2002 (No. 9)

2002

PARLIAMENT OF TASMANIA

AUDITOR-GENERAL SPECIAL REPORT No. 43

ORAL HEALTH SERVICES Something to Smile About?

November 2002

Presented to both Houses of Parliament in accordance with the provisions of Section 57 of the Financial Management and Audit Act 1990

By Authority:

Government Printer, Tasmania

Auditor-General's reports are available from the Tasmanian Audit Office, HOBART. This report and the recent titles shown at the back of this report can be accessed via the Office's home page. For further information please contact:

Tasmanian Audit Office
GPO Box 851
Hobart
TASMANIA 7001

Phone: (03) 6233 4030, Fax (03) 6233 2957
Email:- admin@audit.tas.gov.au
Home Page: http://www.audit.tas.gov.au

This report is printed on recycled paper.

ISBN 0-7246-4767-8

27 November 2002

President
Legislative Council
HOBART

Speaker
House of Assembly
HOBART

Dear Mr President
Dear Mr Speaker

PERFORMANCE AUDIT NO. 43
ORAL HEALTH SERVICES

This report has been prepared consequent to examinations conducted under section 44 of the *Financial Management and Audit Act 1990*, for submission to Parliament under the provisions of section 57 of the Act.

Performance audits seek to provide Parliament with assessments of the effectiveness and efficiency of public sector programs and activities, thereby identifying opportunities for improved performance.

The information provided through this approach will, I am sure, assist Parliament in better evaluating agency performance and enhance Parliamentary decision making to the benefit of all Tasmanians.

Yours sincerely

A J McHugh
AUDITOR-GENERAL

Contents

List of Figures

List of Tables

Executive summary

EXECUTIVE SUMMARY

BACKGROUND

Oral health services are provided to ensure people can eat, speak and socialise without discomfort or embarrassment. Oral health relates to common and highly preventable diseases and disorders of the teeth and gums, but also to a range of less common and sometimes life-threatening disorders.

The Department of Health and Human Services (DHHS) through the Oral Health Service (OHS) provides dental care and information to a target population of more than one hundred thousand Tasmanians.

Prior to 1994, OHS consisted of a children's service and an emergency health scheme for adults. The establishment of the Commonwealth dental health program (CDHP) in 1994 enabled the introduction of general care for adults in possession of a health care card or pensioner concession card.

The CDHP was discontinued from the end of 1996 leaving OHS with a large funding shortage.

SCOPE

The audit provided limited coverage of the four service areas:

- Children's service;
- Adult general care;
- Adult emergency treatment; and
- Prosthetic services.

The focus was on the provision of general care, as failure to provide general care was considered to be a pervasive problem that could undo the generally good oral health of children.

OBJECTIVES

The audit had the objectives of determining whether:

- The provision of the oral health function is efficient, effective and equitable; and
- Clear goals, standards and performance indicators have been set and put into effect for the management of the oral health function.

CRITERIA USED

Based on the audit objectives the following criteria were used in the performance audit:

1	Objectives, strategies and performance indicators	Strategic planning is used effectively, including formal objectives, strategies, performance indicators and regular and effective monitoring and reporting of performance.
2	Waiting times	Waiting times for dental and prosthetic services are reasonable.
3	Prioritisation of Waiting Lists	Waiting lists are effectively prioritised based on the principles of patient need, minimising future costs, and fairness to clients.
4	Audit of Waiting Lists	Waiting lists are periodically audited to ensure all clients on the lists are genuinely waiting for treatment.
5	Participation rates	Participation rates are at a reasonable level.
6	Sufficiency of dental resources	There is the appropriate number of dentists to achieve reasonable oral health outcomes.
7	Funding	Current levels of funding are sufficient to achieve reasonable oral health outcomes.
8	Implementation of the Dever Review	Recommendations of the Dever Review have been implemented.
9	Outsourcing	Optimum use is made of outsourcing to meet demand for services, and to reduce overall cost. Where outsourcing is used it is well managed.
10	Efficiency of OHS	Services provided by OHS are efficient.
11	Cost per population	Overall cost of service per target-group population is comparable with other states.
12	Management of facilities	Facilities are not duplicated or under-used, and are subject to periodic review.
13	Staff mix	The mix of dentists, therapists, dental attendants, prosthetists and dental technicians is efficient and effective.

14	Administrative salary expense	Administrative salaries are a reasonable proportion of total salary expense.
15	Fee collection	Outstanding debt from fees is at a reasonable level, and is effectively managed.
16	No-shows	Lost value from clients failing to attend appointments is minimised.
17	Equity	Oral health services are delivered at comparable levels between the major regions, and to rural and remote areas.

AUDIT OPINIONS

OHS has continued to provide satisfactory levels of dental care to children, and in the main, provision of emergency care and prosthetic services has also been satisfactory. However, the impact of the loss of the DHHS on provision of general care has been devastating. The Commonwealth has argued that the CDHP was only ever intended to be a temporary measure. Nonetheless the reduction in specific dental funding has resulted in a decline in service provision back to pre-CDHP levels.

The immediate response to the loss of the CDHP was satisfactory with termination of casual and temporary staff and transfer of resources from the children's service to adult general care. However, despite the identification of the OHS as a high-risk service, strategic planning and performance monitoring have been inadequate, and the OHS has consequently been required to continue to supply dental and prosthetic services, including general care to adults, with inadequate funding, and insufficient dental resources.

Given the serious shortfall in funding from the loss of the CDHP, the difficulties in attracting dentists, the poor state of oral health in the target population and the need to implement the recommendations of the Dever Review, (including implementing fees and setting up a network of community-based dental clinics), the performance of OHS, in many respects, has been commendable.

On the other hand, the OHS has failed to provide effective strategic planning, to develop a model for required dental resources, to periodically review efficiency and to prepare detailed and well-supported funding submissions. We accept that these failures are largely due to the shortage of senior experienced administrative staff.

It is not our intention to advocate more funding for OHS. The reason for this is that funding decisions cannot be made in isolation. Supply of money is limited and it is usually the case that additional funding in one area can only be made at the expense of another. These decisions

are properly the responsibility of the Minister, the Head of Department and the executive decision-making group within the department.

We do, however, believe that failure to provide minimum standards of health care to the target population will inevitably lead to more expensive oral health, and poor oral health outcomes, in the future. Tasmanians are already paying a large price in cost of treatment, and poor oral health because of past failures to provide public general care.

Audit findings against the individual criteria were as follows:

Objectives, strategies and performance indicators

The strategic management process has been poorly documented, has lacked consistency and has failed to address critical issues including the shortage of dentists and increasing waiting lists until the current budget submission.

Waiting times

Waiting times for general care are at unacceptably high levels, with no reasonable chance of an adult obtaining general care in Tasmania's public oral health system.

Waiting times for prosthetic services are considered reasonable, although the longer waiting times in the North West region need to be monitored.

Prioritisation of Waiting Lists

Although priority levels for general dental care for adults were entered in the OHS computer system the priorities were subsequently ignored when sending invitations to make appointments.

Priorities for prosthetic services were being managed effectively.

Audit of Waiting Lists

Waiting lists are periodically audited to ensure all clients on the lists are genuinely waiting for treatment.

Participation rates

Only 26 per cent of eligible adults are actively participating in attempting to access general care. Of those only one third were successful.

Participation rates for children are excellent.

Sufficiency of dental resources

Dental resources are insufficient to provide general care and there was some evidence that in the Southern region the service is struggling to meet the demand for emergency care.

Analysis based on a number of models indicated that OHS requires twice as many dentists to meet a suggested national minimum standard.

Funding

Funding has not been adequate to maintain an adequate level of general care for adults since the withdrawal of the Commonwealth dental health program at the end of 1996.

Implementation of the Dever Review

Most recommendations made in the Dever Review (commissioned in response to the loss of the CDHP, in 1997) have been implemented.

Outsourcing

OHS has supplemented their dental service in the Southern Region by outsourcing to the private sector, to the extent of the equivalent of two dentists.

That level of outsourcing is considered to be both efficient and effective and there appear to be good grounds for extending the scheme to the Northern region.

There is also limited statewide outsourcing of prosthetic services.

Efficiency of OHS

While a reasonable level of efficiency is being maintained in relation to OHS's cost structure, the large disparity between actual and standard times for delivery of dental services indicates that there is scope for substantial improvement.

Comparison of value with costs suggested that delivery of prosthetic services may not be efficient, however, there were some indications that this may have been due to deficiencies in recording of services provided.

Cost per population

It was not possible to reliably compare costs with other States; however, there were some indications that the ratios of total cost to target population for most states were reasonably comparable.

Management of facilities

Facilities were found to be sufficient to allow for efficient service delivery.

There was a considerable excess of dental chairs to dentists, which reflects the decline in numbers of dentists in recent years.

There was some evidence that the number of prosthetic laboratories may be excessive.

There is a need for policy and standards in this area to be developed.

Staff mix

The mix of dentists, therapists, dental attendants, prosthetists and dental technicians is generally in accordance with OHS guidelines, except for an imbalance between prosthetists and technicians in the Southern Region.

Administrative salary expense

Overall total administrative salaries at OHS would appear to be relatively low.

In particular, administrative resourcing appears to have been insufficient in the area of senior management, given the difficulties inherent in the loss of the CDHP and the implementation of structural change based on the Dever Review.

Fee collection

The level of outstanding debt is satisfactory compared with the annual budget and the collection rate of similar government agencies.

No-shows

Lost value from clients failing to attend appointments is low, nevertheless, there may be a case for implementing reminder phone calls for non-financial reasons.

Equity

There was no evidence of a lack of equity in distribution of dental resources between regions. OHS continued to provide services to children in remote areas. One area of concern was the lack of private dentist participation in some areas of the State.

SUMMARY OF RECOMMENDATIONS

Objectives, strategies and performance indicators:

1 A review of information recording should be performed to ensure that current practices and standards are adequate to make sure that significant planning and review documentation is retained centrally.

2 A strategic plan should be finalised and approved for OHS. The plan should incorporate quantified objectives for specified time frames. It should also include a small number of performance indicators that will accurately reflect performance of the Service, achievement of objectives, and greatest risks. Possibilities include waiting times, participation rates, activity levels, dental resources available (and predictions for the next 6 months), and an overall efficiency measure.

3 Mechanisms should be established to ensure that strategic planning is performed annually and that comprehensive performance information is provided monthly to executive management of the department.

4 Comprehensive performance information should be included in annual reports.

Waiting times:

5 Given the importance of waiting times as a performance measure within the Department of Health, there is a need for contextual analysis, to ensure that abnormal factors do not mislead, and that the waiting times reflect recent performance.

6 Resource allocation decisions should be revised as necessary, to take into account the fact that there is virtually no general care currently being provided, and that waiting times for general care are grossly excessive.

7 OHS should:

- Determine why some prosthetic services provided in the past six months have not been included as 'removals' in the EXACT system; and
- Take remedial action to ensure accurate records and meaningful reports.

Prioritisation of Waiting Lists:

8 The current practice in the South for allocating appointments for emergency care based on phone calls at 8.30 needs to be carefully reviewed, since it may not be fair to all patients, and

is unsuitable where demand significantly exceeds supply of dental services.

9 Consideration should be given to statewide adoption of the more rigorous categorisation of the urgency of client needs based on a series of questions, as used in the North.

10 A statewide policy should be developed, and effectively promulgated, outlining issues related to prioritisation of dental care and prosthetic services.

11 There is a need for criteria to be established for setting priorities for general care, which take into account the needs of clients in terms of pain relief and clinical outcomes; and minimisation of future costs to OHS.

12 OHS should attempt to strike a balance between giving preference to clients with a higher assessed priority, and fairness to clients who have had the longest wait for care.

Participation rates:

13 Based on high participation rates for the Children's Service and low participation rates for the adult service, consideration should be given to redirecting resources from the children's service to the adult service. Accordingly OHS strategy of providing additional training to therapists to enable them to work on adults is endorsed.

Sufficiency of dental resources:

14 A model should be developed to enable objective determination of the required numbers of dental workers.

15 In the short term, consideration should be given to reinstating the after-hours scheme for private dentists previously used in the Northern region during the period of the Commonwealth dental health program.

16 Consideration should be given to establishment of dental units at public hospitals.

17 In the longer term the following additional strategies for increasing dental resources are proposed for evaluation and consideration:

- Assistance to dentists setting up their own practice in Tasmania on the basis that the dentist agrees to treat set percentages of public patients for an agreed number of years (e.g. 80% in year 1, 60% in year 2, 40% in year 3, 20% in year 4). This method provides short term dental resources to OHS, but also offers the benefit of increasing

the number of dentists in Tasmania. The exact nature of the assistance needs to be discussed with dentists, but the provision of guaranteed patients should be, in itself, a significant advantage for a new practice.

- A 'bonding' scheme for dentistry students, similar to the scheme offered by the Queensland Dental Service. In this scheme dentistry students are recruited in September of the second year of their course. In exchange for financial assistance during tertiary study they are required to complete a contractual service period after graduation. The Queensland scheme is supported by specific legislation.
- Ensuring OHS has the administrative resources, and recruitment skills to actively recruit recently graduated dentists and experienced dentists.
- Setting up a training scheme (with for example 2 weeks of paid training leave per year) linked to a teaching hospital in mainland Australia to ensure OHS dentists are not professionally disadvantaged by working in Tasmania.

Funding:

18 The department should recognise that providing sufficient levels of general care to achieve acceptable standards of oral health in the target population will require a substantial injection of funding.

Outsourcing:

19 OHS should give priority to retaining private dentists in the emergency care scheme. This might involve excluding patients known to be abusive, and increasing the rates paid to private dentists.

20 The emergency care voucher scheme should be extended to the North of the state.

21 Control over issue of vouchers should be improved to ensure that most vouchers are only issued in accordance with available funds and the likelihood of clients being able to get an appointment with a private dentist.

Efficiency of OHS:

22 A model for assessing the efficiency of service delivery for the various services offered by OHS should be developed, and efficiency indicators regularly reported with other performance indicators.

23 A review should be performed to determine the reasons for the disparity between actual and standard times for provision of dental services.

Management of facilities:

24 Consideration should be given to the introduction of a two-chair policy as a method of increasing the efficiency of dental service delivery.

25 A policy on the provision and use of oral health facilities should be developed and used to determine the number and location of prosthetic laboratories in Tasmania.

Staff mix:

26 OHS should endeavour to correct the imbalance in the Southern region between prosthetists and dental technicians.

Administrative salary expense:

27 The department should ensure that the service has sufficient administrative resources to enable strategy formulation and implementation, strategic planning and preparation of funding submissions.

No-shows:

28 Given the current difficulties in meeting demand for emergency care, the practice of making phone calls to patients on the day prior to appointment should be considered.

Equity:

29 The service needs to actively recruit private dentists to be available to provide emergency care under the voucher scheme, wherever there is a private dental presence.

MANAGEMENT RESPONSE

OBJECTIVES, STRATEGIES AND PERFORMANCE INDICATORS

Finding

The strategic management process has been poorly documented, has lacked consistency and has failed to address critical issues including the shortage of dentists and increasing waiting lists until the current budget submission.

Response

While it is accepted that the strategic planning process may have been inadequately documented, information relating to the shortages of dentists and the increasing waiting lists has been the subject of activity reports and staffing reports for some time.

The Dever report was part of a strategic response by Government and the Department to address the impact of the withdrawal of the Commonwealth Dental Health Scheme.

At this time, it was State Government policy that the State could not and should not replace Commonwealth specific purpose funding that had been withdrawn. The Commonwealth's removal of funding from dental health was one of a number of actions taken by the then new Federal Government to reduce specific purpose funding to the States, along with a requirement for State fiscal contributions, to assist in eliminating the then Federal Budget deficit. The Agency was required to implement efficiency measures in order to attempt to maintain services within significantly reduced Commonwealth and State funding parameters. This is particularly evident from the Agency's Consolidated Fund forward estimates published in State Budget papers in 1996-97 and 1997-98.

