DHBNZ
National School Dental Service Review
Final Report

December 2004

Report prepared by
DHBNZ

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Foreword

District Health Boards NZ Incorporated, on behalf of District Health Boards, has prepared this report. This report summarises the initial District Health Board findings relating to the School Dental Service Review and outlines the possible service configuration models commonly reflected in individual District Health Board reports.

All District Health Boards were required to facilitate the completion of a review of school dental service facilities, describe the future vision and possible service reconfiguration models for the service and document plans to implement the outcomes of the review.

Although District Health Board Planning and Funding staff have been involved in the formulation of the individual District Health Board reports, because of the tight timeframes relating to the review, most if not all District Health Boards involved have not had the opportunity to discuss any proposed options at a Board level.

Therefore, District Health Boards are not in a position to commit to any changes in service or funding arrangements that may be implied as a result of this report. District Health Boards will await an announcement from the Ministry regarding the way forward for the School Dental Service with an expectation that an indication of any funding intentions to support any service reconfiguration will be made at that time.

Contents

Executive Summary

District Health Boards (DHBs) have recently conducted a national review of School Dental Services. Initial findings of the review indicate a service that is under threat.

This report will briefly summarise the key points raised by the DHBs and where possible suggest some service solutions. It is recognised that one service model will not accommodate the population and service needs within each DHB, however there are a number of excellent service delivery models that could be considered as part of a national framework or strategy.

Vision for the School Dental Service

The School Dental Service (SDS) review has provided DHBs with an excellent opportunity to comprehensively review the current status of the SDS in order to consider the positioning of the service for the future.

Many DHBs have provided ideas (See Appendices) for a future vision and service reconfiguration. It is recommended that these individual reports are read in conjunction with this summary report. Although there is no one service delivery model proposed across all DHBs, a national vision for the future of child oral health services that supports service variation at a local level is articulated. Supporting local service variation (within a national framework) will also endorse the SDS review work completed by DHBs to date as it is recognised that 'one model will not fit all'.

The vision for child oral health services proposed by DHBs envisages:

- A highly trained and motivated workforce that is well regarded in the community
- Working in safe, modern and functional premises,
- Providing a range of preventative and treatment services to preschool and school children including health education and promotion,
- A variety of service delivery models that are configured to be best meet the needs of the local population. These include the co-location of school dental clinics with Primary Health Organisations (PHOs) thus further reinforcing the vision of the Primary Health Care Strategy
- An adequately funded national service
- School dental therapists as part of the Primary Health Team involved in integrated health promotion strategies.

Strategic Issues

Based on the report information provided by District Health Boards, nationally the School Dental Service faces the following strategic issues:

- service structure issues – education and health
- inequalities in oral health

- access issues
- dental therapist workforce recruitment and retention problems
- low preschool enrolment rates
- inadequate and unsafe facilities
- lack of education and health promotion
- fluoridation variances.

Reconfiguration Themes

Proposed DHB service models are tailored to meet the needs of each specific DHB population group however from a national perspective some common themes have emerged.

Common DHB service reconfiguration themes:

- national decision at the Ministerial level regarding ownership of current fixed school based clinics
- reconfiguration and redesign of fixed school based clinics
- clinics located in communities of interest (high risk areas)
- review the recall process increase for high risk (6/12) decrease for low risk (18/12)
- transport support for families
- increase hours of clinic operation
- focus on preschool enrolment
- dental therapist recruitment drive and promotion
- increase the dental therapist scope of practice
- oral health educators and promoters
- tendency toward community based clinics supported by an outreach model ("Hub and Spokes") (i.e. not fixed school clinics)
- fluoridation.

Further Work for DHBs

There are various collective relationships that already exist for DHBs at a regional and national level to facilitate continuous improvement and learning exchange. A continuous improvement approach would allow each DHB to learn from other DHBs while maintaining a fit in its service planning with its particular local circumstances. A process of learning exchange lead by DHBs with input from the Ministry could give confidence that the continuous improvement could occur in a in way best suited to population needs.

Examples of networks that could play a role in continuous improvement in this area include the DHBNZ Service Improvement Group (national), the General Managers' Planning and Funding regional forums, the DHBNZ Oral Health Group (national), the DHBNZ Workforce Development Group (national)

and the Workforce Champions Network (national). The programme of Health Sector Conferences being implemented would also be expected to provide an opportunity for information exchange and education in the oral health area

There are examples of the benefits of this approach. DHBs found that the process of learning from each other through the PHO implementation phase was very useful and created a network of contacts that were able to provide advice and support to each other on an informal and ongoing basis.

The goals of such a shared learning process would be to develop a supportive network across DHBs, uptake of the best practices and development of the capacity within DHBs.

Recommendations

Suggested Recommendations Service Structure Issues
These recommendations need to be considered in parallel with the service reconfiguration options submitted by DHBs.

1. The Ministry of Health addresses facility ownership issues with the Ministry of Education.
2. If fixed school based dental clinics remain in some DHBs it would be advisable to formulate a refurbishment and maintenance programme. This would involve both capital and sustainable funding costs.
3. If the Ministry of Health provides capital and operational funding for new facilities, it is suggested that the Ministry and DHBs carefully consider clinic design.

