



Northland DHB Prioritisation Policy
Whānau Ora Health Impact Assessment

Report Three: Appraisal Report
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Prepared by

Lyn Rostern, Ellie Berghan and Tania Rawiri (Northland DHB)
Judith Ball (Quigley and Watts Ltd)

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Glossary of Terms and Abbreviations

DHB	District Health Board
GM	General Manager
HIA	Health Impact Assessment
Prioritisation	Prioritisation is concerned with how decisions are made about what health and disability services to fund, for the benefit of the whole population, within the resources available.
MoH	Ministry of Health
SDF	Service Development and Funding, which is the funder arm of Northland DHB.
WOHIA	Whānau Ora Health Impact Assessment, a type of HIA that focuses specifically on identifying the likely impacts on Māori health and wellbeing of a project or policy

1 Introduction

1.1 Background

District Health Boards are required to carry out principles-based prioritisation processes in order to meet the objectives of the New Zealand Public Health and Disability Act 2000. Northland DHB's current Prioritisation Policy is based on the work done by the Joint DHB and Ministry of Health Working Group on Prioritisation, specifically on their document released in 2004 *The Best Use of Available Resources: an Approach to Prioritisation* (DHB and MoH Joint Working Group, 2004). This document aimed to provide for a common principles-based approach to prioritisation across the country.

This WOHIA has been initiated by DHB staff who are cognisant of the shortcomings of Northland DHB's current prioritisation policy and the way it has been implemented. There are particular concerns about its adequacy for guiding decisions in the current funding environment.

Until recently, Northland DHB has had the luxury of receiving extra funding each year to meet identified needs. In the current economic environment that luxury no longer exists, with the Government giving clear signals that if new funding is to be found, it must come from within existing resources – in other words, DHBs must be prepared to disinvest in some services and reinvest in others. For Northland DHB to be confident that it is making the correct decisions and to be able to convince existing service providers of its reasoning, there is a vital need for a rational and transparent prioritisation tool.

Northland DHB (NDHB) has undertaken a Whānau Ora Health Impact Assessment (WOHIA) of its existing Prioritisation Policy, with a view to developing a new Prioritisation Policy. This report presents the findings of that WOHIA.

1.2 What is Whānau Ora Health Impact Assessment?

Health impact assessment has been defined as a practical approach that predicts how a proposal will affect people's health and wellbeing. WOHIA is a particular type of HIA that specifically focuses on the likely impacts on Māori wellbeing, and Māori participation in decision making. The proposal under assessment may vary from a project (for instance, a new housing development, a leisure centre, or a health centre) to programmes (such as an urban regeneration or new nursing services for a region) to policies (like an integrated transport strategy, the introduction of water metering, or a funding prioritisation policy).

WOHIA builds on the now generally accepted understanding that a community's health and wellbeing is not only determined by its health services, but also by a wide range of economic, social and environmental influences. Where a health service is being assessed, a strong focus on addressing inequalities is taken.

Ideally, a WOHIA should happen before the project, programme or policy concerned is implemented, so that any potential negative health effects can be avoided or reduced, and the positive ones enhanced. The current WOHIA is slightly unusual in that it is being applied to an existing policy as part of a policy review and redevelopment process. While less common, this is a valid and accepted use of the HIA approach. WOHIA systematically works through relevant questions and issues, providing a rigorous base for any recommendations provided to decision makers. The principles of this approach have much in common with other established impact assessment methods such as environmental and social impact assessments.

1.3 Aims of the WOHIA

Aims were originally set in the funding application to the Ministry of Health, and these were further refined at the scoping meeting (09/03/10) and during the peer review of the WOHIA scoping report. The five key aims of the WOHIA are:

- 1 Training in the use of HIA/WOHIA to build wider NDHB capacity in both the Public Health Unit and the funder arm of NDHB
- 2 Apply a WOHIA to NDHB's Planning and Funding Prioritisation Policy (2005)
- 3 Produce evidence-based recommendations for redeveloping the NDHB's Prioritisation Policy (based on evidence-based understanding of what the redeveloped policy should look like – its key features, content and implementation.)
- 4 Work with intersectoral partners on the WOHIA to strengthen intersectoral relationships
- 5 Evaluate the application of WOHIA to NDHB's Prioritisation Policy, to report on the process and short-term impact of the WOHIA.

It is important to note that because of the high level nature of the policy being assessed, the focus of the WOHIA was on understanding the strengths and weaknesses of the current prioritisation policy from a Māori health and population health perspective, and developing robust recommendations for its redevelopment. Part of this approach was to articulate the causal pathways between the prioritization policy and whānau ora outcomes, and identify impacts on proximal determinants of health (e.g. access to quality health and disability services). However identification and quantification of the specific impacts on distal health determinants and health outcomes (e.g. smoking rates, unemployment rates, prevalence of diabetes, cancer etc) was not an aim of this WOHIA.

1.4 Scope of the WOHIA

The WOHIA assessed the whole NDHB Prioritisation Policy (2005), including both its content and its implementation. This policy represents the “status quo”, which was implicitly compared with a new and improved prioritisation policy which is yet to be developed.

The population scope of the WOHIA was the population of Northland (reflecting the DHB's mandate) with a particular focus on:

- whānau
- health and disability providers
- intersectoral partners.

The key health determinants focused on were:

- evidence-based and equitable allocation of health funding
- equitable access to high quality health and disability services that are responsive to Māori
- availability of intersectoral programmes/services to support wellbeing (eg healthy housing, environmental health)
- sustainability of employment.

Fig 1: Causal Pathway between Prioritisation Policy and Whānau Ora

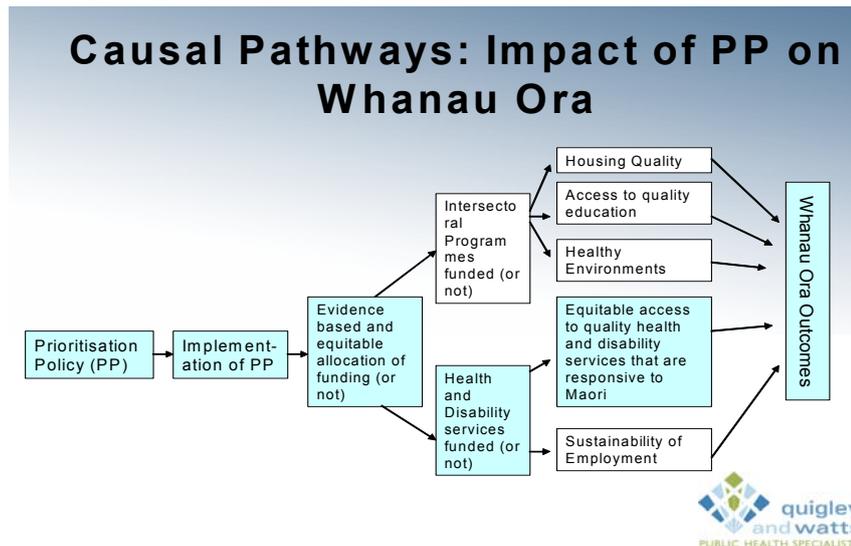


Figure 1 provides a logic model showing the causal pathways between the Prioritisation Policy, intermediate factors (such as access to services), and Whānau Ora outcomes. This diagram was initially developed during the screening and scoping hui, and was further refined at the appraisal stage. The pathway highlighted in blue (shaded) was the main focus of the WOHIA.

The causal pathways outlined are well supported by evidence. For example, there is evidence from New Zealand and overseas that differential access to and utilisation of health services leads to inequitable promotion of health and well-being, disease prevention, and illness recovery and survival (WHO/Commission on Social Determinants of Health, 2008, p3). Another example from New Zealand research shows that Māori are 18% more likely to be diagnosed with cancer than non-Māori, but nearly twice as likely as non-Māori to die from cancer. “These findings indicate the likely existence of disparities between Māori and non-Māori in timely access to definitive diagnostic procedures, staging procedures, and optimal treatment or management of cancer” (Cormack et al, 2005). Recent New Zealand efforts to improve access to primary health care for disadvantaged communities have demonstrated that funding decisions and service configuration can improve equity of access to services (Gribben, 2007).

There is also evidence that the daily conditions in which people live and work have a strong influence on health equity. For example, “access to quality housing and clean water and sanitation are human rights and basic needs for healthy living” (WHO/Commission on Social Determinants of Health, p6). It is also known that ongoing insecurity and lack of control over work and/or home life can have powerful effects on health, as can unemployment (WHO, 2003; Ministry of Health/University of Otago, 2006). The New Zealand “Decades of Disparity” research concluded that socioeconomic indicators account for up to 50% of the ethnic disparity in all-cause inequality in mortality (Ministry of Health/University of Otago, 2006).

The WOHIA aimed to answer the following research questions:

1. what is best practice in prioritisation/funding allocation for health and disability services?

2. what are the success factors for positive prioritisation outcomes, that is whānau ora outcomes, equity and sustainability¹? (refer fig1 *Causal Pathways: Impact on Whānau Ora.*)
3. what are the strengths and weaknesses of the current policy and its use?
4. how does the policy address the principles of the Treaty of Waitangi (partnership, participation and protection)?
5. how does the current policy impact on whānau/providers/intersectoral partners/inequalities?
6. what does NDHB need to get right in order for the Prioritisation Policy to have the desired effect on whānau ora?
7. how could the current policy and its implementation be changed to enhance positive outcomes and reduce/mitigate negative outcomes?

The key decisions that the WOHIA is intended to inform are:

- (a) whether or not a new Prioritisation Policy should be developed
- (b) the key features, content and implementation of the redeveloped policy.

To date the current Prioritisation Policy has only been applied to funding decisions made by the funder arm of NDHB. During the scoping phase of the WOHIA, it was decided that a redeveloped Prioritisation Policy would maintain this position.

During the Senior Management Group (SMG) appraisal workshop there was strong support for redeveloping the Prioritisation Policy which can be applied to both the funder and provider arms of NDHB.

The decision makers that the WOHIA is intended to inform are NDHB's Executive Leadership Group (ELT) and other interested DHBs.

1.5 Methods

The project team responsible for conducting the WOHIA were Lyn Rostern, Ellie Berghan and Tania Rawiri (NDHB) with mentoring and support from Rob Quigley and Judith Ball (Quigley and Watts Ltd) and evaluation support from Kate Marsh (Quigley and Watts Ltd).

A steering group comprising 10 senior NDHB staff was set up to provide governance for the WOHIA. This group was responsible for setting the direction of the WOHIA and overseeing the process. The governance group will also be responsible for carrying the recommendations forward once the WOHIA is complete.

The WOHIA was conducted using the following steps.

Screening

A screening meeting was held on 23 Feb 2010. At that meeting it was decided that the WOHIA should go ahead, since Māori health is a high priority for NDHB and the Prioritisation Policy has the potential to significantly impact on whānau ora. It was also agreed that the WOHIA could make a unique and valuable contribution to the work of

¹ The scoping group agreed that whānau ora outcomes (as outlined in He Korowai Oranga p1), equity and sustainability were the key prioritisation outcomes of interest in this WOHIA

NDHB, and potentially also to other DHBs and government agencies. Details of the screening stage are recorded in full in *Report One: WOHIA Screening*.

Scoping

Initial discussions about the scope of the project began during the screening hui (23 Feb). These discussions were continued and the scope further defined at a scoping hui on 9 March 2010. The scoping team included the steering group who attended the screening hui, plus representatives from intersectoral partners Ministry of Social Development (MSD) and Whangarei District Council (WDC). A full list of participants is provided in Appendix One. Details of the scoping stage are recorded in full in *Report Two: WOHIA Scoping*.

Appraisal

During the scoping workshops and subsequent discussions within the project team, *The Health Lens* checklist (Ministry of Health, 2007 p 22) was adapted to identify the potential impacts of the current prioritisation policy and key health determinants were identified. (Refer *Fig 1: Causal Pathways between Prioritisation Policy and Whānau Ora*). The information needs for the WOHIA were also clarified, and a set of research questions developed (see section 1.4, pages 5, 6)

Following this, a combination of appropriate appraisal methods were selected by the steering group, and included both qualitative (eg key stakeholder workshops) and quantitative methods (eg Northland community profile and environmental scan).

In preparation for the stakeholder workshops a series of questions were developed based on the WOHIA research questions above (p5, 6) and the *Health Lens* checklist.

A range of information was sought beyond the traditional policy development process because of the scale and likely impacts of the prioritisation policy; the need for wider stakeholder input; and the opportunity the WOHIA was seeking for mitigating or enhancing the current prioritisation policy.

The following table outlines the four information gathering strands of the WOHIA.

Table 1: Information Gathering for WOHIA Appraisal Stage

Actions	Those involved	Measures/ milestones
Undertake a rapid literature search, review and analyse key findings.	Quigley and Watts	Full review of up to 15 papers/reports. Summary of best practice in prioritisation of Health and Disability Services. New Zealand and International findings Outline of key success factors for prioritisation outcomes.
Document community profile relevant to the current application of the Prioritisation Policy and potential changes.	Northland DHB Health Planner supported by Quigley and Watts	Community Profile established from existing HNA data for Northland. Additional information collected and added.
Analysis of prioritisation	NDHB	Analysis of key systems and processes linked to

Actions	Those involved	Measures/ milestones
policies from DHBs: <ul style="list-style-type: none"> • NDHB • The three other Northern Regional DHBs • The three other Reducing Inequalities DHBs. 	Population Health Strategists	reducing inequalities and +/- impact on public and population health.
3.11.4 Facilitate four stakeholder workshops: WOHA steering group and intersectoral stakeholders – initial appraisal held in conjunction with scoping hui SDF & Māori Health GM, Portfolio Managers, Strategists, Planner, Programme Managers Providers, intersectoral stakeholders, PHU Team Leaders NDHB Senior Management Group (SMG)	Quigley and Watts Quigley and Watts Quigley and Watts NDHB Population Health Strategists	The following measures/milestones were applicable to all stakeholder groups. Input and feedback by those representing stakeholder groups about the policy impact on the relevant determinants of health, Northland's resident population and vulnerable communities. Increased understanding of across government impacts. Building across entity knowledge of WOHA. Strengthening intersectoral relationships.

Evaluation

NDHB contracted Quigley and Watts to undertake a process and outcome evaluation of the WOHA. The evaluation is being undertaken by a public health research professional, who has not been directly part of the WOHA project team. The evaluation involves analysis of:

- a) evaluation sheets filled in by participants after each hui or workshop
- b) project documents (eg proposal, screening, scoping and WOHA reports)
- c) interview data; four telephone interviews will be conducted with project team members and key stakeholders to inform the evaluation.

Findings of the evaluation will be presented in a separate report.

1.6 Limitations

A range of stakeholders have been involved in this WOHA process, but the limited timeframe and budget restricted the level of inclusiveness possible at the information-gathering stage.

