Review of Māori Child Oral Health Services

Kia pakiri mai ngā niho

Mauri Ora Associates

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Executive Summary

Unacceptable inequalities exist in the oral health of New Zealand children, especially among Māori, Pacific and those children from low socioeconomic status (SES) families. The Public Health Advisory Committee report to the Minister of Health - ‘Improving Child Oral Health and Reducing Child Oral Health Inequalities’ made a recommendation that an evaluation of the current Māori oral health initiatives be undertaken.

A hui of Māori providers, DHB managers and the Ministry of Health recommended a review process that saw 16 Māori oral health services visited with the objective of identifying best practice models of Māori Child Oral Health (MCOH) services and to capture recommendations to develop the MCOH service further, particularly in the areas of capacity and capability.

Māori providers currently deliver contracts comprising one or more of the components of the oral health service being enrolment, attendance and treatment. Tamariki ora nurses deliver many of the stand-alone oral health educators (enrolment) and adolescent oral health (attendance) contracts by utilising their existing relationships with whānau, particularly new mothers. Treatment services are typically delivered through community clinics that primarily support low-income adults as well as some tamariki and rangatahi.

Most Māori provider contracts are interlinked with mainstream oral health services such as the School Dental Services (SDS) and dentists. Some have mobile services that treat tamariki and rangatahi at kohanga reo, kura kaupapa and schools reducing the need to travel and minimising the common problem of DNA’s (do not attends). In general, Māori providers over service their DHB contracts, as it is their kaupapa to treat any member of the whānau that needs to be seen. This flexibility and commitment to whānau ora places excessive demands on the providers as costs are not supported by contracted funding. In most cases, funds are found from alternate sources to ensure that the kaupapa can be maintained. DHB contracts could be better written to allow Māori providers to provide oral health services in line with whānau ora.

Many of the barriers faced by Māori in accessing oral health services are systemic, yet Māori providers overcome these through community and mobile treatment services and the cooperation and coordination between Māori providers. Several more community clinics, based on the successful the Te Taiwhenua o Heretaunga model, are recommended with additional mobile services introduced to reach not only isolated rural areas but also place the treatment service at the schools tamariki and rangatahi
attend. This report depicts an ideal community model that ensures barriers to Māori receiving their free oral health treatment are overcome.

In the regions where such a model is not possible, Māori providers should be enlisted to reduce the barriers to enrolment and attendance through their relationships with whānau and delivery of other services in an integrated manner. All tamariki ora nurses should be given the opportunity to enrol tamariki into the community clinic or SDS.

There are only a few urban Māori providers funded to provide oral health services. Therefore, it is recommended the Ministry of Health and DHBs with large urban populations encourage the development of a model that meets the requirements of the very large number of urban Māori. Such a best practice model may be based on the community model but practical implementation may see some new issues arise and overcome that are unique to urban settings. Should further community clinics be developed, they too will experience some of the issues that the pilot site at Te Taiwhenua o Heretaunga has overcome. It is therefore considered important that the Heretaunga programme be further developed as a ‘centre-of-excellence’ for Māori oral health initiatives combining research and practical experience into sustainable strategies.

The contract value of the Māori providers oral health contracts are relatively small in dollar value and do not allow the appointment of a FTE person. Māori providers also highlight that oral health service contracts do not provide for repairs and maintenance of critical equipment. Unlike commercial providers, Māori organisations are reliant on the DHB funding to ensure facilities remain operational. They ask why they are not considered in the same way as the DHB provider arms that appear to have budgets for repairs and maintenance as well as capital equipment purchases.

Some Māori providers have difficulty attracting and retaining oral health professionals appropriate to their services. Some have been unable to deliver much needed services as positions are or have been vacant. Māori providers with treatment contracts should be encouraged to develop their own oral health workforce through incentives and assistance to attracting Māori into the oral health professions.

Te Ao Marama (New Zealand Māori Dental Association) was seen as an important link for Māori providers as, in some cases, it provided the only contact with the oral health profession. Conferences allowed those working in regional areas to discuss common issues and find support in overcoming the issues related to Māori child oral health.

Positive improvements in Māori child oral health is the responsibility of all providers, not solely the 16 Māori providers included in this review. However, it is important to identify the contribution made by Māori providers. The limitation of the DHB’s
contract reporting requirements and other data collected makes it difficult to ascertain the actual improvements in the oral health status of Māori. Reporting aligned to identifying improvements and analysis of data would allow the anecdotal improvements to be confirmed providing further support for these initiatives.

In this review, only current contracts were assessed using a systems approach to service delivery. However, oral health services depend entirely on the wider health system in which it operates. There were sufficient issues highlighted in this review to suggest that the current delivery arrangements will only be as effective as the overall system allows. Further, oral health reviews are recommended into issues like the relationship between the Ministry of Health oral health policy and DHB implementation through its funding decisions.

Māori providers will only be as successful at reducing the inequalities in Māori child oral health as they are able. There are clear examples in this report of how successful oral health outcomes can be achieved through the delivery of kaupapa Māori services. Further improvements can be made if the resources are directed in the right areas.

**Summary of recommendations**

1. Māori providers should have flexible oral health service contracts that are funded appropriately to ensure that they can provide necessary services to Māori by adopting a whānau ora approach. More urgently, Māori providers who are providing services outside of their contracts should be reimbursed for the additional services.

2. DHBs should consider capitation funding for Māori provider child oral health contracts so that services can be delivered in the most effective manner.

3. Māori providers recommend increasing the number of oral health community clinics that are based on the successful service at Te Taiwhenua o Heretaunga. Such a service adopts whānau ora as its kaupapa and has proven to reduce the barriers to Māori receiving oral health treatment and therefore reducing inequalities in Māori oral health.

4. Mobile services are considered an essential part of the ideal community service model and funding for this should be prioritised by the Ministry of Health and DHBs in building the capacity of capability of Māori providers.

5. A co-ordinated approach to the delivery of oral health services to Māori is crucial and the relationship between DHBs, Māori providers, SDS and dentists must be focused on addressing inequalities in Māori child oral health. Co-ordination plans should be developed that ensures a partnership approach is adopted and the key role of the Māori provider recognised in providing the two key components of any Māori oral health service, being enrolment and attendance.
Many other Māori providers are available to offer these services through their tamariki ora nurses and therefore the successful models can be easily duplicated.

6. The Te Taiwhenua o Heretaunga oranga niho service should be developed further into a centre-of-excellence for Māori oral health services. This service would then act as a development site for new initiatives seeking successful approaches and outcomes to improve the status of Māori oral health.

7. The Ministry of Health and DHBs with predominantly urban populations should identify Māori providers who can adapt the community model into a successful urban service to ensure that the goal of improving child oral health and reducing child oral health inequalities is achieved.

8. Māori providers should have capital equipment funding made available to them and repairs and maintenance components included in their contracts. Māori providers are not private practices and therefore more like the DHB provider arms than mainstream private practices. DHB contracts should be amended to reflect this as the lack of operational equipment means that oral health services can not be delivered.

9. Measures of performance are required to determine the effectiveness of the Māori child oral health services and to demonstrate how these services are improving Māori child oral health. A consistent framework that allows the components influenced by Māori providers should be used to accurately assess the effectiveness of these services.

10. Māori providers should be encouraged to develop their own oral health workforce through their relationships with training establishments and the development of further treatment services where Māori can gain important community experience and attraction to the oral health professions.

11. Te Ao Marama should be supported by the Ministry of Health and DHBs and be recognised as an important thread that brings together the Māori oral health workforce.

12. Further assessment of the wider oral health system should be undertaken to determine how organisational and systemic issues affecting Māori oral health providers can be improved.
Introduction

Unacceptable inequalities exist in the oral health of New Zealand children, especially among Māori and Pacific children and those from low socioeconomic (SES) families. There is, however, enormous scope to reduce these inequalities, as most dental disease is preventable. The Public Health Advisory Committee’s report ‘Improving Child Health and Reducing Child Oral Health Inequalities’ describes significant child oral health inequalities and makes several recommendations including that the Minister of Health directs the Ministry of Health to fund evaluation of current Māori oral health initiatives and continue to evaluate and monitor mainstream oral health services for their impact on Māori oral health.

