of other programs.

6.37 We believe that a review of the funding formula is warranted to ensure clinics are adequately and equitably funded to reflect the costs of service delivery, including the costs of their management infrastructure and program costs while incorporating incentives for efficient service provision.

6.38 As this audit was being completed, the Department advised that it is in the process of developing the Terms of Reference for a review of the funding systems for services provided under the Community and Youth Dental Programs and the School Dental Service, to test the effectiveness and efficiency of the current funding requirements. The draft Terms of Reference cover some, but not all, of the above matters. We commend the Department for this proposed review, and suggest that the Terms of Reference be expanded to include all of the matters we have raised regarding the funding rates and funding formula. The outcome of this review should be to establish a more appropriate basis for setting the unit prices paid to clinics, since the current basis, i.e. DVA LDO rate, is unlikely to reflect the actual cost of Victorian service delivery.

6.39 To inform the review, a clinical costing exercise should be carried out by DHSV. Appropriate systems should also be introduced by DHSV to collect the information necessary to monitor these costs, on an ongoing basis.

Community Dental Program: voucher schemes

6.40 The Community Dental Program budget includes:

- a capped restorative budget for services provided in-house and through the voucher schemes, i.e. the Victorian Emergency Dental Scheme and the Victorian General Dental Scheme;
- a capped total denture budget; and
- a capped in-house denture budget (the Victorian Denture Scheme is uncapped allowing maximum expenditure of the total denture budget on that Scheme).

6.41 Combining in-house and voucher services under the one capped restorative budget and capping the in-house denture (prosthetic) budget enables each clinic to determine the actual use of in-house and external resources to best meet the demand for services.

6.42 While voucher schemes provide a means of service provision when public dental staff are not able to meet the demand, neither the Department, nor DHSV determines the appropriate level of usage of the schemes on the basis of their relative cost-effectiveness. Indeed, it is not possible for the relative cost-effectiveness to be assessed because, as mentioned above, there are no systems in place at DHSV to provide the necessary information to identify the true cost of treatments provided by DHSV or non-DHSV clinics.

6.43 Because fees paid to private practitioners participating in the voucher schemes (100 per cent of the DVA LDO rate) are higher than the unit prices paid to public clinics for providing the same treatments (around 60 per cent of the DVA LDO rate), on face value the cost of treatments provided under the voucher schemes is higher. However, fuller analysis of costing data is likely to find that this is not always the case.

6.44 A costing exercise, as referred to earlier, would enable purchasing decisions about whether to provide services in community dental clinics or through the voucher schemes, to be made with reference to relative costs, rather than on the basis of resource availability alone.

RESPONSE provided by the Secretary, Department of Human Services

The report questions whether use of private sector schemes maximises the capacity of the program to meet its objectives. The decision to maximise the provision of general care in the public sector is based on actual data. The private schemes are used where there are workforce shortages or insufficient public infrastructure.

School Dental Service

6.45 For the School Dental Service, global funding is allocated for indirect costs, e.g. management overheads, and a capped budget is allocated for the direct costs of service provision. The capped budget represents the maximum funding available for the year for the provision of the outputs. In 2001-02, the funding rate set by the Department for services provided under the School Dental Service was \$94.48 per completed course of care.

6.46 Issues about timeliness of finalisation of the budget, already discussed in relation to the Community Dental Program, are also relevant to the School Dental Service.

ACCOUNTABILITY AND MONITORING

6.47 There are 2 major levels of accountability that apply to community dental services, namely:

- External, comprising:
 - Annual public reports by the Department and DHSV to Parliament under the *Financial Management Act 1994* on financial results, and on achievements against the output targets specified for the Dental Health Output Group in the annual *Budget Papers*; and
 - Annual *Quality of Care Report* to the community as a requirement of a metropolitan health service. The report is designed to focus on the results and outcomes of quality monitoring and quality improvement initiatives; and
- Internal, comprising:
 - Periodic reporting by Dental Health Services Victoria to the Department on performance and service delivery matters, in accordance with the Health Service Agreement; and
 - Monthly reporting by each clinic to DHSV on the delivery of services and other requirements under their Funding and Service Agreements.

6.48 We examined the performance information reported under each of these accountability vehicles to determine whether it was relevant, appropriate and fairly represented performance.