As with any HIA, this HIA is limited by the availability and quality of the data available. In a complex and constantly changing health sector environment, it is possible that some of the data and information on which this HIA was based is imperfect or out of date. The knowledge of those involved in the stakeholder workshops was extensive, covered various perspectives and contributed enormously to the HIA process. However stakeholder knowledge is never complete or perfect, nor is the evidence base documented in the literature. Knowledge gaps and uncertainties mean that the findings of the HIA presented

here should not be seen as conclusive, but present a considered view based on the best available evidence.

2 Context

2.1 District Health Boards' operating environment relating to prioritisation

Prioritisation across the health sector is challenging and it is recognised that processes used by the Planning and Funding (P&F) teams need constant refining to ensure that the process and decisions are robust.

To ensure DHBs apply consistent principles and best practice to their prioritisation policies and processes, external standards have been set and minimum requirements mandated within DHBs' legislative and operational requirements as follows:

- The national prioritisation tool (*The Best Use of Available Resources: An approach to prioritisation, Ministry of Health and DHBNZ, 2005*) remains the Minister of Health approved national tool for guiding prioritisation processes within DHBs. The process recommended includes use of the *Reducing Inequalities Framework*, the *Health Equity Assessment Tool* (HEAT) and Whānau Ora principles
- The four prioritisation principles from this national tool are:
 - effectiveness
 - Whānau Ora
 - equity
 - value for money

Prioritisation processes developed by District Health Boards should generally adhere to these principles.

- The New Zealand Public Health and Disability Act 2000 (the Act) lays down the duties of DHBs. Several of these duties are relevant to any service changes inclusive of changes that result from prioritisation activity.

The Act is supplemented by three policy documents:

- the Operational Policy Framework
 - the Service Coverage Schedule
 - the Crown Funding Agreement
- DHBs must also pursue their objectives in accordance with their strategic plan, annual district plan, statement of intent and any direction or requirement given by the Minister.
 - Under the mandate of *The Operational Policy Framework* (OPF) (Ministry of Health 2009-10) is a set of business rules as well as policy and guideline principles that outline the operating functions of DHBs, in each annual period. Clause A.3.2 of each Crown Funding Agreement (CFA) held between the Minister of Health and each DHB confers DHB agreement to the OPF. Upon receiving the Minister's endorsement the current iteration of the OPF applies to all 21 DHBs.

Under the OPF, DHBs are required to adhere to the following requirements:

- ministerial directions
- government policy (Cabinet decisions and published policy statements), in which case the Minister of Health or Director General of Health (Director-General) is exercising a statutory power
- the Crown Funding Agreement (CFA)
- rules set out by the Cabinet Social Policy and Health Committee (SPH) (00) 160 (2 November 2000) report

- the New Zealand Health Strategy
- the New Zealand Disability Strategy
- He Korowai Oranga: Māori Health Strategy.

The external requirements under the OPF frequently determine what funding must be prioritised and allocated to meet national or regional policy direction. These “must do”s are often noted as exemptions under the scope and application of DHBs prioritisation policies and processes.

2.2 Outline of the NDHB Prioritisation Policy 2005

The existing Prioritisation Policy (2005) to be assessed is attached in Appendix Two. The wording of the policy suggests that it was designed for application across both funder and provider arms of the DHB. However, in practice the Prioritisation Policy has only been applied to funding decisions regarding Public and Population Health NGO services (i.e. about 230 contracts). Other DHB funded services (eg laboratory services, clinical services, pharmacy) and the provider arm of the DHB have not been subject to the Prioritisation Policy.

The existing Prioritisation Policy has the potential to impact significantly (both positively and/or negatively) on the Māori population, as well as providers, other key stakeholders and across government agencies.

The following is a high level summary of the current policy and its implementation:

- the policy guidelines were set in 2005 based on DHB/MOH national working group on prioritisation.
- processes include: The *Reducing Inequalities Framework*, *Health Equity Assessment Tool and Whānau Ora*.
- NDHB added the *Leading For Outcomes Life Course Continuum*, as an area to be assessed.
- the policy forms the basis for the prioritisation stage of the annual and strategic planning cycles and strategic direction in other years.
- the policy is a guide for funding allocation decisions and outlines the annual funding allocation process
- the policy only applies to the Funder’s funding allocations
- the policy outlines a three stage prioritisation process and what evidence will be gathered at each stage.
- the policy outlines the factors which will influence the PFC (Prioritisation Funding Committee) in their decision making (the PFC is not currently in operation).

2.3 Context for policy redevelopment

The WOHIA is being undertaken in a wider health sector context of budgetary restrictions. The key drivers for the redevelopment of the policy are:

- (a) a changed funding environment in which new funding is no longer available, and reinvestment of existing resources may be necessary.
- (b) critique of the current Prioritisation Policy and funding decision making process by those involved, who feel a more robust and transparent approach is required.

It is hoped that the redeveloped Prioritisation Policy will help to guide the prioritisation stage of the annual and strategic planning cycles. It will guide NDHB in setting our major priorities during the 3-yearly preparation of the District Strategic Plan and during discussions on strategic directions in other years. The policy would also guide decisions occurring at several levels:

- across strategic priorities (for example, diabetes compared with cardiovascular disease and oral health)
- within strategic priorities (for example, once a number of strategic actions are identified to address diabetes, how funding should be distributed among them to most effectively meet needs and reduce inequalities)
- deciding among applications received from providers who tender for services in response to Northland DHB requests for proposals
- considering the capacity to deliver services
- considering the need to re-distribute current/reduced health resource.

2.4 Northland community profile and environmental scan

A detailed community profile and environmental scan has been prepared to better understand the population affected by the prioritisation policy, document current ethnic health inequalities, and establish a baseline against which future health impacts can be assessed. The full report is available in Appendix Three.

The profile shows that, based on 2006 census figures, nearly 30% of Northland's population is Māori, and 52% of Northland's children and young people (0-25 years) are Māori. Northland has one of the highest deprivation profiles of any region in New Zealand, with stark differences between Māori and non-Māori communities². In 2006 over half of the Māori population (56.2%) lived in deciles 9 and 10 compared to only 23.5% of the non-Māori population. There are also marked differences between Māori and non-Māori on a range of health indicators and outcomes including potentially avoidable mortality and hospitalisations, lifestyle factors (smoking, obesity, alcohol use), immunisation rates and breastfeeding rates, for example. For the period 1999-2003 Northland DHB had the highest score of all DHBs on a health inequalities index (representing unfair distribution of health)³. The health inequalities index was established as part of a national study, and this has not been updated.

Māori health improvement and reducing inequalities in health have been identified by NDHB as vitally important public health issues. Māori health cuts across other identified population health priorities for Northland such as communicable disease, physical activity and nutrition, mental health, alcohol and drug harm, tobacco, injury prevention, immunisation and screening. Through the WOHIA process, it is hoped that the contribution of the current prioritisation policy to the reducing inequalities agenda will be better understood, and recommendations will be made to ensure that the redeveloped prioritisation process is as effective as possible in promoting Māori wellbeing and health equity in the region.

² NZDep2006, data received by NDHB from Ministry of Health, based on the NZ deprivation analysis carried out by the University of Otago.

³ Monitoring Health Inequality Through Neighbourhood Life Expectancy; Public Health Intelligence Occasional Bulletin number 28. Ministry of Health, Wellington.

3 Findings

3.1 Summary of key literature review findings

As part of the WOHIA information gathering and appraisal process, a rapid literature review was undertaken to provide an evidence base to support the appraisal process, and the development of recommendations. The review drew on both New Zealand and international findings, and aimed to:

- summarise best practice in prioritisation of health and disability services
- outline key success factors for positive prioritisation outcomes.

The full literature review report is provided in Appendix Four. Key findings are summarised below.

The challenge of how to allocate scarce health resources is a universal and growing issue because the population is ageing, and technological developments are rapidly expanding the possibilities for and costs of health interventions. Many argue that a systematic, explicit approach to priority setting which is fair and, where possible, evidence based is called for.

There appears to be no agreed best practice in prioritisation. While a range of systematic approaches and tools have been developed (eg economic approaches, and Multi Criteria Decision Analysis), these are rarely used in practice.

At regional and local levels, funding decisions are generally made on an ad hoc basis, and decision makers often rely on historical or political resource allocation processes. Such processes are not transparent, and provide no mechanism for maximising health benefit within a given budget.

Fair, evidence-based and practical resource allocation is fraught with practical, methodological, ethical and political difficulties.

Prioritisation is not simply a technical process – it involves values and ethics. Prioritisation tools need to reflect and incorporate the values and ethics of the society in which they are used, rather than purport to be “value free”.

Prioritisation should involve questions of equity as well as efficiency.

Research found that the inequalities agenda was poorly embedded in health prioritisation decision making at the local level in the UK. Core services and mainstream priorities were untouched by the inequalities agenda, which only focused on a small subset of services at the margins of health care.

While there is wide agreement in the literature that economic analyses can provide a more robust basis for decision making than previous approaches to prioritisation, there is also acknowledgement that there are practical, political and methodological barriers to the widespread adoption of economics-based prioritisation.

Because of the value-laden nature of health prioritisation, many argue that the prioritisation process should incorporate a range of views, including those of the public.

Effective prioritisation is unlikely to make a significant difference to population health (or health sector efficiency) if it is only applied to a small subset of funding decisions.

Expectations for the prioritisation policy must be realistic. It has been argued that any prioritisation process should, in the end, always be guided by informed judgment. Prioritisation tools should be seen as an aid to policy making, not a means of avoiding judgment, responsibility or risk associated with decisions.

There is wide agreement that prioritisation process should be transparent (open), systematic (explicit) and should involve the public in some manner. The process by which decisions are reached is important because the legitimacy of decisions largely rests on the perceived appropriateness of the process used to reach them.

A central role for an advisory panel comprising stakeholders such as health personnel, policy makers, finance staff, and community representatives has been recommended in the literature.

Commentators note that the prioritisation process should be strongly embedded in the organisational context.

The prioritisation process must also be aligned with national priorities and with legislation and regulation governing health institutions.

3.2 Summary of key findings from review of other DHBs' prioritisation policies

As part of the WOHIA information gathering and appraisal process, prioritisation policies and processes were reviewed from:

- the three other Northern regional DHB's (Metro Auckland DHBs)
- two of the three other Reducing Inequalities DHBs (three requested)

The four Reducing Inequalities DHBs (Northland, Whanganui, Lakes and Te Tai Rawhiti DHBs) are commonly grouped or referenced as they received additional funding based on their vulnerable, high needs, high Māori populations with high deprivation and low socio economic population status.

Reviewing the policies and processes used by the northern region DHBs was important in terms of NDHB continuing to work in a regional context.

The main conclusions and key learnings from the review are listed below under two key headings:

Links to reducing inequalities, which assesses how the various prioritisation policies address the inequalities agenda and equity issues within the prioritisation process

Links to positive and negative impacts on the population, which assesses how the DHB policies address population health issues within the prioritisation process.

The full report is provided in Appendix Five.

Links to reducing inequalities

While the national prioritisation principles developed in 2004 are generally being applied in the DHB policies and tools subject to this review, DHBs are adopting wider definitions eg:

- under inequalities it has been recognised by DHBs that equitable access to a qualified and quality workforce will have a significant impact on equity of outcomes
- regional/ geographic equity emerges more strongly as we increase regionalisation or centralisation services.

All DHB policies and processes reviewed target reducing inequalities and population health impacts as key priorities with some positive variations reflecting the variation in local health needs assessment. However while some acknowledge that health inequalities are fundamentally linked to inequalities in other sectors, only one DHB has strongly embedded this into their prioritisation process.

Whānau Ora related principles and criteria have been generally well adopted and explicitly included in assessment/prioritisation criteria and weightings.

All of the policies reviewed adhere to the four national prioritisation principles.

A comprehensive prioritisation tool has been developed by one DHB which includes explicit criteria and sub criteria for equity indicators:

- regional equity
- geographic equity
- population equity

Wider descriptors relating to inequalities are emerging, eg health inequalities defined to include:

- shorter life span
- earlier onset of chronic disease
- higher infant mortality rates
- higher rates of suicide
- disease(s) associated with poverty

Links to positive and negative impacts on population

There is a variety of references assessing the positive and negative impacts on population health as part of analysis for prioritisation but only one participating DHB requires a comprehensive population impact assessment as part of their funding proposals.

There is scope for including broader evaluation framework(s) aligned to DHBs' strategic direction and the health outcomes they are seeking for their population, particularly their high needs populations which need to be clearly defined.

All relevant priority population groups and vulnerable communities need to be identified and included in prioritisation processes.

Population health impacts documented as principles are not always defined or linked to operational processes. They are typically portrayed as aspirational rather than intentional.

Other considerations were identified eg broader consideration of population health gain versus "impact on individuals" and "assessment of patient experiences".

3.3 Summary of key findings from stakeholder workshops

As part of the WOHIA information gathering and appraisal process, there were four key stakeholder workshops:

- 9 March 2010, WOHIA Steering Group and intersectoral stakeholders
- 17 May 2010, Service Development and Funding Team
- 18 May 2010, Public Health Unit, government agencies, community, provider and Māori health organisations
- 25 May 2010, Northland DHB Senior Management Group.

WOHIA typically seeks information from a range of sources, including Māori organisations and individuals, to ensure that different perspectives are represented and that the WOHIA provides a clear Māori voice in the policy making process.

Seven key research questions were identified during the scoping phase. These questions were adopted and/or adapted for each workshop.

The questions and associated findings are summarised below.

What are the strengths of the current policy and its implementation?

(Research question 3 in section 1.4 *Scope of the WOHIA*)

There were good intentions and enthusiasm about the policy when it was developed.

Some of the tools and areas of analysis are helpful: equity, effectiveness, whānau ora.

Some aspects of reducing inequalities are covered.

It exists; we have something to assess, and there is value in assessing it now.

It was discussed and supported by the DHB's Community and Public Health Advisory Committee (CPHAC) back in 2005.

What are the weaknesses of the current policy and its implementation?

(Research question 3 in section 1.4 *Scope of the WOHIA*)

Current approach is provider driven, rather than needs based – relies largely on unsolicited proposals from providers. (Funder sometimes identifies gaps and puts out an RFP, but this isn't the norm).

Subjective, open to interpretation, risk of individual interpretation.

No training was provided in interpretation or use of the policy.

Lists areas of analysis that should be covered, but does not provide guidance/tools for making valid comparisons based on dissimilar criteria (how to compare 'apples' and 'pears').

The implementation and application of the PP has fallen short of the intention and original vision of the policy – not actually applied systematically to every contract.

Small sphere of influence. It is only applied to funding left over after the provider arm has been funded, funder has rolled over existing contracts, and any external directives (eg from Minister) have been met. Only applied to demographic funding – often one-off, not sustainable. PP applies to a very small slice of overall funding pie.

Was not signed off by the Board – has no status.