A review of the Māori Child Oral Health (MCOH) Services is therefore necessary in order to obtain information about the types of services being delivered, the capacity and capability needs of the services and to identify preferred models of Māori child oral health services. The MCOH review would be carried out simultaneously with a review of the School Dental Services (SDS).

The scope of the review was agreed at a hui of Māori providers, DHB Planning and Funding Portfolio Managers and the Ministry of Health. The hui recommended a Māori Child Oral Health Project Team be established to oversee the project and ensure that the objectives of the review are achieved. All 16 Māori providers were reviewed to evaluate their operations and experiences in delivering oranga niho services. To define each of the services in a consistent manner, a ‘systems approach’ was adopted to assess each of the inter-related elements contributing to successful oral health outcomes for tamariki and rangatahi.

At the Ministry level, a MCOH Advisory Committee assessed the outcome and recommendations of the review and combined those with similar initiatives recommended by the SDS review. Recommendations will be presented to the Minister of Health for consideration.

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2 Only 16 of the 200 (plus) Māori providers nationally have child oral health service contracts.

Review Methodology

Eleven questions formed the basis of the MCOH Review contract scope and subsequently formed the basis of a qualitative questionnaire that the interviewer used with the 16 Māori providers. The MCOH Project Team undertook to approve the review process including refinement of the questionnaire and project objectives. A key concern was the efficacy of the review methodology with concern highlighted by previous oral health reviews not sufficiently considering kaupapa Māori in the process.

A meeting of the MCOH project team adopted a review process to overcome any barriers Māori providers may have to this type of review and finalised the review objectives as follows:

- Identify best practice Māori models of MCOH services within particular context and environments.
- Capture recommendations from Māori providers for all stakeholders to consider when developing policies and plans.
- Make recommendations on the direction to develop MCOH services further.
- Gain a better understanding of the make up of the MCOH workforce (including ethnicity, age, professional qualifications) and make recommendations supporting MCOH workforce development.
- Provide recommendations to strengthen current service capability and capacity.

To facilitate the review process, an introductory letter was sent to the Māori providers and relevant DHB Chief Executive Officers’ outlining the aims and objectives of the review and explaining the contact and interview process planned. Telephone contact was made with key provider representatives to arrange a meeting date and time. Upon confirmation, the interview questionnaire was sent to the provider to establish expectations of the review process. This review methodology ensured that the interviews were completed as programmed with useful contribution received from all those interviewed.

Individual provider responses were summarised and returned to Māori providers for amendment if required. Further analysis involved general themes emerging under each question group with results reported against each question number. Data such as workforce composition and access to fluoridation were included as additional questions prompted by the project team who oversaw the entire process through regular teleconference meetings.

4 A full list of the Māori providers is shown at Appendix 1.
5 A full list of members of the MCOH Review Project Team is shown at Appendix 2.
Data analysis involved coding of responses into general themes referenced back to the original review questionnaire. A systems approach was adopted to evaluate these themes. A draft report was presented to the Ministry for review by the advisory committee followed by presentation of the final report.

**Review Responses**

Interviews were undertaken with the 16 Māori providers nominated in the project scope as well as the President of the New Zealand Dental Therapist Association and a dentist who leads a mainstream provider in South Auckland with predominantly Māori and Pacific Island oral health professional staff. Interviewers did not directly follow the format of the questionnaires but rather used this as a guide only. The reviewer adopted a conversational approach whereby the information offered was collected as it arose. The conversations/questioning therefore continued until such time as all the required information was gathered or the interviewee felt they had nothing further to add. The approach ensured a cooperative and collaborative review process with the interviewer accepting as much or as little as the interviewees were prepared to contribute. In nearly all cases, the interviews took more time than planned. However, sufficient time was set aside to ensure no interview was terminated prematurely or the interviewer was able to enjoy the host’s hospitality.

**A description of the Māori child oral health service**

By adopting a systems approach to this review, it was found that there are three general types of contract being completed by the Māori providers covering the areas of oral health education and enrolment, appointment attendance and delivery of oral health clinical or treatment services. If placed in a logical flow diagram, (the child oral health system) the three services can be depicted as follows.

![Diagram 1: Child oral health service continuum](image)

For the purposes of this report, each of the Māori provider child oral health contracts has been categorised into one of the three components above. Enrolment and education contracts are typically carried out by tamariki ora or community nurses who

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6 Mainstream in this sense means a health provider that is not specifically recognised as a Māori provider through its commitment to a kaupapa Māori service.
have undergone oral health promotion training to compliment their core skills. Oral health education and enrolment into the School Dental Service is therefore achieved as providers have an existing relationship with new mothers and their extended whānau. General oral health information is disseminated and included with other services such as nutrition advice and Parents as First Teachers. This integrated approach is considered one of the key strengths of Māori providers and allows young mothers to be informed of the free oral health services available to tamariki.

Assistance for rangatahi to attend the oral health service is supported by a few small Adolescent Oral Health contracts (AOHC) that rely on the existing relationships Māori providers have with whānau encouraging rangatahi to attend their oral health appointments. In some cases, Māori providers are meeting these contracts by transporting rangatahi to their appointments, accompanying them through the visit then transporting them home. With an average value of just $8000, the contracts rely a great deal on the goodwill of the Māori providers and their willingness to see that rangatahi receive their treatment.

The most comprehensive contracts include the delivery of oral health treatment. Some of the providers have fixed site clinics that include services available to pakeke and kaumatua/kuia in a community clinic. In some cases the service delivery is combined with a smaller enrolment contract. For the treatment contracts, enrolment and attendance are aided through the delivery of mobile services in schools, kohanga reo and kura kaupapa. By taking the services to the tamariki and/or rangatahi, several barriers are overcome and the entire process facilitated in an efficient manner. All of the service delivery contracts are performed by qualified oral health professionals, many of whom are Māori.

Table 1 summarises the oral health contracts currently performed by Māori providers.

Table 1: Summary of contracted Māori child oral health services

<table>
<thead>
<tr>
<th>Age group</th>
<th>Enrolment</th>
<th>Attendance</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 months to 5 years</td>
<td>Pre-school</td>
<td></td>
<td>School Dental Service</td>
</tr>
<tr>
<td>DHB/Ministry of Health contract types</td>
<td>Oral health educator/promotion ($25,000 –$35,000p.a)</td>
<td></td>
<td>High risk areas (dental therapist service)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brush-in programme</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Special dental benefits</td>
</tr>
<tr>
<td>5 years to 12 years</td>
<td>At school</td>
<td></td>
<td>School Dental Service</td>
</tr>
<tr>
<td>DHB/Ministry of Health contract types</td>
<td></td>
<td></td>
<td>High risk areas (dental therapist service)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Brush-in programme</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Special dental benefits</td>
</tr>
<tr>
<td>12 years to 18 years</td>
<td>Self-enrolment</td>
<td></td>
<td>Dentists</td>
</tr>
</tbody>
</table>

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Outside of the contracted services, Māori providers typically deliver additional related services that overcome some of the many barriers experienced with oral health treatment because it is their kaupapa to deliver services to meet the needs of their people. Some examples of this include treatment of primary and pre-school tamariki with DHB and SDS knowledge but without DHB contracts, baby-sitting tamariki whilst parents take others for treatment, transporting tamariki and rangatahi to their appointments and providing a triage service to prioritise pre-schoolers for SDS treatment.

Table 2 depicts the actual services being provided showing how Māori providers are overcoming some of the barriers to oral health treatment by facilitation of the enrolment and attendance components of the oral health system. This should be compared to contracted services in Table 1.