Suggested Recommendations Addressing Inequalities

1. All DHBs need to implement their obligations relating to the Treaty of Waitangi and involve iwi and Maori organisations in any SDS service reconfiguration discussions.
2. All service development should include partners of the Treaty of Waitangi and other significant population groups within the DHB.
3. DHBs are encouraged to recruit Maori, Pacific and other significant ethnicities into oral health roles. Consider a national drive or scholarship approach.
4. To address low socio-economic issues such as transport, communication access (phone) and misconceived perceptions of service cost, DHBs should consider marketing and locating the service in high deprivation low socio-economic areas.
5. The Ministry and DHBs consider rebranding the service in light of the changing location and varying service models being suggested. (In some areas the focus is moving away from school based clinics).
6. Regulate and evaluate the service so that it addresses the needs of those children in high-risk groups

7. SDS increases the communication and education links with early childhood organisations, Maori providers and primary health care organisations to encourage early enrolment
8. Maintain standard data collection.
9. The Ministry and DHBs provide standardised educational and promotional material to all communities. This information should be available in Maori, Pacific and other significant languages that are represented in specific DHBs.
10. The introduction of fluoride into water supplies should feature as part of the District Health Board Health Promotion initiatives and should continue to be discussed with local bodies in areas that do not have a fluoridated water supply.
11. DHBs conduct pre and post review analysis of dmft / DMFT and enrolment data (particularly Maori and Pacific), customer satisfaction surveys and continue community involvement.
12. DHBs develop and implement a communication strategy that will manage any community concerns in relation to any changes made to the service
13. DHBs regularly review any service changes and continue to focus on reducing inequalities.

Suggested Recommendations Access Issues

1. DHBs need to involve significant population groups in any service design.
2. DHBs consider extending or changing clinic hours to better meet the needs of their community in order to increase clinic utilisation rates.
3. Encourage standardised data collection.
4. To increase dental therapist clinical time, a reduction in administration duties and travel time between clinic facilities needs to occur.
5. To address low socio-economic issues such as transport, communication access (phone) and misconceived perceptions of service cost, DHBs should consider marketing and locating the service in high deprivation low socio-economic areas.
6. Consider revising the recall periods for those low risk children in order to increase the amount of clinical time available to treat those with high need.
7. DHBs are encouraged to recruit Maori, Pacific and other significant denominations into oral health roles. Consider a national drive or scholarship approach.

Suggested Recommendations Dental Therapist Recruitment & Retention

1. DHBs implement a national recruitment drive to raise the dental therapy profile.
2. Introduce educators and assistants nationwide (where not currently practising) to maximise dental therapist clinical time – recruit a proportionate number of Maori and Pacific.
3. DHBs implement a national review of dental therapy salary and conditions of employment.

4. Provide dental therapy scholarships – provide a proportionate number for Maori and Pacific. (Dependent on funding)
5. Market dental therapy to young people – target Maori and Pacific.
6. Consider the development of postgraduate studies to up skill and extend dental practice.
7. Reduce travel and administration duties in order to increase clinical time.

Suggested Recommendations Low Preschool Enrolment Rates

1. SDS increases the communication and education links with early childhood organisations, Maori providers and primary health care organisations to encourage early enrolment.
2. Encourage standardised data collection. Consider "reminder links" with other child health programmes.
3. Develop population wide education programmes aimed at children and families / whanau, and develop unique programmes specifically designed to target the high-risk groups (Maori, Pacific, low socio-economic and rural groups).
4. Printed information made available in English, Maori, Pacific and other significant population groups (e.g. Asian).

Suggested Recommendation Facility Costs

1. Initial findings suggest that the updating of current facilities and the implementation of suggested reconfiguration models will require at the least an injection of capital funding. The sustainability of the SDS will also be dependent on a longer term funding strategy. This funding should address the inequalities identified within DHBs and also facilitate the extension of the service into the future.

Suggested Recommendations Information Technology

1. Encourage standardised data collection.
2. Equip mobile units with computer laptops and mobile phone access (Dependent on funding)

Suggested Recommendations Education and Health Promotion

1. Implement a nationwide campaign on enrolment and advertise widely the age at which children can attend a school dental clinic.
2. Implement a strategy that increases the availability of promotional and educational SDS material to children and families. This material should be available in Maori, Pacific and languages of other significant ethnic groups. It is suggested that this is a cohesive public health approach educating the entire population about the importance of oral health.
3. Consider introducing community based 'Oral Health Educators' to promote oral health to all population groups. Specifically recruit Maori and Pacific educators to communicate with these high-risk groups.

Suggested Recommendation Fluoridation

Fluoridation is a cost effective, practical and safe means of reducing and controlling dental disease. It is acknowledged that in some areas the local authorities do not have the funding to fluoridate the water supply, however the following recommendation should be considered.