The Dever Report provided a strategic framework for the service reconfiguration necessary in these circumstances. It also positioned the Oral Health Services to be able to take advantage of any re-introduction of dental services at national level.

Until recently the focus of effort has been on:

- Implementing the Dever report; and
- Working with other states to encourage renewed Commonwealth funding into Oral Health for all States.

The State Government in recognising the needs of the Oral Health Service (OHS) has allocated significant additional funds to the service, despite lack of success at a national level.

In relation to an Oral Health Strategic Plan a process has been developed which will address all the issues raised in the audit report.

Audit Recommendations

1. A review of information recording should be performed to ensure that current practices and standards are adequate to make sure that significant planning and review documentation is retained centrally.
2. A strategic plan should be finalised and approved for OHS. The plan should incorporate quantified objectives for specified time frames. It should also include a small number of performance indicators that will accurately reflect performance of the service, achievement of objectives, and greatest risks. Possibilities include waiting times, participation rates, activity levels, dental resources available (and predictions for the next six months) and an overall efficiency measure.
3. Mechanisms should be established to ensure that strategic planning is performed annually and that comprehensive performance information is provided monthly to executive management of the Department.
4. Comprehensive performance information should be included in annual reports.

Response

Each of the above recommendations will be addressed in the Strategic Planning Process and Activity Reporting Process that is now underway.

WAITING TIMES

Findings

Waiting times for general care are at unacceptably high levels, with no reasonable chance of an adult obtaining general care in Tasmania's public health system.

Waiting times for prosthetic services are considered reasonable, although the longer waiting times in the northwest region need to be monitored.

Response

Waiting time for general care is contingent upon the number of dentists available. General care is not outsourced to the private sector in the same way as emergency care and the costs of doing so would be prohibitive. The Social Infrastructure Funding allocation of 55.3 million over the next four years to the Oral Health Service will provide opportunities for recruitment and retention of additional staff, which will in turn begin to address the issue of waiting times for general care.

The report does not take into account the findings of the most recent waiting list audit which indicated that 40% of people on the waiting list failed to respond to a request that they confirm their continued need for general dental care. The Agency believes that this would alter the calculations on which the estimated waiting times were based. Further fine tuning of the data collection system will ensure that information relating to the waiting times and lists is a correct reflection of the actual number of clients waiting for care and the actual needs of those clients.

Audit Recommendations

5. Given the importance of waiting times as a performance measure within the Department of Health and Human Services, there is a need for contextual analysis, to ensure that abnormal factors do not mislead, and that waiting times reflect recent performance.

6. Resource allocation decisions should be revised as necessary, to take into account the fact that there is virtually no general care currently being provided and that the waiting times for general care are grossly excessive.

7. The OHS should:

- Determine why some prosthetic services provided in the past six months have not been included as "removals" in the EXACT system; and
- Take remedial action to ensure accurate records and meaningful reports.

Response

Further fine-tuning of the data system as indicated above will address many of the issues raised by the Audit report. Recruitment and retention of dentists will also further alleviate the pressures on the emergency system and allow for allocation of specific time for general care.

PRIORITISATION OF WAITING LISTS

Finding

Although priority levels for general care for adults were entered in the OHS computer system, the priorities were subsequently ignored when sending invitations to make appointments.

Response

Currently general care is limited. Because of the extreme lengths of the waiting lists the fairest option has seemed to be that those waiting longest are offered general care first. Clients who are in high need of care usually access through the emergency service and receive appropriate care wherever possible.

Audit Recommendations

8. The current practice in the south for allocating appointments for emergency care based on phone calls at 8.30 am needs to be carefully reviewed, since it may not be fair to all patients, and is unsuitable where demand significantly exceeds supply of dental services.

9. Consideration should be given to statewide adoption of the more rigorous categorisation of the urgency of client needs based on a series of questions as used in the north.

10. A Statewide policy should be developed, and effectively promulgated, outlining issues related to prioritisation of dental care and prosthetic services.

11. There is a need for criteria to be established for setting priorities for general care, which take into account the needs of clients in terms of pain relief and clinical outcomes; and minimisation of future costs to OHS.
12. OHS should attempt to strike a balance between giving preference to clients with a higher assessed priority and fairness to clients who have had the longest wait for care.

Response

The prioritisation of individual care and the issue of access to the service is being reviewed. The current strategic planning processes will consider the means for a more appropriate prioritisation of the target client group. Further assessment of clients at the initial contact and again at the surgery will assist further in ensuring that those at most need receive the care.

AUDIT OF WAITING LISTS

Finding

Waiting lists are periodically audited to ensure all clients on the lists are genuinely waiting for treatment.

Response

A more rigorous process is underway to ensure that the waiting lists accurately reflect the number and dental needs of people actually waiting for care. An audit of the list, by way of letter contact of those clients listed in 2001, indicated that, as approximately 40% did not respond, their names could have been removed. OHS, at that stage, gave those clients the benefit of the doubt and decided against removing their names from the lists. However, very few of those people have subsequently contacted the service either through the emergency service or by request for further information, and the OHS is confident in being able to remove their names from the lists.

Audit Recommendations

None

Response

N/A

PARTICIPATION RATES

Findings

Only 26 per cent of eligible adults are actively participating in attempting to access general care. Of those only one third were successful.

Participation rates for children are excellent.

Response

Participation rates are likely to be influenced by community perception. Once additional staff are recruited, the participation rate is expected to increase. The service will still have an ongoing responsibility to ensure services are targeted at those with highest need.

Audit Recommendations

13. Based on high participation rates for the Children's Service and low participation rates for the adult service, consideration should be given to redirecting resources from the children's service to the adult service, Accordingly OHS strategy of providing additional training to dental therapists to enable them to work on adults is endorsed.

Response

The Oral Health Strategic Plan will address the issue of equity of access.

SUFFICIENCY OF DENTAL RESOURCES

Findings

Dental resources are insufficient to provide general care, and there was some evidence that in the southern region, the service is struggling to meet the demand for emergency care.

Analysis based on a number of models indicated that the Oral Health Service requires twice as many dentists to meet a suggested national minimum standard.

Response

The Social Infrastructure Funding (SIP) allocation in the last State budget will assist in recruitment and retention of new dentists into the State.

Audit Recommendations

14. A model should be developed to enable objective determination of the required numbers of dental workers.
15. In the short term, consideration should be given to reinstating the after-hours scheme for private dentists previously used in the northern region during the period of the Commonwealth Dental Health Program.
16. Consideration should be given to the establishment of dental units at public hospitals.
17. In the longer term the following additional strategies for increasing dental resources are proposed for evaluation and consideration:

- Assistance to dentists setting up their own practice in Tasmania on the basis that the dentist agrees to treat set percentages of public patients for an agreed number of years.

- A 'bonding' scheme for dental students, similar to the scheme offered by the Queensland Dental Service.
- Ensuring OHS has the administrative resources and recruitment skills to actively recruit recently graduated dentists and experienced dentists.
- Setting up a training scheme linked to teaching hospitals in mainland Australia to ensure that OHS dentists are not professionally disadvantaged by working in Tasmania.

Response

Point 14 will be addressed in the Strategic Plan. In response to Point 16, it is recognised that public hospitals are under considerable pressure for medical end surgical services and the specific needs of the Oral Health Services require separate consideration. Points 15, and 17 relate to recruitment and retention of dentists, some of which will be addressed in part through the SIF allocation and also through further discussions within the Partners in Health Process which identifies strategies between the Department, the University of Tasmania and the University Department of Rural Health to address issues of education, recruitment and ongoing support.

FUNDING

Finding

Funding has not been adequate to maintain an adequate level of general care for adults since the withdrawal of the Commonwealth Dental Health Scheme at the end of 1996.

Response

See response under Objectives, Strategies and Performance Indicators.

Audit Recommendation

18. The Department should recognise that providing sufficient levels of general care to achieve acceptable standards of oral health in the target population will require substantial injections of funding.

Response

See responses both above and under Objectives, Strategies and Performance Indicators. Funding allocations need to be made on the basis of relative priorities within overall budget constraints and government policy settings. Within a given budget for the Agency, a substantial injection of funds into a particular area cannot be achieved without reducing services in other areas of need. The current Government has allocated significant additional funds specifically to oral health services through the Social Infrastructure Fund initiative, which has allowed the Agency to maintain other priority services.

IMPLEMENTATION OF THE DEVER REVIEW

Finding

Most recommendations made in the Dever Review have been implemented.

Response

Implementation of the review is being monitored.

Audit Recommendations

None

Response

N/A

OUTSOURCING

Finding

The Oral Health Service has supplemented their dental service in the southern region by outsourcing to the private sector, to the extent of the equivalent of two dentists.

That level of outsourcing is considered to be both efficient and effective, and there appear to be good grounds for extending the scheme to the northern region.

There is also limited statewide outsourcing of prosthetic services.

Response

The use of outsourced services has enhanced the capability of the Oral Health Service. However, limitations exist in the private sector's capacity to provide additional services.

Audit Recommendations

19. OHS should give priority to retaining dentists in the emergency care scheme. This might involve excluding patients known to be abusive, and increasing rates paid to private dentists.
20. The emergency care voucher scheme should be extended to the North of the state.
21. Control over such vouchers should be improved to ensure that the most vouchers are only issued in accordance with available funds and the likelihood of clients being able to get an appointment with a private dentist.

Response

The supplementation of the Oral Health Service delivery by outsourcing to the private sector is desirable, While DHHS has implemented further assessment of clients, reduction in the potential for bad debts and increased payment to the private

sector this has not resulted in substantial increases in participation by private dentists. The OHS will continue to seek further participation.

A partnership is proposed with the private dental sector to recruit additional dentists to the State who could work across both sectors. The additional resources allocated to Oral Health Services through the Social Infrastructure Fund for the next four years will fund this.

EFFICIENCY OF THE ORAL HEALTH SERVICE

Finding

Services provided by dentists at the Oral Health Service were found to be efficient, based on comparison of the value of services provided to adults with the full cost of providing those services.

A similar analysis indicated that delivery of prosthetic services was less efficient, however, there were some indications that this may have been due to deficiencies in. recording of services provided.

Response

Further analysis of the prosthetic service is underway to determine whether the inefficiency is caused by reporting or by work practice. Strategies to address the issue will be based on the findings of that analysis.

Audit Recommendations

22. A model for assessing the efficiency of service delivery for the various services offered by OHS should be developed, and efficiency indicators regularly reported with other performance indicators.
23. A review should be performed to determine the reasons for the disparity between actual and standard times for provision of dental services.
24. Consideration should be given to the introduction of a two-chair policy as a method of increasing the efficiency of dental service delivery.

Response

DHHS agree that it is necessary to develop a model for assessing the efficiency of service delivery. However it is not realistic to measure the Oral Health Service against private sector standards of efficiency. The standard times within the EXACT system will be reviewed, as it is the view of the Agency that these times, which are based on Veteran Affairs data, have proven not to be applicable to the situation within the Oral Health Service in Tasmania. The Oral Health Service is the service of last resort to most health care card recipients, many of whom regard their own oral health as a low priority amidst an array of other more pressing issues. Difficult behaviour, high levels of acuity and poor dental compliance, coupled with a level of dental phobia for many, combine to reduce the throughput of clients through the service. In relation to recommendation 24, while the agency will certainly consider this recommendation, it

may not prove possible to manage high numbers of difficult and complex clients every day using a two-chair type of practice without high levels of burnout and low professional satisfaction. Any such attempt may have a negative impact on recruitment and retention of dentists.

COST PER POPULATION

Finding

It was not possible to reliably compare costs with other States; however, there were some indications that the ratios of total cost to target population for most states were reasonably comparable.

Response: None.

Audit Recommendations

None

Response

N/A

MANAGEMENT OF FACILITIES

Findings

Facilities were found to be sufficient to allow for efficient service delivery.

There was a considerable excess of dental chairs to dentists, which reflects the decline in numbers of dentists in recent years.

There was some evidence that the number of prosthetic laboratories may be excessive. There is a need for policy and standards in this area to be developed.

Response

A review of facilities and equipment is underway and a management plan will be developed as a matter of urgency. The issue of the number of prosthetic laboratories will be the subject of a more intensive analysis of prosthetic services that will occur towards the end of the current financial year.

Audit Recommendations

25. A policy on the provision and use of oral health facilities should be developed and used to determine the number and location of prosthetic laboratories in Tasmania.

Response

This issue will be addressed in the Oral Health Strategic Plan

STAFF MIX

Finding

The mix of dentists, therapists, dental attendants, prosthetists and dental technicians is generally efficient and effective, except for an imbalance between prosthetists and technicians in the southern region.

Response

The imbalance between technicians and prosthetists in the south will be addressed in the proposed analysis of the prosthetic service. (see above).

Audit Recommendation

26. OHS should endeavour to correct the imbalance in the southern region between prosthetists and dental technicians.

Response

This issue will be addressed in the Oral Health Strategic Plan.

ADMINISTRATIVE SALARY EXPENSE

Findings

Overall total administrative salaries at the Oral Health Service would appear to be relatively low.

In particular, administrative resourcing appears to have been insufficient in the area of senior management, given the difficulties inherent in the loss of the Commonwealth Dental Health Scheme, and the implementation of structural change based on the Dever Review.

Response

A new management structure is in the process of being implemented. The appointment of northern, southern and business support managers is complete. The position of data manager is also being progressed.

Audit Recommendations

27. The Department should ensure that the service has sufficient administrative resources to enable strategy formulation and implementation, strategic planning and preparation of funding submissions.

Response

OHS has implemented a new management structure that should address this issue.

FEE COLLECTION

Finding

The level of outstanding debt is satisfactory compared with the annual budget and the collection rate of similar government agencies.

Response

Outstanding debt is followed up through the use of an external collection agency.

Audit Recommendations

None

Response

N/A

NO-SHOWS

Finding

Lost value from clients failing to attend appointments is low; nevertheless there may be a case for implementing reminder phone calls.

Response

Processes to reduce the numbers of clients failing to attend are being trialled to ensure that staff are fully utilised at all times.

Audit Recommendations

28. Given the current difficulties in meeting demand for emergency care, the practice of making phone calls to patients on the day prior to appointments should be considered.

Response

Issues such as this will be addressed through appropriate quality and productivity processes.

EQUITY

Finding

There was no evidence of a lack of equity in distribution of dental resources between regions. The Oral Health Service continues to provide coverage of remote areas. One area of concern was the lack of private dentist participation in some areas of the State.

Response

The lack of private sector participation is a direct result of their inability to recruit dentists to private practice, the increasing private workload as well as the reticence on some practitioners to provide care for public patients.

Audit Recommendations

29. The service needs to actively recruit private dentists to be available to provide emergency care under the voucher scheme, wherever there is a private dental presence.

Response

Recruitment of private dentists is contingent on their capacity and willingness to participate. OHS is doing everything it can to attract new participating practices. A partnership is proposed with the private dental sector to recruit additional dentists to the State who could work across both sectors. The additional resources allocated to Oral Health Services through the Social Infrastructure Fund for the next four years will fund this.

Introduction

INTRODUCTION

BACKGROUND

Oral health services are provided to ensure people can eat, speak and socialise without discomfort or embarrassment. Oral health is often associated with common and highly preventable diseases and disorders of the teeth (dental caries) and gums (periodontal diseases).

It does, however, include a wide range of dental disorders, generally involving pain and discomfort.

Some of these are potentially life-threatening if left unattended or not properly treated (see inset examples).

> A middle-aged male presented with severe swelling of the face and neck. He had been on the waiting list for more than two years. He was admitted to hospital where surgical drainage was carried out. His condition then worsened and the patient was diagnosed as having acute Ludwig's Angina. The patient survived after a protracted period of intensive treatment.