No standard approach to priority setting across entity. Many in DHB are unaware of the PP – has no status/clout because not mandated. What funder arm decides is often rebutted by provider arm. Because of the above, PP has little power to really change anything – operating at the margins. We continue to do what we have done historically, and this is very difficult to change due to patch-protection and self interest of provider stakeholders.

The PP is not widely known about by NGO providers.

The PP is not reflected in DHB's monitoring/reporting requirements or tender processes – no evidence of alignment.

Providers don't know rules, don't know criteria their proposals are being judged against.

Process is not transparent.

Process is not inclusive – DHB perceived as a 'closed shop'.

Intersectoral partners are not currently informed about what the DHB is funding and why. What the DHB funds has a ripple effect on other sectors, so need to keep them in the loop.

How does the current policy support Māori participation and Māori health?

(Research question 4 in section 1.4 Scope of the WOHIA)

He Korowai Oranga, Ministry of Health Māori Health Strategy, emphasised the need for Whānau Ora outcomes to be integral to decision making for the population served in Northland in an effort to address the poor health status of Māori.

Māori participation occurs at governance level with Te Tai Tokerau MAPO and Tihi Ora MAPO, at an operational level with Māori staff and Te Roopu Kai Hapai o Te Tai Tokerau (the collective of Māori Health NGOs and PHOs, NDHB and TTTMAPO). Te Roopu Kai Hapai provided the opportunity for NDHB to discuss key processes within the service development and funding arm of NDHB with the ability of this Roopu to make recommendations regarding funding allocations.

Historically the HEAT tool and Reducing Inequalities framework was utilised at an operational level to progress through a set a criteria which ensured that information provided would support equitable decision making on the disbursement of funds to services. The intent was that those services work towards improving the health of Māori in Northland. This was particular to the year end unallocated funds.

The process used in the year end unallocated funds in the current policy appeared to provide the opportunity for one off, quick fix unsustainable initiatives that built up unfulfilled expectations from Health Providers. The process became fraught with a set agenda to distribute funds on the basis of allocation to particular providers rather than based on good evidential information and capability or capacity for achieving whānau ora.

Monitoring reports were utilised as 'proven track record' of success in the past which did not particularly equate to the achievement of for Māori within Northland population. This current process required a mechanism to be able to test the impact/outcome/result of the disbursement of effort and funds to provide supporting evidence to fund further or similar services where success (or not) was achieved.

Māori health specific services were developed, through the prioritisation policy, that sought to support and protect the Māori models of care that would have positive results for eliminating inequalities in health outcomes for Māori.

What are the key elements of a good prioritisation process/ tool?

(Research question 1 in section 1.4 Scope of the WOHIA)

Prioritisation is even more important when funding is short - vital that disinvestment decisions are transparent and robust.

Short clear policy that states the purpose of prioritisation policy, and the process that is to be followed.

Transparency and communication at each stage.

Consistency. The tool should be consistently used and applied, and it should produce consistent decisions stakeholders should be involved.

The mechanism should solicit whānau input. It should not be provider driven (It was commented that providers are often put in the position of being a 'go between' between Māori communities and the DHB. Sometimes providers can articulate the voice of the community, but sometimes not – eg if conflict of interest, providers may be more focused on their own interests).

Prioritisation policy should be an expression of Tiriti o Waitangi - elevate to a genuine partnership in decision making. Must use a Māori model (i.e. He Korowai Oranga)

How can the policy be improved and made fairer and more effective?

(Research question 2, 6 in section 1.4 Scope of the WOHIA)

Content.

Document robust and clear process to be followed.

Need a population health approach (focus on outcomes), instead of a focus on services eg Health of Older People, Emergency Services etc.

Keep similar content – continue to focus on inequalities.

Link to determinants of health and put Whānau Ora at the centre.

Must be careful not to design the prioritisation policy for the convenience of providers, or create a top-down approach based on collectives (eg iwi) – needs to focus on outcomes for individual whānau and hapu.

Embed HIA and/or /WOHIA.

Building blocks of hauora – align it to Te Tei Tokerau plans (PH, Māori) and priorities.

Part of the decision making process/criteria should be a consideration of workforce implications.

Sustainability of funding should be a consideration – what will be the long term impacts on communities of providing one-off funding?

Better use of data. Prioritisation needs to bring together objective, subjective and outcome data and decisions need to be evidence based. What are the needs? Where is funding currently going? Current performance of providers (in terms of whānau ora outcomes)? DHB needs to do its homework.

Need a data unit.

Need multiple sources of data – not just health outcomes.

Have consideration to the fact that large organisations have a different capacity to smaller NGOs in putting forward a proposal.

Need some method of scoring.

How can the process be improved?

(Research questions 1, 7 in section 1.4 Scope of the WOHA)

PP needs to be endorsed by the Board, and communicated to all stakeholders.

Foundation for prioritisation policy is a joint agreement between DHB and providers about purpose and principles.

All funders (DHB, MSD etc) need to get together and align their processes, because the whānau ora outcomes are the same across sectors. Should have a standardized contracting and monitoring templates/infrastructure to ensure alignment and reduce burden on providers.

Needs to be a participatory process: clinical, managerial, independent non-DHB participation.

End user participation? In principle, yes, but how to go about it – ‘don’t have a room big enough for that hui’.

Need to limit or manage personal agendas.

Greater transparency and communication.

Disclosure of DHB priorities, process and budget.

Need to ensure tool is widely understood by assessors eg provide training in how to apply PP.

Final decision making body needs to be impartial. Group who makes decisions could be cross-provider or intersectoral.

Follow up/evaluation on process and implementation (post-prioritisation feedback).

Ongoing monitoring.

If the DHB gets it right with the redevelopment of the prioritisation policy, what is the impact on whānau ora likely to be?

(Research questions 5, 6, in section 1.4 Scope of the WOHA)

Equity of outcome and access but not just to do with health. Change our silo thinking utilised te whare tapa wha model.

Improved outcomes/access.

Effective intersectoral work/relationships leading to whānau empowerment.

Whānau would in the end be empowered.

Negative reduced focus on individual right for access to inequitable funding.

Better health/social/financial/spiritual outcomes.

Reduced focus on individuals right for access to inequitable funding.

Increased requirement for whānau to be involved in funding allocations.

It should impact on the whānau ora outcomes that are listed in appendix 3 of the current prioritisation policy (taken from He Korowai Oranga). This framework is already in place for measuring outcomes.

Should support the DHB strategies and strategic plans that are in place.

Should contribute to social outcomes.

Should lead to a strengthened relationship between DHB and providers, and this will have a positive impact on whānau ora.

We need indicators to see that we are heading in the right direction, since the actual Whānau Ora outcomes may take many years to achieve.

Indicators need to include social determinants broadly, not just clinical measures (it was noted that MSD currently monitor social determinants).

Indicators should be common across sectors – working together towards same outcomes, so this should be reflected in monitoring.

4 Discussion

NDHB's funder arm initiated the WOHIA anticipating scarce resources for 2010/2011 and out years. There were concerns about the adequacy of the current Prioritisation Policy for guiding decisions in the current funding environment. This concern is supported by the WOHIA findings.

4.1 Why is explicit prioritisation important?

Ensuring that services are both accessible and appropriate for the population groups they are intended for is recognised as being fundamental to achieving health gain. Prioritisation provides an opportunity to shift funding towards services that are more accessible and appropriate for Māori and other groups where there is high need.

If a funder allows expenditure on a particular service to grow in an uncontrolled way at the expense of other services, then a decision not to intervene is, in effect, a prioritisation decision. The risk for the funder is that major prioritisation decisions will be made this way rather than through a considered prioritisation process.

From the evidence, the necessity to prioritise and the methodology adopted, was frequently linked to resourcing levels. The more constrained the resources the more prioritisation is needed.

The need to prioritise is not only driven by constrained resources. Even in an environment of plenty, decision-makers need to be aware of the 'opportunity cost' of funding decisions, that is, what the value of the chosen service is compared to alternative uses of the funds.

Prioritisation also provides an opportunity to allocate or reallocate funding, on the basis of evidence and robust analysis, to services that are more effective in improving health and independence and reducing inequalities.

At regional and local levels, funding decisions are generally made on an ad hoc basis, with decision makers often relying on historical or political resource allocation processes. Such processes are not transparent, and provide no mechanism for maximising health benefit within a given budget.

4.2 What is best practice in prioritisation?

Although there is no consensus on best practice in prioritisation, it has been widely recognized for some time that the shortcomings of the currently dominant prioritisation approaches need to be addressed. There is also wide agreement in the literature that the prioritisation process should be transparent (open), systematic (explicit) and should involve the public in some manner. The process by which decisions are reached is important because the legitimacy of decisions largely rests on the perceived appropriateness of the process used to reach them

Efforts to improve health sector prioritisation began in New Zealand in the late 1990s. The national prioritisation tool (*The Best Use of Available Resources: An approach to prioritisation, Ministry of Health and DHBNZ, 2005*) remains the Minister of Health approved national tool for guiding prioritisation processes within DHBs.

When a service or proposal has been identified for analysis the decision-maker will need to work closely with the organisation's analysts and key staff trained in prioritisation

methodology. This is an important step, framing the appropriate questions to be answered. This will ensure that the analysis will generate the information that will be most helpful to the decision maker in making a decision.

Under the above approach it is important to note the option for the analysis to be generated for the decision makers, avoiding vested interest or “gaming” around scoring or weighting methodology. The decision makers are therefore required to make a judgement, on the basis of the evidence, whether funding the service will make the best use of the resources available.

Decision-makers also need to consider:

- the acceptability of the service/proposal, including the degree of acceptability to, and participation by, Māori, other population groups and other stakeholders
- the ethical dimensions of the service/proposal
- the impact on the sector
- the ability to manage potential risks
- other legislative requirements.

A low degree of acceptability among any stakeholder group does not necessarily mean that a service/proposal would not proceed. It does, however, provide a ‘flag’ to decision makers that further work on, and analysis of, the proposal might be needed. If decision makers decide to go ahead with the proposal, careful implementation planning, including further consultation, will be needed.

There is a high degree of interdependence in the health sector, which should be taken into consideration in decision making. For example, NDHB’s decisions for its resident population could adversely effect the policies and funding capacity of other government sectors, vulnerable communities and providers. Decision makers may also want to consider the impact of a decision, such as the costs and compliance costs of the decision, on other parts of the health sector and other sectors.

Once the decision is made to support a proposal there will remain significant work to ensure successful implementation. Decision makers will need to carefully consider when and how to implement prioritisation decisions. Decision makers may require a separate assessment of the implementation implications of the proposal, including recommendations as to how these should be managed. Note that some decisions may require DHBs to consult with their resident population about the proposed change.⁴

4.3 Evaluation of current prioritisation policies in other DHBs

The DHBs considered in the WOHIA are not fully implementing the national prioritisation tool, *The Best Use of Available Resources*, e.g. the tool says that the scope should not be limited to DHB funder arm decisions, and should provide a process that allows decision-makers to make informed judgements about what services to fund, in a transparent and consistent way. Funding decisions that are consistent and transparent will help maintain and increase the trust of New Zealanders in the wider public health and disability sector.

⁴ NZPHD Act 2000 s40.

4.4 The impact of prioritisation is limited in practice

The health sector operates in a continually changing environment. WOHIA findings indicate that many funding decisions within DHBs are based on historical funding models and the application of “flexible” prioritisation methodology and tools.

Both the literature review and stakeholder workshops highlighted that in practice, prioritisation processes tend to be applied at the “margins” (eg “new” funding, unallocated funding, targeted dis-investment), leaving mainstream, provider arm or current services untouched or exempt from any prioritisation process. This means that the potential positive impacts of prioritisation policies on population health and inequalities may not be realised, since significant reallocation of funding is not occurring.

This approach can lead to a growth in expenditure that is neither envisaged nor desired, and perpetuate tension between both the NDHB provider arm services and the funder arm’s obligations to its resident population.

4.5 Impacts of NDHB’s Prioritisation Policy

It is important to note that, because of the high level nature of the policy being assessed, the focus of the WOHIA was on understanding the strengths and weaknesses of the current prioritisation policy from a Māori health and population health perspective, and developing robust recommendations for its redevelopment. Part of this approach was to articulate the causal pathways between the prioritization policy and whānau ora outcomes, and identify impacts on proximal determinants of health. However identification and quantification of the specific impacts on distal health determinants and health outcomes (e.g. smoking rates, unemployment rates, prevalence of diabetes, cancer etc) was not an aim of this WOHIA.

The key impacts identified were on the following health determinants:

- evidence based and equitable allocation of health funding
- equitable access to high quality health and disability services that are responsive to Māori
- availability of intersectoral programmes/services to support wellbeing (eg healthy housing, environmental health)
- sustainability of employment.

An equity approach recognises that it may be important to work with people differently in order to work towards more equal outcomes. There is no evidence to indicate that the introduction of the 2005 Prioritisation Policy has (or has not) led to overall improvements in Maori health, or health equity. Because the prioritisation policy is very high level, it was impossible for the WOHIA to come to conclusions about specific impacts on whānau ora outcomes. However as noted above, the findings of the WOHIA indicate that, in practice, the prioritisation policy is only applied to a limited number and range of decisions and therefore its impact on the determinants of health above is also limited, and the ultimate impact on Māori wellbeing is also likely to be limited.

4.6 How does the prioritisation policy address Treaty principles?

The Treaty of Waitangi provides a fundamental framework for improving Māori health and reducing health inequalities in Northland through putting into action the principles of partnership, participation and protection. NDHB addresses Treaty principles by:

- setting targets for prioritising the funding of Māori health and disability initiatives

- taking account of Northland's population profile and health needs analysis
- building Māori provider capacity and community empowerment in service delivery
- improving upon quality issues.

NDHB also addresses Treaty principles of *participation, protection and partnership* through the implementation of the Māori Health Strategy, He Korowai Oranga. The overall aim of He Korowai Oranga is whānau ora: Māori families supported to achieve their maximum health and wellbeing. Whānau is recognised as playing a central role in the wellbeing of Māori and is key to improving Māori health and wellbeing.

NDHB interacted on a regular basis with Te Roopu Kai Hapai o Te Tai Tokerau as a means to engage and respond to those strategic health issues that were pertinent to improving Māori health outcomes. This was seen as an avenue for Māori to take up a partnership role in the decision making for Māori health in Northland. This Roopu also recognised that many Māori accessed mainstream providers who had a role to play in delivering quality culturally appropriate health services.

Up until the end of December 2009 the NDHB interacted with the two MAPO organisations (Te Tai Tokerau MAPO and Tihi Ora MAPO) that had a partnership agreement at the governance level. These were tri-governance meetings which discussed and advised on strategic issues that arose for improving Māori health outcomes. TTT MAPO had an integral role, at an operational level, to developing the current prioritisation policy as it stands. Progressing forward, the Board is engaging with iwi in regards to a treaty relationship to continue this purpose and role of participation and partnership with Māori.