Table 2: Summary of actual Māori child oral services

<table>
<thead>
<tr>
<th>Age group</th>
<th>Enrolment</th>
<th>Attendance</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 months to 5 years</td>
<td>Pre-school</td>
<td>Provider “fetch and carry”</td>
<td>School Dental Service</td>
</tr>
<tr>
<td>Overcoming Barriers</td>
<td></td>
<td>Provider babysitting Whānau ora Integrated service approach</td>
<td>Māori provider Māori staff Kaupapa Māori service Cultural competence A familiar face</td>
</tr>
<tr>
<td>DHB/Ministry of Health contract types</td>
<td>Health educator/promotion ($25,000 -$35,000 p.a)</td>
<td>High risk areas (dental therapist service) Brush-in programme Special dental benefits</td>
<td></td>
</tr>
<tr>
<td>5 years to 12 years</td>
<td>At school</td>
<td>Whānau ora Fetch and carry Mobile clinics Integrated service Facilitation with SDS</td>
<td>Community clinic Kaupapa Māori service Māori staff Cultural competence A familiar face</td>
</tr>
<tr>
<td>Overcoming barriers</td>
<td>School nurse</td>
<td>High risk areas (dental therapist service) Brush-in programme Special dental benefits</td>
<td></td>
</tr>
<tr>
<td>DHB/Ministry of Health contract types</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 years to 18 years</td>
<td>Self-enrolment</td>
<td>Dentists</td>
<td></td>
</tr>
</tbody>
</table>
Overcoming barriers

Dentists going to schools (remove self-enrolment option)
Health education

Whānau ora
Fetch and carry
Mobile clinics
Referrals from facilitation with dentists re DNAs
Integrated service approach

Dental benefits scheme
Community clinic
Kaupapa Māori service
Māori staff
Cultural competence
A familiar face

| DHB/Ministry of Health contract types | Adolescent oral health contract ($7000 – 9000p.a) | Mobile service for high risk (low decile) schools
Community clinic (capitation) |

A full diagrammatic description of the services being provided by the 16 providers can be found at Appendix 3. Analysis shows that the enrolment-attendance-service delivery continuum is best achieved through mobility with just four providers delivering each of the three steps for both tamariki and rangatahi. The majority of the Māori provider oral health services just cover one of the three components of the full service in the continuum.

A common theme from providers is that they provide services beyond their contractual obligations. If Māori providers only delivered the contractual requirements, they would not meet the needs of the children the service is designed to support. A key recommendation from providers is therefore that the DHBs recognise that oral health contracts need to accept the different steps in delivering a successful service. A treatment contract alone does not necessarily ensure that the oral health needs of Māori will be met because there are two prior steps in the process that need to be achieved before the oral health treatment can be successfully delivered. Mainstream services to Māori are improved when Māori providers support the enrolment and attendance components of the wider process. In many cases the work of Māori providers is not being recognised by the DHB and therefore provided from other scarce Māori provider resources.

Additionally, several providers felt that the established practice of separating tamariki and rangatahi services between the SDS and dentists did not support whānau ora. With exception to Te Whare Kaitiaki and Te Whānau o Waipareira, most Māori providers deliver oral health services outside of their formal DHB contracts, as it is their kaupapa to support whānau ora. This has an obvious impact on their ability to maintain services within the budget available.

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7 Te Manu Toroa, Te Whanau o Waipareira, Te Whare Kaitiaki and Hauora Whanui.
8 Te Whanau o Waipareira is the only provider of the 16 providers reviewed, that have contracts to deliver a full range of services to both tamariki and rangatahi on site at kohanga reo and kura kaupapa.
Each of the service delivery contracts has been established through different routes including recognition of special needs areas, partnership arrangements between the SDS and Māori providers, long standing arrangements with the School of Dentistry in Dunedin and the Te Taiwhenua o Heretaunga pilot project in Hastings. Services are typically managed by the oral health professionals (dentists and dental therapists) with contract and administration oversight being provided by Māori provider management teams.

Some services took several months to staff. This highlights the difficulty providers have in recruiting and retaining oral health professionals appropriate to their services. Managers, on the other hand, were already established within providers with sufficient experience and knowledge to support the oral health contracts. For the enrolment and attendance contracts, execution of the contracts was included in the roles of the existing workforce, mostly tamariki ora nurses. However, there are examples of dental therapists (no longer practising) employed in oral health education roles.

**A description of client demographics and utilisation**

In all cases Māori providers are located near to and support low decile schools and high deprivation index populations. Many of the DHB contracts specify the particular schools (typically decile 1) that Māori providers are responsible for as schools are used as the basis for accessing both tamariki and rangatahi for treatment. Tamariki ora nurses enrol pre-schoolers into the nearest SDS service or through a mobile service visiting kohanga reo. Several contracts specifically target high-risk children or areas where SDS or dentists have difficulty ensuring children are treated.

Providers have good general knowledge of their service coverage area and demographic characteristics of their whānau. Several providers have detailed demographic information resulting from local council reviews or population health studies. In all cases these were not related to the oral health contract. Providers produced client demographic information for primary and pre-school children through their reports to the DHB but similar reports were not seen for rangatahi.

Utilisation is therefore predetermined by the contract for primary and secondary schools with estimated numbers recommended for pre-school tamariki. For the service delivery contracts, the biggest barrier to utilisation for child oral health service was the waiting time to see the oral health professional. In several cases this is reduced by the use of mobile clinics.

A factor affecting pre-school children enrolment was the temporary nature of the SDS at some primary school clinics, particularly in low decile schools. Oral health educators described the frustration of trying to encourage young parents to enrol and
attend a clinic that they did not know when would be open. The concern about the reliance on the SDS as the only service provider for tamariki was a general issue highlighted by several providers who did not offer their own service.

**An assessment of customer satisfaction**

Only a few providers have formal instruments to capture levels of customer satisfaction and these were generally part of a wider service assessment under one of the quality programmes like Te Wana or Quality Health New Zealand. Those with formal surveys reported over 90–95 percent customer satisfaction. Other providers referred to anecdotal indicators of satisfaction citing higher levels of comfort within the clinical environment, improved access achieved by mobility, familiarity with providers who were part of a close community and more flexible services where all tamariki and rangatahi in one whānau could be seen at the same time.

In the main, however, providers had few measures of customer satisfaction or instruments that would allow them to capture this information. They simply know that the services they are performing are needed and have developed service models to meet those needs.

**A description of Māori health providers’ experiences with delivering the service**

In general, Māori providers offer a kaupapa Māori service that makes Māori more comfortable in receiving oral health treatment. The relationship between the Māori providers and whānau allows them to access all members to ensure that all tamariki and rangatahi are receiving the free oral health services. This relationship forms the basis of the Adolescent Oral Health Contracts (AOHC) where tamariki ora or community nurses are asked to assist in ensuring rangatahi attend their oral health appointments. Provider experiences with the AOHC service include transportation of rangatahi to their appointments, finding and counselling rangatahi who have missed dental appointments and unresponsive to further prompting, trying to overcome many of the known barriers of dental services and generally acting as the advocate between rangatahi and the dental provider. Obvious strengths are the relationship Māori providers have with whānau and the main weakness is the small amount of funding available\(^9\) for this kind of service where mobile services attending the high schools could reach the adolescents at a single point.

Pre-school enrolments are normally provided by tamariki ora or community nurses. In one or two cases the health education contracts are performed by Māori dental

\(^9\) On average, the AOHC contracts are for $8000 per year.
therapists who are no longer active in clinical practice. Again, the ability of Māori providers to make use of existing relationships indicates the main strength of them providing these services. Added to other services such as midwifery, Parents as First Teachers, Family Start and tamariki ora, Māori providers know whānau well and can carry out the oral health education service on a one-on-one basis. Pre-school enrolment into the SDS is therefore a natural extension to these other whānau ora services. In one instance where the oral health educator was trained as a dental therapist, a triage service has been started to prioritise tamariki into the SDS. This service is run out of the Māori provider’s general practice clinic two mornings per week with the blessing of the NZDTA and the SDS area co-ordinator.

Weaknesses associated with the oral health education services include:

- Oral health education contracts typically cover the salary of less than one full-time equivalent (FTE) employee and therefore there is no funding available for oral health promotion materials such as those developed at by Te Whare Kaitiaki or through ‘brush-in’ programmes.

