

Business Case Guidelines for Investment in Child and Adolescent Oral Health Services

Citation: Ministry of Health. 2006. *Business Case Guidelines for Investment in Child and Adolescent Oral Health Services*. Wellington: Ministry of Health.

Published in August 2006 by the
Ministry of Health
PO Box 5013, Wellington, New Zealand

ISBN 0-478-30035-2 (Book)
ISBN 0-478-30038-7 (Internet)
HP 4291

This document is available on the Ministry of Health's website:
<http://www.moh.govt.nz>



MANATŪ HAUORA

Contents

1	Introduction	1
1.1	Overview	1
1.2	Background	1
1.3	Aim and scope	3
1.4	Structure and use of this document	3
1.5	Objectives and principles of an OHS business case	4
1.6	What investments should the oral health service business case framework cover?	5
1.7	Public–private partnerships	5
1.8	Peer review of OHS business cases	6
1.9	Joint procurement	6
1.10	DHB facility master plan	6
1.11	The funding allocation process	7
1.12	Capital sign-off thresholds	8
1.13	Crown Health Funding Agency (CHFA) involvement	8
2	Building an Oral Health Service Business Case	9
2.1	Stage 1: Strategic analysis	9
2.2	Stage 2: Options analysis	10
2.3	Stage 3: Completed business case	17
Appendices		
	Appendix A: Oral Health Service Business Case: Table of Contents	20
	Appendix B: An Example of Service Configuration Development	28
	Appendix C: Example Criteria for Change Management	34
	Appendix D: Review of Oral Health Business Cases	36
	Appendix E: Example DHB Board Recommendations for Approval of Oral Health Projects	37
	Appendix F: DHB Capital Priority Analysis	39
	Appendix G: Capital Intentions Spreadsheet	43
	Appendix H: Operational Financial Analysis Template	45
	Appendix I: Oral Health Services Business Case Approval Process	47
	References	48

List of Tables

Table 1:	Key sources to inform the strategic analysis stage	9
Table 2:	Positions/roles and their input into stages 1 and 2 of the OHS business case	10
Table 3:	Service level targets	12
Table 4:	A comparison of previous and best practice service delivery	13
Table 5:	DHB positions and the input required	19
Table A1:	Current enrolment, examination and treatment rates	29
Table A2:	Regional planned enrolment, examination and treatment rates assumptions	29
Table A3:	Distribution of adolescent oral health services	30
Table A4:	Dental chair and visit number estimations	32
Table A5:	FTE assumptions	33
Table A6:	Example DHB board recommendations for oral health service projects	37

List of Figures

Figure 1:	The progression of an OHS business case	4
Figure 2:	Sign-off thresholds for funding OHS business cases	8

1 Introduction

1.1 Overview

The World Health Organization recognises oral health as an integral part of general health and a basic human right. The 2005 Liverpool Declaration called for countries to formulate policies for oral health as an essential part of their national health programmes. New Zealand supports this call for action. Improving oral health is one of the 13 health priorities specified in the New Zealand Health Strategy, and one of 12 priorities for Māori health.

The document *Good Oral Health for All, for Life* sets out the strategic vision for oral health policy over the next 10 years. This vision is for good oral health for all New Zealanders, for life. The vision is for quality oral health services that promote, improve, maintain, and restore good oral health, and are proactive in addressing the needs of those at greatest risk of poor oral health. Realising this vision will require a significant re-orientation in the delivery of publicly funded oral health services.

The government is about to embark on a substantial upgrade of community-based oral health facilities to support the delivery of child and adolescent oral health services and improve oral health outcomes. Before the Ministry of Health invests in these kinds of capital and operational improvement projects, it must have confidence that a District Health Board (DHB) requesting funding has planned for a model of care that improves the quality of service delivery.

Key to oral health service planning is how the DHB will maintain and preserve the asset base and make appropriate provision for the replacement of oral health facilities and equipment through sound asset management. The *Business Case Guidelines for Investment in Child and Adolescent Oral Health* aim to guide DHBs in their preparation of business cases for capital and operational investment in oral health services.

This guideline is structured in two parts. The first sections looks at different aspects of developing a business case, and the second sections work step-by-step through the three stages of business case development. The appendices provide examples and further detail.

1.2 Background

Reinvestment in a nationwide oral health system for children and adolescents and reducing inequalities in child oral health are government priorities as part of the ongoing implementation of the New Zealand Health Strategy. The 2004 School Dental Services reviews, the Māori child oral health review and DHB strategic asset and service plans for oral health all identified significant needs in terms of oral health service provision, as well as a need for a major upgrade in the configuration and delivery of oral health services.

The reports identified that:

- many school dental clinics are in a state of poor repair, and the majority are not suitable to the needs of modern dentistry
- clinic configurations do not meet the needs of local communities
- there are significant recruitment and retention issues in the dental therapist workforce
- enrolment rates of preschoolers are poor, and the continuity of care for adolescents is problematic
- the current Memorandum of Understanding with the Ministry of Education is not the most effective tool for ensuring school dental clinics are maintained at a standard suitable for the practice of modern dentistry.

These *Business Case Guidelines* are based on the Ministry of Health's *Capital Investment Guidelines 2003*, but a number of other documents developed by DHBs and the Ministry will also support the development of oral health service business cases. They include:

- DHB district annual plans, which provide a clear link between service demands and business drivers and the proposed capital project for oral health expenditure
- School Dental Service and Māori child oral health services reviews
- DHB oral health asset management plans
- *Child Oral Health Services: Service specification* (Ministry of Health 2004)
- *Community Oral Health Service: Facility guideline* (Ministry of Health 2006).

A community-based and population-focused oral health service will require a mixture of oral health facilities appropriate to the needs of each community and the needs of the population. The 2004 New Zealand School Dental Service Review reported proposed reconfiguration of oral health facilities based on the 'hub and spoke' model. It is anticipated this configuration will usually consist of strategically sited 'hub' clinics with appropriate outreach services and facilities. Outreach services may include examination and preventive care only, or full treatment services. The focus of outreach services should be on retaining and improving access to oral health care in a new oral health facility configuration. Further details of the issues are contained in the *Community Oral Health Service: Facility guidelines* (Ministry of Health 2006).

The vision for re-establishing and re-equipping child and adolescent oral health services offers the opportunity for future expansion, flexibility, and for allowing services to be extended beyond those traditionally offered from oral health facilities. With this in mind, this document will refer to oral health services (OHS) in preference to child and adolescent oral health services.

1.3 Aim and scope

These guidelines are designed to assist DHBs to complete their business cases, and they should be available to the wide group of stakeholders involved in the OHS business case process. Appropriately applied, these guidelines are designed to foster a culture of quality decision-making and accountability within the sector, and will ensure the best outcomes from investments in OHS.

Health service planning must drive capital and operational investment decisions, not vice versa. The process for developing a business case for investment should therefore begin with a service plan. Service planning – particularly long-term strategic planning – is a key foundation for DHB asset management planning. It is therefore important that health service planning, asset management and capital investment are linked at the national and regional levels.

There are three stages to developing the final OHS business cases:

1. strategic analysis
2. options analysis
3. completed business case.

Each stage builds on the level of detail. Advice from the Ministry should be sought at the end of each stage to assist progress to the next one. It is essential that each stage builds towards the final business case. Retrospective reworking can cause inconsistencies and a lack of coherence in the final business case. Following the step-by-step process leads to a business case that is clear, robust and complete. To help this process, the appendices to this document set out examples and recommendations that will allow the DHB and associated parties to develop and objectively self-assess each business case.

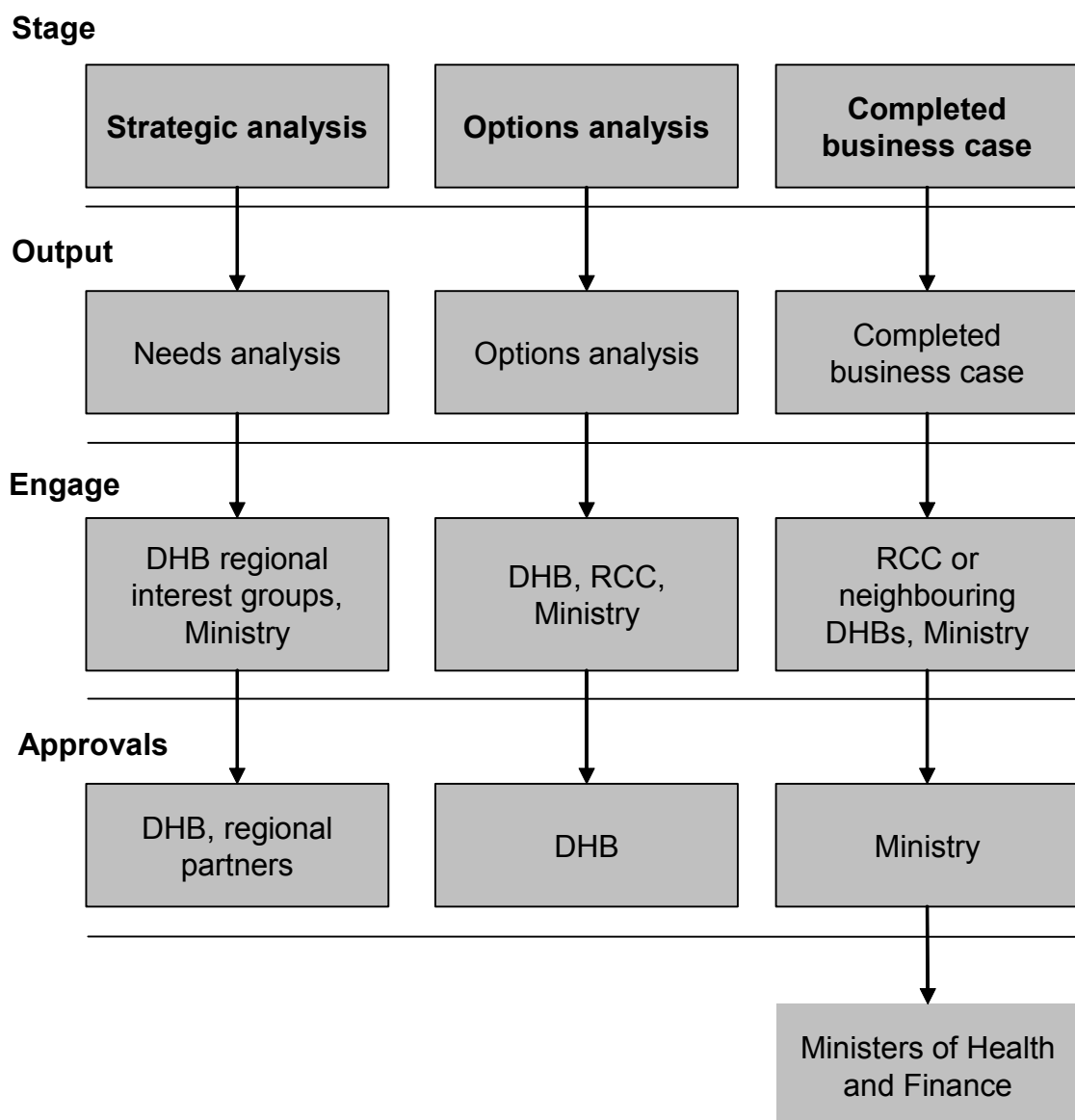
The Ministry of Health appreciates that many DHBs will not be able to submit a full business case for the total planned reinvestment in oral health services across the DHB region in one step. We therefore anticipate that many DHBs will provide phased business cases. However, in these cases it will still be necessary for business cases to clearly articulate the overall service plan and model for the DHB at the first phase.