Annual reporting

Department of Human Services

6.49 Table 6E shows the performance measures for the Dental Health Output Group for 2001-02 and 2002-03 and the 2002-03 targets, as shown in the annual *Budget Papers*.

TABLE 6E
DENTAL HEALTH OUTPUT GROUP,
PERFORMANCE MEASURES AND TARGETS

<i>Major output/deliverable</i>	<i>Target 2002-03</i>
<i>Dental Services (a)</i>	
Quantity -	
Community, school, pre-school and specialist services (dental service units)	624 300 units
Quality -	
Ratio of emergency to general courses of dental care	49:51
Disadvantaged students accessing school dental care	80 per cent
Timeliness -	
Waiting time for restorative dental care	22 months
Waiting time for dentures	24 months
Cost -	
Total output cost	\$74 million

(a) In 2002-03 the Dental Health Output Group is divided into 2 outputs: Dental Services (budget \$74 million) and Dental Services System Development and Resourcing (budget \$10 million).

Source: Department of Treasury and Finance, *Budget Paper No. 3*, 2001-02 and 2002-03.

6.50 We believe that the above measures are relevant to the departmental objectives, are appropriate for the reporting of the outputs delivered, and are capable of fairly representing performance in this regard, i.e. how many services were delivered, the service mix delivered and the timeliness of service delivery. However, as the measures focus on the delivery of outputs, they do not address public dental health outcomes, i.e. the quality of the care delivered and how that care contributed to better oral health status in the community.

6.51 We reviewed the performance information reported in the Department's *2000-01 Annual Report* and found that while it complied with the performance reporting requirements of the Financial Management Act, it lacked important comparative data which would enable assessment of the relative quality of oral health services delivered, e.g. benchmarking of waiting times against other jurisdictions, and analysis of the quality of services over time.

6.52 We recognise that the Financial Management Act requires performance reporting on the measures set out in Table 6E in departmental annual reports. However, we do not believe this constrains departments from reporting on additional aspects of performance in order to better inform the public on program outcomes.

Dental Health Services Victoria

6.53 Table 6F shows performance measures reported in the *2001 Annual Report* of DHSV.

**TABLE 6F
DENTAL HEALTH SERVICES VICTORIA,
COMMUNITY DENTAL SERVICES,
PERFORMANCE MEASURES AND ACTUAL PERFORMANCE, 2001-02**

<i>Major output/deliverable</i>	<i>Actual performance</i>
Number of children treated by the School Dental Service	107 290 children
Number of adults treated through the Community Dental Program	178 464 adults
Statewide waiting list for general care showing the numbers for both conservative and prosthetic care	(a) 164 493 people (conservative care) (a) 20 576 people (prosthetic care)
Statewide waiting list for specialist care	(a) 3 026 people
Average waiting time in months for conservative, prosthetic and specialist care	19.8 months (conservative care) 20.2 months (prosthetic care) 8.6 months (specialist care)

(a) At 30 June 2002.

Source: Dental Health Services Victoria, *2001 Annual Report*.

6.54 We assessed the relevance and appropriateness of these measures and whether they fairly represent performance, and again found the focus of performance reporting to be on outputs rather than oral health outcomes.

6.55 However, we did note that the DHSV *2001 Annual Report* contained the following indicators of performance that provide for assessment of oral health outcomes:

- average number of decayed, missing or filled teeth (6 year olds and 12 year olds) - trend over time;
- percentage of children with no decayed, missing or filled teeth (6 year olds and 12 year olds) - trend over time;
- percentage of children with no decayed teeth (6 year olds and 12 year olds) – trend over time; and
- number of services per 100 patients, for a range of service descriptions, e.g. diagnostic services, preventive services, oral surgery etc.

6.56 Reporting of targets for each of the measures in the above table, as well as comparison of the numbers treated per program against the numbers eligible, would have enhanced the quality of the information reported.

Quality of care reporting

6.57 We reviewed the *Quality of Care Report* published by DHSV in September 2001. The report, available in the form of a brochure and on DHSV's website, provided performance information about access, appropriateness and effectiveness, continuity of care, acceptability and safety of care, and organisational systems for quality improvement.

6.58 The information presented includes a mix of input and output measures and performance indicators and provides a much fuller picture of performance than the information required under the Financial Management Act, or the Health Service Agreement discussed below. It would be improved if information presented on safety of care, i.e. infection control and occupational health and safety, addressed the standards in all dental clinics, rather than only DHSV clinics.