- Where tamariki ora nurses were not fluent in te reo, oral health promotion in kohanga reo had been difficult with some services being delivered outside of the classroom in the stauncher kohanga.

- In some cases the relationship between the tamariki ora nurses and the SDS is not amicable meaning contacts to ensure continuity of care do not exist. Several tamariki ora nurses commented that they assist mothers to complete enrolment forms and deliver them to the SDS with no further knowledge of whether appointments have been made and/or kept.

- One oral health educator (former SDS dental therapist) explained that she was initially allowed to review SDS records to ensure tamariki from whānau known to her were enrolled and had received treatment. The SDS had stopped access to patient records with privacy being cited as the reason.

- In the cases of poor communication between the Māori providers and SDS dental therapists, there was no coordination to know when school dental clinics would be in operation and for what hours. Providers commented that it was difficult to promote the SDS when they did not know when the nearest clinic would be open to see the tamariki.

Experiences relating to treatment contracts include the breaking down of a number of barriers to access through the use of mobile vehicles and equipment, by the oral health professionals being Māori and through the adoption of an understanding that oral health treatment services present a number of difficulties to Māori and with additional resources and effort these barriers can be overcome.
One SDS dental therapist explained that in her local area she had access to pre-school, primary school and high school children within the same area. When she drew names for appointments she drew the whānau name and all tamariki and rangatahi in the whānau came to the clinic with the eldest child collecting the others on the way. All were allowed in the clinic at the same time with the youngest treated first to ensure that others followed suit.

At Te Whare Kaitiaki, tamariki and rangatahi are accompanied by their whānau into the clinic and allowed to observe and assist where practical. Two words are banned from this clinic being ‘don’t’ and ‘touch’.

One dentist explained that his place in the surfing community was probably more important to lowering barriers to oral health services than the fact he was Māori. Many of the oral health professionals employed by Māori providers were not Māori. The important strength of the service was the fact that the provider adopted and demonstrated a kaupapa Māori approach that made both parents and children comfortable to attend and feel as they were going to be given a measure of respect despite their poor oral health status. Some said that it was as important to be a recognised as a member of the close-knit community as being Māori, particularly in rural and regional areas.

At one service where the relationship between the DHB, SDS and Māori provider was co-operative and more of a partnership, tamariki enrolled within a network of providers were seen by a Māori dental therapist who was specifically assigned to delivering oral health services to them. In this unique model, one larger Māori provider (also a Māori PHO) held a contract for a number of tamariki located throughout the rohe. Smaller providers linked to the PHO then utilise their close links with local whānau to gather tamariki when the dental therapist calls. In this model, the three steps of enrolment, attendance and treatment service are achieved through the coordination of smaller providers and a larger provider who holds the oral health service contract.

As the service is also mobile (chair is moved around the smaller providers) a large number of tamariki can be seen in environments that they and their parents are comfortable with and has the flexibility to cope with the inevitable attendance of additional whānau members who would also like to be seen. As demonstrated by all Māori providers, everybody is seen.

A diagrammatic representation of this model can be seen at Appendix 4 and represents several aspects of best practice in the delivery of oral health services to Māori in regional and rural areas, particularly in lowering the barriers associated with enrolment and attendance. The same model is used for other health services to access Māori and others most at risk.
The greatest weakness described by Māori providers is their inability to see more tamariki and rangatahi. In most cases providers only saw those specified in their contracts so this related directly to schools, kura kaupapa and kohanga reo. Te Taiwhenua o Heretaunga were contracted to see rangatahi and tamariki who particularly wished to attend the clinic. They were unable to see all tamariki from local whānau because they did not have the capacity to do so. The demand for this service has resulted in up to a thee-month waiting list.

Other weaknesses described by service providers are the lack of funding for repairs and maintenance of equipment. Most providers had old equipment that had been either donated or originally sourced from grant funding. As the service contracts did not cover maintenance, providers had to find money from other areas to maintain their medical equipment. In one case the lack of a new autoclave would mean the clinic might have to close until a new one is purchased. In another, where the provider had independently funded and outfitted mobile vehicles, maintenance and compliance costs meant that the vehicles were off the road for periods of time.

Te Atiawa Dental Service was no longer operating as it had been established and operated with the same DHB contracts as other private providers. There were no other enrolment or attendance DHB contracts. It was found that this funding alone was insufficient for the work being done particularly as the success of the clinic grew and attracted more Māori who obviously needed the service. The Māori dentist found that his private practice was supporting the community work causing a negative impact on his personal circumstances. It was felt that more support for a community model from the DHB could have allowed this much needed service to remain in operation.

Although Māori providers predominantly employ Māori oral health professionals, finding and employing Māori willing to work in remote and regional areas had proved difficult for some providers. In two cases, the oral health treatment services were not being provided as suitable oral health professionals could not be sourced. This meant that those needing to be seen had to go elsewhere or not visit a dental professional at all.
Common to all Māori providers with fixed clinics was the high number of rangatahi who failed to attend their appointments in spite of reminder letters and phone calls. Providers with mobile services who located at high schools were able to overcome this common problem by calling for other students thereby not wasting valuable treatment time. In fixed clinics this is not so easily done.

**Costs of establishing and operating a Māori child oral health service**

The set up and operational costs of the AOHC and oral health education contracts was much less than treatment contracts. In the main, the oral health promotion and facilitation contracts were undertaken by existing Māori provider employees or the tasks were added to those of the tamariki ora nurses. Where the oral health education contracts typically supported less than 1.0 FTE employee, the Māori providers generally split the role between two or more tamariki ora nurses to gain better coverage for their pre-school enrolments.

Costs of establishing oral health treatment services were high with most established through one-off grant funding or the combination of a number of grants. Apart from Te Whare Kaitiaki, all service delivery contracts required the providers to purchase equipment, sometimes before the oral health professional arrived.

One service delivery provider held a labour-only contract for tamariki which meant that all of the ongoing costs were absorbed by the SDS. This allowed the dental therapist to concentrate on accessing and treating the tamariki and achieving compliance with the service specification. Other costs like the car and mobile phone were the responsibility of the Māori provider.

There were equally strong arguments for ongoing costs being provided on a capitation or fee-for-service basis. One provider described the capitation funding as allowing them to use the funding in different areas that had the greatest need (eg, resources for ‘brush-in’ programme) and avoided the time consuming form filling and cash-flow concerns of fee-for service contracts. Alternatively, several of the dentists who also work in private practice claimed that capitation funding wouldn’t work because the standard fee per child is too low for Māori who typically need more work and time to restore their teeth.

Most providers with service contracts were able to split out their ongoing costs with all again emphasising how the lack of repair and maintenance money threatens the services they provide. Te Whare Kaitiaki has its costs included in the School of Dentistry’s budget so would be difficult to split out.
Providers generally felt that the salary costs were the most significant so if funding formulae were being developed for Māori providers then salary costs should be the basis rather than the number of patients seen. Some providers attract co-payments from low-income adults and source emergency and relief of pain money from other agencies. A general consensus was that the general benefits scheme amounts were insufficient to cover the extra needs of rangatahi and therefore this amount could be topped-up by special purpose funding to target high-needs children.

Some Māori providers were considering a joint commercial/community model citing an ability to draw additional revenue from some whilst also accessing external agency funding for low-income adults. Such a model may suit Māori providers in an area identified as having a constituency with the ability to pay for oral health treatment then using any excess to support oral health promotion. This approach would require the experience of a dentist who had been in private practice to know how to make such a model work and therefore was dependent on that individual. This review found more than one provider considering this option so further investigation on how this model may best meet the requirements of MCOH services should be undertaken.

All Māori providers spent the budget allocated to their oral health service with one commenting that they always budgeted for a profit\(^\text{10}\) but never seemed to achieve it.