> A 6-year-old female presented with acute swelling due to an abscessed upper canine tooth. The condition required immediate extraction of the tooth to allow drainage and prevent the occurrence of Cavernous Sinus Thrombosis, which is potentially fatal, but a dentist was not available. Instead, the child was seen by a medical practitioner, who placed the child on an inappropriate level of medication. Fortunately, a chance visit by a dentist resulted in a correct diagnosis, urgent admission to hospital, and removal of the tooth.

The Department of Health and Human Services (DHHS) through the Oral Health Service (OHS) provides dental care and information to a target population of more than 150 000 Tasmanians. Children's dental services are aimed at providing relief of pain, restorative and preventative services as well as maintenance of dental health. Adult dental services provide emergency dental care, general dental care and dentures.

LEGISLATION

Reforming legislation enacted 2001

Each Australian State and Territory has separate legislation to regulate the practice of dentistry. The Tasmanian *Dental Practitioners Registration Act 2001* commenced on 3 October 2001, replacing the *School Dental Therapy Service Act 1965* that provided for the provision of school dental services by dental therapists and set service standards. The new Act covers dentists who were previously covered by the *Dental Act 1982* (repealed), dental therapists whose practice

was governed by the *School Dental Therapy Act 1965* and dental hygienists who had not been able to practice in Tasmania due to the restrictive provisions of the *Dental Act 1982*. A new Dental Board of Tasmania has been appointed with membership including dentists, dental therapists, dental hygienists and community representatives.

The *Dental Prosthetists Registration Act 1996* provides for the registration of dental prosthetists and ensures the standards of dental prosthetic services.

SERVICES AND FEES

Eligibility criteria

Dental examinations by OHS are provided free of charge to children under the age of 18, further treatment is also free when the child is:

- Covered by a Health Care Card;
- Eligible for the Department of Education's Assistance Scheme; and
- Attending kindergarten or is under school age.

A co-payment of $35 is applied annually for treatment for children not meeting the above criteria.

For adults to be eligible for treatment by OHS they must possess a Health Care or Pensioner Concession Card and make a co-payment of $20 for every visit. A maximum fee of $100 is charged for a course of care. An upfront co-payment of $20 is charged for emergency treatment. Co-payments are also required for assessments and the provision of replacement dentures.

RECENT HISTORY

Prior to 1994, OHS consisted of a full service to children, and an emergency health scheme for adults, with very limited general care provided to adults.

Withdrawal of Commonwealth funding

In 1994 the Commonwealth Dental Health Program (CDHP) was established as a short-term measure, to reduce a backlog in the provision of services to eligible patients. Using funds from that scheme OHS introduced general care for adults in possession of a health care card or pensioner concession card.

The CDHP was discontinued from the end of 1996 leaving OHS with a recurrent $3.4 million funding shortage.

RESPONSE TO THE LOSS OF THE CDHP

Addressing the funding shortfall

The funding shortage was met by terminating the employment of casual and temporary dentists, a small injection of appropriation funds and terminating schemes that obtained services from the private sector.

While these measures effectively dealt with the funding shortage, there was a substantial reduction in dental resources through the termination of employment of dentists, and the cessation of the private sector schemes. Responses to the loss of resources included:

- Transfer of some dental resources from the children's service to the adult service; and
- Commissioning an independent review of the service by Dr Garth Dever (the Dever Review, 1998).

Partial fees introduced with implementation of Dever Review

The Dever Review recommended the introduction of partial fees (initially estimated to be 38 per cent of the funds previously provided by the CDHP, but representing less than 18 per cent by the 2001-2002 financial year). It also included a number of other recommendations to attempt to address the gap in funding and the chronic unfavourable dentist-to-population ratio in Tasmania. In most cases the recommendations have been implemented or are in process of implementation. These include:

- Restrictions on provision of some dental services;
- Provision of additional training to dental therapists to create a new category of dental worker, able to provide treatment to adults;
- Replacement of school vans by a network of community-based dental clinics;
- Identification of unreasonable use of services; and
- Improved management and clinical information systems.

DEMAND FOR SERVICES

In addition to the reduced funding two other factors adding to the demand for services are:

Tasmania has the lowest adult oral health status

- A steady increase nationally in demand for services projected to be a 29.3 per cent increase between 1998 and 2010[1]. The increase is expected to be greater among older Australians, most of whom are eligible for the use of 'public dental services'; and
- Tasmania has the lowest adult oral health status, the highest number of health-care cardholders[2], and the fastest aging population.

[1] Oral health of Australians: National planning for oral health improvement; Final Report; Australian Health Ministers' Advisory Council – Steering Committee for National Planning for Oral Health

[2] 2002 Oral Health Service Budget Submission page 2

EFFECTIVENESS OF THE SERVICE

Decrease in service delivery

Activity measures published in the department's annual reports indicate a significant decrease in service delivery to adults since 1998/99.

Table 1: Occasions of service for adults

1998-99	1999-00	2000-01	2001-02
27 611	19 970	15 829	14 150

Source: DHHS Annual reports

However, the recorded decrease does not necessarily reflect funding shortages. Other possible reasons for the decline include:

- Inability to attract dentists to the state and/or to OHS;
- Restrictions placed on some services as a consequence of the Dever Review;

Increase in Waiting times

Another important measure of the effectiveness of the Service is waiting times to access the service. The 2000-2001 Annual Report foreshadows the provision of waiting list information in the future based on the new 'EXACT' Information System. Information provided during the planning phase of this audit indicated that waiting times for general services have increased alarmingly since 1997, from approximately 30 months in June 1997 to 66 months in November 2001.

HANSARD

There have been a number of parliamentary queries in 2001 relating to waiting lists and funding issues. In particular, there has been criticism of long waiting times on the North West coast.

PUBLIC DENTRISTRY IN CRISIS?

During the preliminary stages of the audit, the term 'crisis' was used on several occasions by senior departmental staff. Problems cited included long waiting lists, falling participation rates, inability to attract or retain dentists and reduced capacity to provide general care.

Letters of complaint

Letters of complaint to the department, and to newspapers told a similar story. A letter to *The Mercury*, dated 23rd May, 2002 succinctly outlined the difficulties in obtaining adult dental care.

> 'When I received my annual aged pension card from Centrelink this week, the form stated that I was entitled to dental (oral) health care. What a joke!

> If you still have your own teeth, the waiting list for general care is six years and is now closed.
> If you wait until your teeth are rotten, and you are in severe pain, you can only get emergency treatment by ringing the clinic at 8.30 a.m. every day … until they can fit you in'

Children's oral health excellent

On the other hand, there were some encouraging reports. The children's service had been able to meet demand for services without the need for waiting lists, participation rates were satisfactory, and studies of children's oral health reported excellent results both in absolute terms and in relation to other states.

Also, provision of dentures has a more 'reasonable' waiting time of approximately two years, and at least in the north of the State, emergency care is generally provided within 24 hours.

AUDIT COVERAGE

The audit provided coverage of the four service areas:

- Children's service;
- Adult general care;
- Adult emergency treatment; and
- Prosthetic services.

Adult care considered a pervasive problem

The focus was on the provision of general care, as failure to provide general care was considered to be a pervasive problem that could undo the generally good oral health of children. This in turn could lead to expensive and unacceptable outcomes including high levels of emergency care, complex restorative dentistry, loss of teeth, and provision of dentures.

We have attempted to outline the extent of the problem and provided some recommendations to attempt to improve service delivery. We also reviewed the history of OHS in the period since the loss of Commonwealth funds at the end of 1996. The review included analysis of the reasons why the Service may not have received the attention and priority necessary to continue at a sustainable level.

The purpose of reviewing the history of OHS since 1996 was primarily to seek lessons from deficiencies in processes, and to make recommendations that are applicable to other areas of the department, and to other agencies.

AUDIT RECOMMENDATIONS ON FUNDING

Funding priorities a matter for the Minister and the Department

It is our normal practice not to recommend funding increases. The reason for this is that funding decisions cannot be made in isolation. Supply of money is limited, and it is usually the case that additional funding in one area can only be made at the expense of another. For instance, provision of extra hospital beds might mean deferring purchase of a cancer-screening machine. These decisions are properly the responsibility of the Minister, the Head of Department and the executive decision-making group within the department.

However, this report will review the extent to which OHS is sustainable with its current mandate at the current level of funding, as well as the probable long-term financial consequences of not providing adequate levels of general care to adults.

Audit framework

AUDIT FRAMEWORK

STANDARDS APPLIED

This audit has been performed in accordance with Australian Auditing Standard AUS 806 ('*Performance Auditing*') which states that:

> 'The objective of a performance audit is to enable the auditor to express an opinion whether, in all material respects, all or part of an entity's activities have been carried out economically, and/or efficiently and/or effectively.'

Audit procedures included:

- Review of policies and procedures;
- Interviews with staff;
- Verbal and written inquiries;
- Review of general reports on dentistry;
- Observation of practices at OHS;
- Review of ministerial briefing papers;
- Review of correspondence files;
- Analysis of data obtained from OHS's computer system (EXACT).

The evidence provided by these means is persuasive rather than conclusive in nature.

OBJECTIVES

This report had the objectives of determining whether:

- The provision of the oral health function by OHS is efficient, effective and equitable; and
- Clear goals, standards and performance indicators have been set and put into effect by OHS for the management of the oral health function.

AUDIT SCOPE

This audit focused on the services provided by OHS including dental services for children and adults as well as denture services.

CRITERIA USED

The following criteria were used in the performance audit:

1	Objectives, strategies and performance indicators	Strategic planning is used effectively, including formal objectives, strategies, performance indicators and regular and effective monitoring and reporting of performance.
2	Waiting times	Waiting times for dental and prosthetic services are reasonable.
3	Prioritisation of Waiting Lists	Waiting lists are effectively prioritised based on the principles of patient need, minimising future costs, and fairness to clients.
4	Audit of Waiting Lists	Waiting lists are periodically audited to ensure all clients on the lists are genuinely waiting for treatment.
5	Participation rates	Participation rates are at a reasonable level.
6	Sufficiency of dental resources	There is the appropriate number of dentists to achieve reasonable oral health outcomes.
7	Funding	Current levels of funding are sufficient to achieve reasonable oral health outcomes.
8	Implementation of the Dever Review	Recommendations of the Dever Review have been implemented.
9	Outsourcing	Optimum use is made of outsourcing to meet demand for services, and to reduce overall cost. Where outsourcing is used it is well managed.
10	Efficiency of OHS	Services provided by OHS are efficient.
11	Cost per population	Overall cost of service per target-group population is comparable with other states.
12	Management of facilities	Facilities are not duplicated or under-used, and are subject to periodic review.
13	Staff mix	The mix of dentists, dental therapists, dental attendants, prosthetists and dental technicians is efficient and effective.
14	Administrative salary expense	Administrative salaries are a reasonable proportion of total salary expense.
15	Fee collection	Outstanding debt from fees is at a reasonable level, and is effectively managed.
16	No-shows	Lost value from clients failing to attend appointments is minimised.

17	Equity	Oral health services are delivered at comparable levels between the major regions, and to rural and remote areas.

AUDIT METHODOLOGY

Data was gathered through visits to OHS clinics in Hobart and Launceston, inquiries to staff, examination of documents, and review of relevant reports.

STAKEHOLDER INPUT

In line with the Audit Office's established practice for the conduct of performance audits, an advisory committee was convened to reflect stakeholder views. The committee provided input to the audit's methodology and reviewed the draft report upon its completion.

Nevertheless, the views expressed in this report are those of the Auditor-General, and are not necessarily shared by other members of the committee.

The Auditor-General chaired the committee and its members were drawn from the following areas:

- Department of Health and Human Services;
- The Oral Health Service;
- Australian Dental Association; and
- Tasmanian Audit Office.

TIMING

Planning for the performance audit commenced in November 2001. Field-testing commenced in February 2002 and was completed in August 2002 with the report being finalised in October 2002.

RESOURCES

The total cost of the audit excluding report production costs was $72 825.

MANDATE FOR THE AUDIT

Under the provisions of section 44(b) of the Financial Management and Audit Act 1990 the Auditor-General may:

> 'carry out examinations of the economy, efficiency and effectiveness of Government departments, public bodies or parts of Government departments or public bodies'.

The conduct of such audits is often referred to as performance auditing.

Objectives, strategies and performance indicators

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This section of the report deals with our findings, conclusions and recommendations made in relation to the audit criteria.

1 OBJECTIVES, STRATEGIES AND PERFORMANCE INDICATORS

In the audit we were looking for strategic planning, including formal objectives, strategies, performance indicators and regular monitoring and reporting of performance. This expectation is consistent with Department of Treasury and Finance (Treasury) guidelines and DHHS policy.

1.1 EXISTENCE OF CURRENT STRATEGIC OR BUSINESS PLAN

Missing documentation

We were unable to obtain much of the documentation of the past 5 years of strategic management planning for OHS at either Service or Division level. Some documentation was held in assorted binders, but with missing years, and in most instances there was no evidence of performance monitoring. Inquiries to key personnel at OHS failed to produce the required documentation. The Record Management Service had very little information on OHS with almost no documents filed for the period from 1998 to 2001.

Similarly we were unable to locate any documentation of decision processes, budget submissions or internal budget processes related to the loss of Commonwealth dental funds.

Relevant planning documents sighted included:

- At Department level, the document *Building for the Future - Agency Strategic Positioning Document 2000-2003* takes the place of a strategic/business plan while DHHS wait for the Tasmania Together visions goals and benchmarks to be finalised. The goals from the above document are at a high level and do not have a significant effect on goal setting at OHS.

Incomplete business plan

- OHS had a business plan for the current year 2001 - 2002 but it was denoted as 'incomplete', 'not signed off' and 'awaiting Div directions'. When sighted the 2001-2002 financial year was 8 months completed which cast doubts on the usefulness of the document.

Other planning documents at Department or division level were sighted from past years, but were generally at too high a level to assist significantly in strategic planning for OHS.

1.2 OBJECTIVES

A key element in strategic planning is the setting of objectives. In order for achievement of the objectives to be assessed it is recommended that objectives should be quantifiable and relate to a particular time frame. For example, improving the oral health of Tasmanians might be a reasonable goal of OHS, but is not a useful objective.

The DHHS Annual Report 2000-2001 defines the department's oral health objectives to be provision of 'dental care for children and adults who are health care cardholders, and promotion of oral health in the Tasmanian community'.

Similar, but more specific goals are included in the draft Business Plan 2001-2002.

No evidence of quantifiable objectives

We could find no evidence that quantifiable objectives for a set timeframe had been established, and verbal advice from OHS officers confirmed that they had not been set.

1.3 PERFORMANCE INDICATORS

Performance indicators are measurable attributes that collectively serve to indicate the degree to which objectives have been achieved, or strategies have been effective.

The advantages of having performance indicators include the following:

- To ensure senior management is informed about strategic directions and can objectively assess performance;
- What gets measured generally gets done;
- Success needs to be recognised before it can be rewarded;
- Failure needs to be recognised before it can be corrected;
- Public support can be gained by demonstrating results; and
- Continuity planning is enhanced.

The performance indicators should have the following attributes:

- There should be measures for all objectives;
- There should be measures of effectiveness and efficiency;
- The objectives should accurately and objectively reflect performance; and
- Collection of the measurement data should be straightforward with as few measures as possible.

The only formally stated objectives found were measurements of activity in the Department's annual reports, and a large list of measures in the draft OHS Business Plan.

Only blunt measures used

The activity measure – 'occasions of service' is a fairly blunt measure that may not accurately reflect performance, given that the nature of work performed can vary substantially between years. It also fails to indicate how, and to what extent that activity relates to the objectives of OHS.