6.59 We examined the draft 2002 *Quality of Care Report* and it was pleasing to find that information on clinical safety and indicators of quality, e.g. unplanned returns and re-treatments, are to be included. This data should also include performance of non-DHSV clinics.

Periodic reporting

Reporting by DHSV to the Department

6.60 As for annual reporting, we found that the focus of performance reporting under the Health Service Agreement was on outputs. The Agreement sets the following targets for the Community Dental Program:

- the maximum percentage ratio of average waiting times between restorative and non-priority denture care (target 87 per cent);
- the maximum variation between public dental agencies waiting times for non-priority denture care (target 24 months);
- the maximum variation between public dental agencies in waiting time for restorative care (target 24 months); and
- the percentage of eligible school children in years 9 to 12 treated under the Youth Dental Program (target 24.5 per cent).

6.61 While we recognise the importance of providing timely access to services throughout the State, the first 3 of these measures are a source of concern in clinics. Waiting lists are a major driver of monthly reviews of expenditure by DHSV regional managers and subsequent re-allocation of funding from clinics with shorter waiting times to those with longer waiting times relative to the Statewide average waiting time. This focus creates uncertainty within clinics in regard to the level of funding for the year.

Other information reported

6.62 The 2001-02 Service Standards and Guidelines require DHSV to report to the Department on a wide range of matters, including:

- the outcomes of the funded activities, including:
 - library service: number of requests for articles, number of people submitting requests;
 - Resource Centre: number and type of resources requested and source of request; and
 - fluoride cost-effectiveness study;
- in relation to infection control and occupational health and safety:
 - number of clinics requesting audits and/or other assistance;
 - proportion of clinics audited and accredited;
 - number of clinics assisted and nature of assistance; and
 - issues and recommendations;
- any major problems with IT systems that affect the ability of an agency to provide services efficiently and in accordance with the Program Guidelines and Standards;
- in relation to management advice and general support:
 - issues of a serious or contentious nature that are not resolved easily; and
 - notified in advance of forums and provided with draft agenda for comment;
- DHSV involvement in Primary Care Partnerships;
- staff recruitment and development support initiatives to Community Dental Program agencies;
- reports on a number of specific projects undertaken; and
- a number of statistics relating to the number of students training under or graduating from the Diploma in Oral Health Therapy and the number of new graduates employed by DHSV.

6.63 This is in addition to reporting requirements relating to data entered by clinics into the EXACT system, i.e. the system maintained within clinics which records the number of patients treated, types of treatments provided etc., and provided by DHSV to the Department for planning purposes. The Service Standards and Guidelines also require DHSV to provide additional ad hoc reports as requested.

6.64 The reporting requirements under the Agreement should focus on providing sufficient relevant information to the Department to inform the Department's policy development role, and to enable it to monitor the effectiveness and efficiency of DHSV's management of the service system. Some of the current requirements inappropriately focus on operational issues.

Reporting by clinics to DHSV

6.65 All clinics are required to report to DHSV on output-focused performance targets and to submit timely and accurate monthly statistical and financial reports for the purpose of monitoring of service delivery and demand, payments of grants and acquittal. These are stipulated in the Funding and Service Agreements and include:

- service payable reports (monthly reports via EXACT for all services provided);
- co-payment exemption summary report;
- waiting list reports;
- end of month financial summary;
- co-payment exemption details; and
- electronic EXACT log file.

6.66 It was pleasing to see that action was undertaken during 2000-01 by DHSV and the Department to develop clinical indicators for assessing the quality of publicly-funded dental services in Victoria. Examples include indicators related to completion of patient's medical history, dental charting and re-treatment rates in restorative and endodontic services. The Funding and Service Agreements in 2002-03 will include some clinical quality indicators for the first time, e.g. the number of unplanned returns following emergency care, the number of re-treatments following restorative care and the numbers of dentures remade.

CONCLUSION

6.67 The Department of Human Services and Dental Health Services Victoria have divergent understandings and expectations of roles and responsibilities under the Health Services Agreement. This is particularly so for DHSV's purchasing role. The Department's expectation is for DHSV to ensure all providers of community dental services, i.e. DHSV managed clinics or non-DHSV clinics, provide quality services and operate in accordance with established standards. DHSV's focus has primarily been on ensuring the quality of services delivered by its own-managed clinics, with a lesser focus on providing support to the non-DHSV clinics. Based on our examinations, we concluded that at this time roles and responsibilities are not understood, appropriate and clearly allocated or taken up by the 2 agencies.