1. The introduction of fluoride into water supplies should feature as part of the District Health Board Health Promotion initiatives and the ongoing discussions with local bodies in areas that do not have a fluoridated water supply.

1. Background

The Minister of Health wrote to District Health Board Chairs in January 2004 outlining her intention that the Public Health Advisory Committee's report *Improving Child Oral Health and Reducing Child Oral Health Inequalities* be implemented in part through a review and reorientation of the School Dental Service (SDS). One of the Committee's goals is to improve the effectiveness of the SDS and it is intended that the review will contribute to the achievement of this goal.

The Public Health Advisory Committee (PHAC) has described significant oral health inequalities. In particular, the report identifies children with relatively poor oral health as Maori, Pacific, children from low-income families and those children living in rural areas. The report also highlighted the importance of the SDS as the key component of improving child oral health and reducing oral health inequalities.

The Ministry of Health required District Health Boards to survey SDS facilities, (as many clinics are run down, do not suit modern practice and may not be compliant with existing health and safety regulations), to identify service models that will be effective in reducing child oral health inequalities and to indicate how services will be reconfigured to address this.

The Ministry of Health made available one off funding to facilitate the completion of the review by DHBs. Following advice from the DHBNZ Service Improvement Group (SIG), the Ministry of Health agreed that a national project should be established, with a proportion of the available funding being top sliced to enable DHBNZ to contract project management support to set up the national project structure.

School Dental Service Review Objectives

- Facilitate the completion of a review of School Dental Service facilities within each District Health Board.

- Describe the future vision and possible service configuration models.

- Document District Health Board plans to implement the outcomes of the review.

2. Introduction

The purpose of this report is to outline the issues facing the School Dental Service nationally. The initial findings of the review portray a service that is in a strategic crisis. Some districts are compromised at an operational level therefore the service being delivered does not always necessarily meet the needs of all children. It is clear that there is opportunity for service improvement nationally.

To improve the oral health of those most disadvantaged children in New Zealand the service requires strategic direction, rebranding and major reconfiguration at the operational level. This will require careful planning along with a substantial injection of funding, both capital and sustainable, to extend the service into the future.

The report briefly describes the common issues and reconfiguration themes that have been considered by District Health Boards. Recommendations cannot be made regarding a "one size fits all" model for the service, however some recommendations have been suggested that may provide a foundation for a national framework.

3. Project Process

The national project was set up as a joint Ministry of Health and District Health Board project. DHBNZ contracted part time project management support to set up the national project structure and provide DHBs with the necessary framework and tools to complete the review. From the DHB perspective the DHBNZ Oral Health regional representatives provided oversight and project assistance to SDS project teams and linked into the Planning and Funding teams via the Oral Health Portfolio Managers.

The funding for the review was allocated to each DHB based on a population based funding formula. In some areas, DHBs elected to group together with other DHBs within their region to undertake the review whilst others chose to manage the review themselves. The combined approach appeared to be effective in terms of pooling resources and building the knowledge base of the service within the region.

DHBs formed project teams and developed project plans to implement the review. The timeline for the review (six months) was quite short. DHBs started the review in April 2004 and were required to have the final report that included the facilities review, inequalities analysis, service configuration options and implementation outcomes for District Annual Plans 2005/06, to DHBNZ by the end of October 2004.

4. Service Structure Issues - Clinic Ownership

The Ministry of Education currently own the fixed school dental clinic facilities. Since the inception of the school dental service in 1921, the funding for establishing, maintaining and running school dental clinics has been split between Health and Education. The split in responsibilities has caused tensions and difficulties. Over the years there have been policies assigning varying responsibilities for the costs associated with running school dental clinics to either Health or Education. The right of Health to use the clinics is historical rather than contractual and incurs no rental or lease.

There are few mechanisms by which the Ministry of Education can influence decision-making by Boards of Trustees in the Tomorrows Schools environment. Recent survey comments show Boards of Trustees, while placing high emphasis on the value of the school dental service, frequently refer to the dilemma of being responsible for maintaining and upgrading what they see as a health service and facility, within their limited, deferred maintenance budget. They do not see the significant deficiencies with respect to health and safety and infection control issues. In some cases they are cognisant of these matters, but see them as the responsibility of Health rather than Education.

To enable the service to move forward and develop there needs to be a shared vision of the role and operation of the fixed school dental facilities. It is appropriate to consider a long-term solution to resolve the ongoing problems stemming from the historical split in responsibilities between Education and Health.

If the fixed school dental facilities are to remain the property of the Ministry of Education, a clearer set of guidelines for compliance to Health and Safety and Infection Control standards is required. Historically where schools are being upgraded, closed, or new schools built, input into the decision making process has seldom been sought from the School Dental Service.

Listed below are some common configuration options submitted by DHBs, which may assist the MOH in its negotiation with the MOE on this matter.
These options assume the continuation of the service at some school sites. It is expected that the MOH would consult more widely with DHBs directly once the proposed direction of the SDS becomes clearer.
The majority of DHBs will not be in a position to move forward with any proposed reconfiguration plans until the ownership issues are resolved.