Service Development and Funding actively seeks *to protect*, through the development of Māori specific health services, promoting strategies for self-determination. NDHB also has a Board mandated objective to eliminate inequities at all levels and to ensure that health outcomes for Māori and non-Māori are the same.

There is however ongoing discussion where some feel that until Māori have full control of health funding and service delivery (outside of the present framework) then true Tino Rangatiratanga remains an unrealised dream. The prioritisation policy was not designed to create an inequitable environment but rather an attempt for Māori to enjoy (at the very least) the same level of well-being as non-Māori.

The detailed community profile and environmental scan in appendix three, provides an understanding of Northland's population and complexities affected by the prioritisation policy. Overall, Northland presents a more deprived picture compared with the New Zealand average (*Health Needs Analysis, 2006*). Māori are represented within Northland's widespread high deprivation levels and large rural population. Socioeconomic factors such as deprivation, income, education, employment status, housing and occupational status are all linked to a wide range of health indices and risk factors for whānau Māori.

Prioritisation of Māori health within funding allocation requires higher prioritisation and careful management and recognition of the importance of intersectoral action.

Whānau ora principles in the prioritisation process provide a framework for analysis and decision-making that is intended to contribute to improving Māori health and reducing inequalities for Māori and lead to effective health care for Māori and whānau ora over time.

Embedding Whānau Ora principles within prioritisation means considering effectiveness, value for money and equity for Māori from a Māori perspective. It also recognises that prioritisation processes should enable Māori to participate in and contribute to strategies for

Māori health improvement, and foster the development of Māori capacity to participate in the health and disability sector.

4.7 Need for intersectoral cooperation and action

It was widely supported by the stakeholder appraisal meeting (18 May 2010) that to achieve population health gain all funders' (eg DHB, MSD, Housing NZ, Local Councils) need to get together and align their prioritisation processes, because the whānau ora outcomes are the same across sectors.

It was also proposed by stakeholders that standardised processes would support across government alignment, reduce burden on providers, and avoid unintentional negative impacts on other sectors. It was agreed that "health" is only one component in the prioritisation process and that there should be some provision for a broader definition of health, including social determinants of health and not just the provision of health services.

Strategic planning at the meso-level (mid-level) will reflect national priorities and the priorities and needs of local communities. Comparing these plans with current spending should help to identify areas for further analysis, either because the services provided appear not to fit with the strategic direction desired by the community, or there are service gaps. This type of exercise helps to answer the question:

- are we funding the right things?

Further analysis of the services or service gaps will help to answer questions such as:

- are we doing it right? (that is, is the service effective in achieving our strategic goals?)
- are we doing it in the right amounts?

4.8 Need for stakeholder participation in prioritisation

It was further recognised during the stakeholder appraisal meetings that prioritisation at the meso-level impacts on the scope of the decisions that communities, practitioners and clinicians can make at the micro-level. Their involvement in the prioritisation process is vital for the successful implementation of prioritisation decisions. The community and clinicians are also a source of expertise for advice on the effectiveness of health and disability services, and involvement will contribute to the robust analysis of prioritisation proposals and to informed decision making.

4.9 Improvements on the current prioritisation policy

During all of the stakeholder appraisal meetings participants shared their views for improving the current prioritisation policy and process (also refer section 3.3). These are summarised as follows:

4.9.1 What should be in the policy?

- An expression of *Tiriti o Waitangi*—"elevate to a genuine partnership in decision making", use of inequality tools and He Korowai Oranga.
- Embed HIA, wider intersectoral impact analysis and stronger links to determinants of health.
- Robust analysis for example, sustainable funding, minimum data sets, population health gain and workforce capability and capacity.

- Alignment to NDHB approved strategies, priorities and contract management and monitoring processes.

4.9.2 How could the policy be improved?

- Mandated by NDHB Board
- Applied to all NDHB prioritisation decisions
- Transparent and impartial methodology
- Embed principles of whānau ora
- Partnership and participation for Māori
- Equitable allocation of funding, prioritising Māori wellbeing and equity across the Northland region
- Train those implementing the policy

5 Conclusions

The Whānau Ora Health Impact Assessment tool is a formal approach used to predict the potential health effects of a policy on Māori and their whānau. It pays particular attention to Māori involvement in the policy development process and articulates the role of the wider health determinants in influencing health and well-being outcomes.

The key decisions that the WOHIA is intended to inform are:

- (a) whether or not a new Prioritisation Policy should be developed
- (b) the key features, content and implementation of the redeveloped policy.

From the WOHIA findings there is strong evidence to support the redevelopment of NDHB's prioritisation policy and tools to include the wider principles of whānau ora and a wider inequalities agenda.

The Treaty of Waitangi provides a fundamental framework for improving Māori health and reducing health inequalities in Northland through putting into action the principles of partnership, participation and protection. The current prioritisation policy and its application does not fully recognise that to be effective, health care for Māori must be delivered in partnership with Māori and in ways that accord with Māori culture, practices and beliefs. Māori participation in decision making processes should occur.

The WOHIA achieved input from a wide range of stakeholders with considerable cultural and health sector experience, service coverage and across government expertise. The seven key research questions (section 1.4) adopted for the for stakeholder meetings elicited specific suggestions on how to improve the Prioritisation Policy. The stakeholder workshops and facilitation provided the opportunity for stakeholders to express their views regarding what should be in NDHB's Prioritisation Policy and what improvements should be considered.

NDHB current approach to prioritisation is unlikely to make a significant difference to population health (or health sector efficiency) as it is only applied to a small subset of funding decisions.

Both local and international findings indicate that the inequalities agenda tends to be poorly embedded in health prioritisation decision making at the local level. Core services and mainstream priorities were untouched by the inequalities agenda, which only focused on a small subset of services at the margins of health care.

NDHB's current prioritisation policy requires the provider arm of the DHB to use the tools within the policy as part of the annual funding allocation process. There is no evidence that this occurs in practice. An unintended positive consequence of the WOHIA is the commitment by Northland DHB's senior management team to develop a prioritisation policy and tools applicable to the whole organisation.

6 Recommendations

The following recommendations support the key findings of the WOHIA. :

It is recommended that:

- 1 NDHB Executive Leadership Group endorse the findings of the WOHIA, and initiate redevelopment of the Prioritisation Policy and tools to include the wider attributes of Whānau Ora, and Treaty of Waitangi obligations.
- 2 The specific suggestions from the WOHIA on improving the Prioritisation Policy be used (refer section 4) in the redevelopment of the Prioritisation Policy.
- 3 The Prioritisation Policy and tools be used across NDHB's whole organisation, and applied to all prioritisation decisions, annual and strategic planning.
- 4 The redevelopment of the Prioritisation Policy and tools, consultation and roll out be facilitated by the Funder arm of NDHB.
- 5 There is active participation and partnership with Māori and intersectoral partners as part of the prioritisation process.
- 6 NDHB considers working towards the development of a cross-DHB Prioritisation Policy for the Northern Region.
- 7 The process for redeveloping the Prioritisation Policy and tools be more fully aligned to the mandated national prioritisation tool (*The Best Use of Available Resources: An approach to prioritisation, Ministry of Health and DHBNZ, 2005*).

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Appendix One: WOHIA Participants

Scoping Workshop Participants

9 March 2010, 9:30 – 3:00pm, held at Maunu House, Whangarei Hospital.

Name	Position	Attendance
Lyn Rostern	Population Health Strategist (SDF)	✓
Ellie Berghan	Population Health Strategist Māori (SDF)	✓
Stephen Jackson	Health Planner(SDF)	apology
Tania Rawiri	Public Health Planner(SDF)	✓
Marion Bartrum	Service Manager, Public and Population Health	✓
Jonathan Jarman	Medical Officer of Health	apology
Anil Shetty	Public Health Project officer	✓
Witi Ashby	Public Health Māori Advisor and Auahi Kore Marae	✓
Sunitha Gowda	Public and Population Health Strategist	✓
Loek Henneveld	Public Health Physician	Apology
Andre Hemara	Whangarei District Council	✓
Nicole Butler	Ministry of Social Development	✓
Parani Penney	Housing New Zealand	Apology

Appraisal workshop stakeholder participants

18 May, 9am-3pm, held at Barge Park, Whangarei.

Name	Service
Ken Rostern	Ministry Social Development
Tahi Morton	Public Health Unit
Gary Ware	Whangaroa Health Services
Te Ropu Poa	Te Hau Ora o Kaikohe
Christina Edmonds	NDHB Te Poutokomanawa
Mary Carthew	Manaia Health PHO
Andre Hemara	Whangarei District Council
Sunitha Gowda	Public Health Unit
Loek Henneveld	Public Health Unit
Marie Tautari	Ki A Ora Ngati Wai Trust
Samantha Pohe	Ki A Ora Ngati Wai Tust
Louise Kuraia	TTTMaPO
Lynette Stewart	TTTMaPO
Marion Bartrum	Public Health Unit
Bill Halkyard	Te Hauora o te Hiku o te Ika
Errol Murray	Whakawhiti Ora Pai
Ellie Berghan	Service Development and Funding
Tania Rawiri	Service Development and Funding
Jude Ball	Quigley and Watts

Appraisal workshop NDHB senior management participants

25 May, 7.30am-9am, Northland DHB Meeting Room

Name	Service
Dr Gloria Johnson	Chief Medical Advisor
Jo Holdaway	Clinical Director, Mental Health
Jen Thomas	Operations Manager Dargaville Hospital
Roger Tuck	Paediatrician and Clinical Director, Child Health
Pat Hartung	HR
Shirley August	Operations Manager Bay of Islands Hospital
Margareth Broodkorn	Director of Nursing and Midwifery
Neil Benny	GM Chronic and Complex Care
Dr Nick Chamberlain	GM Clinical Services
Fleur King	Communications Manager
Robert Paine	Chief Financial Officer
Lyn Rostern	Facilitator
Tania Rawiri	Project Manager

Northland District Health Board Service Development and Funding Team

17 May, 10.30am-12.30pm, Northland DHB Meeting Room

Name	Position
Kim Tito	General Manager Service Development & Funding and Māori Health
Les Garczynski	Portfolio Manager Acute Services
Tanai Papalii	HEHA Program Manager
Tania Rawiri	Public Health Planner
Helen Wihongi	Portfolio Manager Māori Health
Lyn Rostern	Population Health Strategist
Ellie Berghan	Population Health Strategist(Māori Health)
Susanne Scanlen	Portfolio Manger HOP, DSS, Palliative Care
Robyn Sands	Contracts Administrator
Andrew Mardon	Assistant Accountant
Stephen Jackson	Health Planner
Joyce Donaldson	Finance and Contracting Manager
Paul Baines	Portfolio Manager Primary Care
Vanessa Whui	Programme Manager Long Term Conditions

Appendix Two: NDHB Prioritisation Policy (2005)

Preamble

This policy outlines the process Northland DHB follows to:

- review our strategic priorities
- confirm our approach to prioritisation
- allocate funding for new or expanded services

The policy is based on the work done by the Joint DHB and MoH Working Group on Prioritisation, specifically on their document released in 2004 *The Best Use of Available Resources: an Approach to Prioritisation*. Their process included use of the Reducing Inequalities Framework (Appendix 1), the Health Equity Assessment Tool (Appendix 2) and Whānau Ora (Appendix 3).

The policy will be the basis for the prioritisation stage of the annual and strategic planning cycles. It will guide Northland DHB in setting its major priorities during the 3-yearly preparation of the District Strategic Plan and during discussions on strategic directions in other years. The policy will also guide decisions made on the allocation of funding, which may occur at 4 levels:

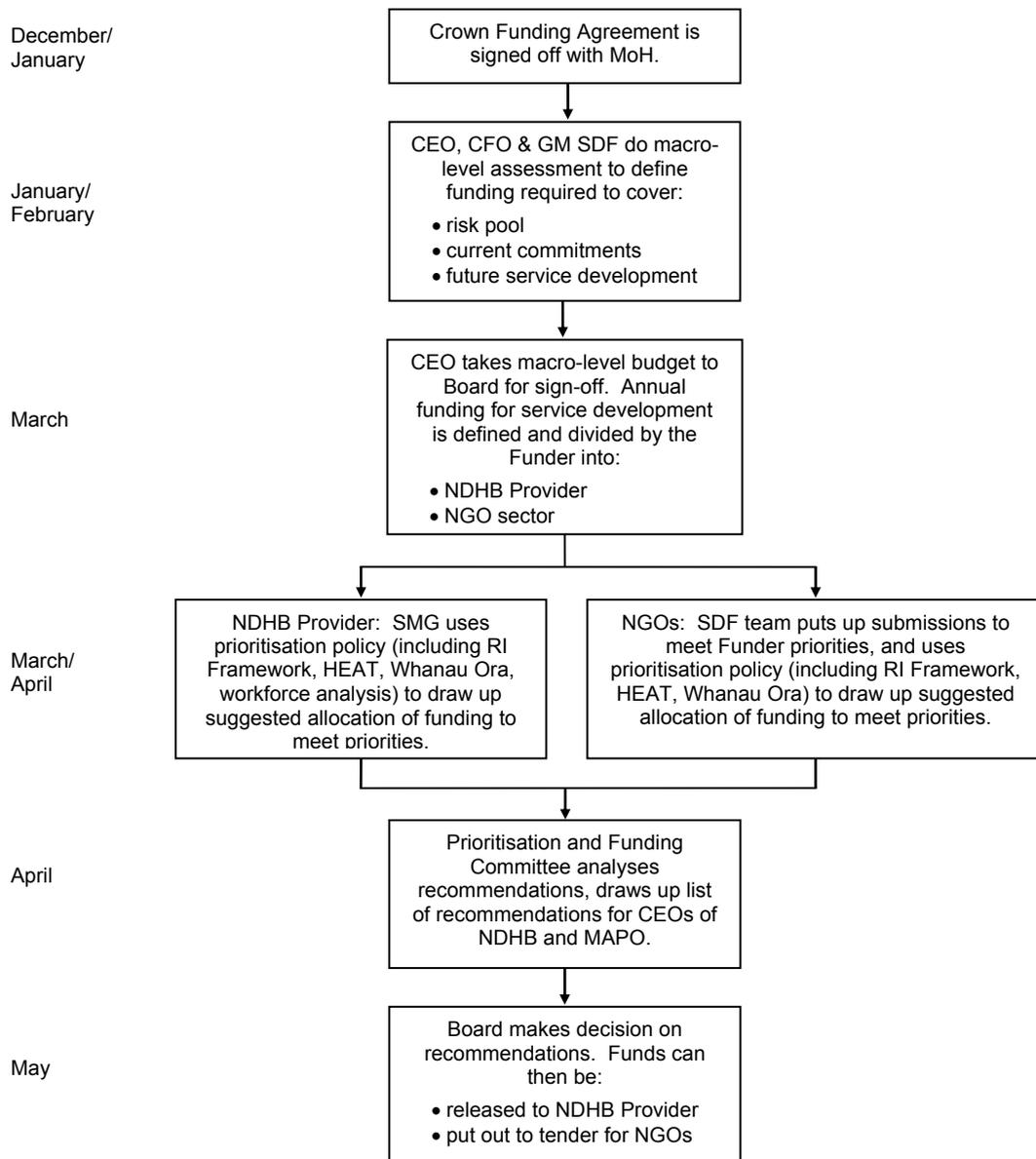
- across strategic priorities (for example, diabetes compared with cardiovascular disease and oral health)
- within strategic priorities (for example, once a number of strategic actions are identified to address diabetes, how funding should be distributed among them to most effectively meet needs and reduce inequalities)
- in deciding among applications received from providers who tender for services in response to Northland DHB requests for proposals
- in considering the capacity to deliver these services

Why prioritise?