**Types of relationships with other oral health services, SDS, dentists, WINZ and schools**

All Māori providers commented that it was essential that they have a positive working relationship with the SDS. This was because the SDS was by far the dominant service provider for tamariki as it was they who were provided with the resources to treat tamariki. All of the dental therapists had worked for the SDS at some stage and had trained in their systems and processes. The oral health educators essentially act as a conduit for the SDS and therefore were wholly dependent on them to achieve successful outcomes for their own service. Te Taiwhenua o Heretaunga did not treat tamariki as a matter of course because their contract did not allow them to provide sufficient services to treat tamariki in the area as they would have liked. The SDS remained the primary provider of oral health services to tamariki even where Te Taiwhenua o Heretaunga offered such a successful service.

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\(^{10}\) Provider serviced adults and sought a co-payment to help off-set the cost of the dental treatment.
Some providers felt that the pre-school enrolment process was not as effective as it could be due to the structure and delivery model used by the SDS. For example, Māori providers found it difficult to encourage young mothers to attend a clinic that they did not know when it would be open. Tamariki ora nurses did not know what happened to the enrolment forms and whether this resulted in a successful treatment service. In areas where there was a co-operative arrangement with the SDS, effective service delivery could be achieved because resources were shared, communication two-way and a genuine willingness to reach those in greatest need apparent.

The relationship between dentists and Māori providers was of concern, particularly in regards to differential access. In many of the regions Māori providers held lists from DHBs, listing the dentists who held General Dental Benefits (GDB) contracts and which identified which groups of people the dentists choose to see. Some dentists would see no rangatahi (ie, no DHB contract) whilst other dentists (with GDB contracts) would only accept rangatahi whose parents were already patients of the dentist. Just why the DHB would allow dentists to be selective and discriminate in this way was unknown. Differential access by some dentists\textsuperscript{11}, added another barrier to rangatahi receiving their free oral health treatment. Māori providers should therefore be assisted to provide services to rangatahi in place of the dentists who were not willing or not able to see them.

Māori providers worked closely with the SDS to cover areas where dentists did not provide a GDB service.\textsuperscript{12} Mobile services located at the high schools appear to be overcoming these barriers with enrolments rising dramatically\textsuperscript{13} when the dental service is taken to the rangatahi. The four Māori providers with service delivery contracts all treat rangatahi on school sites. As the demand for services increase, these services need to expand to take in more schools or new providers resourced to meet the current unmet demand and need. All Māori providers welcomed the opportunity to expand their services as long as they were funded appropriately to do so. The need to enrol with a dental service when you commence secondary school was seen as a systemic barrier that Māori providers considered unnecessary. Māori providers were well placed to facilitate the continuity of services from the SDS to dental services if required.

The relationship with WINZ related to low-income adults and therefore was considered outside the scope of this review. However, it was important to note that all

\textsuperscript{11} Ministry of Health. 2001. Monitoring Ethnic Inequalities in Health

\textsuperscript{12} The one dentist in Wairoa did not hold a GDB or SDB contract so the SDS was providing a dental therapist service at the high schools with higher needs children travelling to Napier to see a dentist.

\textsuperscript{13} Enrolment at one South Auckland secondary school went from 8% to 80% following the arrival of the Mighty Mouth mobile service.
Māori providers have a relationship with WINZ either as a funder of treatment or as part of a whānau ora advocacy role advising adults of their entitlements to emergency dental treatment. In some cases some innovative practices had been developed.

Several Māori providers supported ‘brush-in’ programmes at local schools and kohanga reo. Providers explained that the school itself was the main conduit to a successful brush-in programme as the oral health educator or professional only visited a few times in the year. One provider commented that the SDS was starting to see improvements in tamariki oral health as a result of the brush in programme but research to support this was not available. One dentist commented that the state of pupil’s general health was one criterion assessed during ERO audits and support of a brush-in programme may be seen positively.

Other relationships with schools related to their willingness to accommodate a mobile oral health unit in their school including the provision of power and water. In regional areas this was not considered an issue but at least one urban school principal refused to allow a Māori provider with a mobile unit to treat rangatahi at his low-decile and high percentage Māori population school. In regional and rural areas, the mobile vehicles needed to take account of the roading when considering mobile vehicle characteristics.

**A description of the relationship and arrangements between the Māori child oral health service and their District Health Board**

Like the relationships with other key stakeholders in the provision of health services, Māori providers saw that a good working relationship with the District Health Boards as an integral part of delivering successful services. As with all relationships, regular communication and exchanges of ideas were necessary if the services were to be effectively implemented and improved.

The oral health educator and AOHC contracts required less oversight by DHBs than the treatment contracts. Typically, providers made quarterly reports to the DHB and were in frequent contact with their DHB portfolio manager. The dollar value of the contracts suggests that this level of contact is sufficient for the oral health promotion contracts.
The most successful treatment or service delivery contracts were in organisations that had regular contact with the DHB and met regularly with them as well as other oral health service providers, such as SDS and hospital dental services, where a combined strategic view of oral health for the DHB region could be discussed. Providers commented that this partnership type arrangement allowed some flexibility and reception of innovative ideas as there was constant communication between the groups and each knew exactly what areas they were responsible for. These meetings included input from DHB funding and planning managers who were an important part of the service delivery equation.

In areas where Māori providers felt that they were in competition with the DHB provider arm, the services were not as well coordinated and relationships, although cordial, did not promote a united response to addressing oral health issues within the DHB region. In these areas meetings between the groups were infrequent with contact mainly occurring at dental therapist level where more personal working relationships had formed.

John Broughton (renowned Māori Oral health Advocate and Associate Professor, University of Otago) described Lois Jackson as the model DHB manager because of the commitment shown to addressing the oral health needs of Māori and the relationship formed with Tipu Ora Health Service. This partnership approach had allowed the services to access pre-school children in a clinic based at the Tunohopu Health Centre staffed by SDS dental therapists. Additionally, Māori were able access the week-long clinic of final year dental students from Otago University School of Dentistry with the assistance of John Broughton. This very successful operation required a great deal of goodwill and cooperation between the Māori provider, DHB, Otago University and private practitioners who donated their time to the exercise.

A description of the types of primary care integrated into the service

Māori providers combine the oranga niho service into other health services in an integrated approach that supports whānau ora. In this way, community health workers can access tamariki and rangatahi that would not otherwise know or be concerned with their oral health needs. These services include Tamariki Ora, nutrition education, Family Start, Parents as First Teacher, midwifery, asthma, diabetes, Smokefree, school nursing, immunisation and general practice services.

For the majority of Māori providers, the oral health treatment continues to rely on the SDS or private dentist for the final part of the service. This means that they can only control part of the process without visibility of that final part in some cases. Māori providers expressed a measure of frustration that they were unable to complete the process by providing oral health treatment service, as they would have liked. Much of the success of these services is therefore dependent on the co-ordination and
co-operation between the Māori provider and the mainstream treatment provider as described above.

Several providers without treatment services expressed a wish to include these into their range of integrated services thereby adding to their ability to meet the primary health needs of Māori in ways they believe encourages whānau to seek their assistance. Providers with treatment services would like to expand as their success is clearly demonstrated by extensive waiting lists.

**A description of data collection processes and reporting**

All Māori providers report the data required by them as defined in their oral health service contract. Most report quarterly and annually and include quantitative data such as enrolments, ethnicity, completions, DMFT rates (Diseases, Missing, and Filled Teeth) and access to fluoridation. More details were collected for tamariki than rangatahi. Several providers included a narrative of their activity to support the quantitative data including areas of concern and recommendations for improvement.

In all cases the reporting requirement is seen as a compliance issue relating to the contract rather than any data gathering for further analysis by the Māori provider. All commented that they had religiously completed their reports but not received any feedback in terms of consolidated results or analysis that might suggest that service improvements were required. This was particularly important to the oral health educators who were interested in the impact their enrolments and advisory services were having on the data collected by the SDS.

One provider commented that the DMFT figures were only representative of tamariki seen who utilised the service and did not include those tamariki not seen by the service. The provider suggested that the DMFT figures needed to be balanced by a completions figure then re-weighted, as they suspected Māori would contribute a good proportion of those unidentified.