The list of indicators in the business plan has not been implemented. The list includes a number of measures of input, output, outcome, efficiency and quality. While the list includes some useful indicators, we consider that the measurement process would be more practical and effective by focusing on a small number of key indicators.

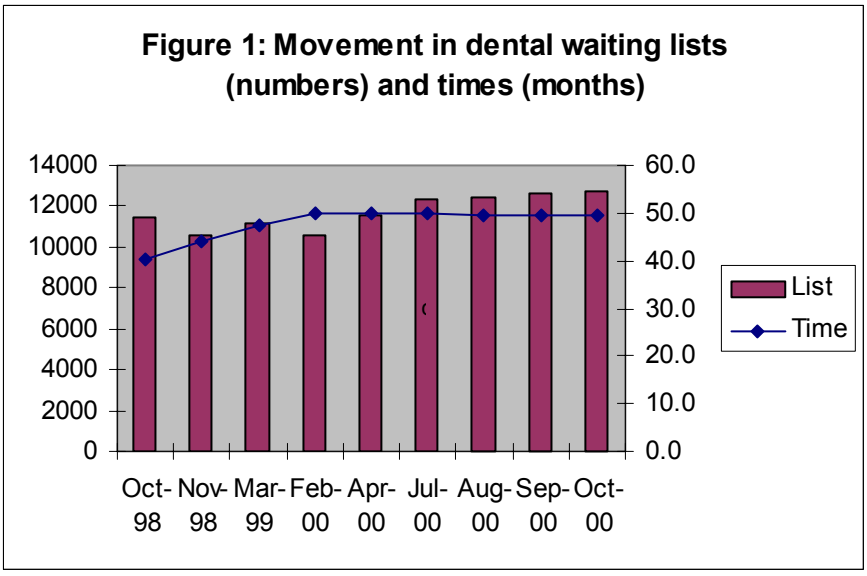
Planning given low priority

There were various other planning documents from past years but the focus was on implementation of strategies rather than goal setting or performance evaluation. Some monitoring reports were available, but our overall impression was that either the planning was spasmodic, or that the planning process was given low priority.

1.4 PERFORMANCE INDICATORS USED BY DEPARTMENTAL MANAGEMENT

The only measure that appears to have been consistently provided to, and relied on by senior department management are numbers on the waiting lists and waiting times for general and prosthetic services. Information provided for the period October 1998 to October 2000 is summarised in the graph below:

Figure 1: Movement in dental waiting lists (numbers) and times (months)



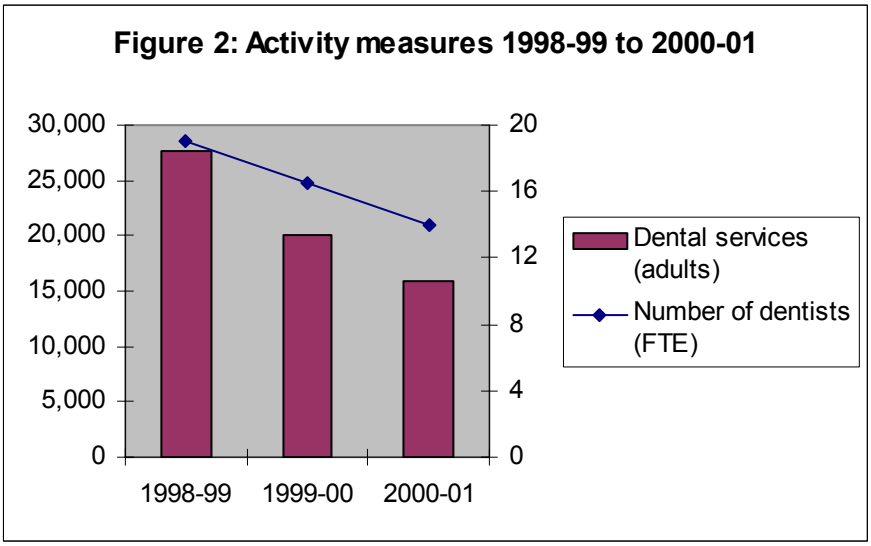
Source: Cabinet Information Briefs Oct 1998 to Dec 2000

Only a small deterioration in waiting times noted

It is interesting to note that, while waiting times are high; there appears to be only a small deterioration in waiting times over the period. In section 2.1, we will show that this appearance is not an accurate reflection of reality.

In that period, activity measures for adults, occasions of service, and number of fulltime equivalent dentists decreased substantially.

Figure 2: Activity measures 1998-99 to 2000-01



Source: DHHS Annual reports, Human Resources Section of DHHS.

Almost certainly, the relative stability of waiting lists in a period of rapidly declining activity is due to decreased participation rates with many eligible adults electing to forgo inclusion on the waiting lists after being informed of the long waiting times.

We consider it likely that information provided to executive management over this period, while accurate, may have created a misleading impression of the performance of OHS because of the focus on flawed waiting lists and waiting times (see section 2.1) and the lack of information on activity measures. It is possible that more comprehensive information may have led to different decisions being made on resource allocation to OHS.

1.5 STRATEGIES

A number of strategies have been outlined in various planning documents. However, the main strategic focus has been on implementation of the 53 recommendations from the Dever Review. Those recommendations included:

- Implementation of partial fees for service;
- Replacement of the mobile dental vans with a network of community-based dental clinics; and

- Providing additional training to dental therapists to create a new category of dental worker, able to provide treatment to adults;

2002 Budget Submission

The last budget submission (May 2002) recognised the shortage of dentists as the major problem facing OHS, and outlined a number of strategies including:

- Purchasing more services from the private sector;
- Improving workforce performance and adaptability;
- Broadening the role of dental therapists, following the completion of approved training; and
- Ensuring an adequate supply of dentists through salary increases including a performance-linked component.

1.6 CONCLUSIONS

Information provided to audit was incomplete, with missing business plans and performance reviews at OHS and Division level. Inquiries were made to OHS staff, the Health Advancement Division and the Record Management Service. From the information provided we believe that the strategic management process has lacked consistency, and has failed to address critical issues including the shortage of dentists and increasing waiting lists until the current budget submission.

Failure to address critical issues

Despite this, it appears that OHS both by implementation of the Dever Review recommendations and other measures to attract and retain dentists has had clear informal objectives even if the documentation has not always been complete. Unfortunately, the absence of consistent objectives, performance measures and strategies, together with an effective monitoring and reporting regimen at Division and Department level may be one of the reasons that increasing waiting lists and declining numbers of dentists have not been addressed over the past five years.

Recommendation 1

A review of information recording should be performed to ensure that current practices and standards are adequate to make sure that significant planning and review documentation is retained centrally.

Recommendation 2

A strategic plan should be finalised and approved for OHS. The plan should incorporate quantified objectives for specified time frames. It should also include a small number of performance indicators that will accurately reflect performance of the Service, achievement of objectives, and greatest risks. Possibilities include waiting times, participation rates, activity levels, dental resources available (and predictions for the next 6 months), and an overall efficiency measure.

Recommendation 3

Mechanisms should be established to ensure that strategic planning is performed annually and that comprehensive performance information is provided monthly to executive management of the department.

Recommendation 4

Comprehensive performance information should be included in annual reports.

Effectiveness criteria

Waiting times
Prioritisation of waiting lists
Audit of waiting lists
Participation rates
Sufficiency of dental resources
Funding
Dever review implementation
Outsourcing

2 WAITING TIMES

The audit sought evidence that waiting times are reasonable, compared with objective standards and previous years.

Waiting lists are maintained in each region for general and prosthetic services. Waiting lists are not maintained for children's service or the adult emergency service, for which immediate appointments are usually made.

Waiting time is the expected time for all clients on the waiting list to receive treatment at current treatment rates. The OHS computer system (EXACT) calculates waiting time in months to be the number on the list divided by the average monthly number of 'removals', over the past 12 months.

Doubts about the quality of the data

OHS and department managers consider waiting times to be the key performance indicator of the Service. The number of people on the list is considered to be a poorer indicator because of doubts about the quality of the data, and because it fails to take into account the capacity of OHS to service those clients within a reasonable time.

Both general care and prosthetic lists are divided into priority groups. However, to simplify the exercise we have looked at the waiting lists consolidated across all priority groups.

2.1 GENERAL CARE

Waiting list information, as provided on reports from the OHS computer system (EXACT) as at 31 May 2002, was as follows:

Table 2: Waiting lists for general dental care

Region	List	Waiting times (months)
South	4 858	42.9
North	5 387	38.9
NW	1 526	172.8

Reported waiting times not accurate

However, from inquiry and personal observation we had noted that almost no general care was being provided, so that the waiting times calculated by EXACT did not correspond with reality. On further analysis, we identified a number of factors which made the reported times unreliable.

- Over the past 12 months an audit of waiting lists by OHS has identified approximately 1 300 clients who no longer

require treatment. These clients have been removed from the system during the preceding year, however, those removals are treated by the EXACT system in the same way as removals due to treatment. Since waiting times are based on average monthly removals over a 12-month period the system understates the real time it will take for listed clients to be treated.

- In the South and North regions, the number of additions to the waiting list has reduced to a 'trickle' due to a combination of client and staff unwillingness to add clients who would not be treated for many years.
- In the South and North regions, reductions in dental resources have led to significant reductions in the amount of general care being provided. It follows that basing waiting times on average removals over the last 12 months is misleading, and accordingly we recalculated waiting times based on average removals over the past 6 months, instead of the past 12 months.

  As a result, average removals per month was calculated to be 26 instead of 113 in the South, 27 instead of 162 in the North, and a smaller adjustment in the North West.

After adjusting for these factors we recalculated waiting times to be:

Table 3: Adjusted waiting lists for general dental care

Region	List	Waiting times (months)	Waiting times (years)
South	5 211	200.4	16.7
North	6 610	241.2	20.1
NW	1 526	234.8	19.5

These recalculated waiting times provide a much more accurate assessment, and are in keeping with observed practice which is focusing almost exclusively on trying to meet the demand for emergency care.

Impact of one extra dentist per district

Having said that, it should be noted that one extra dentist in each region, seeing a relatively modest 100 clients per month, would reduce the waiting times for the South, North and North West back to 41 months, 52 months and 14 months respectively, at least, until more people elect to go on the waiting list in response to increased availability of general care.

2.2 PROSTHETIC SERVICES

The unadjusted data from the EXACT system for prosthetic waiting lists is as follows:

Table 4: Waiting lists for general prosthetic care

Region	List	Waiting times (months)
South	1 162	11.7
North	159	10.6
NW	361	22.2

However, basing the waiting times on removals over the last 6 months instead of the past 12 months gives the following table.

Table 5: Adjusted waiting lists for general prosthetic care

Region	List	Waiting times (months)
South	1 162	55.9
North	159	9.8
NW	361	21.2

The above measures demonstrate that waiting lists for dentures are reasonable in the North of the State, but that waiting times for prosthetic services in the South are increasing rapidly. On inquiry we were advised that some services had not yet been included in the EXACT system because of a breakdown in a clerical process, and because of a high proportion of employee leave in the 6 month period. Manual records provided to us verified that services had continued at previous levels. Accordingly we consider the unadjusted waiting times, rather than the revised times, to be the more accurate measures.

2.3 CONCLUSION (WAITING LISTS)

General care waiting times are at unacceptably high levels

Waiting times for general care are at unacceptably high levels. There is no reasonable prospect (with some specific limited exceptions), given the current level of dental resources, of an adult obtaining general care in Tasmania's public oral health system. The appointment of additional dentists would have a substantial affect on waiting times in the short term, although in the long term increased participation rates would negate much of that effect.

Waiting times for prosthetic services are considered reasonable, although the longer waiting times in the North West region need to be monitored.

Recommendation 5

Given the importance of waiting times as a performance measure within DHHS, there is a need for contextual analysis, to ensure that abnormal factors do not mislead, and that the waiting times reflect recent performance.

Recommendation 6

Resource allocation decisions should be revised as necessary, to take into account the fact that there is virtually no general care currently being provided, and that waiting times for general care are grossly excessive.

Recommendation 7

OHS should:

- **Determine why some prosthetic services provided in the past six months have not been included as 'removals' in the EXACT system; and**
- **Take remedial action to ensure accurate records and meaningful reports.**

3 PRIORITISATION OF WAITING LISTS

We sought evidence that waiting lists are effectively prioritised based on the principles of patient need, minimising future costs, and fairness to clients. We also looked for consistent statewide procedures.

3.1 CHILDREN

There are currently no waiting lists for the children's service. Dental therapists are meeting current demand and appointments can be made immediately.

3.2 EMERGENCY CARE

Southern region unable to cope with even emergency demand

In the case of emergency care, we were advised that emergency care is provided within 24 hours in the North of the state, however, in the

South shortages of dentists, and injuries to some dentists have made it impossible to keep up with emergency demand.

A separate waiting list was introduced in January 2002, but the list had been 'swamped' by February 2002 with over 600 people on the list. We were advised that many of the clients on the list did not require emergency care but had self-diagnosed themselves as emergency cases in order to get more rapid access to treatment than the general care list would allow.

The emergency-care list has now been abandoned. Instead of being placed on a waiting list, patients requiring emergency care are required to ring on a first-come-first-served basis at 8.30AM every morning.

Because clients requiring emergency care are not recorded on waiting lists we could not ascertain the extent to which OHS was unable to keep up with demand for emergency care. From observation of the telephone switchboard from 8.30AM to 10.00AM we noted that:

- Appointments were made for the majority of clients requiring emergency care;
- Assessment of the urgency of the client's needs was based on the client's assessment;
- All available appointments had been booked by 9.30AM;
- One client with a burst abscess was fitted in to a dentist's lunch break;
- Two callers after 9.30AM were told to either wait at the clinic in the hope of a cancellation, or ring at 8.30AM the next day; and
- One caller complained he had been calling for weeks and had not been able to get through (he was issued with a voucher number).

Serious oral problems may not be treated for weeks

While the system appeared to be working reasonably well on the morning we observed the process, there are concerns that patients with serious oral problems might be unable to be treated for weeks.

In the North, dental staff have been able to keep up with emergency demand. They do this through a standard set of questions asked by switchboard staff which are used to categorise clients into one of five categories of urgency, with only the top category receiving emergency care.

3.3 GENERAL CARE

Patients requiring general care are prioritised as high priority ('1') or lower priority ('3') if assessed at an OHS clinic, or no priority otherwise. In addition, many of the patients on the list date back to the

previous computer system and no priority has been set in some cases, and in other cases a priority of '2' (no longer used).

Priorities ignored

However, the current practice is that priorities are ignored and invitations to make appointments are sent to people who have been on the waiting list longest. Having said that there have been no invitation letters issued for approximately six months with OHS struggling to cope with emergency demand in all regions of the state.

We were unable to find documented procedures outlining how priority levels are to be determined or how priorities are to impact on issue of invitations to make appointment.

We believe that there is a need for a policy on prioritisation of general care. The policy should set criteria for setting priorities that take into account:

- The needs of clients in terms of pain relief and clinical outcomes; and
- Minimisation of future costs.

Suggested waiting list criteria

The policy should address the issue of invitations, and attempt to strike a balance between giving preference to clients with a higher assessed priority, and fairness to clients who have had the longest wait for care. The policy should be encapsulated in documented procedures, and effectively promulgated to staff throughout the State.

3.4 PROSTHETICS

The following summarises how the waiting list operates with prosthetics.

A member of the public makes contact with the dental service and advises that they need to see someone in relation to their dentures. At this point a Customer Service Officer then puts them on the prosthetics waiting list.

When they get to see a prosthetist it may be discovered they still have some natural teeth needing general dental work. If this is the case, then they will be placed at the back of the general waiting list.