- 1.1 To allocate new or additional funding to services that are more effective in improving health and independence. Specifically, to meet the priorities identified at national and district levels, and to reduce inequalities.
- 1.2 To allocate or reallocate resources when funding is constrained or retrenchment is necessary to meet budgets.
- 1.3 To create a nationally consistent approach by using the *Best Use of Available Resources* report.
- 1.4 The government requires all Crown entities, which includes DHBs, to prioritise the key outcomes they intend to achieve (a necessary part of 'Managing for Outcomes' in the public sector).
- 1.5 To satisfy workforce needs, to ensure that we have the right people with the right skills and cultural competence, at the right place and at the right time, to meet health needs and reduce inequalities.

The Northland DHB's annual funding allocation process

Each year the Northland DHB will undergo the following annual process in allocating funding. A typical timescale is indicated, though adherence to this will largely depend on how long it takes for the Crown Funding Agreement to be signed off with the Ministry of Health.



Notes:

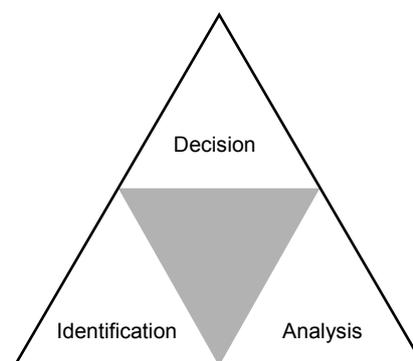
Northland DHB is engaged in the 3-yearly strategic planning process (or any other process which entails amendment to the priorities in the District Strategic Plan), the process of consulting with providers and the Northland community generally will include discussion on the priorities.

This approach is based on the premises that:

- Northland DHB will not incur financial deficits during the 5-year planning period and hence will not be forced to disinvest from existing services
- existing services will not be systematically considered for disinvestment, but rather will be subject to ongoing scrutiny to ensure their efficiency and appropriateness
- funding increases associated with with demographic growth and maintenance of Northland DHB at the PBF target level will create discretionary funds for allocation through the prioritisation process
- future funding track increases will be available for existing services, together with other funds, to comply with specific government decisions (such as pay equity, Holidays Act), with the Board having the option each year to direct some or all of this funding to priority initiatives
- benchmarking against national norms and other DHBs will remain an important facet of priority setting

How to prioritise?

Prioritisation uses a 3-stage process beginning with *identification* followed by *analysis* to inform *decision making*, represented in the accompanying diagram drawn from *The Best Use of Available Resources*.



Identification

How are needs identified? What sources of information are there? How much is driven by factors outside the control of NDHB?

Policy	Local analysis	Consultation	External evidence	Cost effectiveness
<p><i>National:</i></p> <p>Existing national strategies (esp NZHS, NZDS, PHC Strategy, HKO).</p> <p>New national</p>	<p>Assessment of population health status for Northland, esp identification of health status inequalities.</p> <p>Inequalities in</p>	<p>Local consultation with and feedback from:</p> <ul style="list-style-type: none"> • Treaty partners • other Māori communities • PHOs • other contracted 	<p>Disparities between research evidence and current practice, esp concerning how services can be provided more effectively.</p>	<p>Constraints (such as ageing workforce, skills availability, capital) influencing the quality and effectiveness of the service.</p>

<p>directives (eg MVS) and priorities (eg cancer control).</p> <p>Shifting priorities derived from changes in the political or social environment.</p> <p>Workforce.</p> <p><i>Local:</i></p> <p>Funding priorities identified during NDHB DSP and DAP processes, esp the few top priorities (see Appendix 5).</p>	<p>access to services.</p> <p>Shifting priorities derived from changes in demographics.</p> <p>Information from audit and monitoring which identifies:</p> <ul style="list-style-type: none"> • service gaps • duplication in service provision • poor performers. <p>Misalignment between service provision and NDHB priorities.</p> <p>Workforce analysis.</p>	<p>NGO providers</p> <ul style="list-style-type: none"> • other non-contracted NGO providers • clinical staff across the health sector • the public • special interest groups • intersectoral agencies • staff. 	<p>Benchmarking reveals wide variation in practice between DHBs.</p> <p>Improving base service delivery.</p>	<p>Concerns about the value for money of one service relative to another.</p>
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Analysis

Evidence will be gathered to assess the contribution each proposal makes to improving health and independence and reducing inequalities. Each of the principles will be considered by addressing the following questions:

Equity

This has 2 dimensions:

- *equity of outcome*: will the intervention reduce inequalities in health status?
- *equity of access*: will the intervention reduce inequalities in opportunities for independence and participation available to people with disabilities?

Two of the important tools we use in assessing equity are the Reducing Inequalities Framework (Annex 1) and the Health Equity Assessment Tool (Annex 2).

Effectiveness

Is there evidence that the intervention will:

- improve health status?
- improve the independence and participation of people with disabilities?

One of the aims of Northland DHB is to keep people as well as possible through healthy lifestyle and preventive and screening services. In the context of the Life Course Continuum (Annex 4) this means keeping people to the left of the dotted line as much as possible.

Value for money

Compared with other interventions at a similar cost, would this intervention be more effective in improving the health and independence of Northlanders?

Will the intervention be more effective in reducing inequalities, compared to another intervention or the status quo?

Are there additional benefits associated with the intervention?

Achieving Whānau Ora This set of questions is specifically linked to the DHB's statutory objectives and functions for Māori health and the incorporation of He Korowai Oranga into the Northland DHB's prioritisation work (see Annex 3).

Will this intervention:

- contribute to reduced inequalities in health status for Māori?
- reduce inequalities in independence for Māori with disabilities?
- increase Māori participation in the delivery and utilisation of health and disability support services?
- improve the health status of Māori?
- improve independence for Māori with disabilities?
- improve opportunities for Māori to participate in wider society as well te ao Māori (the Māori world)?
- consider Māori values (as well as value for money) and be culturally appropriate?
- increase the level of Māori participation in service planning, implementation and delivery?

Costs and constraints The economic costs of services, including start-up and consequential effects on overall health expenditure are considered, together with the effectiveness of those services to ensure funding achieves the maximum gain. Also consider and identify:

- capital costs
- access criteria to manage demand growth in this intervention
- other resources including human resource capacity, scarcity and capability
-

Implementation Consider other issues such as:

- consultation
- regulatory requirements
- impact on other organisations and stakeholders, including Māori

The key agents in gathering information, assembling evidence and using the prioritisation tools are:

- for the Funder's allocation to NGOs, the Service Development and Funding (SDF) team
- for the NDHB Provider, the NDHB Provider General Managers

Evidence must be produced that the prioritisation tools have been used. These include:

- this policy
- Reducing Inequalities Framework
- Health Equity Assessment Tool
- Whānau Ora

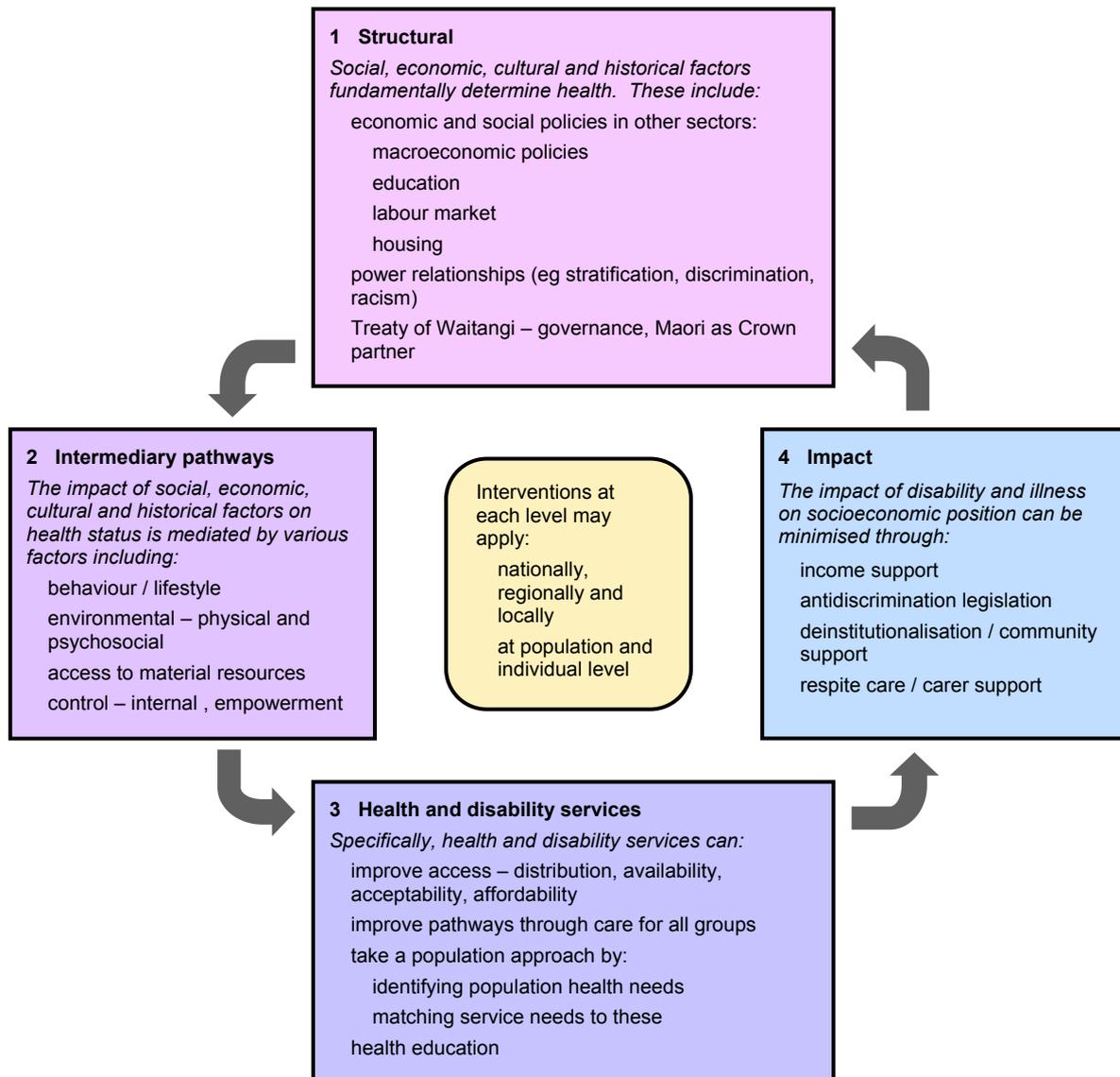
Decision making

The Prioritisation and Funding Committee will be influenced in their decision making by:

- the evidence provided, particularly the comparative benefits of proposals
- Northland DHB's current set of priorities (see Annex 5)
- affordability within NDHB's available funding
- the completeness of costing, including long term resource implications such as compliance costs

- constraints upon, or constraints imposed by, other resources such as workforce, information technology
- ethical considerations
- acceptability to stakeholders
- impacts on other DHBs
- ability to manage potential risks, including those related to political factors and industrial relations
- timing factors, such as the ability to meet suggested deadlines and the implications this might have for when funding is committed
- workforce demographics, availability

Annex 1 The Reducing Inequalities Framework



Annex 2 Health Equity Assessment Tool

The following set of questions has been developed to help in considering how particular inequalities in health have come about, and where the effective intervention points are to tackle them.

- 1 What health issue is the policy / programme trying to address?
- 2 What inequalities exist in this health area?
- 3 Who is disadvantaged most and how?
- 4 How did the inequality occur? What are the mechanisms by which it was created, and is it being maintained or increased?
- 5 What are the determinants of the inequality?
- 6 How will the programme address the principles of the Treaty of Waitangi (specifically partnership, participation and protection)?
- 7 Where / how will the programme intervene to tackle this issue? (Use the MoH Intervention Framework and the ToW to guide thinking.)
- 8 How could this intervention affect health inequalities?
- 9 Who will benefit most?
- 10 What might the unintended consequences be?
- 11 What will you do to make sure the programme reduces or eliminates inequalities?
- 12 How will reduction in inequalities be measured?

Annex 3 Whānau Ora

[Extracted from He Korowai Oranga, page 1]

Emphasising whānau health and wellbeing

The overall aim of He Korowai Oranga is whānau ora: Māori families supported to achieve their maximum health and wellbeing. Whānau (kuia, koroua, pakeke, rangatahi and tamariki) is recognised as the foundation of Māori society. As a principal source of strength, support, security and identity, whānau plays a central role in the wellbeing of Māori individually and collectively.

The use of the term whānau in this document is not limited to traditional definitions but recognises the wide diversity of families represented within Māori communities. It is up to each whānau and each individual to define for themselves who their whānau is.

The outcomes sought for whānau include:

- whānau experience physical, spiritual, mental and emotional health and have control over their own destinies
- whānau members live longer and enjoy a better quality of life
- whānau members (including those with disabilities) participate in te ao Māori and wider New Zealand society

These outcomes are more likely where:

- whānau are cohesive, nurturing and safe
- whānau are able to give and receive support
- whānau have a secure identity, high self esteem, confidence and pride
- whānau have the necessary physical, social and economic means to participate fully and to provide for their own needs
- whānau live, work and play in safe and supportive environments.

He Korowai Oranga asks the health and disability sectors to recognise the interdependence of people, that health and wellbeing are influenced and affected by the 'collective' as well as the individual, and the importance of working with people in their social contexts, not just with their physical symptoms.

Annex 5 Current Northland DHB priorities

This appendix is derived from the Northland DHB's District Annual Plan 2005/06. It will be reviewed and if necessary altered once the District Strategic Plan is completed. Priorities will be reviewed during the 3-yearly strategic planning process, but they may also be reviewed in other years as the result of ongoing analysis of need and strategic priorities, or as a result of ministerial directives.

Top priorities

Clinical priorities:

- Diabetes
- Cardiovascular disease
- Oral health
- Mental health

Other priorities

Generic priorities which matrix with all other priorities:

- Primary health care
- Māori health

People-based priorities:

- Health of older people
- Child and youth health

Service priorities:

- Public health
- Acute and elective services
- Disability support services
- Workforce

All priorities are affected by and inextricably linked with:

- Collaboration, both intrasectoral (within the health sector) and intersectoral (between the health sector and other sectors, particularly central government agencies and local government)

Emerging priorities

From 2005/06, cancer control will become a priority for DHBs.