Suggested Options

Education Responsibility
Retained funding with full responsibility for the building, upgrading and rebuilding of the fixed dental facility to the required standard to enable the safe practice of modern dentistry. More comprehensive guidelines on standards and deferred maintenance would be required for Boards of Trustees.

DHB Responsibility
The DHBs are funded to assume full responsibility for the fixed facility, including exterior, interior and surrounding structures.

Education and Health Combined Responsibility
DHB has ownership of the building with a supporting arrangement in place with the MOE to maintain the exterior and surrounding structures. Interior alterations, upgrading and rebuilding if required, would be the responsibility of the health sector, including the removal and sale if no longer required.

Intermediary Step
An intermediary step where facilities are rented by the DHB from the MOE with clearly defined responsibilities and appropriate recompense.

Suggested Recommendations Service Structure Issues
These recommendations need to be considered in parallel with the service reconfiguration options submitted by DHBs.

1. The Ministry of Health addresses facility ownership issues with the Ministry of Education.
2. If fixed school based dental clinics remain in some DHBs it would be advisable to formulate a refurbishment and maintenance programme. This would involve both capital and sustainable funding costs.
3. If the Ministry of Health provides capital and operational funding for new facilities, it is suggested that the Ministry and DHBs carefully consider clinic design.

5. Addressing Inequalities in Oral Health

Although dental care is largely free to New Zealand children, differential access and utilisation play a substantial role in oral health inequalities and the prevalence of caries. Key social and economic determinants of oral health inequalities identified in research include income, education, employment, occupation, housing neighbourhood characteristics and ethnicity. It is recognised that to improve oral health for disadvantaged groups wider health and social issues need to be addressed.

Most dental disease is preventable so there is enormous scope for reducing oral health inequalities. In addition, the Treaty of Waitangi confers special responsibility on the Crown to protect the health and wellbeing of Maori and places an obligation on the Crown to address inequalities in health, which includes oral health.

Research surveys and data analysis (carried out by DHBs during this review) to assist with the identification of inequalities within each DHB, included the deprivation status, decile, significant ethnicities, and decay rate of all clinics in the DHB. This enabled the high-risk clinic areas, children and schools to be identified.

DHBs were asked to look at inequalities in terms of; access, service delivery, socio-economic status, transience and cultural barriers.

Based on the questions provided in the inequalities template common inequality issues across DHBs are as follows:

Inequalities Template Questions

1. **What health issues is the service trying to address?**
   - Reduction of oral health inequalities, particularly high dmft and DMFT rates in Maori, Pacific, low socio-economic groups and rural children

2. **What child oral health issues exist?**
   - Oral health determinants
   - Oral health ethnic inequalities
   - Service access issues - for children who are Maori, Pacific, in low socio-economic groups and rural areas
   - Non-fluoridated water supplies
   - High dmft and DMFT in Maori and Pacific children

3. **Which children are most advantaged and in what way?**
   - Children in areas that have a fluoridated water supply
   - Higher socio-economic groups
   - Pakeha / European
   - Children in urban areas
   - Children in areas where there is a school based clinic
   - Children who remain living in one area (non transient)

4. **What are the determinants of the inequalities and how are they created, maintained or increased?**

Access
- Facility location
- Lack of transport
- Awareness of service existence and that the service is free
- Marketing / service visibility
- Access to mobile services

Service
- No change in service operation or structure for decades
- Service does not necessarily address the needs of different communities
- Lack of community awareness
- Therapist workforce issues – ethnic imbalance

Socio-economic
- Competing priorities and demands on finances
- Diet and nutrition (coke versus milk prices)
- Cost of brushes and fluoridated toothpaste
- Transport issues
- Lack of phone access to keep in touch with the service
- Unemployment
- Poor parent hygiene may be replicated

Transience
- Children don't attend appointments
- Difficult to track children
- Low socio-economic may have a less stable

Cultural Barriers
- Failure to provide and deliver specific services for Maori and Pacific
- Language barriers
- Low enrolment rates for Maori and Pacific children
- Lack of Maori and Pacific oral health staff

5. **How will the Treaty of Waitangi be addressed in this review?**

- The Treaty of Waitangi confers a special responsibility on the Crown to protect the health and well being of Maori and places an obligation on the Crown to address inequalities in health, which includes oral health.

- It is expected that DHBs would involve key Maori groups and work in partnership with these groups in any planning and development phases of the service. In determining inequalities it is expected that DHBs would implement service strategies to continually reduce inequalities for Maori.

- Resources would need to be realigned to focus on improving oral health for those children with high needs.

6. **Describe Maori input to the review and outline the key Maori linkages and that have been established?**
   (This is a national perspective i.e. not consistent within each DHB)
   - Local iwi were involved with review consultation
   - Maori Organisational Groups – e.g. Maori Women's Refuge, Te Ao Marama
   - DHB Planning and Funding Maori Executive Teams
   - Maori Providers
   - Ministry of Health Maori Child Oral Health Project.