**An analysis of the level of evidence available to demonstrate improved oral health**

The overwhelming finding here is that there is no objective information available from the Māori providers that demonstrate improved oral health of Māori. There were several anecdotal expressions that SDS is starting to see improvements in the oral health status of tamariki who have been in a ‘brush-in’ programme but no provider has a systematic process to analyse their own data to show demonstrable improvements.
One or two providers had research information that described the general oral health status of tamariki in their area but these were done as part of submissions to the local council in fluoridation debates and were completed by external parties.

Māori provider workforce

The Māori provider oral health workforce is predominantly Māori. All but three of the oral health education and AOHC roles are performed by Māori tamariki ora nurses with one provider being unique having two Pakeha tamariki ora nurses providing the oral health education and enrolment service. There were five Māori dentists interviewed as part of this review, one working for a Māori provider, one at the School of Dentistry and the other three in private practice. Four Māori providers employed Māori dental therapists or hygienists in clinical roles with two others involved in oral health promotion. Treatment services employed dental assistants who were all Māori.

Māori providers had experienced difficulty in attracting oral health professionals to their services for a number of reasons. Geographic isolation meant that some areas of greatest need had the most trouble finding oral health professionals. There was also an aspect of professional isolation where dental therapists, in particular, felt that they had been separated from the SDS who had been their previous employer and the place they undertook the majority of their training. This highlighted the need for the Māori providers and the SDS to maintain close relationships so that professional development could be maintained and the quality of services assured. Professional oversight by the Principal Dental Officer would be beneficial for all dental therapists just as it is within the SDS; however, at least one provider was expected to pay for this.

Oral health educators recommended that te reo was important for them to be able to deliver messages to kohanga reo and kura kaupapa effectively. Although many were Māori, not all were fluent in te reo which could prove a problem in kohanga that insist only te reo is spoken inside the school.

All Māori providers highlighted the importance of Te Ao Marama,14 particularly the oral health educators who may not be oral health professionals. All who attend the Te Ao Marama conferences explained how they updated their knowledge of oral health education and networked with others in similar roles. For many, this is their only contact with oral health professionals as they are essentially tamariki ora nurses. Te Ao Marama is therefore seen as not only the voice of Māori oral health professionals but an important thread that binds Māori oral health service providers together.

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14 Te Ao Marama is the New Zealand Māori Dental Association.
Fluoridation

One of the objectives of this review was to gain an impression of the Māori provider’s knowledge and activities relating to the access to fluoridated water. There were essentially three groups who commented on this issue. The first related to the Māori providers located in areas with 100 percent access to fluoridation. They had an understanding of the benefits of fluoridation and would only make a comment about it were there a discussion about removing it from the water supply. In one case, a Māori dentist canvassed on behalf of Māori to ensure that fluoride continued to be added to the water in his city.

The second group involved regional providers whose whānau were not generally on a reticulated water supply. These providers understood that other methods of adding fluoride could be adopted and this formed part of the oral health promotion message. In the small towns where reticulated water was available, providers joined wider community groups to support fluoridation.

The third group of Māori providers had been actively involved in the fluoridation debate by councils deciding whether to add or remove the fluoride from the water supply. Māori providers were typically part of a wider community lobby group who made submissions on behalf of all Māori to the council hearings.

One dental therapist reviewed reports prepared for a DHB that had been referred to the runanga for comment as part of their consultation process. As a Māori oral health professional she was able to make recommendations to the runanga that went back to the DHB citing deficiencies in the report relating specifically to Māori oral health needs and the use of fluoride in reticulated water supplies.

In general terms, Māori providers have a good understanding of the benefits of fluoridation but are not confident their input to local government will affect the decision of whether to add or remove fluoride from the water or even engage in the debate.

Assess the capacity and capability needs of Māori child oral health providers

There is strong support amongst the Māori providers for the community oral health service such as that proven successful at Te Taiwhenua o Heretaunga. Many of the providers would like to duplicate this service as it is proven to be successful in removing many of the barriers that Māori face in accessing oral health treatment.

Hauora Whanui have probably taken the community concept further with their ability to add mobile services to their assets removing several of the weaknesses of only having a fixed clinic service. With both a fixed and mobile service, Hauora Whanui is
able to meet the needs of Māori from 0 years to 100 years delivering mobile services to schools and remote areas whilst also having a base at Kawakawa that has a visiting dentist to perform more extensive work. Being collocated with the GP service and integrated with other public health initiatives means that all of the strengths of Māori providers described in this report can be found at Hauora Whanui. The issue for them is that they do not have a DHB contract for the tamariki they see.

One of the key recommendations from providers is that they would like to offer mobile services as access through transportation is one of the greatest barriers experienced by Māori. Providers with oral health professionals recommended a fixed clinic base with mobile outreach services that included oral health education.

Te Manu Toroa has developed their service in a slightly different manner utilising their network of hauoranga to access whānau throughout their region. This emphasises the point that there may be a base model that is the starting point for a full range of oral health services but local differences will dictate how the final organisation is set up.

Diagram 2 represents a proposed ideal service compared to current services can be seen below.

Diagram 2: A representation of a proposed ideal community model

15 Hauoranga – a collective of Māori Providers working under Te Manu Toroa (Tauranga) network
All of the current Māori oral health providers have at least one element of the community model above but no existing Māori providers are contracted to provide the comprehensive community model identified. For the capacity and capability development of the Māori providers, it is therefore recommended that those who meet some initial criteria for a full range of services be developed to allow them to implement the missing components of the set above. Such criteria might be the existence of a GP or related service, high needs and/or rurally isolated population, and a recognised and influential Māori provider.

The community model appears to work better in regional areas than urban where there is more a sense of community than in the cities. Just one urban Māori provider was visited that provided a full range of services and their experiences differed from those described by iwi based providers. For example, the Te Whānau o Waipareira clinic in West Auckland saw equal numbers of Māori and Pacific Island patients. Their services were clearly focused on low SES families regardless of ethnicity. It is expected that the community model developed in an urban setting may be different to that in a regional or rural setting. As such a large number of Māori are located in urban centres it is considered vitally important that a suitable model be developed to provide oranga niho services to tamariki and rangatahi in the urban centres.

For providers who could not sustain the community model above, the oral health promotion and advocacy roles appear to be the best way they can contribute to further improving the oral health status of tamariki and rangatahi. These services do, however, rely on a partnership arrangement with the mainstream clinical providers such as the SDS and dentists. Without that cooperative and coordinated approach, Māori providers are only able to influence part of the full process and therefore not as effective as they could be.

In areas where the SDS were doing an excellent job accessing and treating tamariki and rangatahi, Māori providers requested better coordination and cooperation so that they could assist the dental therapists to see tamariki and rangatahi through advocacy, transportation and oral health promotion. Those with oral health education contracts would like to expand these services to further outlying areas but expressed concern that their success in pre-school enrolments may be leading to over-demand of the SDS. Māori providers appreciate that the SDS has been under some pressure in recent years with dental therapist numbers reducing, yet the demand for their time has been growing. It is therefore considered that the work undertaken by Māori providers is complimentary to the SDS, particularly the treatment services, and any further service development done is to assist the SDS to cope with increasing demands, particularly from Māori.
As discussed earlier, Māori providers have had difficulty attracting oral health professionals to their services due to remote locations and the perceived isolation of working away from the established dental community. This appears more pronounced for dental therapists than dentists. For this reason, there is a need for more Māori oral health professionals at all levels. Māori providers believe there is an aspect of “build it and they will come” to attracting Māori into the dental professions.