Appendix Three: Community Profile and Environmental Scan

Demographics

Population

In 2006 the Northland Region had a total population of 152,700 living in three territorial authorities: the Far North District, the Whangarei District and the Kaipara District. Based on births, deaths and migration since the census, the 2009 Northland population was estimated to be 155,800.

Table 1: Northland Region Estimated 2009 Population by Territorial Authority

	Far North District	Whangarei District	Kaipara District	Total
Total population estimate 2009	58,000	79,000	18,750	155,800
% of total population	37.2%	50.7%	12.0%	

Statistics New Zealand population projections have indicated that by 2026 the Northland population will grow to approximately 171,000. The 65 years and over age group is expected to grow at the fastest rate. Whangarei District is expected to have the fastest rate of population growth (17%), followed by the Far North District (10%). The Kaipara District's population is expected to remain steady.

Ethnicity

Using a prioritised definition of ethnicity, 29.3% of the Northland population in 2006 were Māori, and 60.3% were European (including "New Zealanders"). 1.3% of the Northland population were Pacific people and 1.4% were of Asian ethnicity.

In 2006 the Far North District had the highest proportion of Māori at nearly 40%. This means that 51% of all Māori in Northland lived in the Far North District. The Far North District was also the Territorial Authority with the fastest percentage growth in the Māori population between 2001 and 2006 at 3.9%.

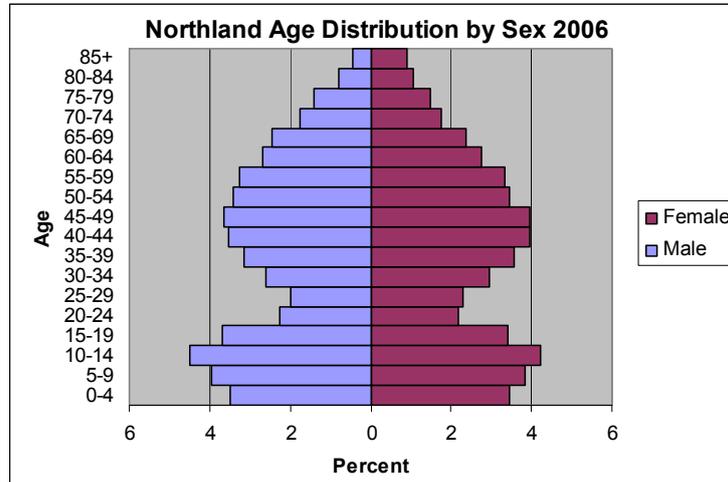
Table 2: Northland Population by Ethnicity and Territorial Authority

Ethnicity	Far North District	Whangarei District	Kaipara District
European (including "New Zealander")	48.1%	67.0%	71.5%
Māori	39.6%	23.7%	20.8%
Pacific	1.2%	1.1%	1.2%
Asian	1.0%	1.9%	0.7%
Other/NA	10.1%	6.3%	5.8%

Age Structure

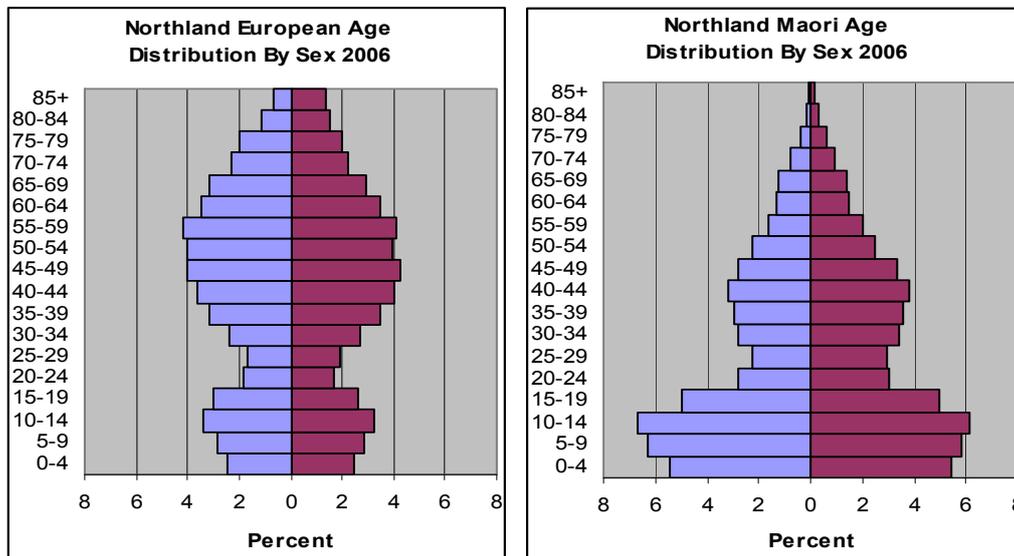
For the total Northland population in 2006, 35% were aged less than 25 years, 32% were aged 25-49 years, 27% were aged 50-74 years and 6% were over the age of 75 years.

Figure 1: Northland Total Population Age Distribution



When analysed by ethnicity, the age distributions of the European (including “New Zealanders”) and the Māori population differed markedly. For the European population 26% were aged under 25 years and 9% over the age of 75 years. In contrast the Māori population had a much younger age distribution with 52% of the population under the age of 25 years and only 1.7% of the population over 75 years.

Figures 2 and 3: Northland Population Age Distribution by Ethnicity

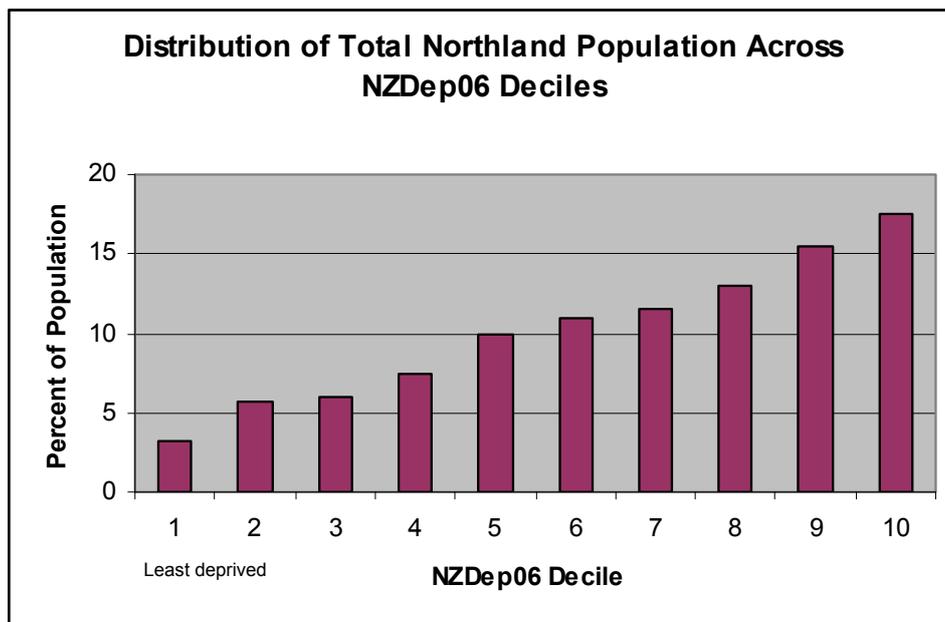


When analysed by Territorial Authority, the Far North District had the youngest population in 2006 with 35% of the population under the age of 25 years. The Kaipara District had the highest percentage of older people.

Socioeconomic Status

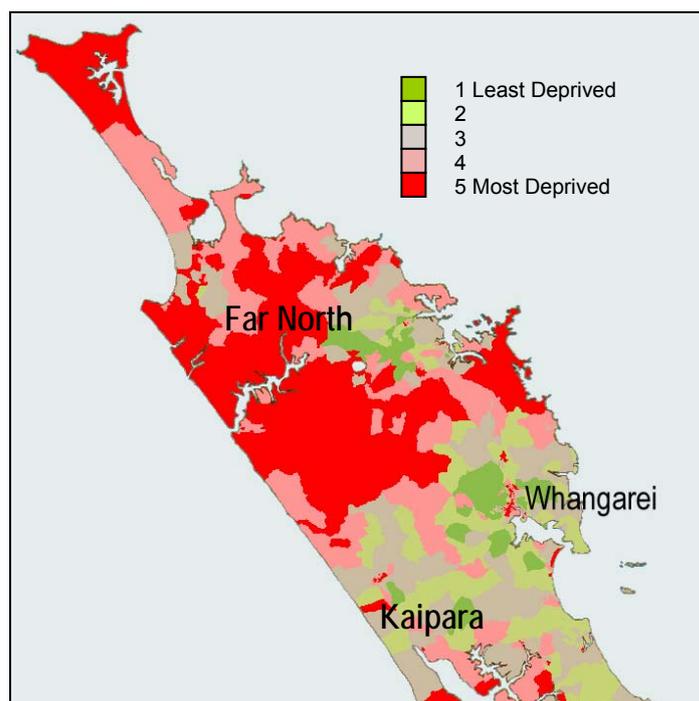
Northland has one of the most deprived populations in the country, reflected in the skewing of the population towards the more deprived deciles of the NZDep06 index. Deciles 9 and 10 represent the most deprived material and social circumstances – encompassing income, home ownership, employment, qualification level, household composition and crowding, access to telephone and car.

Figure 4: Northland Total Population Socioeconomic Deprivation Profile



Levels of deprivation vary by Territorial Authority and community in Northland. In 2006 The Far North District had the most deprived population with 47% of people living in deciles 9 and 10, compared to 24.5% in Whangarei District and 24.3% in Kaipara District.

Figure 5: NZDep2006 Quintiles of Deprivation in Northland.



Levels of deprivation are also starkly different between Māori and Non-Māori populations in Northland. In 2006 over half of the Māori population (56.2%) lived in deciles 9 and 10 compared to only 23.5% of the Non-Māori population.

Figure 6: Northland Non-Māori Socioeconomic Deprivation Profile

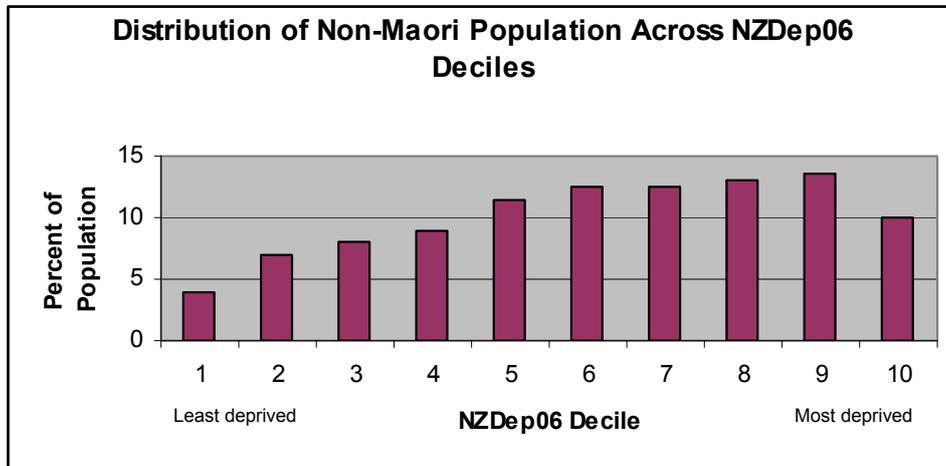
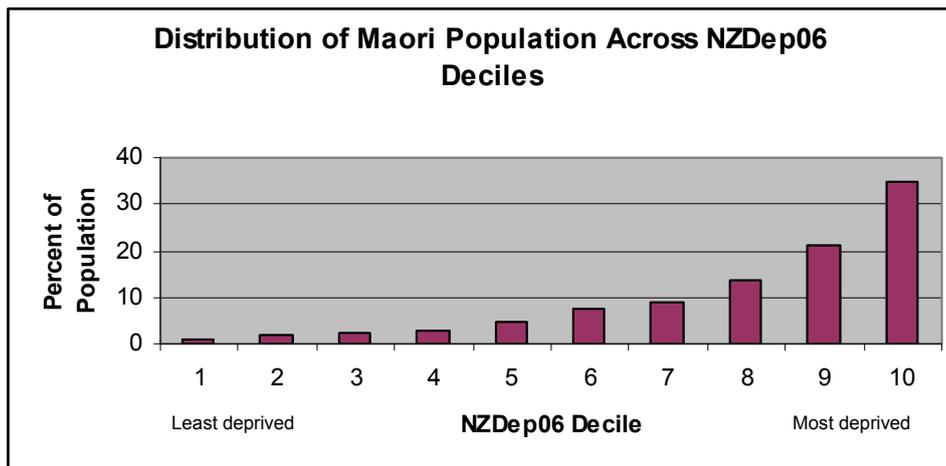
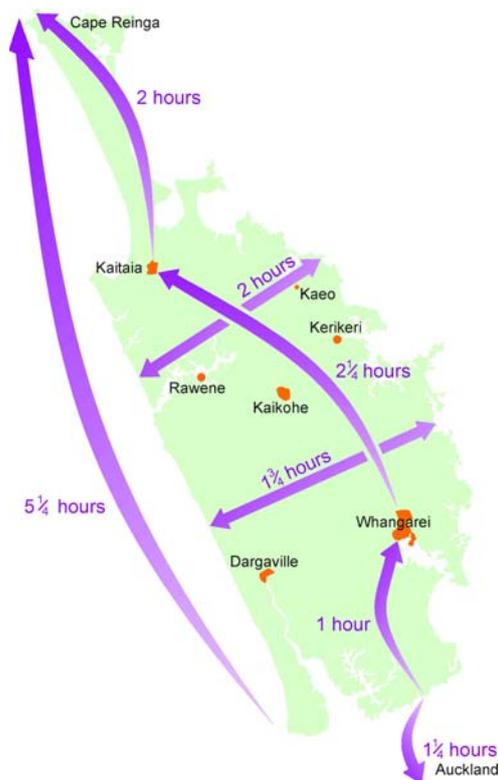


Figure 7: Northland Māori Socioeconomic Deprivation Profile



Geography



Northland is a long narrow peninsula with a large coastline, dominated by rolling hill country. The population is scattered in a large number of small communities, and six bigger centres (Whangarei, Kerikeri, Kaitaia, Kaikohe, Dargaville, Paihia-Waitangi).

Access around the region can be challenging given the winding roads, the large proportion of roads that are unsealed, and the lack of public transport.

The trip from Northland's most northern point to the most southern point takes over five hours.

Environment

One of Northland's defining features is the coastline. Coastal waters are used for a number of recreational and commercial activities. The coast is also an important taonga (treasure) to the many Iwi and Hapu in Northland, who have a kiatiakitanga (guardianship) relationship with the coast. Both coastal and fresh water quality in Northland is under pressure from pollution.