7. **It is recognised that other population groups will need to be considered as part of this review. Outline these groups.**
   - Asian
   - New Immigrants.

8. **How will the proposed reconfiguration models address identified inequalities?**
   Consider structural, intermediary pathways, Health & disability services and impact.

   - Improved access to services – models that fit the specific community
   - Integration with other health care providers
   - National oral health database collection system
   - Nationwide education and health promotion programmes
   - Improve community links with ongoing community involvement.
   - Potential to develop community based clinics
   - Potential to model services that
   - Potential to integrate and / or collaborate with other health care providers
   - Potential to locate and configure services in areas where there is the highest level of need
   - Possibility of increasing clinic hours and configuring the hours of operation to best suit the needs of the children and their family / whanau
   - Provide transport support in order to assist and treat the high-risk groups
   - Focus on developing the workforce and reduce some of the ethnic imbalances of the oral health workforce
   - Increase preschool enrolment and specifically target those high-risk groups with education and health promotion initiatives
   - Improve the oral health status of those most disadvantaged
   - Promote fluoridation.

9. **Who will benefit the most from any changes?**
    - Those who are currently disadvantaged with high oral health needs - Maori, Pacific, low socio-economic and rural children
    - All preschoolers
    - Oral health staff – improved working conditions may attract more people into the profession.

10. **What might the unintended consequences be?**
    - Decreased access to service for children who have to travel to another school based clinic
    - Changes to recall notices may be viewed negatively by parents
    - Adverse reaction from parents
    - Increased number of children accessing the private sector
    - Dental therapists leave the service.

11. **What will be done to make sure inequalities are reduced or eliminated?**
    - Focus on Treaty of Waitangi obligations
    - Focus on high risk / needs children
    - Compare caries prevalence in targeted areas
    - Review the service and its changes
    - Review, evaluate and monitor outcomes
    - Revisit service business plans six monthly to see if plan is being implemented effectively.

12. **How will we know if inequalities have been reduced?**
    - Comparative analysis on dmft and DMFT data pre and post the review (reduction in dmft / DMFT)
    - Increase in caries free children
    - Increased preschool enrolment rates particularly for Maori and Pacific children
    - Customer satisfaction surveys
    - Continued discussions and consultation with communities
    - Evaluation of education and health promotion programmes
    - Evaluation of review changes.

Suggested Recommendations Addressing Inequalities

1. All DHBs need to implement their obligations relating to the Treaty of Waitangi and involve iwi and Maori organisations in any SDS service reconfiguration discussions.
2. All service development should include partners of the Treaty of Waitangi and other significant population groups within the DHB.
3. DHBs are encouraged to recruit Maori, Pacific and other significant ethnicities into oral health roles. Consider a national drive or scholarship approach.
4. To address low socio-economic issues such as transport, communication access (phone) and misconceived perceptions of service cost, DHBs should consider marketing and locating the service in high deprivation low socio-economic areas.
5. DHBs consider rebranding the service in light of the changing location and varying service models being suggested. (In some areas the focus is moving away from school based clinics).
6. Evaluate the service so that it addresses the needs of those children in high-risk groups
7. SDS increases the communication and education links with early childhood organisations, Maori providers and primary health care organisations to encourage early enrolment
8. Maintain standard data collection.
9. The Ministry and DHBs provide standardised educational and promotional material to all communities. This information should be available in Maori, Pacific and other significant languages that are represented in specific DHBs.
10. The introduction of fluoride into water supplies should feature as part of the District Health Board Health Promotion initiatives and should continue to be discussed with local bodies in areas that do not have a fluoridated water supply.
11. DHBs conduct pre and post review analysis of dmft / DMFT and enrolment data (particularly Maori and Pacific), customer satisfaction surveys and continue community involvement.
12. DHBs develop and implement a communication strategy that will manage any community concerns in relation to any changes made to the service
13. DHBs regularly review any service changes and continue to focus on reducing inequalities.

6. Access Issues

School dental facilities are generally open for a limited period of time each year. Many clinics stand idle when not in use and it is not always clear to parents when the clinic is open. Many parents have difficulty locating the clinics particularly if they are “tucked away” and are not clearly visible on a school site.

There is a national shortage of dental therapists. Most of the dental therapist workforce is European and the majority work part time. There is an ethnic imbalance among the oral health workforce, which may be a barrier to some cultural groups accessing the service.

Many DHBs have found that not all clinics are suitably located in terms of treating those with high oral health needs. As part of the review DHBs have identified within their districts where clinics should be located to address any inequality issues they may be facing within their population.

Suggested Recommendations Access Issues

1. DHBs need to involve significant population groups in any service design.
2. DHBs consider extending or changing clinic hours to better meet the needs of their community in order to increase clinic utilisation rates.
3. Encourage standardised data collection.
4. To increase dental therapist clinical time, a reduction in administration duties and travel time between clinic facilities needs to occur.
5. To address low socio-economic issues such as transport, communication access (phone) and misconceived perceptions of service cost, DHBs should consider marketing and locating the service in high deprivation low socio-economic areas.
6. Consider revising the recall periods for those low risk children in order to increase the amount of clinical time available to treat those with high need.
7. DHBs are encouraged to recruit Maori, Pacific and other significant denominations into oral health roles. Consider a national drive or scholarship approach.