For example, if tamariki or rangatahi never see a Māori dental therapist or dentist then they may not believe that this is a role Māori can actually perform whereas Māori providers with Māori oral health professionals have attracted several rangatahi into dental assistant roles that have seen them go onto the degree courses at Auckland and Dunedin. Māori oral health professionals may then be more inclined to return to the Māori provider to work particularly if they have been supported through their studies by an iwi scholarship.16

As Te Taiwhenua o Heretaunga has been the flagship for oranga niho services it has learned a number of lessons in developing its services to overcome barriers and meet the needs of Māori. Key recommendations above are that a number of other providers should be contracted to duplicate this service. However, the Ministry of Health and DHBs must continue to develop Te Taiwhenua o Heretaunga further as there are many advancements that can be made. For example, in this area Te Taiwhenua o Heretaunga do not have a contract to treat tamariki although they do not turn away any child that preferred to attend the clinic with whānau. It may be the ideal location for a DHB to fund a Māori provider to service all Māori within the area taking over the role of the SDS and providing an integrated service to all tamariki and rangatahi utilising a whānau ora approach. Te Taiwhenua o Heretaunga need a mobile service to achieve this and therefore their capability and capacity enhancement would see them moving to another level as a pilot project initially and then as the ‘centre-of-excellence’ for oranga niho services as it is becoming.

To summarise the capability and capacity recommendations for all Māori providers, it is recommended that each of the current contracts be reviewed against the ideal service range as set out in the community model. For the providers who meet pre-set criteria, services should be added until the provider builds up to a point where they can offer a full range of services from their community clinic. This may include some innovative thinking about how mobile services can be funded. For providers who do not meet the criteria at this stage, they could either assist the larger providers with oral health services (enrolment and attendance) as seen in the Te Manu Toroa model or form partnership arrangements with the SDS and dentists to ensure that tamariki and

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16 Personal comment Ngati Porou Hauora.
rangatahi are overcoming the barriers preventing them from accessing oral health services.

A progression framework from oral health education to tamariki treatment then rangatahi treatment could be established where smaller providers add capability and capacity sequentially until such time as the resources for a full range of services became available. A dental therapist could cover all services but support from a dentist may be a preferable option for professional oversight.
Summary and Recommendations

All 16 Māori providers made valuable contributions to this review and looked forward to positive outcomes from it. Services are being provided that overcome many of the barriers associated with oral health treatment and there is a sense that tangible gains are being made in addressing the oral health inequalities experienced by Māori.

Therefore, all providers would like to see their services expanded and funded appropriately, particularly in the treatment areas where there is significant unmet demand but insufficient capacity. This is demonstrated by the extensive waiting lists now evident at some services. In this regard, Māori service providers are more successful at accessing and treating Māori than they can commercially sustain. In a commercial practice they could employ more oral health professionals and expand their services by charging users. For contracted Māori providers, however, services are constrained by the amount of DHB and external agency funding to ensure the doors remain open.

Successful service providers need funding to support the desired outcomes. Māori providers have found successful methods to overcome barriers to Māori accessing oral health services yet may of these services are outside of their DHB contract. Close and constant communication with the DHB should ensure that contracts and funding reflects these essential services. This includes all components of the oral health service; enrolment, attendance and treatment as in several instances all three are being delivered but just one or two contracted for. Part of the problem here may be that DHB contract specifications are not sufficiently flexible to support a whānau ora approach. If it is difficult to be so specific then perhaps DHBs could consider capitation contracts that support a certain population group with the amounts taking into account the high need and risks of Māori.

Recommendation 1

Māori providers should have flexible oral health service contracts that are funded appropriately to ensure that they can provide necessary services to Māori by adopting a whānau ora approach. More urgently, Māori providers who are providing services outside of their contracts should be reimbursed for the additional services.

DHB contract specifications are neither sufficiently flexible nor funded appropriately to support a whānau ora approach. If it is difficult to be so specific then perhaps DHBs could consider capitation contracts that support a certain population group with the amounts taking into account the high need and risks of Māori.
Recommendation 2

DHBs should consider capitation funding for Māori provider oral health contracts so that services can be delivered in the most effective manner.

Māori providers have difficulty with some parts of the oral health service system that introduce what are considered unnecessary organisational and systemic barriers. Rangatahi having to re-enrol when they transfer from primary to secondary school is an unnecessary barrier to receiving free oral health treatment and should therefore be removed. Rangatahi are also at the discretion of the dentist (with GDB contracts) on whether or not they can access their services.

Māori providers adopt a whānau ora approach that ensures rangatahi continue to be seen by a mobile service or a fixed community clinic. DHBs have prioritised oral health services differently meaning that areas of high need are not being met with appropriate services. Māori providers have proven capability in meeting those needs and therefore should be supported to provide services that will directly improve the oral health status of Māori.

Recommendation 3

Māori providers recommend increasing the number of oral health community clinics that are based on the successful service at Te Taiwhenua o Heretaunga. Such a service adopts whānau ora as its kaupapa and has proven to reduce the barriers to Māori receiving oral health treatment and therefore reducing inequalities in Māori oral health.

Mobile services have been shown to overcome the first two components of oral health services being enrolment and attendance. Both pre-school and rangatahi enrolments have improved significantly with the facilitation and treatment by mobile services offered by Māori providers at kohanga reo, kura kaupapa, primary and secondary schools.

Recommendation 4

Mobile services are considered an essential part of the ideal community service model and funding for this service should be prioritised by the Ministry of Health and DHBs in building the capacity of capability of Māori providers.
Where the ideal community models are considered inappropriate or too expensive, Māori and mainstream providers need to work closely if the services are to meet the needs of Māori. Several Māori providers are improving access and therefore outcomes of oral health services to Māori through partnership arrangements with the SDS and private dentists. DHBs can facilitate this process by providing Māori providers with oral health service contracts then allowing them to facilitate the services with SDS and dentists who provide appropriate treatment to Māori and support the provider’s kaupapa. The models adopted by Te Manu Toroa and Tipu Ora demonstrate that a coordinated approach between all stakeholders can ensure that the oral health needs of Māori in regional and rural areas can be met. There is also capacity within other Māori providers to provide enrolment and attendance support thereby duplicating these already successful services in other high needs areas.

**Recommendation 5**

_A co-ordinated approach to the delivery of oral health services to Māori is crucial and the relationship between DHB, Māori providers, SDS and dentists must be focused on addressing inequalities in Māori child oral health. Co-ordination plans should be developed that ensures a partnership approach is adopted and the key role of the Māori provider recognised in providing the two key components of any Māori oral health service, being enrolment and attendance. Many other Māori providers are available to offer these services through their tamariki or nurses and therefore the successful models can be easily duplicated._

The service at Te Taiwhenua o Heretaunga has proven to address the needs of Māori in the Hawkes Bay region. Part of the success has been due to the influence of John Broughton who sits on an overseeing committee and his research into oranga niho services. Having been in operation now for four years, the operation should be developed further into a ‘centre-of-excellence’ for Māori oral health services. Such development could see how the ideal community model can expand through out-reach services to remote areas, support of other Māori providers in the Hawkes Bay region and even assisting with addressing the issues in Wairoa. Te Taiwhenua o Heretaunga could replace the SDS in the area and ensure that all tamariki and rangatahi received their free oral health treatment through a whānau ora approach. Other DHBs and larger Māori providers can then adopt the successful practices in their own areas, adapting and developing them further to suit their own needs.

**Recommendation 6**

_Te Taiwhenua o Heretaunga oranga niho service should be developed further into a centre-of-excellence for Māori oral health services. This service would then act as a development site for new initiatives seeking successful approaches and outcomes to improve the status of Māori oral health._
Similarly, there was insufficient data gathered during this review to suggest that the community model would be as successful in urban settings as it is in the regional centres. The urban services visited during this review focused on Māori, Pacific Island and low SES families. Therefore, the oral health community model may need modification to take into account the larger proportion of non-Māori that are likely to attend the service. The very large number of Māori living in urban centres means that this service is vital if oral health inequalities are to be reduced. A service in Auckland should be developed further to determine whether the community model is appropriate for urban settings or alternative options sought for high needs groups.

**Recommendation 7**

*The Ministry of Health and DHBs with predominantly urban populations should identify Māori providers who can adapt the community model into a successful urban service to ensure that the goal of improving child oral health and reducing child oral health inequalities is achieved.*

Māori providers with treatment contracts highlighted the difficulty of purchasing and maintaining expensive capital equipment items under the current contract structure that was limited to services. Several services had been stopped for periods due to the unavailability of equipment or vehicles. As this equipment ages this issue will only get worse. Māori providers ask why DHB provider arms can access capital equipment funding and cover repairs and maintenance when they are limited to service provision funding only. Māori providers are not private practices and therefore should not be treated as such.