Northland's climate is generally mild and humid. Droughts are common in the summer months, putting some communities at risk of water shortages. Climate change means that Northland could become warmer and drier, with more extreme weather events. Flooding could become more frequent. Northland is already at risk of extreme weather events with high winds, heavy rain and flooding.

Health status and Public Health issues

Potentially Avoidable Mortality and Hospitalisation

Potentially Avoidable Mortality (PAM) is defined as premature deaths <75 years of age that could have been prevented by effective health interventions. The following table shows that the proportion of deaths that were potentially avoidable was higher for Māori than Non-Māori in Northland during 2001-2005.

Table 4: Potentially Avoidable Mortality by Ethnicity 2001-2005

	Māori	Non-Māori	Total
Total deaths 0-74yrs	1203	1696	2899
Non PAM	315	597	912
PAM	888	1099	1987
%PAM	73.8%	64.8%	68.5%

The top ten causes of PAM for the total population, Māori population and Non-Māori population are listed in table five. For Māori, ischaemic heart disease, cancer of the lung/bronchus/trachea and diabetes make up 50% of all the PAM. For Non-Māori, ischaemic heart disease is similarly responsible for about a quarter of all PAM, but diabetes makes up a much lesser proportion of PAM.

Table 5: Potentially Avoidable Mortality by Population Group for Northland 2001-2005

PAM	Total population	Māori	Non-Māori
1	Ischaemic heart disease (24.7%)	Ischaemic heart disease (23.1%)	Ischaemic heart disease (25.9%)
2	Cancer of lung/bronchus/ Trachea (12.9%)	Cancer of lung/bronchus/ Trachea (14.1%)	Cancer of lung/bronchus/ Trachea (12.0%)
3	Diabetes (7.5%)	Diabetes (12.7%)	Colorectal cancer (10.5%)
4	Colorectal cancer (7.3%)	Motor vehicle crashes (7.9%)	Chronic bronchitis & Emphysema (7.0%)
5	Chronic bronchitis & Emphysema (7.2%)	Chronic bronchitis & Emphysema (7.4%)	Breast Cancer (6.3%)
6	Motor vehicle crashes (6.1%)	Suicide (4.3%)	Suicide (5.4%)
7	Breast cancer (5.0%)	Breast Cancer (3.4%)	Intracerebral haemorrhage or occlusion (stroke) (5.1%)
8	Suicide (4.9%)	Colorectal cancer (3.4%)	Motor vehicle crashes (4.6%)
9	Intracerebral haemorrhage or occlusion (stroke) (4.3%)	Intracerebral haemorrhage or occlusion (stroke) (3.4%)	Melanoma, other skin cancer (4.5%)
10	Melanoma, other skin cancer (2.7%)	Acute rheumatic fever, heart disease (2.4%)	Diabetes (3.3%)

Potentially avoidable hospitalisation (PAH) refers to admissions to hospital for conditions that could have been avoided through population based health promotion strategies, or intervention in primary care. The top ten causes of PAH for the total Northland population,

Māori population, and Non-Māori population are listed in table six. For Māori, cellulitis is the leading cause of PAH, followed by angina/chest pain and dental conditions. Diabetes, ENT infections and respiratory infections/CORD are also collectively significant causes of PAH. For Non-Māori angina/chest pain/myocardial infarction are responsible for about 35% of all PAH².

Table 6: Potentially Avoidable Hospitalisation by Population Group for Northland 2007-08

PAH	Total population	Māori	Non-Māori
1	Angina and chest pain (32.8%)	Cellulitis (10.2%)	Angina and chest pain (23.1%)
2	Cellulitis (18.5%)	Angina and chest pain (9.7%)	Myocardial infarction (10.8%)
3	Myocardial infarction (15.1%)	Dental conditions (8.7%)	Skin cancers (10.7%)
4	Dental conditions (15.0%)	Diabetes (7.2%)	Cellulitis (8.3%)
5	ENT infections (13.9%)	ENT infections (7.1%)	ENT infections (6.7%)
6	Diabetes 12.7%	Resp infections – pneumonia (6.0%)	Dental conditions (6.3%)
7	Resp infections – pneumonia (11.7%)	Resp infections – bronchiolitis (5.8%)	CORD (5.9%)
8	Skin cancers (11.2%)	Asthma (5.8%)	Resp infections – pneumonia (5.7%)
9	CORD (10.6%)	CORD (4.7%)	Diabetes (5.5%)
10	Kidney/urinary infection (9.5%)	Myocardial infarction (4.3%)	Kidney/urinary infection (4.2%)

Risk and Protective Factor Profile

Tobacco

The 2006 census indicated that the prevalence of regular smokers in Northland (25.7%) was higher than the prevalence of regular smokers in New Zealand (20.7%). The prevalence of regular smokers in Northland is particularly high in the Māori population⁹. Smoking in Northland is related to 25% of all deaths (47% of all Māori deaths, and 18% of non-Māori deaths).

Table 7: Census 2006 Smoking Prevalence by Ethnic Group for Northland

	Male	Female	Total
Māori	40.4%	46.1%	43.3%
European	22.2%	20.9%	21.6%

Alcohol

Data from the 2006/07 New Zealand Health Survey indicated that Northland's age standardised rate of hazardous drinking (21.3%) was higher than the rate for New Zealand (19.6%). A third of Northland's fatal crashes between 2004-6 involved alcohol, and 40% of offenders apprehended in Northland in 2007/8 reported consuming alcohol. Youth, males and Māori are over-represented in these harms.

Overweight and Obesity

Data from 2006/07 indicated that Northland's age standardised rate of overweight and obesity (collectively) was about 65.6%, approximately 5% above the national average.

Table 8: Prevalence of Overweight and Obesity: Northland and New Zealand 2006/7

Rate	Northland	New Zealand
Overweight	35.8%	35.0%
Obese	29.5%	25.4%

Immunisation

National Immunisation Register data from 2008 indicated that the proportion of children fully immunised at each age in Northland was lower than for New Zealand as a whole. There are also marked ethnic differences in the immunisation coverage at each age, with coverage for Māori children being 10-20% lower than European children. Northland DHB's performance against the national target for 85% of 2 year olds to be fully immunised is the poorest of all DHBS and coverage is deteriorating according to the 2009/10 quarter three results (Ministry of Health, 2010).

Table 9: 2008 Immunisation Coverage by Age, Northland and New Zealand

Age	Northland	New Zealand
6 months	48.4%	63.0%
12 months	74.9%	84.0%
18 months	56.4%	68.0%
2 years	69.1%	76.5%

Breastfeeding

Plunket data from 2004-8 indicated that breastfeeding rates at <6 weeks and 3 months in Northland were higher than the New Zealand average at around 70-75% and 55-60% at respectively. Rates at 6 months however were lower than the New Zealand average at 20-25%. Rates of breastfeeding for Māori women in Northland during 2008 were approximately 10-15% lower than European women at each age.

Access to Primary Health Care

Data from 2006/7 indicated that the rate of 'unmet need for a general practitioner in the previous 12 months' in Northland (8.8%) was higher than for New Zealand as a whole (6.8%). Māori are significantly more likely to report unmet need for a general practitioner than the total population.

Table 10: Established and Emergent Public Health Issues in Northland

Issue	Issue description	Comments
Health Inequalities and Māori Health	Very large inequalities between Māori and Non-Māori in terms of determinants of health and health status ^{15, 16}	<p>There is a 14.9 year life expectancy gap between Māori and Non-Māori in Northland.</p> <p>In almost every cause of mortality and morbidity, Māori have poorer outcomes than Non-Māori.</p> <p>Māori are grossly over-represented in the highest levels of deprivation (NZDep06) in Northland, indicating lower access to the determinants of health.</p> <p>For the period 1999-2003 NDHB had the highest score of all DHBs on a health inequalities index (representing unfair distribution of health).</p>
Communicable diseases	<p>Rheumatic Fever</p> <p>Meningococcal Disease</p> <p>Tuberculosis</p> <p>Skin infections</p> <p>Pandemic Influenza</p> <p>Ethnic inequalities</p>	<p>Northland consistently has one of the highest rates of rheumatic fever within New Zealand. Virtually all cases involve Māori.</p> <p>Over the last eight years, the rate of meningococcal disease in Northland has mostly been higher than the NZ rate.</p> <p>Northland's rate of tuberculosis notification is comparable with the NZ rate, but cases are often complex and require a high degree of cultural competency in their management.</p> <p>Serious skin infections in children are prevalent in Northland and contribute to a large number of potentially avoidable hospitalisations.</p> <p>Pandemic influenza (Novel Influenza A H1N1 2009) had a much higher impact on the Māori population than Non-Māori in Northland.</p>
Physical activity and nutrition	High rates of overweight and obesity	See section 2.2
Mental health	<p>High rates of self harm and suicide</p> <p>Ethnic inequality</p>	<p>Northland had higher rates of hospitalisation for intentional self harm (2006) and suicide deaths per 100,000 (2003-5) compared to NZ rates.</p> <p>Northlanders have slightly lower scores for mental and emotional health than the rest of New Zealand, and Māori in Northland have lower scores in both areas compared to people of European ethnicity.</p> <p>Māori are overrepresented in Northland mental health services both in terms of number of clients, and number of inpatients.</p>
Gambling harm	Not yet quantified, but likely to be high in Northland, with ethnic inequality	Northland has a higher number of non-casino gaming machines per 10,000 population than the national average – and there have been large increases in machine density in recent years. One of the key risk factors for problem gambling is socioeconomic deprivation which is high in Northland. Māori are over-represented in national problem gambling statistics.

Issue	Issue description	Comments
Alcohol and drug harm	High rates of alcohol harm with ethnic inequality	See section above
Physical environments	<p>Pollution of water resources⁸</p> <p>Contamination of shellfish</p> <p>Many drinking water supplies that don't comply with standards</p> <p>Agrichemical spray drift and contaminated sites</p>	<p>Water quality at many shellfish beds is unsuitable for recreational collection. 17 documented food borne outbreaks have been linked to faecally contaminated shellfish from the Bay of Islands.</p> <p>After heavy rain, many coastal areas become unfit for swimming.</p> <p>1/4 (sampled) freshwater swimming spots. consistently below standard for recreational bathing.</p> <p>Only 50-60% of population receive drinking water that complies with the Drinking Water Standards.</p> <p>Some areas in Northland have horticultural activities adjacent to 'sensitive areas', which raises concerns of agrichemical spraydrift affecting human health.</p> <p>Many sites where residential development is encroaching on ex-horticultural land with risk of exposure to chemical residues. Other Northland contaminated sites include: DDT dump sites, sheep and cattle dip sites, old timber treatment plants, and old gasworks.</p>
Sexual health	Relatively high STI rates with ethnic inequality	Youth in Northland have relatively high rates of sexually transmitted infections in comparison to other areas in NZ. The 2009 annual age specific rate of chlamydia infection in 15-19 year olds in Northland was almost 6%.
Tobacco	High rates of smoking with ethnic inequality	See section 2.2
Injury	High rates of injury with ethnic inequality	Northland age standardised rates of mortality for all causes of accidents/ injuries above NZ rates, except for falls. Māori in Northland twice the mortality rates of non-Māori with death at younger ages.
Immunisation	Low rates of immunisation with ethnic inequality	See section 2.2
Screening	Low rates of screening with ethnic inequality	The proportion of Northland 50-69 year old women breast screened in 2006-2008 (59.5%) was lower than for NZ as a whole (63.2%). There were also ethnic disparities – Māori 53.1% and Non-Māori 60.6%. A similar pattern is seen for cervical screening for the Northland region, but the ethnic disparity is wider.

Appendix Four: Literature Review

Purpose

The purpose of the literature review is to inform the WOHIA and provide an evidence base to support the appraisal process, and the development of recommendations. Based on Table 3.10 (p 6) of the scoping report, the objectives of the literature review were to:

- summarise best practice in prioritisation of health and disability services
- outline key success factors for positive prioritisation outcomes (i.e. population health, whānau ora outcomes, equity, sustainability).

The review draws on New Zealand and international findings.

Methods

The review approach was to systematically seek out recent and seminal guidelines and academic literature that shed light on the research questions agreed. Both grey literature (published and unpublished reports from governments, the WHO, non-governmental organisations etc) and academic literature were included.

Grey literature was retrieved primarily via internet searching. Recent (2004 - 2010) academic literature was sourced using the MEDLINE database. The Cochrane and Campbell Collaborations – online searchable collections of systematic reviews of interventions in the medical, public health and health policy arenas – were also searched. To ensure that recent seminal reports were included in the review, we also sought papers and reports frequently cited in publications already sourced, and searched reference lists of already sourced publications for promising academic titles.

Academic papers were retrieved through the Wellington School of Medicine library in the first instance, or purchased via the internet if necessary. Papers unavailable via these sources were excluded from the review since the timeframe and budget did not allow for inter-loan from other libraries in New Zealand or overseas.

All of the retrieved papers were briefly reviewed for relevance, and key papers were selected for final inclusion, based on their quality and relevance to the research questions. These were thoroughly reviewed and the findings analysed and summarised in narrative form, with referencing throughout.

Exclusions:

- material on national level (macro) and practice/provider/clinical level (micro) prioritisation
- technical guides for economic modeling or conducting economic analyses
- literature relating to health care prioritisation in developing countries.

Limitations

Initial searching and review revealed that there has been very little, if any, empirical research into the outcomes of various prioritisation methods. Therefore it is not possible for the literature review to achieve its aims of summarising evidence-based best practice, or proven success factors. However there is a substantial international body of literature on theory and critique of health sector prioritisation, and a number of relevant sets of guidelines issued by the New Zealand government. The literature review report therefore does not reflect the

original objectives of the literature review, but attempts to present the available information in a way that is relevant and useful for the WOHIA.

Findings

1 Overarching findings

The challenge of how to allocate scarce health resources is a universal and growing issue

There is unanimous agreement in international and New Zealand literature that demand for health services will continue to exceed the money available in coming years. Since 1996/97, total real expenditure on health care in New Zealand has grown at an average annual compound rate of 5.2% per year (Ministry of Health, 2010a). The pressure on resources is increasing as the population ages, and as technological development expands the possibilities for and costs of health interventions (Wright, 1999; Baltussen and Niessen, 2006; Meltzer, 2008). McKie et al comment:

Most countries appear to believe that their health system is in a state of semi-crisis with expenditures rising rapidly, with the benefits of many services unknown and with pressure from the public to ensure access to a comprehensive range of services. (McKie: 2008, 114).

Under these conditions, it is inevitable and necessary that decisions are made about what to fund and what not to fund (Mitton and Donaldson, 2004; Brock, 2007). In New Zealand, this is reflected in the Minister of Health's foreword to the Ministry's *Statement of Intent 2010-2013*, in which he states:

New Zealand cannot afford the cost of its health care to continue to grow in an uncontrolled way, nor can we afford poor decision-making. The tight economy creates an unavoidable need to make the very best use of limited health resources while delivering the improvements in services that New Zealanders expect, particularly for those with the greatest needs. (Ministry of Health, 2010b).