1.4 Structure and use of this document

This document contains guidelines and templates to help DHBs complete each stage of the business case. The business case format for a OHS business is in Appendix A, and is designed to be a living document, with the relevant section updated at each of the three stages of the business case.

The progression of the business case through the three stages and the corresponding integration points are outlined in Figure 1.

Figure 1: The progression of an OHS business case



Note: RCC = regional capital committee.

1.5 Objectives and principles of an OHS business case

These guidelines for capital investment in oral health services are designed as a set of requirements to offer guidance and support to DHBs when completing their OHS business case.

The objectives of OHS business cases are to:

- promote introduction of modern models of oral health care
- empower clinicians to provide efficient health care delivery through the use of purpose-built facilities and up-to-date equipment
- maximise the opportunity for savings from the joint procurement of facilities and equipment

- promote regional collaboration
- minimise the risk associated with new facility configurations.

Although it is important that DHBs have the flexibility to develop their business cases in their own way, the following general principles should be followed.

- Make the best use of limited resources and funds within the sector.
- Maximise the use of facilities and equipment that meet the current standards of modern dentistry.
- Provide incentives for innovation in a way that is co-ordinated within the sector (ie, ensure there is no duplication and that the complementary nature of DHB services, primary health organisation and non-governmental organisation (NGO) services, including Māori providers and private dental practices, is considered).
- Ensure the impacts of the initiatives outlined in the business case are fully understood (eg, the opportunity cost of the investment and the future commitments the investment may require).

1.6 What investments should the oral health service business case framework cover?

The OHS business cases should cover the following areas:

- facility infrastructure, including:
 - buildings owned by the education sector (ie, school dental clinics to be retained for service provision)
 - current and planned facilities owned by the health sector
 - clinical equipment
- operational resources, both current and additional, to support new models of care
- joint ventures and NGO providers, such as Māori oral health services, where the DHB considers the business case requires additional capital, or operational funding investment is required to support the development or viable operation of oral health services in the DHB.

Note: Investment in information technology should be specifically excluded from these OHS business cases.

1.7 Public–private partnerships

Depending on the nature and structure of the project (eg, shared services, joint ventures, leasing arrangements), specific approval may be required through the Minister of Health or Ministry of Health. A key high-level test DHBs should apply when considering these situations is as follows (Ministry of Health 2003: *Guidelines for Capital Investment*; page16):

Is the proposed structure likely to increase the quality (clinical and financial) of public health services and at least not diminish the level of community trust and confidence in the public health system, and remain consistent with the service coverage schedule?

Further guidance is available from the Ministry of Health.

1.8 Peer review of OHS business cases

Completed OHS business cases should provide evidence of peer review by either the Regional Capital Committee (RCC) or all neighbouring DHBs.

People employed in the same field by neighbouring DHBs or the RCC offer an opportunity for sector peer review and discussion on cross boundary issues, eg, service coverage and best use of facilities and resources as well as models of care and opportunities for innovation.

Sector peer review is intended to maintain and enhance the quality both directly by detecting weaknesses in business cases and indirectly by providing a basis for making decisions about improving the final business case.

Appendix D offers a review framework that could be applied to a peer review.

The reviewers should confirm that proposals are consistent with the objectives and principles outlined in section 1.2, 'Objectives and principles of the oral health business case', and that the recommended option best addresses the region's needs.

1.9 Joint procurement

OHS projects offer considerable scope for DHB collaboration and joint procurement. Evidence will be required that all collaborative options for joint procurement, including facility and equipment and supplier selection, have been explored.

The Ministry of Health will be working with DHBs to explore options for regional and nationally procurement of many of the purchases necessary for OHS.

1.10 DHB facility master plan

Because reinvestment in oral health services will occur over a number of years, DHBs are expected to develop a *facility master plan* supported by a staged implementation plan. We anticipate that phases of the business case will focus on communities or zones within each DHB area, but the initial business case submitted by each DHB should clearly explain the overall DHB facility master plan that will be used throughout the phased business cases.

The facility master plan is essential to demonstrate that individual cases are not being developed ad hoc, and that an overall plan of service development and coherent capital responses exist in each DHB. Initial and subsequent proposals must therefore be developed in the context of the master plan. DHBs will then submit business cases to meet their ongoing OHS project development framework.

A staged process should also enable DHBs to manage their project implementation plan, manage staff and community expectations, manage the risk, and achieve improved understanding of development costs as each DHB gains experience with this process over time.

1.11 The funding allocation process

Prioritisation and allocation of capital and operational funding will be managed through a quarterly funding allocation round. The Ministry of Health will manage the funding allocation rounds. The OHS business cases will be reviewed by a technical review panel, and recommendations will be made to the Clinical Services Directorate Funding Board. The Minister of Health will provide final approval. Appendix I provides a flow chart of the business case review process following submission to the Ministry of Health.

The DHB should maximise its ability to afford the project via management of free cash flow expenditure, asset sales and strengthening of its balance sheet by repayment of debt.

The first rounds for DHBs to submit business cases will be as follows:

- 31 August 2006
- 30 November 2006
- 28 February 2007
- 30 May 2007.

It is not essential for DHBs to submit business cases to these initial funding rounds, but by June 2007 it will be expected that all DHBs will have indicated their timeframes for business case development to the Ministry of Health.

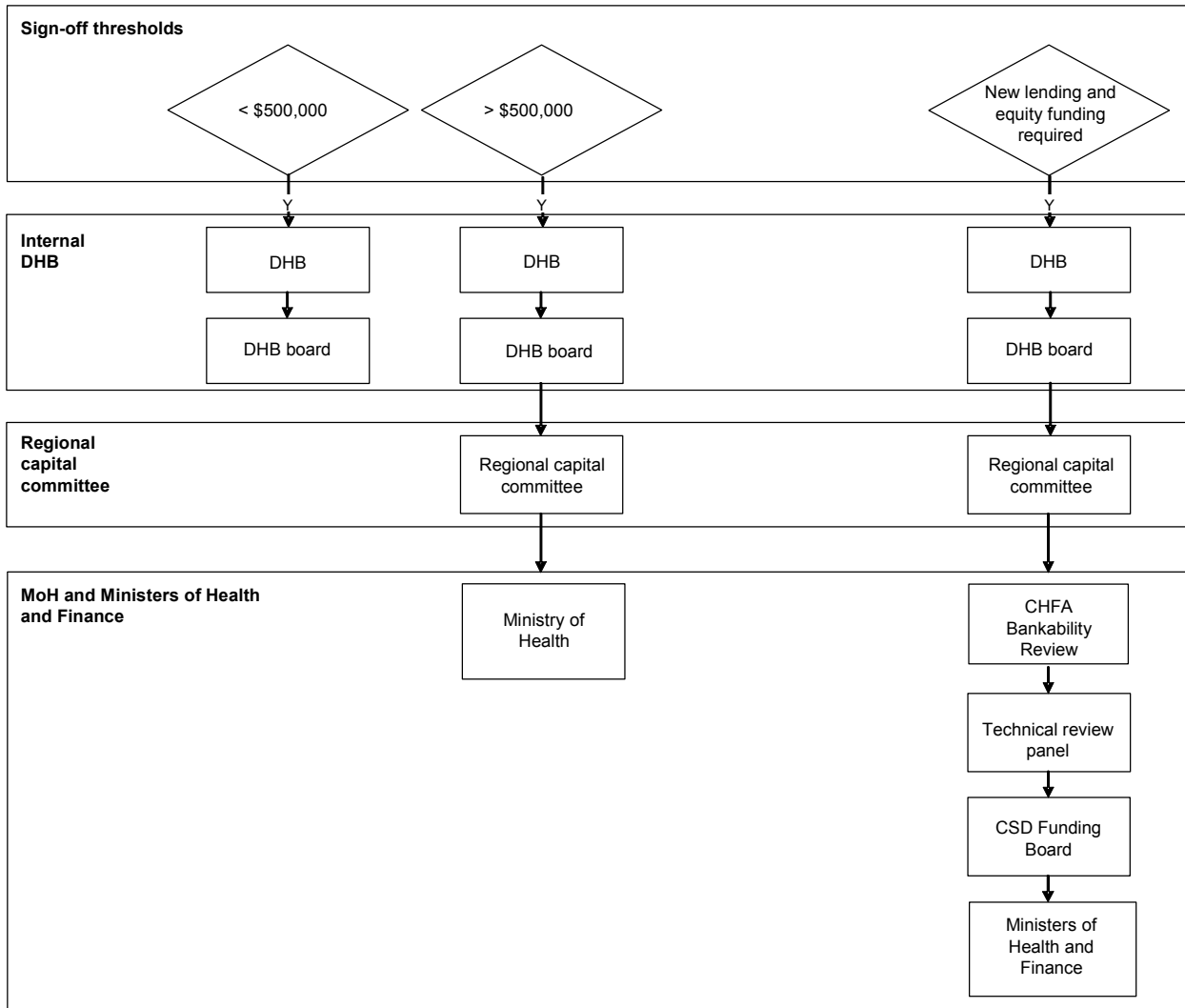
Confirmation of funding recommendations will be provided to DHBs as soon as possible following each round. However, final approvals by relevant Ministers will ultimately determine the actual timeframe for final confirmations.