Natural teeth require treatment before prosthetic needs can be addressed

The dentist will firstly treat their natural teeth and once these are taken care of their prosthetic needs can then be addressed. The general dentist can do the clinical part for partial dentures then refer the work on for completion by the prosthetist to who will complete any necessary laboratory work.

If the client loses all their teeth they can then be referred back to the prosthetist's waiting list, which will ensure they are a given priority 1 on the prosthetics waiting list. This means they will be seen in around six months.

Recommendation 8

The current practice in the South for allocating appointments for emergency care based on phone calls at 8.30 needs to be carefully reviewed, since it may not be fair to all patients, and is unsuitable where demand significantly exceeds supply of dental services.

Recommendation 9

Consideration should be given to statewide adoption of the more rigorous categorisation of the urgency of client needs based on a series of questions, as used in the North.

Recommendation 10

A statewide policy should be developed, and effectively promulgated, outlining issues related to prioritisation of dental care and prosthetic services.

Recommendation 11

There is a need for criteria to be established for setting priorities for general care, which take into account the needs of clients in terms of pain relief and clinical outcomes; and minimisation of future costs to OHS.

Recommendation 12

OHS should attempt to strike a balance between giving preference to clients with a higher assessed priority, and fairness to clients who have had the longest wait for care.

4 AUDIT OF WAITING LISTS

The audit sought evidence that waiting lists are periodically audited to ensure all clients on the lists are genuinely waiting for treatment

A statewide audit to review the accuracy of the general care waiting list was commenced in July 2001 and completed in November 2001. The audit involved sending letters out to all clients on general care waiting lists (13 104) to determine if treatment was still required.

Treatment was still required for 50% of respondents (6468). The remaining 50% can be categorised as:

- 10% (1 370) no longer require treatment; and

- 40% (5 266) did not respond

The negative responses were removed from waiting lists in August-September 2001. The non-responses have been retained on waiting lists but have had their status reset to 'suspended'.

Overall, the exercise has reduced the size of the waiting list by approximately 10%. An additional reduction of 40% could have been made if non-respondents had been removed from the list.

Reducing size of waiting list does not affect waiting times

However, the primary value of the exercise was to improve the efficiency of waiting list processes, and this has occurred. Removing people who no longer require treatment from the waiting list does not have any significant effect on waiting times in the long term, as those people inflate both the waiting list and the number of removals with no net effect on waiting times.

However, one result of the audit has been a distortion of waiting times in the short term because removal of people no longer requiring treatment is included with other removals in the formula used to determine waiting times (see section 2).

5 PARTICIPATION RATES

The audit sought to determine participation rates for adults, and for children.

5.1 ADULTS

The Australian Health Ministers' Advisory Council Steering Committee for National Planning for Oral Health have proposed a minimum standard for general care for adults of one course of care every three years[3]. There are an estimated 70 000 adults in the target population. On that basis, the number of clients actively participating is the number that have received or attempted to receive general care in the past three years.

That number is estimated to be those on the general care waiting list (11 771 as at April 2002), together with the number of clients receiving general care over a three-year period (2 189 x 3).

Participation rate estimation

The participation rate is then estimated to be:

(11 771 + 2 189 x 3) / 70 000 = 26%.

Of the 26% of eligible adults attempting to access general care (participating) approximately one third are successful.

[3] Australian Health Ministers' Advisory Council Steering Committee for National Planning for Oral Health. 2001. *Oral health of Australians: National planning for oral health improvement - Final Report pp 100-101*

In determining the actual number of patients per year we are not including emergency care statistics. In some instances, patients receiving emergency care also receive general care, however, these cases are also included in general care statistics.

5.2 CHILDREN

The Australian Health Ministers' Advisory Council Steering Committee for National Planning for Oral Health have also proposed a minimum standard for general care for children of one course of care every two years[4]. For the estimated 110 000 children in OHS's target population, that translates to 55 000 patients per year.

Excellent children's service

Dental therapists provide children's services and all indications are that an excellent service continues to be provided. We note from the last three annual reports (i.e. 1998-1999, 1999-2000, 2000-2001 that the quoted figure for annual 'occasions of service' for the children's service is approximately 80 000, and conclude that participation rates for children are in excess of the minimum standard set.

Recommendation 13

Based on high participation rates for the Children's Service and low participation rates for the adult service, consideration should be given to redirecting resources from the children's service to the adult service. Accordingly OHS strategy of providing additional training to dental therapists to enable them to work on adults is endorsed.

6 SUFFICIENCY OF DENTAL RESOURCES

The audit sought to determine the required number of dentists to achieve reasonable oral health outcomes.

6.1 INTRODUCTION (DENTAL RESOURCES)

Resourcing insufficient to meet emergency demand

The waiting times produced by the EXACT system clearly demonstrate that the number of dentists is currently insufficient to provide general care. In addition, there is evidence from the temporary operation of the 'standby' list, and the practice of providing appointments based on a first-come first-served basis from 8.30AM

[4] Australian Health Ministers' Advisory Council Steering Committee for National Planning for Oral Health. 2001. *Oral health of Australians: National planning for oral health improvemen - Final Report pp 100-101*

every morning that, at least in the Southern region, resources are currently insufficient to meet demand for emergency care.

To determine the extent of the problem we attempted to estimate the required level of dental resources. OHS was unable to provide a model for determining the required number of dentists. This inability is seen in recent budget submissions, which identified the need for more dentists, without specifying the numbers required.

We considered a number of different models for determining the optimum number of dentists:

6.2 THE WAITING LIST MODEL

This model uses the growth in the waiting list over a year as a basis for calculating the additional dentists required.

Based on increase in waiting list

In the 2000-2001 financial year 14 510 adult patients received care from an average 14.5 dentists. Based on that ratio we estimate that the additional 2 169 patients on the waiting list in the period May 2001 to April 2002, (using adjusted waiting lists, as discussed in section 2.1), would have required an additional 2.1 dentists. Therefore, this model suggests 16.6 as the required number of dentists to maintain waiting lists at their current level. A larger number of dentists should result in a decrease in waiting lists.

This model reflects observed demand for services but probably understates the long term demand since many people have chosen not to be included on waiting lists because of unrealistic waiting times. Theoretically a larger number of dentists than 16.6 should result in a decline in numbers on the waiting list, but in practice it is likely that higher participation rates would slow the rate of decline.

6.3 THE ADA MODEL

Based on recommendation of ADA

This model relies on a recommendation of the Australian Dental Association (ADA) for number of dentists per population and applies it to adult numbers in the target population.

The ADA has recommended that there should be 36.8 dentists per 100,000 people. The adult target population is estimated at 70,000, and on that basis, OHS needs 25.8 dentists.

This model overcomes the problem of low participation rates discussed for the previous model, but it may be unrealistic for an over-burdened medical system to deliver the level of service recommended by the ADA.

6.4 MINIMUM STANDARD MODEL

Based on proposed minimum standard

The Australian Health Ministers' Advisory Council has proposed as a minimum standard that all eligible adults should receive at least one course of general dental care every three years on average.

Applying this to Tasmania's 70 000 adults within the target population, OHS needs to provide a course of care to at least 23 333 patients per year. Based on 2000-2001 data, when an average 14.5 dentists saw 14 510 patients, OHS needs 23.3 dentists.

This model is based on an objective standard, but uses current efficiency rates to calculate the required number of dentists.

6.5 AVERAGE VISITS MODEL

As for the previous model, the Average Visits model assumes that OHS needs to see 23 333 patients per year. The average for Australian dentists is 2 800 patients per year. On that basis, OHS require only 8.3 dentists and currently have an over-supply.

Considerable caution warranted

This model needs to be applied with considerable caution. The implication is that OHS dentists are extremely inefficient, however, our analysis (refer section 10) indicates that, while there is substantial scope for improvement, a reasonable level of efficiency relative to the OHS cost structure is being achieved. Other possible explanatory factors for the disparity between the number of patients treated by an average Australian dentist and OHS dentists include:

- The nature of the services provided by OHS (mainly restorative); and
- The number of services provided per visit.

Accordingly, this model is rejected.

6.6 OTHER STATES MODEL

This model uses ratios of dentists to target population in other states to determine a reasonable ratio for Tasmania.

Some data was obtained for other states and ratios calculated which indicated a ratio of between 160 and 200 dentists per million of target population. On that basis, Tasmania would have between 22 and 28 dentists.

Data considered unreliable

However, for this purpose the data was considered unreliable without an understanding of the service delivery models and composition of the target population in those states. For example, in Tasmania children are always treated by dental therapists in the first instance. Without knowledge of the practice in other states, comparison of the ratio of dentists to the target population becomes meaningless.

Application of this model requires better understanding of definitions of target populations and service delivery in the surveyed states than was obtained for the audit. However, this model is a possible and practical method of determining a reasonable figure for the required number of dentists.

6.7 PREFERRED MODEL

We preferred the 'Minimum standard model' for the reasons given above. That model indicates that 23.3 dentists are needed to achieve the minimum standard proposed by the Australian Health Ministers' Advisory Council.

In the short term, 15 to 20 dentists would be capable of producing significant improvement in the oral health of the target population, and of reducing the waiting lists and times, to reasonable levels. However, it has been demonstrated in other jurisdictions that demand increases once potential clients are aware that additional resources have been made available to the service, so that in the longer term, a smaller number of dentists is unlikely to reduce waiting times to acceptable levels.

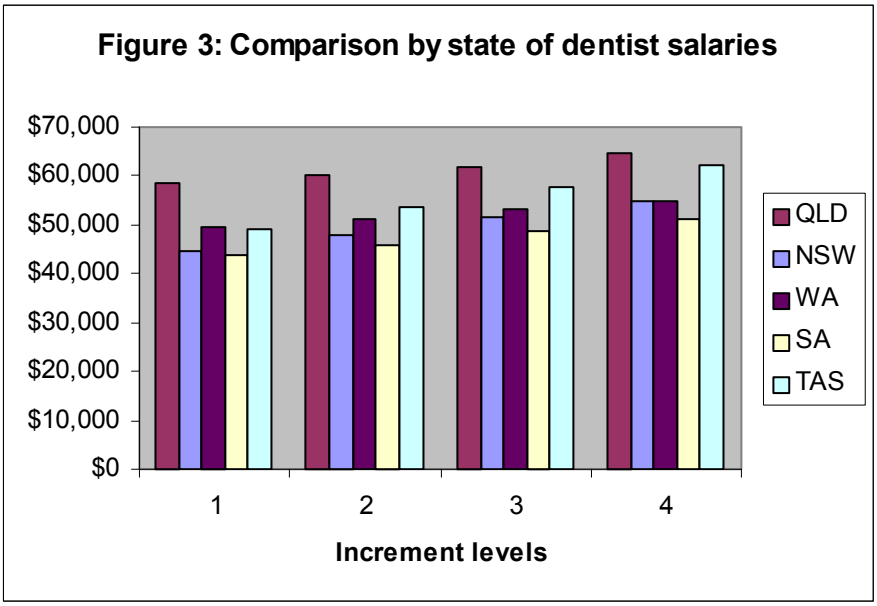
Achieving 'minimal standard' will lead to improved oral health

In the longer term, achieving the 'minimum standard' should lead to improved oral health in the target population. This in turn will result in OHS dentists being able to service more patients per year, and ultimately to a lower number of dentists being required, (possibly as low as 8.3 as indicated by the 'Average visits' model).

It is unfortunately true that Tasmania's poor record of providing oral health services in the past has led to the need for an expensive service in the present. It follows that consideration should be given to the future cost of providing expensive restoration services and emergency treatment when determining the current level of oral health services.

6.8 ATTRACTING DENTISTS TO OHS

Figure 3: Comparison by state of dentist salaries



Source: Inquiries to public dental services

Tasmania not attractive to prospective dentists

Currently, OHS is not an attractive destination for prospective dentists. Although its salary rates for new graduates are comparable with the mainland public health services (see figure 3), it is relatively unattractive because of:

- A high percentage of 'less professionally satisfying' emergency care;
- Inability of dentists to provide a course of care instead of one-off treatment;
- Higher salaries in the private sector;
- Lack of a dental training centre in Tasmania (graduates are more likely to work close to their place of training); and
- Lack of a teaching hospital (to allow continual improvement in skills).

Nevertheless, it should be noted that in the period of the Commonwealth dental health program it was possible to recruit dentists (many of them temporary or casual), and to purchase services in the private sector. Discussions with senior staff at OHS suggest that this may again be possible provided funds are available, although it was pointed out that some previously accepted overseas qualifications are no longer automatically accepted.

Some overseas qualifications no longer accepted

In its most recent budget submission OHS has proposed the following strategies be used to increase dental resources:

- Extending the emergency scheme to the North West and North of the state;
- Broadening the role of dental therapists through training to allow them to provide adult care; and
- Increasing salary levels for dentists with bonuses linked to performance

Advantages in attaching dental units to hospitals

An additional strategy currently being considered is the establishment of dental units in Tasmanian Public hospitals. As noted above, the lack of a dental training centre in Tasmania may be a deterrent to prospective OHS dentists. Dental units attached to major hospitals might improve the recruitment and retention of dentists by creating a continuing education focus for dentistry in the state. Additional advantages include:

- Better management of patients with co-morbidities requiring medical support;
- Improved triage of clients requiring urgent care;
- Improved in-patient care; and
- A more efficient environment for providing dental care to severely handicapped, homebound and institutionalised patients.

There is also the potential disadvantage that funding might be diverted from general dental care.

Remote area allowances

Our analysis did not support the contention that Tasmanian salary rates are lower than rates in other Australian states. However, to compensate for other above-mentioned disadvantages we agree that there may be a case for performance pay, and in addition, remote area allowance and retention bonuses. Remote area allowances might seem unrealistic at first glance, however, the remoteness of Tasmania from dental training facilities and teaching hospitals has been shown to be a significant factor in deterring dentists from working in Tasmania.

Recommendation 14

A model should be developed to enable objective determination of the required numbers of dental workers.

Recommendation 15

In the short term, consideration should be given to reinstating the after-hours scheme for private dentists previously used in the Northern region during the period of the Commonwealth dental health program.

Recommendation 16

Consideration should be given to establishment of dental units at public hospitals.

Recommendation 17

In the longer term the following additional strategies for increasing dental resources are proposed for evaluation and consideration:

1. **Assistance to dentists setting up their own practice in Tasmania on the basis that the dentist agrees to treat set percentages of public patients for an agreed number of years (e.g. 80% in year 1, 60% in year 2, 40% in year 3, 20% in year 4). This method provides short term dental resources to OHS, but also offers the benefit of increasing the number of dentists in Tasmania. The exact nature of the assistance needs to be discussed with dentists, but the provision of guaranteed patients should be, in itself, a significant advantage for a new practice.**

2. **A 'bonding' scheme for dentistry students, similar to the scheme offered by the Queensland Dental Service. In this scheme dentistry students are recruited in September of the second year of their course. In exchange for financial assistance during tertiary study they are required to complete a contractual service period after graduation. The Queensland scheme is supported by specific legislation.**

3. **Ensuring OHS has the administrative resources, and recruitment skills to actively recruit recently graduated dentists and experienced dentists.**

4. **Setting up a training scheme (with for example 2 weeks of paid training leave per year) linked to a teaching hospital in mainland Australia to ensure OHS dentists are not professionally disadvantaged by working in Tasmania.**

7 FUNDING

The audit sought to determine whether current levels of funding were sufficient to achieve reasonable oral health outcomes, and the extent to which the department had addressed the shortfall in funds resulting from withdrawal of Commonwealth funds at the end of 1996.

7.1 IMMEDIATE RESPONSE TO LOSS OF CDHP

Discontinuation of CDHS in 1996 was a surprise

Prior to 1994, Tasmania provided almost exclusively emergency care for adults. The Commonwealth Dental Health Program (CDHP) provided an additional $3.4 million per year, which enabled the service to be extended to provide general care. The service was only intended to be a short term measure, although there was an understanding at operational level (Commonwealth and State) that the scheme would continue for the foreseeable future. Accordingly, the axing of the scheme from the end of 1996 was a considerable surprise to the department and OHS.