**Recommendation 8**

*Māori providers should have capital equipment funding made available to them and repairs and maintenance components included in their contracts. Māori providers are not private practices and therefore more like the DHB provider arms than mainstream private practices. DHB contracts should be amended to reflect this as the lack of operational equipment means that oral health services can not be delivered.*

This review found a lack of reliable research or data to determine the effectiveness of the services being provided. Māori providers commented that DMFT data only reported tamariki seen and took no account of those not seen. It was expected that many of those not seen were Māori. Some sought feedback on their regular reports whilst others were interested in whether the brush-in programmes were starting to produce results. Reports were considered a compliance issue that reported activity rather than any measure of performance. Some Māori providers only had a small role
in the overall service and therefore dependent on other mainstream providers to show if their work was having a positive impact. In all, there was little analysed information making its way back to the providers if such information were available.

**Recommendation 9**

*Measures of performance are required to determine the effectiveness of the Māori child oral health services and to demonstrate how these services are improving Māori child oral health. A consistent framework that allows the components influenced by Māori providers should be used to accurately assess the effectiveness of these services.*

Implementation of further Māori provider treatment services will have a positive effect on the Māori oral health workforce. Already, Māori providers have initially gained the interest then supported Māori through oral health professional training increasing the overall number of practitioners. Some Māori providers deliver training programmes or have relationships with training establishments to increase the number of Māori moving into the oral health sector. If tamariki and rangatahi experience Māori providing their oral health treatment then they too may see it as a profession they may want to join.

**Recommendation 10**

*Māori providers should be encouraged to develop their own oral health workforce through their relationships with training establishments and the development of further treatment services where Māori can gain important community experience and attraction to the oral health professions.*

Te Ao Marama acts as an important thread to the Māori oral health workforce as many are not oral health professionals meaning their attendance at the Te Ao Marama hui is their only continuing professional education in oranga niho. These hui also provide an important forum for the discussion of specific oral health issues, relationship building, ongoing support and coordination between providers.

**Recommendation 11**

*Te Ao Marama should be supported by the Ministry of Health and DHBs and be recognised as an important thread that brings together the Māori oral health workforce.*

This scope of this review was the evaluation of current Māori Child Oral Health service contracts. A systems approach was used to assess the effectiveness of the operations and recommendations about how these could be improved. However, Māori child oral
health services will only ever be as effective as the wider health system allows, as it is entirely dependent on the allocation of contracts for various components of the overall service. Further assessment of the wider health system as it related to oral health should be undertaken to assess, for example, how Ministry of Health policy on Māori child oral health is implemented at the DHB level. Other issues, such as the inability of Māori providers to fund capital equipment, the relationships with the SDS and dentists and the shortage of Māori oral health professionals are all part of a wider health system combining to place Māori at a disadvantage in receiving oral health treatment. Through logical and positive action these issues can be addressed.

**Recommendation 12**

*Further assessment of the wider oral health system should be undertaken to determine how organisational and systemic issues affecting Māori providers could be improved.*
## APPENDICES

### Appendix 1: Māori child oral health providers

<table>
<thead>
<tr>
<th>Māori provider</th>
<th>Postal address</th>
<th>Phone number</th>
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<tr>
<td>Ngati Whatua o Orakei Health Services Ed</td>
<td>128 Apirana Avenue Glenn Innes PO Box 42183 Orakei Auckland</td>
<td>09 578 0941</td>
</tr>
<tr>
<td>Tipu Ora – Service</td>
<td>Tunohopu Health Centre Houkotuku Street Ohinemutu Rotorua 3201</td>
<td>07 348 9613</td>
</tr>
<tr>
<td>Te Manu Toroa</td>
<td>15 Garden Place Tauranga</td>
<td>07 571 2026 07 574 9831(f) 027 254 9060</td>
</tr>
<tr>
<td>Te Whānau o Waipareira</td>
<td>13–15 Ratanui Street PO Box 21-081 Henderson Auckland</td>
<td>09 839 0288 021 958 259</td>
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<tr>
<td>Te Atiawa Dental Services</td>
<td>‘Taylor Dental’ 25 Vivian Street New Plymouth</td>
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<tr>
<td>Ngati Porou Hauora</td>
<td>PO Box 2 Te Puea Springs East Coast 3850</td>
<td>06 864 6803</td>
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<tr>
<td>Turanga Health</td>
<td>145 Darby Street PO Box 41 Gisborne 3815</td>
<td>06 869 0457</td>
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<tr>
<td>Hauora Whanui</td>
<td>2–4 Rayner Street PO Box 141 Kawakawa</td>
<td>09 404 1551</td>
</tr>
<tr>
<td>Kahungunu Executive</td>
<td>65 Queen Street PO Box 79 Wairoa</td>
<td>06 838 6835</td>
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<td>Kahungunu Health Services</td>
<td>208 Southampton Street West PO Box 901 Hastings</td>
<td>06 878 7616</td>
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<td>Te Kupenga Hauora o Ahuriri</td>
<td>5 Sale Street PO Box 1018 Napier</td>
<td>06 835 1840</td>
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<tr>
<td>Taiwhenua o Heretaunga</td>
<td>821 Orchard Road Heretaunga Park Complex PO Box 718 Hastings</td>
<td>06 873 0971</td>
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<td>Te Kohao Limited – Ed</td>
<td>180 Dey Street PO Box 7107 Hamilton</td>
<td>07 856 1211</td>
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<td>Te Korowai Hauora o Hauraki</td>
<td>201 Richmond Street PO Box 605 Thames</td>
<td>07 868 5375 021 979 350</td>
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<td>Māori provider</td>
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<td>Tuhikaramea Medical Centre</td>
<td>1000 Victoria Street</td>
<td>07 839 5298</td>
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</tr>
<tr>
<td>Te Whare Kaitiaki</td>
<td>Dunedin School of Medicine</td>
<td>03 479 7268</td>
</tr>
<tr>
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Appendix 2: Māori child oral health project team

Charrissa Makowharemahihi – Māori Health Directorate, Ministry of Health
Eugene Berryman-Kamp – Lakes DHB
Minnie McGibbon – Te Manu Toroa, Bay of Plenty
Edith McNeill – Te Whānau o Waipareira Trust
Louise Kuraia – Te Tai Tokerau MAPO
Kay Poananga – Te Ao Marama
Kim Smith – Oral Health Promotion – Regional Public Health
Tania Hodges – Mauri Ora Associates
Chris Natapu – Mauri Ora Associates
### Appendix 3: Diagrammatic description of services provided by Māori providers

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**Key**
- Tamariki contracts
- Rangatahi contracts

*Note 1: Russell Emerson has a contract to provide services to rangatahi with Te Manu Toroa support*

*Note 2: This contract cancelled in early 2004.*
Appendix 4: Te Manu Toroa service delivery model
Abbreviations

AOHC  Adolescent Oral Health contacts
DHB / DHBs  District Health Board / District Health Boards
DMFT  Diseased, Missing and Filled Teeth
DNA  Did Not Attend
ERO  Education Review Office
FTE  Full Time Equivalent
GDB  General Dental Benefits
MCOH  Māori Child Oral Health
NZDTA  New Zealand Dental Therapists Association
SDB  School Dental Benefits
SDS  School Dental Services
SES  Socio Economic Status
WINZ  Work & Income New Zealand

Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Hauoranga</td>
<td>Māori Health Provider Network linked with Te Manu Toroa</td>
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<tr>
<td>Rangatahi</td>
<td>Adolescent (in this report, 12 to 18 years)</td>
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<td>Tamariki</td>
<td>Children (in this report, 18 months to 12 years)</td>
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<td>Te Ao Marama</td>
<td>New Zealand Māori Dental Association</td>
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<td>Whānau</td>
<td>Family / Collective family grouping</td>
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References