A review of business case approval timeframes and ongoing dates will be completed following year one, taking into account sector development and demand, and the strong desire to avoid unreasonable delays in the business case approval process.

1.12 Capital sign-off thresholds

The following figure outlines the sign-off thresholds for funding OHS business cases.

Figure 2: Sign-off thresholds for funding OHS business cases



Note: CHFA = Crown Health Funding Agency

1.13 Crown Health Funding Agency (CHFA) involvement

If DHBs elect to take on additional debt for the project, they need to meet the CHFA's lending criteria. Debt availability will be subject to securing funding from the health capital budget regardless of whether it is paid as equity or CHFA debt (Ministry of Health 2003: *Guidelines for Capital Investment*: page19).

2 Building an Oral Health Service Business Case

This section focuses on the three business case stages and provides guidance to support DHBs in the development of their OHS business cases.

2.1 Stage 1: Strategic analysis

The strategic analysis stage links the organisational objectives contained in the district annual plan, the district strategic plan, oral health service plan, strategic asset management plan and the capital plan.

2.1.1 Objectives

The objectives are to:

- define the problem requiring a solution
- establish the financial and clinical resources available to apply to the problem
- define the specific outcomes expected from the investment for both the current and future services
- outline any regional service implications.

2.1.2 Key resources

The key resources to use in the strategic analysis stage of the business case are outlined in Table 1. Particular reference should be made to the oral health service review and asset management plans completed by all DHBs during 2004 and 2005 when assessing the requirements for this stage.

Table 1: Key sources to inform the strategic analysis stage

Source	Context
District annual plan	Provides a clear link between the service demands and business drivers and the proposed capital project for OHS expenditure.
Asset management plan (2005) and service review (2004)	Provide an asset forecast and the corresponding investment required, and identify the funding source. This will summarise the forecast capital expenditure and put it in the context of the DHB's overall capital and funding plans.
Ministry of Health vision and guideline documents, service specifications and Oral Health Toolkit	Provide guidance on the national direction and priorities in oral health, and the service framework guidelines for the delivery of oral health services and introduction of modern models of oral health care delivery.
New Zealand standards and Dental Council codes of practice	Set standards for facilities, service delivery and quality of care.

2.1.3 Analysis

The strategic analysis process will:

- determine the optimal service delivery model and facility configuration (see Appendix B)
- if required, update the oral health facility asset management plan
- apply any national standards and guidelines
- identify opportunities for rationalisation
- identify opportunities for complementary oral health services (eg, DHB service provider, private dental practices, primary health organisation services and Māori oral health services)
- identify duplications in proposed developments and approaches for addressing service delivery improvement (eg, the development of Māori oral health services)
- take into account non-DHB assets (eg, school dental clinics owned by the Ministry of Education)
- address workforce, clinical and community perspectives.

2.1.4 DHB position/role input

Table 2 is an example of DHB positions and the expected input of each to the strategic and option analysis stages of the business case.

Table 2: Positions/roles and their input into stages 1 and 2 of the OHS business case

Position/role	Input
Clinical Director/ Service Manager/ sponsor	Provides the clinical and business 'drive' behind the project. This involves establishing a clear link between a critical need, as outlined in the district annual plan, and the corresponding requirement for a project to address this need.
General Manager, Planning and Funding	Defines the project in the context of the asset management plan, regional opportunities and any relevant constraints. The General Manager is also responsible for analysing the oral health service needs in the context of the environment (local, regional and national trends).
Chief Financial Officer	Provides guidance on the project's overall affordability and the funding options available.
Chief Executive Officer	Reviews and endorses the project and its fit within the delivery of the DHB's strategy.

2.2 Stage 2: Options analysis

The options analysis stage refines the requirements from the strategic analysis stage and identifies the options and recommended solution(s). This will involve regional collaboration where there are agreements in place for the regional provision of child and adolescent oral health services, and may include collaboration when regional decisions could improve the delivery of child and adolescent oral health services.

The facility requirements must be soundly based on clinical requirements and supported by appropriate evidence.

2.2.1 Clinical and service analysis

The clinical discussion contained in the business case should include a population needs assessment, a description of service coverage and a discussion of service development and improvement.

Population needs assessment

The population needs assessment should be based on current demand, future needs analysis and forecast population changes. Provide clear evidence of the oral health needs in the DHB region for preschool children, primary school-aged children and adolescents. Outline the incidence and severity of disease among the population, including Māori, Pacific peoples and those on low incomes, as well as key issues, including existing oral health inequalities and disparities.

Service coverage

Describe the current service coverage and gaps in service (any gaps between need, service demand and supply) for preschool children, and school-aged children and adolescents. Reports completed by the School Dental Service should provide details of the number of preschool and primary school-aged children enrolled, and services should be able to report the number of children who have had their treatment completed, and the number enrolled who have not been offered care within their recall timeframe.

Access to and provision of adolescent oral health services (formerly GDB and adolescent oral health agreement) and special dental services (formerly special dental benefits) through the combined dental agreement (CDA) with private dentists can provide valuable information about service coverage for child and adolescent oral health. Information about the combined number of adolescents receiving annual dental care should be available through the Regional Adolescent Co-ordination Services, which provides important information about adolescent dental service coverage.

Data about the potentially eligible population of people aged 0–18 years should be included, and can be obtained from estimates derived by Statistics New Zealand or Public Health Intelligence at the Ministry of Health.

The service-planning component of the business cases should outline the anticipated service coverage targets for children at different periods in the 0–18 years range. This could be considered for children in the different age bands, such as:

- infants (0–2 years)
- preschool (3–4 years)
- primary school age (5–12 years)
- adolescents (13–17 years).

These figures should inform the business case in terms of the anticipated current service coverage and demand levels, and the same issues five years out, to provide an indication of the expected impacts of population change and service coverage changes.

Table 3 outlines the Ministry of Health’s anticipated target service coverage levels, by age cohort, for DHBs. In some age cohorts these targets are not currently being achieved, and in some regions it may take some time to achieve them. Business cases should outline the DHB’s anticipated progress towards the targets and the impacts on the infrastructure investment, workforce and other operational costs.

Table 3: Service level targets

Patient group	DHB enrolment targets
Infants 0–2 years	50%
Pre-school 3–4 years	85%
School age 5–12 years	95%
Adolescent 13–17 years	85%

Service development and improvement

We expect that OHS business cases will include the need for service delivery improvements, including:

- an increase in infant and preschool contact, health promotion and preventive activities
- reducing barriers to access for Māori, Pacific peoples and low-income families
- reducing disparities
- improving access to services for adolescents
- developing sustainable solutions for providing dental care beyond the scope of dental therapists (options may include employing dentists to provide community-based care in a team environment, with dental therapists continuing to contract with private dentists; working in conjunction with NGO providers, including Māori oral health providers; and working in conjunction with secondary hospital-based dental services)
- workforce recruitment and retention
- planned new technologies and how they will affect service models
- improving the quality of care provided.

We encourage DHBs to explore partnerships and/or opportunities for service delivery with primary health organisations, Māori OHS providers, Pacific health service providers, private dental practices and other health providers.

Include in this section current and planned initiatives and links with primary care and population health activities (eg, opportunities to provide early intervention and prevention programmes for the 0–2 years age group). New initiatives have significant potential to affect current service provision models. For example, if a DHB pursues the option of contracting out prevention and early intervention for 0–2-year-olds, with referral to the oral health service at two years or earlier if required for treatment, it will be necessary to consider the impact this could have on oral health service provision in terms of workforce and facilities requirements.

2.2.2 Models of care

Any major redevelopment and reinvestment in health services presents an ideal opportunity for the DHB to introduce substantial improvements in clinical practice and modern models of care. Table 4 compares previous and best practice health service delivery.

Table 4: A comparison of previous and best practice service delivery

Previous	Best practice
Culture of independence	Collaborative
Little sector leadership	Confident, strong sector leadership
Traditional models of care: <ul style="list-style-type: none"> • treatment-focused care • reactive • focus on the individual • episodic care • uni-causality approach to care • sole operator oriented • passive recipients. 	Modern models of care: <ul style="list-style-type: none"> • preventive-focused care • integrated with primary care • inclusive of public health • anticipatory • focus on population patterns • continuity of care • chronic/complex disease capability • multidisciplinary teams (eg, dentist/dental therapist/assistant) • enabled participants.
Multiple ad hoc decision-making structures	Clear decision-making structures that allow difficult decisions to be made
Unsustainable, fragmented services	Sustainable, co-ordinated services
Intractable recruitment issues	Attracting and retaining an oral health workforce
Fixed provider mix	Flexible provider mix

DHBs will be expected to plan to implement best practice models of oral health care when developing business cases for investment in oral health services.

The companion document to these Guidelines, *Community Oral Health Service: Facility guideline* (Ministry of Health 2006) includes a discussion of role delineation and organisation of care. This includes a hierarchy of levels of care to be provided from oral health facilities. Models of care should take into account services from less complex to more complex dental procedures, with consideration of local need, resources, the needs of different populations, the existence of inequalities and geographic constraints.