The shortfall in funding resulted in an immediate incapacity to fund salaries for existing OHS employees and to continue various private sector schemes. The department responded by:

- Terminating employment of casual and temporary dentists;
- Staff reduction associated with introduction of community-based dental clinics;
- Reduced management structure;
- Abolition of student training;
- Implementing fees, (initially estimated to be 38 per cent of the CDHP funds), as recommended by the Dever Review;
- Obtaining a small increase in appropriation funding; and
- Axing private sector programs.

The Dever Review was submitted in November 1997. The 53 recommendations included introduction of contributory fees and replacement of the mobile service to schools with a community-based dental-clinic network. Other Dever recommendations resulted in reduced demand for services in some areas.

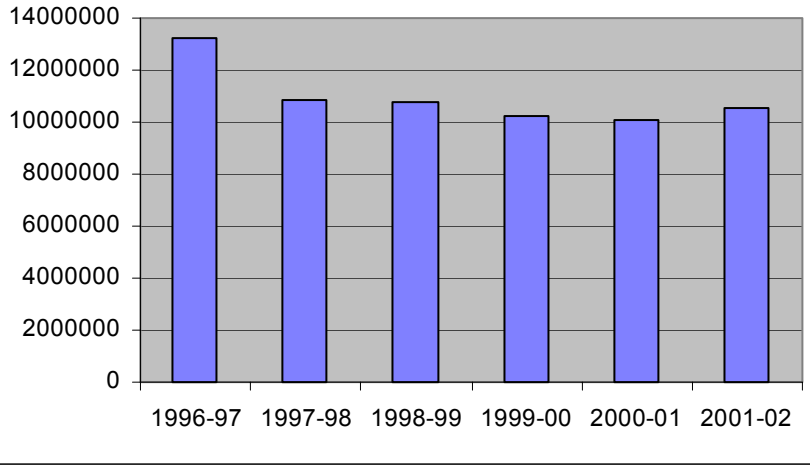
7.2 FUNDING FROM 1996 TO 2002

Virtually no general care now provided

There was clearly a significant loss of service through loss of the private schemes and reduction in internal dental resources, which has resulted in extensive waiting lists and long waiting times. There has also been a steadily increasing focus on emergency care to the extent that at present there is virtually no general care being provided.

Funding in that period is summarised in figure 4 below.

Figure 4: Funding 1996-97 to 2001-2002



Source: Budget Documents 1996-1997 to 2001-2002

After the initial response, some unsuccessful attempts were made to seek relatively small amounts for specific purposes (for example, implementation of a new management structure).

Other than that, we could find no evidence of:

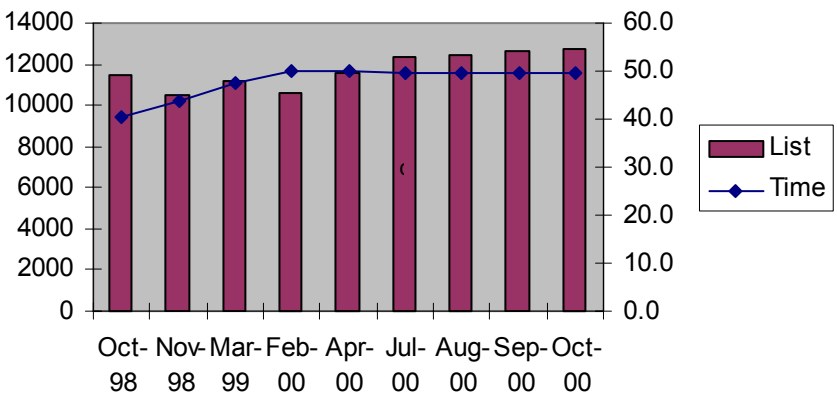
- Additional funding, or requests for additional funding, for the service;
- Decisions to reduce services; or
- Attempts to monitor and increase efficiency.

OHS did prepare a funding submission for an additional $800,000 for 2000-2001 and subsequent financial years, which was rejected. A subsequent submission for 2002-2003 was partially accepted, with the result that an additional $5.3 million will be provided over the next four financial years.

Performance information not adequate

A possible reason for the apparent lack of a response in the period 1997 to 2000 is that performance information provided to executive management of the department was not adequate to disclose the worsening situation because of the lack of information about participation rates, proportion of general to emergency care, and the number of dentists. As discussed in section 1, the only regular performance indicators used by executive management information appears to have been waiting list data as summarised in figure 5.

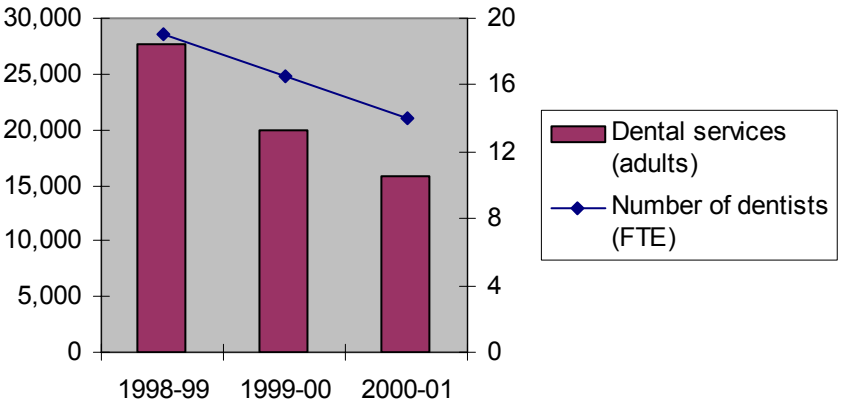
Figure 5: Movement in dental waiting lists (numbers) and times (months)



Source: Cabinet Information Briefs Oct 1998 to Dec 2000

More comprehensive and realistic performance information would have disclosed reducing activity levels, (as in figure 6), decreasing proportion of general care and falling participation rates.

Figure 6: Activity measures 1998-99 to 2000-01



Source: DHHS Annual reports, Human resources section of DHHS.

7.3 CONCLUSION (FUNDING)

To some extent DHHS appears to have been caught between the proverbial 'rock and a hard place' with abandonment of general care for adults not politically acceptable, and replacement of Commonwealth funds not compatible with Treasury funding principles.

In the short term the strategies implemented were a reasonable response, and allowed OHS to maintain a reduced level of general care.

Resources not sufficient

In the longer term, the resources were clearly not sufficient and additional funding was always going to be necessary to maintain an adequate level of general care for adults. We noted some internal attempts to obtain relatively small amounts for specific purposes, which were subsequently vetoed by internal processes. Other than that, we could find no evidence of attempts to get increased funding until a belated and unsuccessful effort in the 2000-2001 financial year.

Recommendation 18

The department should recognise that providing sufficient levels of general care to achieve acceptable standards of oral health in the target population will require a substantial injection of funding.

8 DEVER REVIEW IMPLEMENTATION

Dever Review recommendations implemented

As at August 2001 the status of implementation of the Dever Review recommendations was:

- In progress: 16
- Completed: 26
- Deferred: 1
- Rejected: 4
- Not started: 3
- Waiting: 6

Of those recommendations with the status 'waiting', four recommendations were waiting for approval of a business case (funding) and the other two were minor issues.

Of those 'In progress' at the time of this update, most have now been fully implemented.

Implementation commendable

Given the lack of administrative resources provided for implementation of the recommendations, (as outlined in section 14), the level of implementation is commendable.

9 OUTSOURCING

The audit sought evidence that optimum use was made of outsourcing to meet demand for services, and to reduce overall cost. It also reviewed management of outsourcing practices.

9.1 INTRODUCTION (OUTSOURCING)

The term 'outsourcing' covers a range of options including:

- Replacing the entire OHS with a subsidy scheme, similar to the Medicare scheme;
- Purchasing some services from the private sector, while continuing to provide some or most services in-house.

Complete outsourcing unrealistic

The first option would almost certainly result in better oral health for the target population, but at a considerably increased cost because of improved access to dental services, without the long waiting times inherent in the current system. There would also be a need for a powerful regulatory body to guard against fraud on over-servicing. Overall, this option is not considered to be realistic in the current economic climate.

Use of the second option should be based on two considerations; effectiveness and efficiency. The effectiveness criterion applies when OHS is unable to meet its supply objectives (as is presently the case). The efficiency criterion applies when services can be purchased from the private sector at lower cost than providing those services in-house.

9.2 CURRENT USE OF OUTSOURCING

Cost of private sector compared to public sector

Currently, OHS is purchasing services from the private sector for both prosthetics and emergency care. The services are purchased at DVA rates, (a set of rates paid for dental work by the Commonwealth Department of Veterans Affairs), although typical private sector rates for dental services are substantially higher.

Our analysis (based on services provided and budget costs) indicated that the current full cost of providing dental services is 49 per cent above DVA rates. However, that full cost includes a large component of overhead expenses, so that the marginal cost of acquiring additional in-house dental services is only 10 per cent above the cost of purchasing those services from private dentists, at DVA rates.

9.2.1 Emergency voucher system

Voucher system

Private dentists are engaged to perform emergency care using a 'voucher' system, whereby some clients are provided with a voucher number by the Customer Service Officers either over the telephone or at the front counter. The voucher system for emergency dental treatment is currently only operating in the Southern region of the State. The client receiving the voucher is advised of the nearest participating dentist, of which there are currently only a handful. A client only has seven days from date of issue, to use the voucher before it expires.

Vouchers are assigned when public dentists cannot deal with all of the emergency patients. Unfortunately, this is a daily occurrence due to insufficient emergency appointment slots to deal with demand. Holders of a private voucher are only entitled to have fillings and extractions (excluding wisdom teeth) dealt with by private dentists.

The vouchers cost $20.00 each with the client paying their fee direct to the private dentist, who then deducts the client's contribution from the charge-back to the dental service. This arrangement leaves the dental service susceptible to being charged the full amount by the private dentist who has not been paid by the public client after the receiving the service. Tracking the emergency vouchers can be quite difficult as the dental service will not normally know which vouchers have been taken up until they are billed by the private dentists. This in itself can take some time depending upon the individual billing system employed by the private dentists.

Few private dentists accept vouchers

The number of private dentists participating in the voucher scheme is low, and as a result clients who are issued vouchers do not always succeed in getting an appointment with a private dentist. In those instances, the client reapplies to OHS for emergency care. There are no firm guidelines in place to restrict the number of vouchers being issued per day, however, a shortage of participating dentists ensures the emergency voucher system does not exceed its budget.

9.2.2 Prosthetic voucher system

The prosthetic voucher system is available for only upper and lower full dentures or for a full upper or lower denture. The prosthetic voucher system differs in a number of ways. Notable differences being;

- The voucher system operates statewide;
- The client has to physically collect a voucher, requiring sign-off by a Customer Service Officer, and must complete co-payment before the denture is manufactured and supplied; and
- The life of the voucher is for 30 days.

9.3 FINDINGS

The emergency voucher system is a pilot program (commenced April 1999) that was initially trialled in the Southern region and has now been extended to the North West region. Funds have been sought in a 2001 budget submission to extend the program to the Northern region.

There is only a small number of participating private dentists. Some private practitioners having recently withdrawn their willingness to accept vouchers citing reasons such as:

- Unwillingness to put up with abusive public patients;
- The rate paid by OHS (the DVA rate) is significantly less than typical private rates; and
- Emergency work is considered by many dentists to be less pleasant than normal dental work.

No control over number of vouchers issued

There doesn't appear to be a control over the number of vouchers issued. In the current situation this has little affect other than to inconvenience patients who expect to be treated but cannot find a private practitioner to perform the work. If more private practioners were available for the scheme the lack of this control could lead to cost over-runs.

9.4 CONCLUSION (OUTSOURCING)

OHS has adopted a pragmatic approach to outsourcing with the voucher system adding the equivalent of two dentists to their total resources, and a similar proportion of additional prosthetic resources. Outsourcing of dental services has enabled a level of general care to be maintained in the South that has not been possible in the North, at the DVA rate (lower than the full cost of employing dentists).

It is of concern that only a small number of private dentists have made themselves available to provide dental services under the voucher scheme, and that there is evidence of increasing reluctance to provide those services.

Recommendation 19

OHS should give priority to retaining private dentists in the emergency care scheme. This might involve excluding patients known to be abusive, and increasing the rates paid to private dentists.

Recommendation 20

The emergency care voucher scheme should be extended to the North of the state.

Recommendation 21

Control over issue of vouchers should be improved to ensure that most vouchers are only issued in accordance with available funds and the likelihood of clients being able to get an appointment with a private dentist.

Efficiency criteria

Efficiency of service
Cost per population
Management of facilities
Staff mix
Administrative salary expense
Fee collection
Client ‘no shows’

10 EFFICIENCY OF SERVICE

The audit sought evidence that services provided by OHS were efficient.

10.1 INTRODUCTION

Interstate comparison difficult

We decided not to review efficiency in comparison to public dental services in other states because of the difficulty in obtaining reliable and comparable data. Similarly, comparison with previous periods was rejected because the changing nature of the work (for example, the increased proportion of emergency care) makes comparison over time very difficult. The approach adopted was to attempt to value services provided at commercial rates, and compare with the full cost of providing the services.

We focused on the adult service (general and emergency care) because of the inability to meet demand in that area. A less rigorous analysis was also made of the efficiency of prosthetic service delivery. Efficiency of the children's service was not reviewed.

We also performed a further analysis of adult dental services comparing standard time for services (as provided by the EXACT system) with actual time worked.

10.2 ADULT SERVICE (GENERAL AND EMERGENCY CARE)

10.2.1 Commercial valuation of services

Step 1: Obtain annual value at DVA rate

The EXACT system measures the value of dental services provided at the DVA rate (see section 9.2). We obtained summary information for the period 1 April 2001 to 31 March 2002. Although some information for some centres was not obtained, we were able to extrapolate using reliable patient data from other sources. The value of adult services provided at DVA rates was estimated to be $2.31 million.

Step 2: Convert to typical private dentist rates

We converted the estimated value to a private sector valuation of the services using typical private dentist rates to obtain a commercial valuation of the work performed. We found that private rates exceeded the DVA rates by 58%. Revaluing the annual adult services of OHS dentists at private rates provided a value of $3.66 million.

Step 3: Compare to actual (or budget costs).

Direct budget for adult services for the 2000-2001 financial year was $2.62 million. After allocation of overheads (including a proportion of

department overheads) on the basis of direct costs, the budget for adult services was $3.53 million.

Impressive result

On that analysis the value of dental services performed as measured at commercial rates exceeds the cost of the adult component of OHS. This is a good result in view of the low number of dentists currently employed, since economies of scale would undoubtedly result from a better ratio of dentists to overhead expenses. We conclude that adult service delivery by OHS is reasonably efficient in relation to OHS's cost structure, but that improved efficiency should result from the employment of more dentists.

10.2.2 Comparison of standard and actual times

The EXACT system provides recommended times for all dental services provided. Based on this information the recommended time for all dental services provided in the 2000-2001 financial year was 12 000 hours. Actual dental hours available were calculated to be approximately 19 000 hours. This apparent inefficiency is supported by the relatively low numbers of patients per OHS dentist compared with the national average (see section 6.4).

10.2.3 Comparison of the two methods

The conclusion from the two analyses is that while a reasonable level of efficiency is being maintained in relation to OHS's cost structure, there is scope for substantial improvement.

10.3 PROSTHETICS

A similar methodology to the above was used to determine efficiency of prosthetic service delivery.

The results, though based on a more limited comparison of rates, indicated that full prosthetic service costs exceeded the value of services at private sector rates by a significant margin. Caution is needed in interpreting this finding as we noted some evidence that not all prosthetic work was being recorded on the EXACT system.