7. Dental Therapist Recruitment and Retention Problems

DHBs are extremely concerned about the diminishing dental therapist workforce. The current workforce has an age imbalance, which will result in a considerable decline in numbers practising in the next ten years. A number of DHBs have already been dealing with understaffing issues for a long period of time and the future does not look positive. Any service configuration plans must consider ways in which to address the workforce issues.

DHB concerns have compounded as a result of the implementation of the Health Practitioners Competence Assurance Act 2003 (HPCA) in September 2004, which removed the long-standing employment restriction on dental therapists to work only in the public service. This change combined with a scope of practice for patients up to age 18, offers a significant opportunity for dental therapists to seek employment outside the public service and treat child and adolescent patients in private dental practice. It is expected dental therapists may increasingly choose a mixture of employment in public and private practice. The impact of these changes has yet to be felt but they are predicted to place pressure on the provision of the service.

Some obvious workforce issues include:

- the workforce is aging with the average age of a therapist estimated at 40yrs
- younger people do not appear to find dental therapy an attractive career option
- lifting of employment restrictions (HPCA) may impact on the numbers of dental therapists remaining in the public sector
- an ethnic imbalance within the workforce
- professional isolation
- unattractive salary packages
- inadequate workplace environment.

Suggested Recommendations Dental Therapist Recruitment & Retention

1. DHBs implement a national recruitment drive to raise the dental therapy profile.
2. Introduce educators and assistants nationwide (where not currently practising) to maximise dental therapist clinical time – recruit a proportionate number of Maori and Pacific.
3. DHBs implement a national review of dental therapy salary and conditions of employment.
4. Provide dental therapy scholarships – provide a proportionate number for Maori and Pacific. (Dependent on funding)
5. Market dental therapy to young people – target Maori and Pacific.
6. Consider the development of postgraduate studies to up skill and extend dental practice.
7. Reduce travel and administration duties in order to increase clinical time.

8. Low Preschool Enrolment Rates.

New Zealand children have traditionally enrolled with child oral health service at age 2.5 years. Since 1998, child oral health services have actively set out to enrol children earlier. This is because; in line with overseas trends increasing numbers of children are developing the condition known as “early childhood caries”. Early enrolment provides an opportunity to detect early tooth decay. It is also an opportune time to educate families and whanau on the prevention of tooth decay and other aspects of oral health.

Contact with child oral health services by preschool children shows both ethnic and socio-economic inequalities, with Maori and Pacific children, and children from low socio-economic families and whanau being less likely to access services.

The current enrolment system is flawed. There are many avenues that a parent or service provider can access to enrol a preschooler with the SDS this is of course assuming that they know the service exists. There is no robust way of tracking the children who should be enrolled.

Suggested Recommendations Low Preschool Enrolment Rates

1. SDS increases the communication and education links with early childhood organisations, Maori providers and primary health care organisations to encourage early enrolment.
2. Encourage standardised data collection. Consider “reminder links” with other child health programmes.
3. Develop population wide education programmes aimed at children and families / whanau, and develop unique programmes specifically designed to target the high-risk groups (Maori, Pacific, low socio-economic and rural groups).
4. Printed information made available in English, Maori, Pacific and other significant population groups (e.g. Asian).

9. Inadequate Facilities

As anticipated the results of the nationwide SDS facilities review confirm that almost all clinic facilities are run down and require extensive maintenance and refurbishment to bring them up to the required Health and Safety and Infection Control standards.

As a result of the review process many DHBs have suggested closing some fixed clinics, in light of the clinic utilisation rates and extensive costs to refurbish the facility. As a result of the review DHBs have recognised that many clinics are not well situated in terms of addressing inequalities or improving access for those in the high-risk groups.

Suggested Recommendations Service Structure Issues
These recommendations need to be considered in parallel with the service reconfiguration options submitted by DHBs.

1. The Ministry of Health addresses facility ownership issues with the Ministry of Education.
2. If fixed school based dental clinics remain in some DHBs it would be advisable to formulate a refurbishment and maintenance programme. This would involve both capital and sustainable funding costs.
3. If the Ministry of Health provides capital and operational funding for new facilities, it is suggested that the Ministry and DHBs carefully consider clinic design.

10. Facility Review Summary

Every DHB has completed a review of all of the school dental facilities in their district using the 2004 Dental Facilities Survey. Information provided by DHBs shows that the majority of clinics require extensive maintenance work and some facilities are of such a poor standard that refurbishment is not an option.

A large percentage of clinics (fixed and mobile) do not meet the current Health and Safety and Infection Control standards.

The low utilisation rate of some clinics suggests it is not cost effective to refurbish or modify those facilities.

11. Service Configuration Options

DHBs have submitted a wide range of service configuration options, which are based on the needs of their DHB population. Clearly one national model will not address specific issues within each and every DHB.