When developing models of care, outline and evaluate potential approaches to models of care in response to your strategic oral health objectives, including the population needs and proposed levels of service, by site or location. The clinical service plan must demonstrate how you plan to deliver best practice oral health services, as described in Table 4 above.

2.2.3 Workforce development

Describe the current workforce (including vacancies) and detail the workforce requirements for the proposed service development. Include staff, by type and full-time equivalents, required for implementation and operational support.

Outline workforce initiatives, giving attention to the development of a clinical team involving dentists, dental therapists and dental assistants. Consider options to engage dental hygienists, oral health promoters and reception/administration and support staff. However, significant changes (particularly increases to the level of staffing) need to be considered against the cost effectiveness of the changes. In particular, consider the levels of productivity improvement anticipated from clinicians, especially the lead clinicians (dental therapists and dentists), service coverage improvement and the quality and safety improvements achieved from increased or changed staffing models.

Link the workforce plan to the service model and agreed productivity levels. Appendix B provides an example of service configuration development, including productivity by chair, the staff mix and the number of full-time equivalent positions required to meet the oral health needs of the enrolled patient group.

Ensure the workforce plan is phased into stages that fit with the implementation of service and facilities plans.

The workforce mix should be flexible enough to allow for changes in working conditions (eg, changes in hours of work to meet service demands, and to address sole operator issues), and consider workforce costs and the initial and fully developed stages of phased plans.

2.2.4 Facility analysis and requirements

The development of the facility plan, including the chair numbers and community clinic locations, should be based on a community-based 'hub and spoke' model. In developing the plan you will need to consider the facilities and locations of associated providers such as NGOs and contracted dental practices. Appendix B offers a modelling option to help DHBs to establish their facility requirement options.

Develop facility options

When developing the configuration of an oral health facility to provide the required services, you will need to determine the following:

- number of chairs required
- facility size
- facility type (eg, mobile, fixed, shared facilities)
- location options and site selection (community, school, Māori provider, other)
- issues regarding land acquisition, land use and potential costs.

Attention must be given to maintaining and improving access for Māori, Pacific people, low-income families, and any other population groups with established high levels of oral disease, geographic isolation and remoteness, and to achieving cost effective chair/facility utilisation levels.

In the overall design, consider opportunities for co-locating health promotion, outreach and other allied health services staff (eg, school nurses, public health nurses) where this would enable an increase in efficiency and an overall improvement in the quality of care and teamwork.

DHBs will currently own a range of facilities and equipment that are not fully depreciated and continue to have a useful life expectancy, which makes them suitable for inclusion in the facility plan. Facilities and equipment that are to be retained should be suitable for modern dentistry, comply with current standards and preferably should not require significant upgrading. If significant upgrading is required, the costs should be identified in the business case.

The following is offered (as a guideline only) to assist DHBs in considering facilities and equipment that should be retained:

- fixed facilities that have been purpose built or specifically refurbished for dental practice and are less than 10 years old
- mobile facilities less than five to seven years old
- major items of clinical equipment less than five years old.

Note that facilities to be retained and/or remodelled by the DHB must meet the facility guidelines (Ministry of Health 2006). DHBs must outline facilities that do not conform with the facility guidelines and the risk management strategy relating to the facility plan. All new facilities must comply with national standards.

Develop a preferred option

The preferred service delivery and investment options must be able to demonstrate:

- the ability to meet the DHB's strategic objectives, as defined in its district strategic plan and district annual plan
- value for money (ie, the highest ratio of financial to non-financial benefits to costs)
- an improved quality of service

- flexibility and robustness to change
- financial viability
- community consultation (where required by the Operational Policy Framework)
- DHB Board and funder support.

Evaluation of the preferred option

DHBs should also evaluate the preferred option against other options, such as the:

- fall-back option (required)
- do nothing option
- other options, including regional strategies
- non-funding option
- minimum compliance option.

2.2.5 The facility master plan

DHBs should ensure they undertake the following actions as part of developing the master facility plan.

- Demonstrate commitment by clearly showing you have taken into account the needs of the community you serve and the level of inequalities, with strong linkages to schools.
- Show the locations, sites and number of facilities, by type and size, based on population needs, agreed levels of service and the planned staffing mix. The DHB's master plan should look out 10 years, and there should be the flexibility and capacity within the plan to meet forecast service needs and/or support future service options (eg, a service offered beyond what has traditionally been delivered). The plan should include services anticipated to be delivered from non-DHB provider facilities (eg, Māori oral health providers and private dental practices).
- Outline the benefits for Māori, Pacific people and low-income people, including opportunities for reducing oral health inequalities and reducing disparities.
- Detail how the service/facility implementation plan will be rolled out in stages.
- Prioritise the implementation plan and any likely clinical impacts on the transition from the current to the new service provision framework.

2.2.6 Facility design and initial capital cost estimates

The Ministry of Health document *Community Oral Health Service: Facility guideline* (Ministry of Health 2006) includes a set of examples for floor layout and quantity surveyor costs for a variety of community dental facilities. The layouts will be based on a level platform scenario. This means the floor plans do not take into account the variety of platforms a facility may be placed on, eg, fixed, mobile or portable building options.

The plans and costs have not taken into consideration final facility configurations, including the option of whether the facility is a permanent building, a portable building, a remodelled existing facility or a mobile facility. Each of these scenarios will have different associated costs, which will need to be assessed for each business case by the DHB.

The level of service and the size of the facility will determine, in part, the functional areas, design and equipment requirements. Based on this information, a functional requirement specification will be required to progress a tender and procurement processes for facility design and costing to enable the DHB to complete its initial capital estimates.

We encourage DHBs to participate in a national procurement process, where appropriate.

2.2.7 Stakeholder and community consultation

Outline any stakeholder and community (where required by the Operational Policy Framework) consultation you have undertaken. Describe the stakeholders who have been consulted about this proposal, and the process undertaken in this consultation. Stakeholders should include relevant internal DHB services and, where applicable, regional DHBs.

2.3 Stage 3: Completed business case

The completed business case refines the options analysis to the stage where the best option is chosen, and its implementation planned in detail. The completed business case will detail the implementation and financial analysis.

2.3.1 Objectives

The completed business case stage should:

- finalise the preferred facility master plan
- demonstrate fit with the clinical and service requirements, including future expansion or flexibility, current and foreseeable compliance and legislative requirements
- finalise design and costing details
- undertake a full financial analysis, including affordability
- detail operational cost impact analysis and the capital cost estimate
- finalise the governance model
- finalise the project plan, risk analysis and business links
- explain procurement options
- demonstrate that consideration has been given to joint procurement (where investments are similar to those planned by other DHBs)
- provide justification for adopting alternative procurement arrangements (where investments are different to those planned by other DHBs)

- detail the implementation plan, including alternative staging options
- list the education owned school dental clinics to be retained for provision of oral health services
- list the education owned school dental clinics no longer required by the oral health service
- outline any implications for the continued use of existing school dental clinics, to enable a smooth transition to a community-based model
- detail the workforce plan
- detail stakeholders' input and community consultation
- detail resolutions for using dental clinics owned by the Ministry of Education, including leasing agreements with school boards of trustees for any clinics for which capital or operational funding is requested in the business case being submitted.

This stage should also detail the change management plan. An indicative change management plan should show how the shift to new models of care will be managed and the staging of the change process. Connections between population needs, demands for services and the facility requirements should be clearly demonstrated. The change management plan will be linked to the workforce development plan. Appendix C offers example criteria for successful change management.

2.3.2 Financial analysis

The final business case should include a clear analysis of the DHBs current and planned revenues and expenditures for child and adolescent oral health services, and provide a gap analysis of the additional operational costs anticipated by the DHB for the improved model of care. This analysis is required by the Ministry of Health to ensure that improved quality of service and service coverage will result from the allocation of additional operational funding. It will also assist the Ministry of Health to assess the need for any further increase in funding to realise the Government's aim of improving the quality and coverage of child and adolescent oral health services.

2.3.3 DHB position/role input and approval

Table 5 outlines an example of DHB positions and the anticipated flow and endorsement of approvals for a completed business case.

Table 5: DHB positions and the input required

Position/role	Input required
Clinical or business sponsor	Participates actively and endorses the implementation approach. The clinical or business sponsor is also actively involved in change management, workforce planning and risk analysis.
Chief Executive Officer (CEO)	Signs off on the overall affordability of the project and the willingness of the DHB to fund, and endorses the proposal to the RCC for consideration.
Chief Financial Officer (CFO)	Provides details about funding sources (ie, free cash flows, sacrifice of other projects or initiatives, or Crown equity or debt requested).
CEO or Board (depending on the relevant delegated authority)	Signs off that the project: <ul style="list-style-type: none"> • will meet the DHB’s needs, as outlined in the district annual plan • is within the DHB’s financial constraints • is the best use of limited capital in terms of opportunity cost (including that the funding is consistent with meeting the asset management plan).

2.3.4 Project assurance

Following approval of oral health business cases, the Crown will monitor the implementation of oral health projects. Where appropriate, the findings will inform the improvement and development of the business case process at a DHB level.

The review of oral health business cases in Appendix D will provide the framework for project assurance activities for approved business cases.

Appendix A: Oral Health Service Business Case: Table of Contents

Business cases must be developed so that the DHB can effectively deliver the best project for its population. A business case is as much the DHB's own tool, for its own needs, as it is a document for the Crown. This fact must be a key driver of business case content and structure.

The case should stand alone, and the specific needs of the project must be the ultimate drivers of the contents and structure. DHBs should consult with the Ministry of Health at each stage of the project.

An oral health service business case should contain the following components:

- executive summary
- strategic analysis and background
- clinical or business requirements and analysis
- systems analysis and requirements
- financial analysis
- implementation and post-project review.

The executive summary should provide a succinct summary of the project, covering:

- the clinical needs the project will meet (including links in terms of meeting national, regional or local drivers, as signalled in the district strategic plan and district annual plan)
- an assessment of the business need
- the proposed or signalled capital and additional operational budgets.