Review of prosthetic efficiency needed

Based on the exercise we consider there is a need for review of the efficiency of prosthetic service delivery.

We have commented elsewhere (section 12.3) that having four prosthetic laboratories may not be efficient, and that the mix of prosthetists and dental technicians in the South is not ideal.

Recommendation 22

A model for assessing the efficiency of service delivery for the various services offered by OHS should be developed, and efficiency indicators regularly reported with other performance indicators.

Recommendation 23

A review should be performed to determine the reasons for the disparity between actual and standard times for provision of dental services.

11 COST PER POPULATION

The audit sought to compare the overall cost of service per target-group population with other states

Comparison difficult and unreliable

Comparison between states has proved to be difficult and unreliable because of the following factors:

- Some states have teaching hospitals which provide emergency services as well as their teaching functions;
- The proportion of adults in the target populations varies substantially;
- It was not possible to verify to audit standards that all costs, including overheads, were included;
- The States provide different services, require different fee contributions and have different eligibility requirements.

For those reasons, we have not disclosed our calculated ratios of total cost to target population. The ratios for most states were found to be reasonably comparable, except for New South Wales and Victoria. This may reflect better standards of oral health in the target population in the two largest states.

12 MANAGEMENT OF FACILITIES

The audit considered possible duplication or under-use of facilities, and the extent to which the issues had been considered in recent years.

OHS facilities, for the purposes of this audit, have been categorised accordingly to whether they are used by dentists, dental therapists or prosthetists. The facilities used by OHS can be either stand-alone or shared facilities.

12.1 DENTISTS

Dentists employed by OHS currently operate in the major population centres - Hobart, Launceston, Devonport and Burnie.

Table 6: Dentists and dental chairs by region

	FTE Dentists	Dental Chairs[5]
South	5.0	12
North	3.4	13
North West Coast	3.4	10

Table 6 illustrates that there is a considerable excess of chairs in relation to the number of dentists, and reflects the decline in numbers of dentists in recent years.

Two chair policy not popular

One suggestion made during the course of the audit was for introduction of a two-chair policy, as commonly applied in the private sector. In the private sector the two-chair policy allows dentists to maintain a flow of minor dental work in one chair while dealing with more time-consuming work in the other chair. Discussions with senior staff did not generate much support for the concept in the public sector. One of the reasons given was that most of the work performed in the public sector was not well-suited to a two-chair policy and may not result in worthwhile gains in efficiency.

Given the identified disparity between actual and standard times in delivery of dental services and the prevalence of use of two chairs in both the public and private sector we believe that further consideration should be given to introduction of a two-chair policy.

12.2 DENTAL THERAPISTS

Dental therapists, who currently can only treat children under the age of 18, are more extensively dispersed throughout the state. They are not only based in the major population centres but also maintain a presence in many smaller locations often using mobile and demountable units.

Widespread dispersion of therapists supported

We support wide dispersion of dental therapists, because of the importance in achieving high participation rates for children. Regular dental appointments for children are a significant factor in achieving better long-term health outcomes not only because of timely treatment, but also because this is the most important mechanism for providing oral health education. The Dever Review pointed out that Tasmania has a low level of decayed, missing or filled teeth, due largely to water fluoridation and fluoride toothpastes, but also to the availability of the

[5] Dental chairs are also used by dental therapists and prosthetists as required

school dental service. A widespread reduction in the spread of dental therapists throughout the state would no doubt result in deterioration in children's dental health.

Though there are currently a number of vacant dental therapists positions on the North West Coast, the distribution of dental therapists throughout the state on a regional basis is reasonably even, as illustrated in table 7.

Table 7: Dental therapists and chairs by region

	Points of Representation	FTE	Chairs
South	16.0	15.8	29.0
North	13.0	13.7	21.0
North West	11.0	9.8	22.0

There are a number of sites from which dental therapists operate, which are shared with other health providers. From our enquiries, we have determined that around 12 sites are now shared. They are housed in community health centres, schools, district hospitals and, in the case of Sheffield, as part of a community space project. The current strategy, as recommended by the Dever Review, is to co-locate facilities with other related services, wherever practical.

Mobile units aging

OHS management confirmed that a number of the mobile units were aging but were still suitable for use in the field in order to maintain an adequate children's service in remote areas. The service is currently considering replacement of the mobile units with driveable units, as they will not require separate vehicles for towing.

12.3 PROSTHETICS

Prosthetic service delivery has remained unaddressed

In Tasmania there are four prosthetic laboratories operating in Hobart, Launceston, Devonport and Wynyard. Clinical services operate from Hobart, Launceston, Devonport, Burnie, and to a limited degree Wynyard. This provides a sharp contrast with the Victorian public dental service, which has only one laboratory. Despite a recommendation in the Dever Review that prosthetic service delivery should be investigated the issue does not appear to have been adequately addressed.

An options paper entitled *Future Provision of Dental Prosthetic Technical Services in Burnie Tasmania* canvassed a range of options for the provision of prosthetic services on the North West Coast but has not resulted in subsequent action.

12.4 CONCLUSION (MANAGEMENT OF FACILITIES)

Although there appeared to be a number of directions in which OHS was moving in relation to the future use of its facilities, we consider there is a need for policy in this area to be developed and documented.

Scope for further efficiencies

While facilities available to support dental services appear to allow for reasonably efficient, effective and equitable service delivery, planning would be enhanced by documented objectives and standards.

Audit believes there may be scope for further efficiencies to be achieved in relation to the provision of prosthetic services.

Recommendation 24

Consideration should be given to the introduction of a two-chair policy as a method of increasing the efficiency of dental service delivery.

Recommendation 25

A policy on the provision and use of oral health facilities should be developed and used to determine the number and location of prosthetic laboratories in Tasmania.

13 STAFF MIX

We reviewed the mix of dentists, dental therapists, dental attendants, prosthetists and dental technicians to determine whether the current mix is efficient and effective.

13.1 TERMINOLOGY

The categories of dental worker currently operating in Tasmania include:

Dentist:

A person licensed to practice dentistry under the laws of the appropriate state. Dentists are concerned with the prevention and control of diseases of the oral cavity and the treatment of unfavourable conditions resulting from these diseases, from trauma, or from inherent malformations. They are legally entitled to treat patients independently, to prescribe certain drugs, and to employ and supervise auxiliary personnel.

Dental Therapist:

An operating auxiliary legally permitted to treat special populations under the general direction of a dentist. Dental therapists are responsible, within the limitations in which they work, for providing

dental treatment and dental health education in connection with the provision of school dental services. They also assist in establishing and maintaining effective liaison and communication with relevant community groups, organisations and individuals in a designated area.

Dental Attendants:

A non-operating auxiliary who assists the dentist or operating dental auxiliary in treatment, but who is not legally permitted to treat patients independently. A dental assistant may only work under supervision. Traditionally the duties of a dental assistant include immediate chairside assistance in the handling of dental equipment and materials used by the dentist or operating dental auxiliary in treating patients.

Dental Prosthetist:

Qualified registered advanced dental technicians, who take impressions and make and fit dentures and mouthguards. The term applied to a licensed dental technician who has received extra training and is registered to provide full denture care directly to patients, without a dentist's prescription. The advanced dental technician cannot provide partial denture care to patients and can only work under their own name as an advanced dental technician.

Dental Technician:

A non-operating auxiliary who fills the prescriptions provided by dentists or advanced dental technicians regarding the laboratory construction and repair of oral appliances and bridgework. A dental technician cannot deal directly with the patient.

13.2 CURRENT RESOURCES

Current resources expressed in terms of full-time equivalence (FTE) were:

Table 8: Dental workers by category

Dentists:	12.0
Dental therapists:	40.7
Attendants:	29.4
Prosthetists:	7.6
Technicians:	6.4

13.3 MIX REQUIREMENTS

The following rules were extracted from internal documents, and discussions with senior OHS staff. The rules specify:

- 1 dental attendant to 1 dentist;
- 1 dental attendant to 2 dental therapists;
- 1 dental attendant to 1 therapist where there is only one therapist on site; and
- 1 dental technician to 1 prosthetist.

13.4 CONCLUSION (DENTAL SERVICES)

Currently insufficient numbers of dentists

Currently, adults are treated exclusively by dentists and children treated in the first instance by dental therapists. From the steady increase in waiting times for adult general health care, it is evident that there are currently insufficient dentists, however, this problem reflects the difficulty in attracting dentists, and lack of funding, rather than incorrect determination of the staff 'mix'.

The current number of dental therapists is at least sufficient to meet demand for services to children. One of the recommendations of the Dever Review is to provide additional training to some dental therapists and have those dental therapists provide services to adults. This proposal was discussed in more detail in section 6 (Sufficiency of dental resources).

Based on the current number of dentists and OHS guidelines, there should be 12 attendants. Based on the current number of dental therapists, there should also be a minimum of 20 attendants with an extra 0.5 attendants for any site where there is only one dental therapist. In total then, there should be at least 32 dental attendants. With a full time equivalent of 29 officers, OHS has a reasonable fit between dentists and attendants.

13.5 CONCLUSION (PROSTHETIC SERVICES)

As noted above the mix of prosthetists to technicians sought by OHS is one to one. Currently, on a statewide basis there are 7.6 FTE prosthetists and 6.4 FTE technicians, which indicates that the required mix is fairly close to being met.

Imbalance of prosthetists to technicians in the South

An examination by region shows that while in the North and North West regions there is a reasonable match between prosthetists and technicians, there is an imbalance in the South with four prosthetists but only one part time technician. This may be inefficient with prosthetists presumably performing tasks that could be performed by relatively less expensive dental technicians.

Recommendation 26

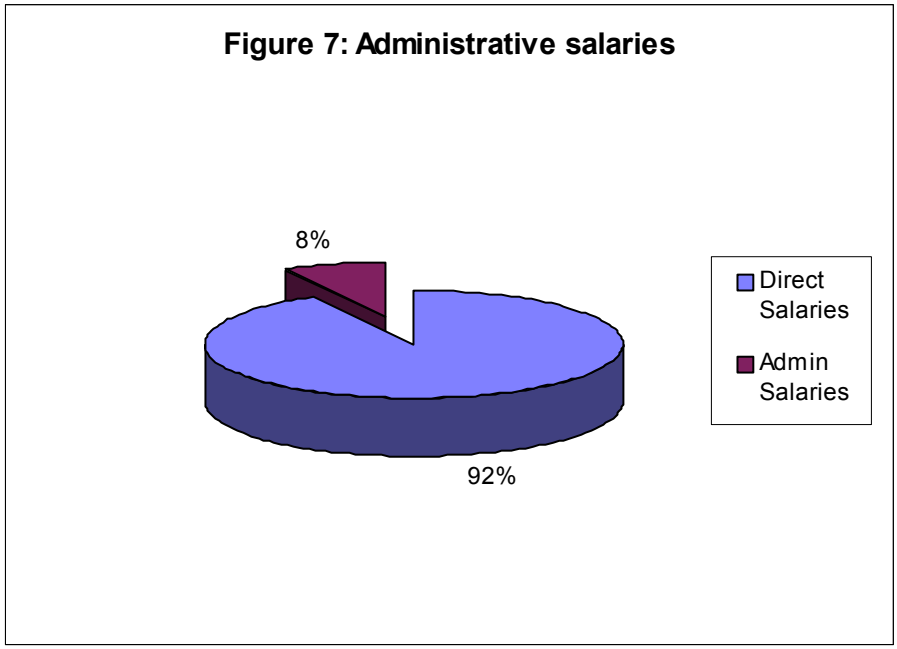
OHS should endeavour to correct the imbalance in the Southern region between prosthetists and dental technicians.

14 ADMINISTRATIVE SALARY EXPENSE

The audit sought evidence that administrative salaries are a reasonable proportion of total salary expense.

Based on establishment data as at 13 February 2002, salary expenses have been summarised as follows:

Figure 7: Administrative salaries



Source: Establishment data 13 Feb 2002

Comparative analysis inconclusive

We attempted to compare the proportion of administrative salaries with dental health services in other states, however, because of the

different structure of dental service delivery and uncertainty in measurement methods, and definitions, the analysis was inconclusive.

As an alternative, we compared the administrative salary proportion with a typical small dental practice, as shown in table 9.

Table 9: Typical small practice administrative costs

Establishment	Actual Salary	Direct Salaries	Administrative Salaries
3 Dentists	200,000	190,000	10,000*
Receptionist/Admin support	35,000		35,000
Total	235,000	190,000	45,000
Administrative Component as %			19%

* Based on 5 per cent of dentists time being of an administrative nature in a small practice, for example, accounting tasks.

This analysis is only intended to be indicative. Contextual factors that also need to be considered include:

- Economies of scale for OHS; and
- Significant policy aspects to OHS function that do not apply to private practice.

Administrative salaries relatively low

Overall total administrative salaries at OHS would appear to be relatively low.

It is also noted that in prior years, the proportion of administrative salaries was lower because of the greater numbers of dentists employed. In that context, management of OHS have faced a formidable task since loss of the CDHP.

Senior management resourcing previously insufficient

A particular area where administrative resourcing appears to have been insufficient has been in the area of senior management.

- The acting manager from 1997 to 2001 was only in that role on a part time basis (additional to his dental work);
- He was inexperienced and untrained as a manager;
- He was required to manage a high-risk area with an identified shortage of dental resources, and funding;
- Senior administrative support was provided by only one executive officer covering the three regions;
- His responsibilities included implementation of the Dever Review recommendations (53 separate recommendations), which included introduction of fees

and replacement of the mobile children's service with a community-based dental-clinic network.

It is noted that OHS is currently implementing structural change that will increase the level of senior management resources.

Recommendation 27

The department should ensure that the service has sufficient administrative resources to enable strategy formulation and implementation, strategic planning and preparation of funding submissions.

15 FEE COLLECTION

The audit reviewed the level of outstanding debt, and procedures for managing the debt.

15.1 PROCEDURES

Up-front fee collection preferred

Patients are encouraged to pay their accounts up front prior to the provision of services. It is only when they advise that they are unable to pay up-front that they are offered 14-day accounts. OHS takes the view that, as a provider of last resort, it cannot turn away patients simply because they have an outstanding account. In regards to prosthetics, patients are required to pay up-front for the cost of prosthetics and any arrears.

15.2 LEVEL OF DEBT

Commercial debt collector being trialed

The level of debtors as at 30 June 2002 was $120 000, an increase of $40 000 in the past year. The increase represents 12 per cent of the fees earned in the past year. OHS is currently trialling the use of a commercial debt collector.

15.3 CONCLUSION

The level of outstanding debt is satisfactory given that the annual increase represents less than 1 per cent of the annual budget and that the collection rate of 88 per cent compares favourably with similar government agencies.

16 CLIENT NO-SHOWS

Minimising lost value from clients not meeting appointments.

We performed a simple cost-benefit analysis for the Southern region, only. In the year March 2001 to February 2002, there were 58 instances recorded in the EXACT system of clients not attending appointments.

At the estimated average value of an appointment ($217) the loss of value to OHS was estimated to be $12 600 for the Southern region.

OHS does not make reminder phone calls to clients, as is common practice for private dentists. Were it to do so, the cost of reminding all general patients of their appointment was estimated to be $1.60 per patient, and for the 1 862 patients in the reviewed year, the total cost was estimated to be $3 000.

Complicating the analysis

Complicating the analysis are the following considerations:

- People attempting to get emergency care are often asked to wait in the waiting room in the hope of a cancellation or ‘no-show’, so that sometimes there is no loss of output from a ‘no-show’;
- Sometimes, also, a local patient will be contacted to come in quickly for treatment; and
- On other occasions dentists will be 'running late' and will be glad of the ‘no-show’ to get back on schedule.