6.68 There is a mismatch between the Government's stated priority for oral health promotion and the mix of services being delivered, which is primarily focused on dental treatment. In clinics providing services under the Community Dental Program in particular, emergency services are being provided at the cost of a reduced focus on preventive treatments. In terms of infrastructure, the focus has been on integrating public dental health with general health, without a re-assessment of whether the strategy developed in the mid-1990s still provides the best direction for a system that is under stress, and whether service and capital planning provides an appropriate framework for service delivery into the future.

6.69 The relative cost of service delivery through DHSV and non-DHSV clinics is not known. Resourcing of clinics has not been determined with reference to full information on the actual cost of service delivery, and decisions on whether to provide treatments in-house or through voucher schemes have not been made on the basis of an assessment of relative cost-effectiveness. Therefore, we do not know if resource allocation currently maximises the capacity of the program to meet its objectives.

6.70 Information reported, both externally and internally, is substantially focused on outputs with a lesser degree of reporting on program outcomes. While we can conclude that the information is relevant, appropriate and fairly represents performance in terms of the numbers of outputs delivered, information reported by the Department is not sufficient for reporting on achievements against the program objectives, for which it is ultimately responsible.

6.71 Overall we conclude that program management requires substantial improvement.

Recommendations

6.72 We recommend that:

- The Statewide strategy for public dental health be reviewed to ensure that priorities for dental health are being properly identified and met, and that responsibilities for policy and operational activities are appropriately assigned and understood between the Department and DHSV. Specifically, DHSV as a purchaser of community dental services must ensure required standards are met, regardless of whether services are delivered by DHSV or non-DHSV clinics;
- A Statewide service plan be developed by DHSV, including a re-assessment of the appropriateness of the service planning principles in place, and whether the location and scale of dental clinics established are meeting the needs of the eligible population;
- The dental health capital plan be revisited to determine the appropriateness of the current approach to capital provision for dental services, i.e. promoting the integration of dental health services with primary health services; and
- The Department and DHSV support, and participate in, national initiatives aimed at collecting data on the oral health of adults including data relating to the oral health of, and services used by, adults receiving treatment through public dental services.

6.73 We recommend that:

- The Terms of Reference for the Department's proposed review of the funding formula be expanded to include consideration of the matters regarding the funding rates and funding formula raised by this audit; and

- A clinical costing study be undertaken and appropriate systems introduced at DHSV, to ensure the costs of service delivery are adequately identified and clinics are equitably funded to meet those costs, while incorporating incentives for efficient service provision. Such information would ensure a more rigorous basis for decisions on whether to provide services in-house, through contracted clinics or through the voucher schemes.

6.74 We recommend that external reporting by the Department be expanded to address achievements against program objectives, and that reporting by DHSV to the Department under the Health Service Agreement provide sufficient relevant information to the Department to inform its policy development role, and to enable it to monitor the effectiveness and efficiency of DHSV's management of the service system, including both DHSV and non-DHSV managed clinics.

RESPONSE provided by the Chief Executive, Dental Health Services Victoria

Para. 6.72

Dental Health Services Victoria (DHSV) agrees with each of the components of this recommendation, specifically:

- *DHSV has been advocating the need to revisit the 1995 strategic plan and would be pleased to work with the Department of Human Services on a new oral health strategy. Furthermore, DHSV would welcome the clearer definition of the respective roles and responsibilities of the Department and DHSV. DHSV agrees that its role as a purchaser is to ensure compliance of the sector with required standards and has specified compliance requirements for agencies in the 2002-03 Funding and Service Agreements. DHSV is pleased to note the Auditor-General's acknowledgement of the Board's proactive initiative to restructure DHSV to facilitate greater role clarity with the Department and the agencies and to ensure transparency of our health purchasing function;*
- *DHSV has already commenced development of a service plan for specialist dental services and has previously submitted a proposal for funding to the Department to extend this service planning across the community dental service. The Statewide service plan would need to include all publicly-funded dental services including pre-school and special needs programs. DHSV has also provided recent advice to the Department on the Hardey and Associates Health Service Planning Project to be used for modelling of supply and demand of dental services;*
- *An updated dental health capital plan, including major equipment, would obviously be required once the Statewide strategic plan and service plan for public dental services have been completed. However, DHSV would prefer not to segregate dental health services from primary care services and is supportive of the current approach of promoting the integration of dental health services with primary health care services. The reasoning behind this approach is that oral health forms an integral part of the general health of the population. Therefore, planning for the overall health care needs of the community and the improvement of health status requires dental services being well coordinated with the general health care services; and*
- *DHSV concurs that the lack of data on the oral health needs of adults does impact on effective resource allocation within the community dental program. DHSV is currently taking part in a national trial to collect adult oral health status data. It is anticipated that this trial will form the basis of the routine collection of such data across the community dental services from 2003-04.*