The other components of the business case are described in table form below.

1 Strategic analysis and background

Strategic stage	<p>Project objectives</p> <ul style="list-style-type: none">• Define the problem to be solved and the imperative for change.• Define the specific outcomes planned from the investment.• Define, at a broad level, the resources (financial and clinical) available to address the problem.• Outline regional and national service implications. <p>DHB strategic context</p> <p>This proposal is made in the context of:</p> <ul style="list-style-type: none">• the DHB's asset management plan• its fit with the district strategic plan and district annual plan• its fit with government health policies and strategies and guidelines, (eg, HEHA)• the potential of the project to maintain trust and confidence in the public health system. <p>DHB resolutions</p> <ul style="list-style-type: none">• Early DHB resolutions should be included at the strategic stage.
Completed business case stage	<p>DHB board resolutions</p> <ul style="list-style-type: none">• Insert a copy of each relevant board resolution here. <p>Peer review</p> <ul style="list-style-type: none">• Detail the results of the RCC or neighbouring DHB's considerations.

2 Clinical or business requirements and analysis

Strategic stage	<p>Clinical or business driver</p> <ul style="list-style-type: none">• Demonstrate the link between population and clinical needs and the proposed development. <p>Oral health service project</p> <ul style="list-style-type: none">• Detail the process and conclusions of the OHS proposal.• Include links and agreements the DHB has with neighbouring DHBs.• Where applicable, detail regional service co-operation.• Ensure compliance with legislation and national standards.• Detail potential synergies and opportunities for rationalisation.• Detail potential conflict/duplication in proposed developments, and the planned approaches for addressing the conflicts.• Detail any relevant joint oral health service developments, including public–private partnerships (eg, NGOs, Māori oral health providers).• Co-ordinate DHB activities to ensure there are no surprises about what is being planned.• Where regional service delivery agreements exist, clarify the agreement to jointly or separately identify and implement an oral health solution. <p>(Appendix B provides an example of service configuration development.)</p> <p>Project’s link with primary health care and population health activities</p> <ul style="list-style-type: none">• Detail relevant primary health and health promotion strategies undertaken or planned by the DHB, and the potential for this development to contribute to the proposed strategies.
Options analysis stage	<p>Service delivery background analysis</p> <p>This should include:</p> <ul style="list-style-type: none">• benchmarking against other relevant services or departments• stakeholder consultation – describe the stakeholders who have been consulted about this proposal and the process undertaken in this consultation• planned service delivery improvements. <p>Service delivery options analysis</p> <p>This should include:</p> <ul style="list-style-type: none">• potential models of care / service delivery options• evaluation of the preferred option against other potential options• sensitivity analysis• prioritisation and trade-offs considered/made.

	<p>Preferred option</p> <ul style="list-style-type: none"> • Detail the preferred service delivery option, including the model of care and access to services. • Show how the preferred service delivery option meets strategic objectives (as per the district strategic plan, district annual plan and Oral Health Initiatives, and government strategies). • Detail how the service delivery proposal fits with the facility master plan. • Detail service locations and site selection (eg, community, school, other). • Detail any consequential impacts on other services (including other DHBs and inter-district flows). • Outline any workforce implications. (This includes additional staff required to support new models of care or reconfiguration of facilities.) • Show flexibility and robustness to change (include workforce mix and extension of services to adolescents, and an improvement in preschool enrolment levels). • Demonstrate the ability to maintain and <i>improve</i> public confidence in child and adolescent oral health services. • Outline benefits for Māori, Pacific peoples and low-income families. • Show value for money (ie, the highest ratio of financial and non-financial benefits to costs). • Outline community consultation (if required by the Operational Framework).
<p>Completed business case stage</p>	<p>Workforce development plan</p> <ul style="list-style-type: none"> • Detail workforce requirements for the proposed development – staff types, full-time equivalents (for implementation and operational support). • Benchmark workforce requirements against similar services. • Show workforce cost estimates – for both the current and proposed workforce. • Include professional association and union discussion. <p>Indicative change management plan (Refer to Appendix C for recommended criteria for successful change.)</p>

3 Facility analysis and requirements

<p>Strategic stage</p>	<p>Benchmarking of facility requirements</p> <ul style="list-style-type: none"> • Review current facilities, including 'fit for purpose' and utilisation levels (refer to the DHB's School Dental Service Review completed in 2004 and Child and the Adolescent Oral Health Service Asset Management Plan completed in 2005). • Review the facilities in place, both locally and nationally. • Review proposed fixed and mobile facilities against the Ministry of Health guidelines and DHB proposals. <p>Stakeholder consultation</p> <p>Take into consideration:</p> <ul style="list-style-type: none"> • composition • process. <p>Initial briefing and design process</p> <ul style="list-style-type: none"> • Detail the facility master plan to support the proposed service delivery models. • Detail, for each community, the planned level of service and operating chair numbers. • Detail site selection requirements for each facility, by type (mobile, fixed or shared) and size (determined by the number of operating chairs and level of service). • Outline any shared service options, including private–public partnerships.
<p>Options analysis stage</p>	<p>Facility options analysis</p> <ul style="list-style-type: none"> • Identify potential facility and location options • Evaluate the preferred facility plan against other potential options, such as the: <ul style="list-style-type: none"> – fallback option (required) – do nothing option – other options (eg, joint ventures or public–private partnerships) – minimum compliance option. • Analyse net present value (NPV) potential options (including sensitivity analysis). • Describe the facilities by type (mobile, fixed, other and the number of chairs) and number. • Detail information about each school dental clinic owned by the Ministry of Education but included for continued use in the master plan, with information about the extent of refurbishment or development required. • List the school dental clinics owned by the Ministry of Education no longer required by the oral health service • Outline the initial capital and <i>operational cost</i> estimates. • Show links between the proposal and the DHB oral health objectives. • Show links with the DHB's existing operations and any regional alignment opportunities. • Outline prioritisation and any trade-offs considered or made. • Establish value for money (ie, highest ratio of financial and non-financial benefits to costs).

Completed business case stage	<p>Develop preferred facility master plan/facility plan option (<i>demonstrate, via a review of the case by the RCC, or all neighbouring DHBs that the proposed option has peer support, or provide proof of the DHB's case if there is a difference of opinion</i>)</p> <ul style="list-style-type: none"> • Demonstrate fit with service and/or clinical requirements. • Demonstrate fit with all current and foreseeable compliance and legislative requirements. • Demonstrate fit with the master plan and asset management plan. • Show the impacts the plan may have on other services. • Detail future expansion and flexibility. • Ensure the ability to maintain public confidence. • Agree on a facility design (use the Ministry of Health's information for facility layout expectations). • Perform an operational cost impact analysis. • Provide a detailed capital cost estimate. • Detail preferred and alternative staging options, prioritisation and costs (cross check with the implementation plan).
--------------------------------------	--

4 Financial analysis

Strategic stage	<p>Initial affordability analysis</p> <p>This involves assessing the:</p> <ul style="list-style-type: none"> • DHB's willingness to fund • DHB's capacity to afford the operating costs and costs of capital • oral health capital budget's capacity to afford the cost of capital • oral health operational budget's capacity to afford the operational costs.
Options analysis stage	<p>Refined affordability analysis</p> <p>This involves assessing the:</p> <ul style="list-style-type: none"> • continued DHB willingness to fund • continued DHB capacity to afford operating costs and costs of capital • continued oral health capital and operational budget's capacity to afford oral health projects.

**Completed
business case
stage**

DHB's overall ability to afford the project

This involves assessing the:

- statement of financial performance
- statement of position
- statement of cash flows
- consequential financial impacts (including total cost model; consequences must be explicit. Include details of current funding for primary child and adolescent oral health services, proposed funding and costs for primary child and adolescent oral health services and a clear explanation of any increased operational costs, and a justification of requests for additional funding. See Appendix H for an operational financial analysis template).
- efficiency gains
- break-even requirement, to ensure it is met
- national prices and DHB prices.

Project in the context of the DHB's overall capital plans

- Complete the capital intentions spreadsheet.
- Show a detailed fit with the DHB's asset management plan.
- Show the project in the context of the DHB's overall capital plan and detail the DHB's financial contribution regarding:
 - provisioning (for asset replacement)
 - prioritisation of free cash flow expenditure on capital
 - maximising funding from asset sales.

Project financing

This includes:

- a statement on the financing and bankability of the DHB from the Crown Health Funding Agency (if new debt is required)
- debt requirements (including timing)
- equity requirements (including timing)
- DHB financial contribution/provision for the project.

National prioritisation and affordability within the oral health capital budget

Append the completed DHB Capital Priority Analysis (see Appendix F).

5 Implementation and post-project review

Completed business case stage

Outline project plan

- Include an indicative timetable.
- Detail the procurement options.

Implementation management

- Maintain 'business as usual'.
- Make joint purchasing arrangements with other DHBs and/or oral health providers.
- Ensure the ability to maintain the confidence of the public and staff.
- Address any impacts of the project (including change management).
- Undertake risk management.

Service delivery – change management plan

- Include a clinical quality plan.

Efficiency gains realisation process or programme

This should include:

- benchmarking.
- an indicative efficiency plan.

Post-project review

- Indicate your intentions for after the project has been completed.

Appendix B: An Example of Service Configuration Development

A key part of developing and implementing an efficient and effective service plan is giving consideration to:

- the DHB's eligible child and adolescent population
- realistic levels of service utilisation
- efficient utilisation of capital facilities
- efficient and effective workloads for clinical staff.

Completed business cases should provide clear assumptions of dental chair:patient ratios and clinician:patient ratios based on the DHB population's needs and demands.

The following methodology has been provided to help DHBs develop service configurations, dental chair numbers and community clinic locations for a community-based 'hub and spoke' model, including the cost and funding modelling.

DHBs should illustrate the areas that community clinics are expected to provide coverage for, their locations, and the level of outreach services (eg, mobile examination facilities) required. Achieving this will require DHBs to estimate the number of clinic visits and chairs for each clinic.