This information is only anecdotal. As a consequence, it is impossible to accurately estimate the true loss from no-shows, and to reliably forecast the benefit of reminder calls.

Recommendation 28

Given the current difficulties in meeting demand for emergency care, the practice of making phone calls to patients on the day prior to appointment should be considered.

Equity criteria

17 EQUITABLE PROVISION OF SERVICES

The audit compared service provision between the three regions, and reviewed service delivery to remote areas.

17.1 WAITING TIMES

Using waiting list data provided by OHS and making adjustments as described in section 2, we obtained the following adjusted waiting times as at 31 March 2002.

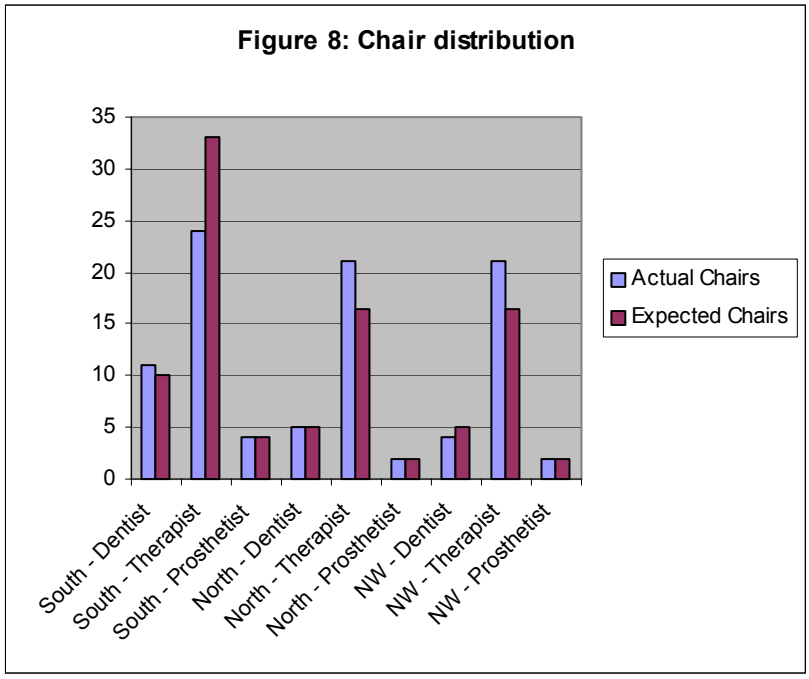
Table 10: Adjusted waiting lists for general dental care

Region	List	Waiting times (months)	Waiting times (yrs)
South	5 211	200.4	16.7
North	6 610	241.2	20.1
NW	1 526	234.8	19.5

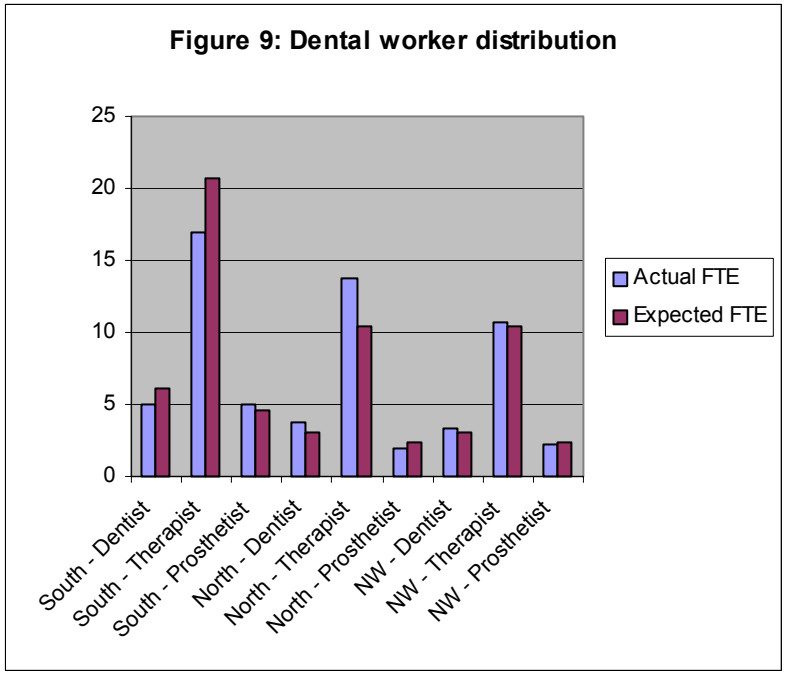
While the waiting times are clearly excessive, there is no evidence of a lack of equity in the services provided to regions.

17.2 LOCATION OF DENTAL CHAIRS AND DENTAL OFFICERS

Assuming the distribution of the target population is similar to the population distribution, approximately 50 per cent live in the South and 25 per cent in each of the North and North West regions. Figures 7 and 8 summarise location of chairs and dental officers by region, compared to the expected distributions, as at April 2002.



Source: Compiled from data provided by OHS staff



Source: Compiled from data provided by OHS staff

Reasonably close fit obtained

Figures 7 and 8 demonstrate that with the exception of a small imbalance in the distribution of dental therapists there is a reasonably close fit between the expected and actual distributions for both dental chairs and dental workers.

17.3 VOUCHER SYSTEM

An examination of the voucher system has been completed in relation to its distribution throughout Tasmania. Each of the four main regional dental clinics throughout the state was contacted to determine numbers of private dentists available for referral of emergency public patients.

We found that several private dentists were available for referral under the voucher scheme in the South and on the North West Coast. However, in the North, the East and West coast and the Bass Strait Islands there was virtually no access to the voucher system. A private dentist travels to Rosebery every Saturday morning, but he is only willing to take a few public patients.

Virtually no access to voucher system in North and North East

17.4 REMOTE SITES

In addition to providing equitable coverage of the major population centres, OHS has 18 mobile chairs (out of a total of 94) that provide coverage of remote and rural areas. These units are staffed by dental therapists and only provide services to children.

17.5 CONCLUSION (EQUITABLE PROVISION OF SERVICES)

Lack of private dentists' participation

There was no evidence of a lack of equity in distribution of dental resources between regions. OHS continued to provide services to children in remote areas. One area of concern was the lack of private dentist participation in some areas of the State.

Recommendation 29

The service needs to actively recruit private dentists to be available to provide emergency care under the voucher scheme, wherever there is a private dental presence.

Audit opinion

AUDIT OPINION

OHS has continued to provide satisfactory levels of dental care to children, and in the main, provision of emergency care and prosthetic services has also been satisfactory. However, the impact of the loss of the DHHS on provision of general care has been devastating. The Commonwealth has argued that the CDHP was only ever intended to be a temporary measure. Nonetheless the reduction in specific dental funding has resulted in a decline in service provision back to pre-CDHP levels.

The immediate response to the loss of the CDHP was satisfactory with termination of casual and temporary staff and transfer of resources from the children's service to adult general care. However, despite the identification of the OHS as a high-risk service, strategic planning and performance monitoring have been inadequate, and the OHS has consequently been required to continue to supply dental and prosthetic services, including general care to adults, with inadequate funding, and insufficient dental resources.

Given the serious shortfall in funding from the loss of the CDHP, the difficulties in attracting dentists, the poor state of oral health in the target population and the need to implement the recommendations of the Dever Review, (including implementing fees and setting up a network of community-based dental clinics), the performance of OHS, in many respects, has been commendable.

On the other hand, the OHS has failed to provide effective strategic planning, to develop a model for required dental resources, to periodically review efficiency and to prepare detailed and well-supported funding submissions. We accept that these failures are largely due to the shortage of senior experienced administrative staff.

It is not our intention to advocate more funding for OHS. The reason for this is that funding decisions cannot be made in isolation. Supply of money is limited and it is usually the case that additional funding in one area can only be made at the expense of another. These decisions are properly the responsibility of the Minister, the Head of Department and the executive decision-making group within the department.

We do, however, believe that failure to provide minimum standards of health care to the target population will inevitably lead to more expensive oral health, and poor oral health outcomes, in the future. Tasmanians are already paying a large price in cost of treatment, and poor oral health because of past failures to provide public general care.

Audit findings against the individual criteria were as follows:

OBJECTIVES, STRATEGIES AND PERFORMANCE INDICATORS

The strategic management process has been poorly documented, has lacked consistency and has failed to address critical issues including the shortage of dentists and increasing waiting lists until the current budget submission.

WAITING TIMES

Waiting times for general care are at unacceptably high levels, with no reasonable chance of an adult obtaining general care in Tasmania's public oral health system.

Waiting times for prosthetic services are considered reasonable, although the longer waiting times in the North West region need to be monitored.

PRIORITISATION OF WAITING LISTS

Although priority levels for general dental care for adults were entered in the OHS computer system the priorities were subsequently ignored when sending invitations to make appointments.

Priorities for prosthetic services were being managed effectively.

AUDIT OF WAITING LISTS

Waiting lists are periodically audited to ensure all clients on the lists are genuinely waiting for treatment.

PARTICIPATION RATES

Only 26 per cent of eligible adults are actively participating in attempting to access general care. Of those only one third were successful.

Participation rates for children are excellent.

SUFFICIENCY OF DENTAL RESOURCES

Dental resources are insufficient to provide general care and there was some evidence that in the Southern region the service is struggling to meet the demand for emergency care.

Analysis based on a number of models indicated that OHS requires twice as many dentists to meet a suggested national minimum standard.

FUNDING

Funding has not been adequate to maintain an adequate level of general care for adults since the withdrawal of the Commonwealth dental health program at the end of 1996.

IMPLEMENTATION OF THE DEVER REVIEW

Most recommendations made in the Dever Review (commissioned in response to the loss of the CDHP, in 1997) have been implemented.

OUTSOURCING

OHS has supplemented their dental service in the Southern Region by outsourcing to the private sector, to the extent of the equivalent of two dentists.

That level of outsourcing is considered to be both efficient and effective and there appear to be good grounds for extending the scheme to the Northern region.

There is also limited statewide outsourcing of prosthetic services.

EFFICIENCY OF OHS

While a reasonable level of efficiency is being maintained in relation to OHS's cost structure, the large disparity between actual and standard times for delivery of dental services indicates that there is scope for substantial improvement.

Comparison of value with costs suggested that delivery of prosthetic services may not be efficient, however, there were some indications that this may have been due to deficiencies in recording of services provided.

COST PER POPULATION

It was not possible to reliably compare costs with other States.

MANAGEMENT OF FACILITIES

Facilities were found to be sufficient to allow for efficient service delivery.

There was a considerable excess of dental chairs to dentists, which reflects the decline in numbers of dentists in recent years.

There was some evidence that the number of prosthetic laboratories may be excessive.

There is a need for policy and standards in this area to be developed.

STAFF MIX

The mix of dentists, therapists, dental attendants, prosthetists and dental technicians is generally in accordance with OHS guidelines, except for an imbalance between prosthetists and technicians in the Southern Region.

ADMINISTRATIVE SALARY EXPENSE

Overall total administrative salaries at OHS would appear to be relatively low.

In particular, administrative resourcing appears to have been insufficient in the area of senior management, given the difficulties inherent in the loss of the CDHP and the implementation of structural change based on the Dever Review.

FEE COLLECTION

The level of outstanding debt is satisfactory compared with the annual budget and the collection rate of similar government agencies.

NO-SHOWS

Lost value from clients failing to attend appointments is low; nevertheless, there may be a case for implementing reminder phone calls for non-financial reasons.

EQUITY

There was no evidence of a lack of equity in distribution of dental resources between regions. OHS continued to provide services to children in remote areas. One area of concern was the lack of private dentist participation in some areas of the State.

Bibliography

BIBLIOGRAPHY

Australian Health Ministers' Advisory Council Steering Committee for National Planning for Oral Health. 2001. *Oral health of Australians: National planning for oral health improvement - Final Report*

Dental Statistics and Research Unit. *Adult oral health and access to dental care.* Adelaide: AIHW, 1999.

_____ .(website: http://www.adelaide.edu.au/socprev-dent/dsru June, 2002). *Dental Therapist Labour Force, 1997.* Adelaide: AIHW, 1999 (Dental Statistics and Research Unit Newsletter; vol. X; no. 2).

_____. (website: http://www.adelaide.edu.au/socprev-dent/dsru June, 2002). *Oral health and access to dental care - the gap between the 'deprived' and the 'privileged' in Australia: research report, March 2001*. Adelaide: AIHW, 2001.

_____. (website: http://www.adelaide.edu.au/socprev-dent/dsru June, 2002) *Oral health and access to dental care - 1994-96 and 1999: Research report*, March 2001. Adelaide: AIHW, 2001.

_____ .(website: http://www.adelaide.edu.au/socprev-dent/dsru June, 2002). *The Child Dental Health Survey, Tasmania, 1999.* Adelaide: AIHW, 2000.

Department of Health and Human Services. 1999. *Annual Report 1998 – 1999*

_____. 2000. *Annual Report 1999 – 2000*

_____. 2001. *Annual Report 2000 – 2001*

Department of Treasury and Finance. 1998. *Operations of Government Departments 1998 - 1999 Volume 2*

_____. 1999. *Operations of Government Departments 1999 - 2000 Volume 2*

_____. 2000. *Operations of Government Departments 2000 - 2001 Volume 2*

_____. 2001. *Operations of Government Departments 2001 - 2002 Volume 2*

Dever, J. G. 1997. *Review of Publicly Funded Dental Services in Tasmania*

University of Tasmania - Department of Rural Health. Department of Health and Human Services - Oral Health Research and Training Project. 2001. *Expanding the Role of Dental Therapists in Public Oral Health Services Tasmania: Literature review of workforce issues and results of local survey*

Recent reports

RECENT REPORTS

1998	SPECIAL REPORT NO. 25	THE YEAR 2000 - ARE WE READY?
1998	SPECIAL REPORT NO. 26	CAPITALISATION AND REPORTING OF ROAD ASSETS IN TASMANIA
1998	SPECIAL REPORT NO. 27	USE OF MOTOR VEHICLES IN GOVERNMENT AGENCIES
1998	SPECIAL REPORT NO. 28	PAYMENT OF ACCOUNTS IN GOVERNMENT AGENCIES
1999	SPECIAL REPORT NO. 29	COMPETITIVE TENDERING AND CONTRACTING BY GOVERNMENT DEPARTMENTS
1999	SPECIAL REPORT NO. 30	THE YEAR 2000: COMING READY OR NOT
2000	SPECIAL REPORT NO. 31	LITERACY AND NUMERACY IN TASMANIAN GOVERNMENT SCHOOLS
2000	SPECIAL REPORT NO. 32	ASSISTANCE TO INDUSTRY
2000	SPECIAL REPORT NO. 33	FOOD SAFETY
2000	SPECIAL REPORT NO. 34	PROCUREMENT IN TASMANIA GOVERNMENT DEPARTMENTS
2001	SPECIAL REPORT NO. 35	SOFTWARE LICENSING
2001	SPECIAL REPORT NO. 36	COLLECTION OF RECEIVABLES AND LOANS IN TASMANIAN GOVERNMENT DEPARTMENTS
2001	SPECIAL REPORT NO. 37	ARCHIVES OFFICE OF TASMANIA
2001	SPECIAL REPORT NO. 38	THE IMPLEMENTATION OF GOODS AND SERVICES TAX IN GOVERNMENT AGENCIES AND LOCAL GOVERNMENT ENTITIIES
2001	SPECIAL REPORT NO. 39	BANK ACCOUNT RECONCILIATIONS
2002	SPECIAL REPORT NO. 40	ENVIRONMENTAL MANAGEMENT AND POLLUTION CONTROL
2002	SPECIAL REPORT NO. 41	KEEPING SCHOOLS SAFE
2002	SPECIAL REPORT NO. 42	FOLLOW UP OF PERFORMANCE AUDITS 1997-1998