RESPONSE provided by the Chief Executive, Dental Health Services Victoria - continued

Para. 6.73

In response to specific components of this recommendation:

- DHSV agrees with the direction identified in the Department's draft Terms of Reference for the review of the Community Dental Program and School Dental Service funding formulae and with the proposed expansion of these draft Terms of Reference. It should be noted that DHSV has already commenced a similar review for specialist and teaching dental services. It is hoped that these 2 reviews will converge into a consistent funding methodology across all public dental services; and
- As part of the funding review for specialist and teaching dental services, DHSV will be implementing a clinical costing process to underpin and calibrate the new funding methodology. DHSV recognises that a similar clinical costing process will be needed to underpin and calibrate any new funding methodology for the Community Dental Program and School Dental Service and believes this has been recognised in the Department's draft Terms of Reference.

DHSV agrees that any new funding methodology should incorporate incentives for efficient service provision but would broaden this to include incentives for effective service delivery such as an appropriate balance between interventions and prevention and promotion activities. DHSV will continue to use its best endeavours in the interim to ensure that clinics are equitably funded.

Para. 6.74

DHSV agrees with this recommendation and with the finding in paragraph 6.64 that some of the reporting requirements of the Department from DHSV inappropriately focus on operational issues. DHSV supports a less operational focus on reporting requirements in favour of higher level reporting to support the Department's policy development and monitoring role. DHSV will work with the Department to refine the reporting arrangements in the Health Service Agreement for 2002-03.

Appendix A

Conduct of the audit

AUDIT OBJECTIVE

The objective of the audit was to examine the economy, efficiency and effectiveness of community dental services in Victoria. The audit examined whether:

- access to community dental services meets the Government’s objective of improving oral health for vulnerable groups, in particular, children and the disadvantaged;
- timely, efficient and effective community dental services are provided;
- funds (recurrent and capital) allocated to public dental services are distributed according to need; and
- an effective framework is in place to plan, manage, measure and monitor the effectiveness of community dental services at a Statewide and program level.

AUDIT SCOPE

The audit focused on the range of community dental services, including services provided to adults and youths as part of general and emergency care services under the Community Dental Program, including the Victorian Emergency Dental Scheme, Victorian Denture Scheme and Victorian General Dental Scheme, and to children as part of the School Dental Service.

The audit examinations were largely undertaken within the Dental Health Unit of the Department of Human Services, Dental Health Services Victoria (DHSV) and its own-operated clinics, and funded non-DHSV clinics, and included:

- examination of services provided to children, young people and adult concession card holders and their dependents through interviews with key stakeholders, review and analysis of research, program documentation and data collected; and
- site visits to a sample of School Dental Service locations, and public dental clinics operated by DHSV, community health centres and rural hospitals.

The clinics visited during the fieldwork were:

- Barwon Health, Belmont Clinic;
- Brimbank Dental Clinic (DHSV-managed);
- Darebin Community Health Service;
- Dental Health Services Victoria, Ballarat Clinic (DHSV-managed);
- Eltham Community Health Centre;
- Greater Dandenong Community Health Service;
- Hume Region School Dental Service, (DHSV-managed);
- Inner South Community Health Service;
- Maryborough District Health Service;
- Royal Dental Hospital of Melbourne, General Dental Unit (DHSV-managed);

- Western Region Community Health Service;
- Western Region School Dental Service (DHSV-managed), comprising:
 - Footscray Dental Centre;
 - mobile clinic; and
 - examination van; and
- Wodonga Regional Health Service.