The New Zealand Deprivation (NZDep) Index maps provide one way to assess levels of oral health need across DHB areas. There appears to be a reasonable relationship between the NZDep Index and levels of five-year-old dental decay. DHBs that do not have information on oral health status by school dental clinic could use the NZDep or similar information.

Data may also be sourced from Public Health Intelligence counts, which can be supplied by Public Health Intelligence, Ministry of Health. DHBs that do have information on oral health status by school dental clinic may choose to use this as the source of information about relative need in differing areas of the DHB region.

The following is an example process and outlines the steps taken to review and establish a new service configuration.

Step 1: Calculate annual examinations and treatments required

Population needs assessment

1. Obtain data from Statistics New Zealand about the number of people usually resident in the DHB region. Then consider the distribution of the population within the DHB (eg, by census area units or at more aggregated levels). These data are available by ethnicity and age. Consider the population by age group across the 0–18 years range (eg, 0–2, 3–4, 5–12 and 13–18 years).
2. Consider ethnic- and age-specific population growth or decline over a five-year timeframe.

Current service coverage

- Establish the current enrolment, examination and treatment rates for each age/ethnic group across the DHB. The data should be informed by known School Dental Service and adolescent oral health provision and utilisation data.

Table A1: Current enrolment, examination and treatment rates

	0–4 years or 0–2 and 3–4 years			5–12 years			13–18 years		
	Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other
DHB eligible population									
DHB level of population enrolment									
Examination rates									
Treatment rates*									

* Treatment rates apply to the examined population, and are the number of additional treatment visits per examined child.

Proposed service coverage

- Calculate the proposed enrolment, examination and treatment rates for each age/ethnic group across the DHB for year 1, and re-forecast for year 5 to account for population movement and changes in the region Consider realistic levels of utilisation of publicly funded services for the three age groups that also address inequalities and improving coverage for at-risk groups. DHBs should include this information as an appendix to their business case).

Table A2: Regional planned enrolment, examination and treatment rates assumptions

	0–4 years or 0–2 and 3–4 years			5–12 years			13–18 years		
	Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other
DHB eligible population									
DHB level of population enrolment									
Examination rates									
Treatment rates*									

The examination rate is expressed as the level of annual examination per enrolled child as a percentage of the total eligible population. The proportion of the enrolled population requiring additional treatment visits and the number of additional visits determines the treatment rate. It is expressed as the average number of treatment visits per enrolled examined child. This information should be able to be informed by known School Dental Service treatment rates; for example, the average number of visits per enrolled child in the region, which are usually one examination and an average of the treatment episodes per year. Data on adolescent treatment visit rates has not been available, although some DHBs may have this information. It may be necessary to use assumptions from services provided for primary school-aged children.

The DHB must consider the level and proportion of services that will be provided by publicly delivered services, NGOs and private contractors. Filling in Table A3 will highlight the DHB’s assumptions about the distribution of adolescent services.

Table A3: Distribution of adolescent oral health services

	%
Public clinic contribution	
NGO provider contribution	
Private contractor contribution	
Other provider contribution	
Not enrolled	

Step 2: Estimate the visits/appointments per dental chair

This guideline is provided to assist in the planning stages with the size of facility that may be required for a particular population. DHBs should consider the productivity anticipated from new clinic facilities, which should be based on the anticipated productivity of the dental chairs. However, the decision to invest in a public dental facility and the size of that facility is affected by many factors. Dental chair productivity, while important, is only one consideration.

Other considerations are the demand for dental services, the level of oral health need in that population, and the proportion of the overall service that it is anticipated will be delivered from the publicly funded facility. Improved utilisation and efficiency are expected from proposed community-based facility configurations over most current school dental clinic facilities.

The following calculations are provided as an example to assess the number of chairs required.

1. Assume total days available = 47 weeks x 5 days = 235 days.
 2. Therefore, total hours available = 235 days x 8 hours/day = 1880 hours.
- (This excludes public holidays and an annual closedown period = 5 weeks.)

To calculate the non-clinical time:

3. Assume chair-side cleaning allowance = 1 hour/day (half-hour between and after sessions = 235 hours.
4. Assume 80% occupancy = 376 hours (this allows for meetings, training, and allowance for managing the work patterns of part-time staff, etc).
5. Therefore, total non-clinical hours = 611.
6. Available hours = 1880 hours per annum – 611 (total non-clinical) = 1269 hours per annum (5.4 hours/day).
7. Based on half-hour appointments, each dental chair has the capacity to support 11 patient appointments per day, or 2585 patient appointments per year.
8. Therefore, 12,000 appointments per year require 4.6 chairs.

The DHB needs to consider full-time equivalent (FTE) output levels, appointment not kept (ANK) rates, and facility configuration options to achieve an optimum staffing mix and maximum efficiencies.

The effect of having clinicians (dentists and dental therapists) working part time is to have variable numbers of staff available throughout the week. This will probably mean there will need to be higher numbers of chairs available than raw FTE staff figures indicate. For example, if 60% of treatments are provided during morning sessions and 40% during the afternoon (because some staff work only mornings), additional chairs will be required in the morning, which would then be idle in the afternoon. DHBs will need to manage this issue for maximum efficiency while remaining realistic about the facility levels necessary to accommodate the workforce mix available.

Rural DHBs may need to consider the level of facility utilisation differently to urban DHBs. Nevertheless, efficiency of use of clinical facilities will be assessed in DHB business cases.

Step 3: Establish levels of service for communities

DHBs need to consider the level of service required in areas across the DHB region, based on the level of need and oral health disparities established during step 1. This information will inform decisions about facility type; for example, a single mobile unit best suited to a level 1 service (examination only), in contrast to a multi-chair fixed facility requirement for level 2 and 3 services.

The three main levels of service are:

- Level 1: access to examination and preventive care only
- Level 2: examination and treatment services
- Level 3: examination and treatment oral health services with the ability to offer sedation services.

Refer to *Community Oral Health Service: Facility guideline* (Ministry of Health 2006) for further detail on levels of service.

Step 4: Cluster chairs into efficient clinic sizes for ‘communities of interest’

Data on the number of visits per chair should be clustered into larger geographic areas, and the total visit numbers should then inform decisions about chair clusters that form community clinics or hubs in a hub-and-spoke model and any associated mobile or outreach facilities, referred to the spoke in the hub-and-spoke model.

Filling in Table A4 will highlight the DHB’s facility configuration requirements based on the estimated number of dental chairs required.

Table A4: Dental chair and visit number estimations

Chair number	Visit number
2	
4	
6	
8	

Community dental clinic model and areas

The modelling process, combined with an analysis of the population mapping, the service’s FTE staff requirements and an understanding of the communities of interest, will help to establish the appropriate service configuration for oral health services for zero to one-year-olds around a hub–and-spoke model. We anticipate this will be structured around a community dental clinic and outreach model across areas within the DHB region, taking into account associated NGO and private dental practice facilities.

The location of these clinic areas, the estimated number of chairs per clinic, levels of public dental clinic, and NGO and private dental practice service within the various DHB areas should all be clearly described.

The service model must address the availability of outreach services for communities with high oral health needs. To enhance access and achieve greater service efficiency, DHBs may consider mobile units to undertake dental examinations or treatment services. The service planning assumptions for choosing between fixed clinics and mobiles should be made clear in all business cases.

Staff modelling and assumptions

DHBs will need to establish FTE assumptions in order to complete staff modelling. The FTE assumptions will be used to develop the clinical service staffing required for the service model and facility configuration. The assumptions should include the level of operational management experience within the service, current data about workforce productivity, a review of staffing ratios in similar child oral health services, and the practical application of staffing given the proposed model and the situation within each DHB.

The workforce plan will take into consideration contracts the DHB has in place for providing oral health services with, for example, Māori oral health services, private dental practices, public health organisations and other NGOs.

Table A5 provides some parameters that may be applied when considering FTE staffing assumptions for the service plan.

Table A5: FTE assumptions

Role	FTE assumption
Dental therapist	Number of visits per FTE per year
Dentist	FTE dentists per FTE dental therapists, or number of visits per FTE per year
Dental assistant	Staffing ratio of dental therapists or dentists to dental assistants
Health promoter	Level of FTE per visits per year, or level of FTE per number of FTE dental therapists and dentists
Receptionist	Level of FTE to number of chairs, or level of FTE to FTE clinicians

The staff modelling will link to the service management model, which may include a number of options, ranging from central administration to combined local practice managers with retention of a central administration.

Appendix C: Example Criteria for Change Management

When DHBs plan a new model of care, a change management plan should show how the shift to new models of care will be managed. Connections between population needs, demands for services and the facility requirements should all be clearly shown. The change management plan will be linked to the workforce development plan. The following are example criteria for successful change.

Organisational buy-in

1. The case for change is clear, well communicated, well understood and committed to throughout the organisation, and is well linked back to the original business case.
2. The DHB funder arm, DHB finance, and DHB operations areas and provider arm are fully connected and their respective responsibilities are integrated.
3. There is demonstrated ownership by both management and clinicians of both the overall programme and each component.
4. There is clear understanding of what will be different in the new environment, and who is being expected to work differently.
5. Where possible, process change is implemented before physical change.

Accountability arrangements

6. There are clear and appropriate accountability and monitoring mechanisms for the change programme at DHB, CEO and operational levels.
7. Effective programme and project management practices are in place.

Preservation of business as usual

8. The change programme supports business as usual and the achievement of current performance targets until new enhanced targets are established.

Benefit identification and tracking

9. There is an appropriately mandated and clinically credible process to identify, agree, implement and audit new models of care, with responsibility linked back to the day-to-day managers and clinicians responsible.
10. There are clear processes and systems for quantifying and tracking progress in the introduction of new models of care, with appropriate key performance indicators linked back to the day-to-day managers and clinicians responsible.