Currently there is a mix of school based fixed clinic facilities and mobile caravans or units operating around the country.

In one DHB eleven schools are closing. The DHB is in negotiation with the MOE regarding reconfiguration.

One DHB completed a review of the SDS in the last 18 months, therefore was only required to submit a report on how the reconfiguration addressed the inequalities that had been identified previously.

Moving forward DHBs are considering the following mixes of service models:

- Community Dental Clinics with Outreach Services – "A Hub and Spokes" model; comprising community fixed site clinics with mobile examination outreach services and health promotion and transport services
- School based fixed site clinics with mobile units. Build new facilities, which would operate year round to improve access for 'transient families' and preschoolers
- Centralised community clinic, (with some school based clinic closures), upgrading of remaining clinics and adding mobile services
- Amalgamation of current clinics into larger full time facilities with community based clinics and mobile units.

12. Facility Costs

Not all DHBs costed out the predicted reconfiguration expenditure of the preferred model for their district. The costs that were submitted varied dramatically across the country for the same or similar facility. To summarise the costs at this stage may depict an inaccurate picture of anticipated costs.

Based on the costs that were submitted

Unit	Approximate Cost Exc gst per unit
Clinic Refurbish	$ 15,000 - $121,146
Mobile Refurbish Single chair	$64,950
New double chair mobile	$81,345
New double chair clinic	$251,479
New four chair clinic	$506,470
Average lease cost	$200 per m2

These costs are based on information provided by DHBs. The prices have not been analysed, reviewed or confirmed as accurate.

Suggested Recommendation Facility Costs

1. Initial findings suggest that the updating of current facilities and the implementation of suggested reconfiguration models will require at the least an injection of capital funding. The sustainability of the SDS will also be dependent on a longer term funding strategy. This funding should address the inequalities identified within DHBs and also facilitate the extension of the service into the future.

13. Information Technology

District Health Boards currently support a range of information technology within their SDS.

The service is diverse, expected to be flexible and required to maintain oral health information on all children it serves. Unfortunately the investment in up to date technology has not been made at the service level. Methods of collecting and maintaining data are antiquated and not necessarily sound in terms of collecting and maintaining an accurate set.

Often therapists can be isolated in a clinic whether fixed or mobile. Access to a cellular phone would reduce the impact of isolation and security considerably.

Suggested Recommendations Information Technology

1. Encourage standardised data collection.
2. Equip mobile units with computer laptops and mobile phone access. (Dependent on funding)

14. Lack of Education and Health Promotion

A significant factor arising from the review has been the request by communities and SDS staff to increase oral health education and the provision of information and promotion of the service in schools and the wider community. Many school, community, iwi and health groups identified education and promotion as one of the most important issues to consider and indicated that it was one of the key areas that was most likely to contribute towards reducing inequalities.

As part of any future education process, clear and easily understood dental health and dietary messages should be produced. Nationwide campaigns on enrolment may reinforce to the general public the importance of early enrolment and the age at which children can attend a school dental clinic. Families are still confused about when and where their child can access the service.

Suggested Recommendations Education and Health Promotion

1. Implement a nationwide campaign on enrolment and advertise widely the age at which children can attend a school dental clinic.
2. Implement a strategy that increases the availability of promotional and educational SDS material to children and families. This material should be available in Maori, Pacific and languages of other significant ethnic groups. It is suggested that this is a cohesive public health approach educating the entire population about the importance of oral health.
3. Consider introducing community based 'Oral Health Educators' to promote oral health to all population groups. Specifically recruit Maori and Pacific educators to communicate with these high-risk groups.

15. Fluoridation Variances

Evidence shows that one of the most important factors that can change and improve our oral health status indices is a fluoridated water supply. Fluoridation not only significantly reduces caries in a population group but also can demonstrably contribute towards reducing ethnic and socio-economic inequalities.

Both the effectiveness of fluoridation and the associated averted dental costs are affected by demographic characteristics of the community serviced by the water supply. The more caries prone an individual is, the greater the benefits from fluoridation. Water fluoridation contributes to equity of health outcomes, as the benefits of dental caries prevention are greater for people of lower socio-economic groups including Maori and children (Public Health Commission 1995)

Access to fluoridated water has been reported to contribute to the reduction in inequalities. Canterbury DHB reports that virtually no Canterbury children receive fluoridated water and this impacts on the oral health inequalities in the region. Recent research shows that dental caries severity in five year old Maori children from Canterbury is 45% higher than for those in fluoridated Wellington. Fluoride related reductions in dental caries are much greater for Maori and Pacific children and those of low socio-economic status.

Suggested Recommendation Fluoridation

Fluoridation is a cost effective, practical and safe means of reducing and controlling dental disease. It is acknowledged that in some areas the local authorities do not have the funding to fluoridate the water supply, however the following recommendation should be considered.

1. The introduction of fluoride into water supplies should feature as part of the District Health Board Health Promotion initiatives and the ongoing discussions with local bodies in areas that do not have a fluoridated water supply.