The clinics were selected to provide a mix of community dental clinics operating within Victoria in terms of:

- Size: number of dental chairs;
- Location: whether clinics were located in a metropolitan or rural region. Due to the known difficulties in recruiting dentists, the review team decided to include a high representation of rural clinics in the sample, in order to examine this issue;
- Auspice: whether the clinic was operated by DHSV or another agency;
- Mix of services and programs delivered: whether the clinic delivered adult dental services (Community Dental Program), child services (School Dental Service), or both (co-located), and whether it delivered special needs programs; and
- Age of the clinic.

The list of clinics was finalised in consultation with the audit Reference Group (refer later in this Appendix for details of this Group).

PERIOD COVERED BY THE AUDIT

Reflecting the substantial changes to the organisation of dental health services in the mid-1990s, the audit focused on the period from 1997-98 for broad service trends and on the last 2 financial years for financial and administration issues.

COMPLIANCE WITH AUDITING STANDARDS

The audit was performed in accordance with Australian Auditing Standards applicable to performance audits and, accordingly, included such tests and other procedures considered necessary in the circumstances.

ASSISTANCE TO THE AUDIT TEAM

Specialist assistance

Specialist assistance was provided by:

- KPMG Consulting Australia Pty Ltd which undertook the review of service access and delivery, including the visits to clinics. The KPMG team included 2 specialists who assisted with the assessments of clinical matters within the 13 clinics visited. These specialists were:
 - Dr Don Highfield, an expert in clinical dental practice, examiner for the Australian Dental Council and member of the Quality Assurance Committee of the Australian Dental Association; and
 - Dr Vin Amerena, an expert in clinical practice and infection control, and Investigative Officer for the Dental Practice Board of Victoria;
- Professor John Spencer, Director, the Australian Research Centre for Population Oral Health which includes the Australian Institute of Health and Welfare, Dental Statistics and Research Unit, Dental School, Adelaide University, who provided specialist advice, particularly in relation to oral health data and research findings;
- Associate Professor Michael Morgan, community dentist and Deputy Head, School of Dental Science, The University of Melbourne, who provided specialist advice in terms of community dental services and general dental matters; and
- A Reference Group comprising:
 - Dr David Burrow, Director, South Australian Dental Service, providing an interstate perspective;
 - Dr John Matthews, member and ex-President of the Australian Dental Association, providing a dentist's perspective;
 - Ms Julie Satur, member and ex-President of the Victorian Dental Therapist Association, ex-member of the Dental Practice Board of Victoria, executive member of the Oral Health Special Interest Group, Public Health Association of Australia, Lecturer in the School of Dental Science, The University of Melbourne, providing a dental auxiliaries' perspective;
 - Mr John Lawrence, ex-Chief Executive Officer of the Lakes Entrance Community Health Centre, ex-Chair and member of the National Rural Health Alliance, previous involvement with school dental service in remote South Australia, recipient of the 2002 Victorian Rural Health Week Award for outstanding contribution to the Victorian rural community, providing a rural perspective; and
 - Ms Lori Anderson, Brotherhood of St Laurence to providing a community perspective.

The Reference Group members provided advice and feedback in relation to the audit program and fieldwork tools, and advice on a range of matters relating to the subject matter of the audit.

I would like to acknowledge and thank the specialists for the advice, assistance and support they provided to my officers during the audit.

**Assistance provided by the Department of
Human Services and Dental Health Services
Victoria**

Significant support and assistance was provided to my officers and the specialists by the management and staff of the Department of Human Services and Dental Health Services Victoria. I wish to express my appreciation to these agencies for this assistance.

Appendix B

Co-payments

CO-PAYMENTS FOR DENTAL SERVICES, AUSTRALIA

The following table shows the co-payments charged by public dental services in all States of Australia.