Improvement planning

11. A process is in place for regular review of the effectiveness of the overall programme, and for identifying emerging issues, adverse impacts and risks to enable effective decision-making and problem resolution.
12. If there are any gaps in the programme or amendments required, they are identified and an improvement plan is in place for each.

Appendix D: Review of Oral Health Business Cases

A Ministry technical review panel will be established to make recommendations on funding oral health service business cases. Business case reviews will include the following questions. (It is recommended that DHBs address the following questions as part of their own review process.)

1. Is the master facility plan design 'fit for purpose'?
2. Are the proposed individual facilities 'fit for purpose'?
3. Does the business case appropriately plan for any new models of care required for the new facility to operate safely and efficiently?
4. Are the processes and assumptions undertaken when developing the costs appropriate and defensible?
5. Are the cost rates applied in generating the costs appropriate?
6. In terms of the completeness of the budgeting, are there any exclusions, consequential costs, assumptions or risks that need to be addressed?
7. Are the proposed project management and procurement methods appropriate?
8. Is the proposed development appropriate in the context of the facility master plan?
9. Has the DHB followed the oral health business case guidelines in preparing and completing their oral health business case?
10. Document any DHB project specific queries requiring a response from the Ministry.

Note that the clinical 'fit for purpose' test requires a business case to demonstrate:

- a commitment to, and understanding, of modern models of care
- a facility configuration based on a hub-and-spoke model
- the appropriateness of any site agreement
- good patient flows and access issues
- flexibility to respond to the needs of the community served
- consistency and fit with service intentions and original board approvals
- monitoring of established chair utilisation/throughput levels
- clinical sustainability
- clinical safety
- good service co-locations and synergies
- workforce planning appropriate to the planned models of care and workforce availability
- establishment of planned clinician-to-patient ratios.

A key part of demonstrating this is that the service planning and planned models of care are actively supported by the planned design.

Appendix E: Example DHB Board Recommendations for Approval of Oral Health Projects

For projects requiring new debt or equity, the Ministry of Health *Guidelines for Capital Investment* (Ministry of Health 2003) require that:

the DHB Board must demonstrate full ownership of the business case. DHB Boards are expected to take full responsibility for the assumptions and consequences of a DHB's business case. Such full support by the Board of a business case prior to submission to the Crown is an essential requirement for ministerial support for capital funding. It must also be clear that Boards have taken the prioritisation decisions necessary to ensure that capital expenditure proposals are affordable to the DHB overall.

To adequately demonstrate this, boards need to show that they have covered the full range of issues essential to the business case. A useful approach is to list key details and consequences of the investment that have been considered by the board. Below is an example of such an approach.

However, bear in mind that just as each business case must be structured for a particular project, so should board consideration of individual projects be specific to each project and to each board's approach. Other related board approvals – particularly those regarding service planning, health service prioritisation and consequential capital and operational intentions – should be covered by earlier board resolutions.

Table A6: Example DHB board recommendations for oral health service projects

a)	Note that following the board resolution of xx, the following options were considered: <ul style="list-style-type: none"> • redevelopment of existing oral health facility • demolition of existing facility and new build • relocation of services into a suitable existing building • relocation of services into an existing building, which requires redevelopment • new development and build 	Yes / No Yes / No Yes / No Yes / No Yes / No
b)	Agree that the option chosen is the best option.	Yes / No
c)	Note that the preferred option is consistent with the overall facility master plan.	Yes / No
d)	Note that the preferred option is consistent with the health priorities and service delivery options approved by the board on xx.	Yes / No
e)	Note that the preferred option will deliver a high and acceptable level of clinical quality and a modern delivery of oral health services.	Yes / No
f)	Note that this project has been supported by the regional capital committee and issues raised by the committee have been addressed.	Yes / No
g)	Note that the project design and costs have been developed with, and confirmed by, the DHBs health planners, health architects and an independent quantity surveyor.	Yes / No

h)	Agree that the complete project budget, including all consequential financial impacts, will be \$xx000.	Yes / No
i)	Note that the project will result in increased annual operating costs (eg, staffing) of \$xx000.	Yes / No
j)	Note that the investment requires the introduction of new models of care.	Yes / No
k)	Agree to the establishment of a change management programme to promote modern models of care and set credible targets.	Yes / No
l)	Note that the project will be funded via: <ul style="list-style-type: none"> • \$xx000 contribution from the DHB's free cash flow • CHFA debt of \$xxx000 • Crown equity injection of \$xx000. 	Yes / No
m)	Agree to reserve \$xx000 per year for 2006/07 and 2007/08 from the DHB's free cash flow to contribute to this project.	Yes / No
n)	Note that taking into account the net cost impact of this project, the DHB will continue to achieve a breakeven result.	Yes / No
o)	Agree to request new debt and equity of \$xx 000 from the Crown.	Yes / No
p)	Note that new debt from the CHFA will require agreeing to banking covenant requirements of xyz ... and amortising the debt over xx years.	Yes / No
q)	Note that the implementation and project management planning to deliver the project is complete.	Yes / No

Appendix F: DHB Capital Priority Analysis

(Based on Ministry of Health 2003, Appendix 2)

Purpose

For the analysis of proposals submitted to the Ministry of Health, and as a checklist and self-assessment tool for DHBs.

Oral health business case review

Project details

Background and short description of project

Financial details

Planned funding arrangements	(\$ million)
Internally generated funds	
Free cash flows	
Asset sales	
Approved private debt	
Crown Health Financing Agency (CHFA)	
Existing credit facility (refinancing)	
New CHFA lending	
Equity	
Total	

Essential criteria

For a project to receive funding, the answer to all essential questions must be 'yes'.

1. Governance

Has the DHB board demonstrated a commitment to the assumptions of the business case and ownership of its implementation and consequences?

Yes / No

2. Option analysis

Has the DHB demonstrated that it has explored all practical options and demonstrated the comparative benefit of the preferred option?

Yes / No

3. Appropriate 'fallback' option

Has the DHB developed a 'fallback' option if planned funding is not available?

Yes / No

4. Peer review

Does the proposed project have peer support from either the Regional Capital Committee or neighbouring DHBs, or has the DHB suitably justified a different view?

Yes / No

5. Planned efficiencies

Has reasonable effort been made to identify efficiencies as a consequence of the investment? If any efficiencies are planned, are they achievable and defensible (eg, the chair utilisation levels established by throughput (appointments) or number of patients)?

Yes / No

6. Project budget

Project costing: Are the processes, assumptions and cost rates used when developing the budget appropriate and defensible?

Yes / No

Consequential projects: Does the financial analysis capture the financial impact of all projects and expenditure that needs to progress as a consequence of this investment?

Yes / No

7. Maximising the ability of the DHB to contribute to the capital cost of the project

Has the DHB maximised its ability to afford the project via management of free cash flow expenditure, asset sales and strengthening of its balance sheet by repayment of debt?

Yes / No

8. Overall affordability

Over the life of the project can the DHB break even given its forecast revenue? If not, does the project make an acceptable contribution to the DHB's long-term strategy to break even?

Yes / No

9. CHFA analysis

Has the business case been reviewed by the CHFA, and is the CHFA prepared to endorse the project (subject to Ministerial approval)?

Yes / No

10. Management of public expectations

Has the DHB managed public expectations to a level consistent with the ability of the DHB and the Crown to afford the project?

Yes / No

11. Facility master plan

Has the DHB demonstrated that the project has been developed in the context of an overall assessment of the future use of the oral health facilities and the plan will not unreasonably compromise future options?

Yes / No

Qualitative criteria

1. DHB capital expenditure history

On the measure of dental capex to depreciation, over the last six years how does the DHB rate?

Low investment	Medium investment	High investment
5	4 3 2	1

2. Asset management planning

What is the quality of the DHB's oral health asset management planning?

Sound	5	4	3	2	1	Poor
-------	---	---	---	---	---	------

3. Asset condition

What is the physical condition of the asset/s requiring investment / replacement?

Poor	5	4	3	2	1	Sound
------	---	---	---	---	---	-------

4. Service quality A

What is the quality of the service currently provided by the asset/s requiring investment/ replacement?

Unacceptable	10	9	8	7	6	5	4	3	2	1	Acceptable
--------------	----	---	---	---	---	---	---	---	---	---	------------

5. Service quality B

What is the quality of the service provided by the proposed new asset/s likely to be?

High	10	9	8	7	6	5	4	3	2	1	Low
------	----	---	---	---	---	---	---	---	---	---	-----

6. Service capacity

What is the ability of the asset/s requiring investment / replacement to meet forecast service need?

Low	10	9	8	7	6	5	4	3	2	1	High
-----	----	---	---	---	---	---	---	---	---	---	------

7. Service priority

In the context of the Health and Disability Strategies, what is the priority for the planned services?

High	10	9	8	7	6	5	4	3	2	1	Low
------	----	---	---	---	---	---	---	---	---	---	-----

8. Primary care integration and population health activities

To what extent does this project maximise the potential to integrate with primary care and population health activities?

Maximum integration	5	4	3	2	1	Minimum integration
---------------------	---	---	---	---	---	---------------------

9. Inter-DHB collaboration

To what extent has the DHB maximised gains from collaboration with other DHBs?

Maximum collaboration	5	4	3	2	1	Minimum collaboration
-----------------------	---	---	---	---	---	-----------------------

10. Workforce planning

What is the state of workforce planning for the project?

Sound	5	4	3	2	1	Poor
-------	---	---	---	---	---	------

11. Implementation planning

What is the state of implementation planning for the project?

Sound	5	4	3	2	1	Poor
-------	---	---	---	---	---	------

Sum of qualitative criteria scores expressed as a percentage (this ensures that if criteria are not applicable, they can be deleted without disadvantaging a DHB): _____%

Value for money judgement

Overall, in comparison with recent and other current requests, does this project represent value for money?

Good	10	9	8	7	6	5	4	3	2	1	Poor
------	----	---	---	---	---	---	---	---	---	---	------

Appendix G: Capital Intentions Spreadsheet

2005–10 DHB capital investment intentions

Name of DHB:

Do you plan a formal bid for the September/October 2006 capital allocation round?