16. DHBNZ Assessment of DHB Review

DHBs saw the review as an opportunity to develop, improve and reconfigure a service that essentially has been operating in the same format since it was established in 1921. In many DHBs it was clear that some changes could be made to improve the service

DHBs started the review in April 2004 and were funded to complete the following review requirements:

- conduct a facility review,
- conduct a service analysis in relation to inequalities,
- consult with communities and organisational groups,
- provide options regarding future service reconfiguration models and
- submit the final report to DHBNZ by the end of October 2004.

There have been tensions throughout the project relating to conflicting DHB priorities, school closures and the MOE relationship, the perceived level of consultation required and the timeline constraints. In spite of these tensions all DHBs completed the review within the required timeframe.

As part of the review process, one of the specific review requirements was for DHBs to complete the inequalities template. This template was to be included in the final report submitted by the DHB. Unfortunately not all DHBs complied with this requirement. This may indicate that DHBs did not consider inequalities as part of the review process but cannot be assumed. The DHBs that did complete the template did so very well. In some cases it is evident from the information provided that where there is an identified high-risk group or area, services planned are located to meet the needs of that high-risk group.

It was recognised early in the process that DHBs would manage the community and stakeholder consultation process as they would normally as part of usual DHB business. Many DHBs communicated that there was a concern that community expectations could be raised if consultation was not managed carefully. Many DHBs have made a commitment to continue consultation regarding the review while awaiting decisions from the Ministry of Health regarding future plans and direction of the SDS.

Not all DHBs costed out the predicted reconfiguration expenditure of the preferred model for their district. The costs that were submitted varied dramatically across the country for the same or similar facility. To summarise the costs at this stage may depict an inaccurate picture of anticipated costs.

It is anticipated that this may well be the first stage of a long planning and implementation process to reorient, build and develop the national service.
DHBs have completed the initial stages of this process and have identified both short and long-term service issues, which provide DHBs with an opportunity to develop a clear direction for the service in the future.

17. National Organisational Comment

The consultation process with key stakeholders of the review has been managed at a DHB level however some national organisations and groups have offered or have been invited to comment on the national report.
Below is a brief summary of the key points from each group.

Cleft Lip and Palate
There are approximately 100 – 150 Cleft Lip and Palate children born in New Zealand per year. This number remains fairly constant over time. Although there appears to be clusters of Cleft children, they are geographically spread throughout New Zealand. Extensive orthodontic treatment and plastic surgery is required for these children over the first 20 years of their life. Therefore their dental health has a greater impact in terms of minimising complications, and the need for further intervention in their long-term treatment. Primary preventative work carried out through a service such as the School Dental Service, simplifies future orthodontic and surgical treatment.

Further background information from the Cleft Lip and Palate group is available.

IHC
The IHC has presented a submission to be considered in the national process. IHC has forwarded a copy of its submission to all DHBs.

Key points are:
- It is important to note that access to clinics for those children who have a physical disability need to be considered. Sufficient access in the form of ramps or other apparatus should be factored into the configuration process whether the clinic is a fixed unit or a mobile unit.
- Notification and ongoing liaison with parents of disabled children
- Improve staff training particularly in relation to communicating with disabled children
- Dental health campaigns and promotions developed in conjunction with disability organisations
- More information about enrolment and the importance of preschool enrolment

Te Ao Marama
Te Ao Marama was invited to comment on the draft report. One of the representatives has links with the Maori Health Dental Therapist Association.

Key points are:
- Longer working hours should be a choice for therapists
- The Treaty of Waitangi obligations and review analysis of dmft and DMFT are directly related and must be compulsory
- DHBs should recruit oral health staff that represent or can relate to the population they serve

- Current workforce requires urgent upskilling in health promotion and prevention
- Review the recall strategies
- The effective use of Maori community oral health educators will be of immense value to DHBs
- Address MOE / MOH responsibility issues
- Support MOH capital and operational funding for clinics that are operational all year round
- Maybe Maori trusts and / or corporations could provide scholarships to support Maori taking up training opportunities.

Oral Health Advisory Group (OHAG)
OHAG was invited to comment on the draft report.

Key points are:
- School based clinics should be retained, concerned that centralised or community based clinics would replace school clinics
- MOE and MOH to reach a plan for the old and new school based clinics
- Travel to central dental locations will inevitably reduce regular child dental visits
- Applaud the inequalities section of the report and recognise that we need a service that has some flexibility in the way it is presented and delivered, but based on a well researched and national model
- OHAG is concerned that while there are well defined and accepted goals for oral health, the funding to make this work is limited is within the DHB general budget, and so if redefinition of such an essential service is to be undertaken there will need to be special funding made available to address an underfunded service.
- OHAG agrees that recruitment and retention of dental therapists is an “urgent problem”
- Support fluoridation
- If DHBs are to configure its own school dental service there should be a minimum standard set nationally
- We support the need to upgrade and maintain technology appropriate for the diverse and flexible service
- Need to define the service nationally before the service is offered to local and regional management
- Queried the level of DHB consultation at a community level