<i>Jurisdiction</i>	<i>Is there a co-payment?</i>	<i>Comments</i>
Australian Capital Territory	Yes	Eligibility - Residents of the Australian Capital Territory who hold a Centrelink Concession Card, such as a Health Care Card or Pensioner Concession Card. Minimum charge of \$20. Child and Youth Dental Membership Scheme is covered by an annual registration fee. Co-payment for Emergency, Adult Dental and Denture Services.
New South Wales	No	Has been proposed and costed. Not current government policy. Emergency Services are triaged using a telephone service.
Northern Territory	No	Government policy.
Queensland	No	Government commitment to ongoing free dental services.
South Australia	Yes	Government policy currently being reviewed. Current co-payment system commenced 1 July 2000 for general dental and prosthetics. Two-tier approach – for those people receiving part or full pension. Marginal impact from the introduction of the co-payment. Few exemptions apply. Includes specialised need groups, e.g. disabilities.
Tasmania	Yes	Eligibility – Health Care Card or a Pensioner Concession Card. Fee commences at \$20 with maximum charge of \$100. Denture ceiling costs are \$130. Exemptions apply for general treatment for children covered by a Health Care Card.
Western Australia	Yes	Co-payments in place now for many years. Two tier approach - for those people receiving part or full pension. Exemptions apply for school students and people with disabilities.
Victoria	Yes	Co-payments introduced in 1997. Eligibility – adult concession card holders and adult dependents of concession card holders. Fee commences at \$20 with maximum charge of \$100. Exemptions apply for emergency and general care provided to concession card holders and concession card holder dependents under 18 years of age, patients treated by students and special needs groups.

Appendix C

Glossary of terms

GLOSSARY OF TERMS

Auxiliaries

Allied dental health professionals, including dental hygienists, dental therapists and prosthetists.

Bridge

A fixed dental prosthesis which replaces one or more clinical crowns of missing natural teeth.

Caries

Bacterial disease which causes the demineralisation and destruction of teeth and can involve inflammation and infection of the dental nerve or pulp. Another name for tooth decay.

Conservative care

That part of dental care related to the restoration or conservation of oral tissue affected by disease. It covers all aspects of dental care except for denture or prosthetic care. Also referred to as restorative care.

Co-payment

A patient's contribution to the cost of his or her dental treatment in publicly provided dental care.

Crown

- 1 That part of a tooth covered by enamel.
- 2 Replacement of part or all of the clinical crown cemented into place.

Deciduous teeth

The first set of teeth, also called baby teeth or primary teeth.

Dentate

Having some natural teeth.

Dentures

Removable artificial substitute for missing teeth and their associated structures. May be partial or complete in either the upper or lower jaw.

dmft

Total number of decayed, missing and filled deciduous teeth. The term "dmft" is used for age groups younger than 12. The dmft score of 5 to 6 year olds is an accepted indicator for oral health of children.

DMFT

Total number of decayed, missing and filled permanent teeth. DMFT is usually used for age groups 12 years and older. The DMFT among 35 to 44 year olds is a key indicator for adult oral health.

Edentulous

Having no natural teeth.

Endodontics

Procedures used to preserve the health of the dental pulp and supporting bone around the base of the root of the tooth, to enable the tooth to be retained in function.

Fluoride

A mineral which is effective in preventing and reversing the early signs of dental caries (tooth decay). Fluoride is provided in 2 forms: topical, which includes toothpastes, mouth rinses and professionally applied fluoride therapies; and systemic, which includes community water fluoridation and dietary fluoride supplements. Fluoride occurs naturally in all water sources. Community water fluoridation is the process of adjusting the fluoride content of fluoride-deficient water to the recommended level for optimal dental health.

General dental care

Relates to the provision of planned routine dental care. It specifically excludes provision of dental care in the emergency situation and care provided by a specialist under referral.

Implant

Metal pin or casting inserted into the jaw bone in order to provide anchorage for a bridge or fixed prosthesis.

Orthodontics

The branch of dentistry which is concerned with the growth and development of the face and jaws and the treatment of irregularities in tooth alignment.

Periodontal disease

An infection of the tissues surrounding and supporting the teeth, also referred to as gum disease. It is a major cause of tooth loss in adults.

Permanent teeth

The second group of teeth. The 32 teeth present in an adult mouth.

Prevalence

In relation to an illness, the number of cases at one point in time.

Prosthetics

The branch of dentistry concerned with the design and construction of devices or appliances replacing one or more missing teeth and/or, if required, associated structures. This term includes bridges and dentures.

Prosthetist

A trained dental professional (not a dentist), who deals directly with the public and makes dentures, bridges and implant-retained prostheses.

Pulp

The centre of the tooth consisting of vessels and nerve tissues.

Recall cycle

The length of time before a child is recalled for general dental care under the School Dental Service.

Restorative care

That part of dental care related to the restoration or conservation of oral tissue affected by disease. It covers all aspects of dental care except for denture or prosthetic care. Also referred to as conservative care.

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(a) This report is included in Part 3.2, Human Services section of the *Report on Ministerial Portfolios*, June 2001.

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