Yes/No?

Part 1: Projects. Capex category / project (Please indicate in the column provided if the project either requires NCC and Ministerial approval or not, and if so, if such approval has been secured or not)	NCC and Ministerial approval status	2005–06	2006–07	2007–08	2008–09	2009–10	Totals	Outyears
Baseline capex; current and forward years (sum of normal expected smaller capital purchases). Note 'provisioning' expectation below.							0.00	
Baseline capex carried forward from previous year(s)							0.00	
Radiation oncology (linacs, bunkers etc ...). Cancer centres must complete this. List significant individual items.							0.00	
Major equipment. Includes motor vehicles. List individual projects.							0.00	
Oral health business cases								
Information systems and communication technology (see definition below). List individual projects.							0.00	
Major refurbishment or new construction. Includes land, buildings, plant (individual projects should be listed separately, please add rows).							0.00	
Total outlay (a)		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Part 2: Source of funds								
Internal funding of baseline capex (should match baseline capex) (b).							0.00	
DHB contribution from depreciation provisions/free cashflows to future or current projects over and above baseline (c). ¹							0.00	
<i>Sum of rows (b) and (c) note; this row should equal the DHBs free cashflow.</i>		0.00	0.00	0.00	0.00	0.00	0.00	
Asset sales (d)							0.00	
Approved private debt (e)							0.00	
Cash carried forward from previous years(s) (f)							0.00	
Other (ie, CFA refinancing, temporary use of OD facility, community trust, etc) please specify and add additional rows if required (g).							0.00	
Total funding required from health capital budget (a-b-c-d-e-f-g)		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net funding required from the health capital budget (please net off already approved equity and new lending).								
Comments:								

¹ Assume a nil deficit (ie, that cash is available up to the level of depreciation).

Asset management planning and provisioning. Investment in capital infrastructure is 'lumpy'. Therefore, it is expected that a financially sustainable DHB will be reinvesting less than its depreciation provisions in most years. This is necessary to build up provisions for the replacement of major assets. The expectation is greatest for DHBs with relatively new major assets, but all DHBs should be demonstrating how they plan to use depreciation on major assets to provision for the eventual replacement of those assets.

Information Systems and Communication Technology capital expenditure. This applies to computer systems such as applications, hardware and software and includes networking and communications. This definition excludes such things as laboratory analysis equipment and digital radiology systems.

Appendix H: Operational Financial Analysis Template

Current DHB funding and costs analysis

Activity	0–4 years or 0–2 years and 3–4 years		5–12 years		13–18 years		Total	
Number of enrolled people								
Provider arm contacts (visits)								
Contracted provider contacts (visits)								
Oral health services funding								
School dental service								
Hospital dental service ¹								
Combined Dental Agreement – adolescents								
Combined Dental Agreement – special dental services								
NGO contracts (eg, Māori oral health provider)								
PHO contracts								
Other oral health contracts ²								
Oral health services costs								
Provider arm services	FTE	\$	FTE	\$	FTE	\$	FTE	\$
Personnel costs								
• Dental therapists								
• Dental assistants								
• Dentists								
• Health promoters								
• Service management								
– Team leader								
– Administration assistant								
– Other								
• Other roles (eg, transport)								
Total								
Clinical supplies								
Infrastructure								
Depreciation								
Internal allocations								
Total direct costs								
Overheads %								

Activity	0–4 years or 0–2 years and 3–4 years		5–12 years	13–18 years	Total
Contracted services					
Combined Dental Agreement – adolescents					
Combined Dental Agreement – special dental services					
NGO contracts (eg, Māori oral health provider)					
PHO contracts					
Other oral health contracts ²					
Total costs					
Net surplus/(deficit)					

Notes:

Oral health services funding

- 1 Hospital dental service funding should be limited to primary oral health care only for children and adolescents (0–18). Do not include hospital caseweights (secondary care) or secondary care hospital dental service outpatient visits.
- 2 Include any other funding to a primary care oral health. Do not include the funding of Public Health Unit oral health activities through Public Health funds.

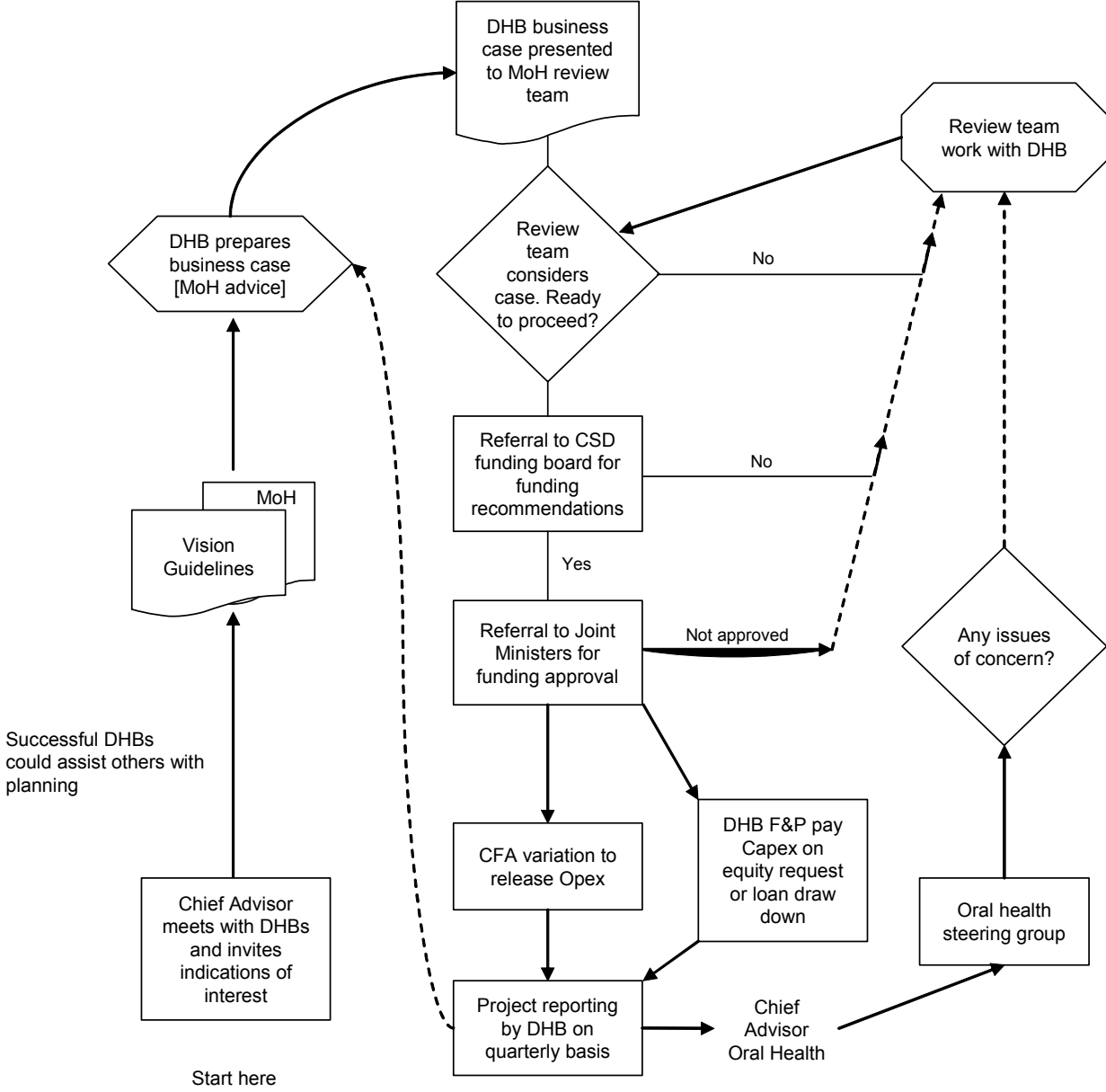
Oral health services costs

- Personnel costs – include direct and indirect costs (training and development, staff mileage, incidentals).
- Clinical supplies – include dental equipment where the value is below the capital threshold, dental materials and bulk goods.
- Infrastructure costs – include telecommunications, cleaning, laundry contracts, electricity, maintenance and repair contracts, stationary, vehicle costs and any lease costs.
- Internal allocations may cover charges for IT equipment, systems and support and DHB provided equipment maintenance and repairs and laundry services.
- Depreciation – provide the depreciation assumptions applied, for example:

Type	Useful life	Rate
Building fit out	20 years	5%
Clinical equipment	10 years	10%
Mobile units	8 years	12%

Complete a template explaining the current funding and costs, and a template for the projected funding and costs in a revised service model. Provide a gap analysis of the increased funding and costs anticipated and the anticipated contribution to the gap by the DHB or by additional new funding. The phased nature of many business cases will necessitate clear explanation of the phasing and the funding and cost movements anticipated through a transition period.

Appendix I: Oral Health Services Business Case Approval Process



References

- District Health Board New Zealand. 2004. *School Dental Service Review Final Report*. Christchurch: District Health Board New Zealand.
- Minister of Health. 2000. *The New Zealand Health Strategy*. Wellington: Ministry of Health.
- Ministries of Health and Education. 1999. *Memorandum of Understanding in Respect of Operation of School Dental Clinics*. Wellington: Ministry of Health.
- Ministry of Health. 2003. *Guidelines for Capital Investment*. Wellington: Ministry of Health.
- Ministry of Health. 2004. *Child Oral Health Service Specification*. Wellington: Ministry of Health.
- Ministry of Health. 2004. *Review of Māori Child Oral Health Services*. Wellington: Ministry of Health.
- Ministry of Health. 2005. *Business Case Guidelines for Investment in Information Technology*. Wellington: Ministry of Health.
- Ministry of Health. 2006. *Community Oral Health Service: Facility guideline*. Wellington: Ministry of Health.
- World Health Organization. 2005. *The Liverpool Declaration*. Geneva: World Health Organization.