According to Mitton and Donaldson:

What is required, and indeed what decision makers seem to be asking for, is a systematic, explicit approach to priority setting which is fair and, where possible, evidence based" (2004, p2).

Fair, evidence-based and practical resource allocation is difficult

The literature highlights the theoretical, methodological, political, ethical and practical challenges that make the task of priority setting in health care extremely complex and difficult. Some of these challenges are briefly outlined below.

Gathering and analysing the information required for a genuinely transparent, evidence-based and fair prioritisation process is very resource intensive – significant time, money and skills are required (Wright, 1999; Ashton et al 1999; Mitton and Donaldson, 2003). Lack of access to economic expertise has been identified as a key barrier to the use of economic methods in health prioritisation in the UK and the USA (Meltzer, 2008).

Prioritisation requires decision makers to compare options based on dissimilar information and multiple criteria (eg maximising population health, reducing inequalities, prioritising those with greatest need, value for money, political considerations, fairness). Humans

typically perform poorly when trying to reach rational and fair decisions in such complex decision making environments (Baltussen and Niessen, 2006).

Analysts and decision makers must often draw conclusions based on imperfect information. For example the effectiveness of public and community health services is seldom quantified and even the cost of specific interventions may be difficult to ascertain, for example if they are delivered as part of a wider contract (Ashton et al, 1999).

How should prioritisation principles be operationalised? As Wright (1999, p6) points out, "It is one thing for everyone to agree that equity is desirable, but equity of what and for whom?". Interpretation and integration of principles into the decision making process is challenging and raises controversy.

Principles/criteria may conflict. For example, equity considerations sometimes conflict with a strict cost-effectiveness goal of maximising the improvement of population health. How should such trade-offs be managed within the prioritisation process? (Wright, 1999; Baltussen and Niessen, 2006).

A fair and rational analysis process typically draws on a range of knowledge-bases including clinical medicine, public health, social sciences, economics and ethics. Few individuals have the expertise to adequately interpret on all these aspects (Baltussen and Niessen, 2006).

By its nature, prioritisation creates winners and losers. How should stakeholder input be incorporated when views on 'fairness' and 'acceptability' are likely to be clouded by self-interest (as well as marred by lack of information)? (Ashton et al, 1999)

How should the prioritisation process fit with and/or incorporate other frameworks – eg national health priorities, clinical guidelines, contracting processes, devolved purchasing? (Ashton et al, 1999).

"Rational" decisions are not necessarily acceptable decisions. In most societies it is ethically unacceptable to withhold life-saving treatment from a few, even when the opportunity cost is health enhancement for many. This "rule of rescue" is often in conflict with economic rationality (Brock, 2007).

There may be legislative, contractual, political and other barriers to actually implementing the changes indicated by the prioritisation process (Ashton et al, 1999; Williams and Bryan, 2007).

Prioritisation is not simply a technical process – it involves values and ethics

There is broad agreement in the literature that prioritisation decisions involve ethical and value judgments and are not purely technical (McKie et al, 2008; Brock, 2007). While stakeholders generally agree on the goal of attaining value for money, for example, there is much debate about the measurement of "value" and the definition of "equity" (Wright, 1999). According to Brock, "controversies about what count as equitable distributions in the health sector are a fundamental source of the difficulty of prioritisation and rationing choices" (Brock, 2007, p137).

These controversies about the fundamental values and ethics that underpin prioritisation tools and methodologies illustrate that the prioritisation process can never be "value free". Rather, prioritisation tools need to reflect and incorporate the values and ethics of the society in which they are used (Baltussen and Niessen, 2006; Brock, 2007; McKie, 2008).

The literature also highlights a general societal reluctance to acknowledge the reality of resource scarcity in the health sector, which appears to be underpinned by values attached to health care (Brock, 2007; Williams and Bryan, 2007). One UK researcher found that local

level attempts to apply a rational, problem solving approach to resource allocation resulted in a 'paralysis' caused in part by "the political unacceptability within the UK National Health Service of the explicit rationing advocated by health economics" (Williams and Bryan, 2007 p140). Brock (based in the USA) also highlights the way that the very concept of health rationing (although inevitable and necessary) is often seen as unethical since people feel "life is precious and money should not enter into decisions about medical treatment" (2007 p125).

There is no consensus on who should be involved, or on mechanisms for wider input

Because of the value-laden nature of health prioritisation, many argue that the prioritisation process should incorporate a range of views, including those of the public (Ashton et al, 1999; Baltussen and Niessen, 2006; Mitton and Donaldson, 2003; Mitton and Donaldson, 2004).

Qualitative research conducted in Australia with health professionals and the general public found "participants saw a legitimate role for a broad range of stakeholders in priority setting decisions so as to incorporate a diversity of expertise and opinion" (McKie et al, 2008 p114). A companion theme was that "the power of special interest groups (such as clinicians) should be kept in check" (ibid, 114). Research from the UK and elsewhere has also highlighted the importance of public participation in prioritisation on the grounds that: (a) citizens have a right to be involved in decisions regarding public institutions; (b) people can contribute a breadth of views and local knowledge that will lead to better decisions; and/or (c) participatory process enhances the legitimacy of decisions and assuages community concerns about lack of responsiveness and accountability of health institutions (McKie et al, 2008).

The literature discusses various methods for incorporating diverse views into the prioritisation process. One approach is use of an advisory panel or decision making panel comprising key stakeholder groups (eg clinicians, managers, intersectoral partners, community representatives) to directly input into the process at various stages (eg criteria setting, weighting, information gathering, decision making) (Baltussen and Niessen, 2006; Mitton and Donaldson, 2004). A similar approach involves using ad hoc stakeholder workshops rather than a standing committee or panel to determine and weight criteria for a prioritisation framework (Wilson et al, 2006). Another approach is to use the results of research into population values and preferences to derive appropriate criteria and weightings to be used in economic prioritisation models or tools (Heller et al, 2006).

There is no agreed best practice, and systematic approaches are rarely used in practice

Although methodologies for measuring effectiveness and cost effectiveness of health interventions are generally agreed amongst health economists, there is no single widely applied methodology for assessing equity (Wright, 1999; Brock, 2007), nor is there a 'gold standard' method for weighing up the wide range of criteria that are typically involved in prioritisation decisions. Various approaches to the methodological challenges of prioritisation are discussed in the literature and hypothetical trials of sophisticated prioritisation methodologies have been undertaken.

However economic approaches have seldom been used in the field at the DHB-equivalent level (Meltzer, 2008; Williams and Bryan, 2007), and consensus about the best practice approach to prioritisation has yet to be developed amongst decision makers at this level. Despite a recognition of the need for robust and transparent methods, it is noted in the literature that, in practice, prioritisation decisions continue to be made on an ad hoc basis,

and systematic approaches to prioritisation are rarely used at the meso level (Marks, 2006; Mitton and Donaldson, 2003).

2 What methods have been used to prioritise health care spending at the meso level internationally? What are the advantages and disadvantages of each?

Historical resource allocation

Decision makers are typically not well equipped to make evidence-based decisions about resource allocation, and “as such often rely on historical or political resource allocation processes” (Mitten and Donaldson, 2004 p1). Historical allocation means that funding decisions are based on what has been funded in the past. The key advantage of this approach is that it is very quick and cheap to implement, and does not require specialist skills or detailed analysis. Historical funding allocation may also be favoured because it is perceived to be safe and apolitical (Mitton and Donaldson, 2003).

However historical allocation provides no mechanism for maximizing health benefit within a given budget (Mitton and Donaldson, 2003). According to a New Zealand review, “There is no reason to believe that the distribution of health care resources that has evolved historically is perfectly efficient or equitable, so the need to improve the allocation of public funds for health care is more pressing than ever” (Wright, 1999 p3).

Collaborative decision making

Collaborative decision making (or political decision making) refers to prioritisation decisions made by a group of stakeholders, generally a small group who hold power. Collectively they came to agreement about which items on the “want list” will be purchased. Wilson et al (2006) explain that this is a resource allocation method often used in Primary Care Trusts in the UK, and typically such decisions are made by “a cluster or group consisting largely of chief executives and finance directors, with occasional clinical input”.

According to Wilson et al (2006) the key advantage of this approach is that it is quick and cheap to operate. The disadvantages are that this approach does not systematically consider relative health gain from alternative courses of action; does not seek to optimize the wellbeing of the population for the given budget; is generally supplier rather than commissioner (funder) led, and it is input-focused with little consideration of outcomes (Wilson et al, 2006). The focus is on balancing stakeholder demands, rather than maximizing health benefits for the population, and the approach is systematically biased towards the interests of dominant stakeholders – that is, those invited to participate in the process – to the exclusion of other interested parties, eg patients. Decisions are not transparent, and may be difficult to justify (Wilson et al, 2006).

Needs Assessment

Needs assessment is a ‘non-economic’ approach to prioritisation in which population level needs are defined, and then a minimum standard of care or suite of services is decided upon to meet those needs. Needs assessment can be valuable for highlighting a gap between current service provision and areas for potential service provision (Mitton and Donaldson, 2003), and brings attention to the goal of population wellbeing.

However, Mitton and Donaldson (2003) argue that needs assessment is not the best way of setting priorities and promoting the efficient use of resources. Problems associated with this approach are: need is difficult to define and depends on perspective (eg clinicians may identify a 'need' that is not perceived as such by patients or vice versa); resources may not be available to adequately meet all the needs identified (that is, it does not solve the key prioritisation problem of scarce resources); need is dynamic and changes over time; the existence and cost-effectiveness of treatments/services for addressing prevalent health needs is not factored in; and finally, needs assessment does not provide a mechanism for considering the costs and benefits of various service configurations, or how the patterns of spending could be changed for the better. Mitton and Donaldson (2003) point out that shifting resources towards conditions with the greatest disease burden will not lead to overall health gain if effective services do not exist to treat those conditions, for example.

Traditional economic approaches to resource allocation

Economic approaches assume that the aim of prioritisation is an optimal portfolio of service/programs that a health care budget can afford. "The traditional economic approach proposes maximizing health gain (however measured) subject to a budget constraint, which implies ranking programs according to their cost-effectiveness ratio" (Hauck et al, 2004). Key economic concepts are opportunity cost (i.e. when one option is chosen, the benefits of other potential options are forgone), and marginal costs and benefits (that is, the benefit gained from one extra dollar of spending, or lost from one less dollar of spending).

The most commonly used economic analyses are cost-benefit analysis (CBA) and cost effectiveness analysis (CEA). The underpinning assumptions and methodology for CBA and CEA are described in detail in the literature (see for example: Hauck et al, 2004; Mitton and Donaldson, 2003). The literature also provides explanation and technical advice about other economic analyses that are recommended by the authors for use in health sector prioritisation, such as population cost-impact analysis (Heller et al, 2006), and cost-utility analysis (Pharmac, 2009).

Economic approaches have the advantage of being systematic and transparent, and allowing direct comparison between options via quantification. Hauck et al comment:

We believe that adopting an economic approach to priority setting has many advantages, not least that it forces the decision maker to define explicitly the objectives of the priority-setting process, even if these cannot be easily measured. An economic perspective recognizes that the priority-setting process will often involve a series of conflicts, but instead of obscuring such conflicts, it provides a framework for their exploration, and trade-offs can be made explicit. (Hauck et al, 2004 p xi)

While there is wide agreement in the literature that economic analyses can provide a more robust basis for decision making than previous approaches to prioritisation, there is also acknowledgement that there are practical, political and methodological barriers to the widespread adoption of economics-based prioritisation. Many of these are outlined in the overarching findings above in the discussion of why prioritisation is difficult. Specific problems associated with an economic approach are:

The resources required to complete economic analysis mean it is not feasible to apply to all prioritisation decisions (Mitton and Donaldson, 2003)

Economic analysis requires accurate data on costs and effectiveness, and this is often unavailable for health interventions at the meso level (Williams and Bryan, 2006)

Economic models often fail to incorporate equity principles, and economists do not agree on how equity should be operationalised (Hauck, 2004). While, in theory, consideration of

equity could be built in to economic analyses, in practice this is rarely done (Cookson et al, 2009).

Economic analysis provides answers to specific questions, but does not incorporate the range of considerations decision makers must take into account (Williams and Bryan, 2007; Mitton and Donaldson, 2007).

There may be ethical, political and practical barriers to implementing changes indicated by economic analysis (Hauck et al, 2004). The political and practical context in which decisions are made means that real life decisions are likely to deviate from those recommended in a purely 'rational' model (Williams and Bryan, 2006).

Hauck et al conclude:

The economic approach is just one element of the priority-setting process and cannot be used in isolation from the many other factors that influence decision makers and which will no doubt remain difficult to incorporate into economists' models. Optimal solutions to the priority-setting process will be very dependent on local circumstances and constraints (Hauck et al, 2004: ix)

This is echoed in a New Zealand report on prioritisation that argues:

Economic evaluation has a very valuable role to play, but its contribution should be put into perspective. [...] None of the [economic] approaches is intended to be a magic formula for removal of judgment, responsibility or risk from decision making activities. At root, they are methods of critical thinking, of approaching choices – and often of placing difficult choices out in the open for discussion” (Wright, 1999 p32)

Tools for decision making in complex environments

Because of the limitations of traditional economic approaches, and “the observed inability of people to effectively analyse multiple streams of dissimilar information” (Baltussen and Niessen, 2006), a number of decision making tools have been developed to assist with decision making in complex 'real world' environments. These include Program Budgeting and Marginal Analysis (see: Mitton and Donaldson, 2004; Wright, 1999) and Multi Criteria Decision Analysis⁵ (see Baltussen and Niessen , 2006; Bots et al, 2000; Hansen, 2010; Wilson et al, 2006).

Mitton and Donaldson (2004, p1) outline the key principles of Program Budgeting and Marginal Analysis (PBMA):

At the core of the PBMA approach is an advisory panel charged with making recommendations for resource re-allocation. The process can be supported by a range of 'hard' and 'soft' evidence, and requires that decision making criteria are defined and weighted in an explicit manner.

In essence, this is similar to Multi Criteria Decision Analysis (MCDA), which provides tools for aggregating data on individual criteria to provide indicators of the overall performance of options. MCDA involves the development of a 'performance matrix' or 'impact matrix' where each row describes an option and the columns describe the performance of the options against each criteria. The individual performance assessments may be brief qualitative descriptions (eg excellent, acceptable, poor), yes/no answers, or numerical values (eg \$ per QALY). Baltussen and Niessen (2006, p4-5) explain:

⁵ also known as Multi-criteria Decision Making (MCDM) or Multi-criteria Analysis (MCA).

The performance matrix may be the final product of the analysis, allowing the decision maker to qualitatively rank the options [...]. In analytically more sophisticated MCDA techniques the information in the basic matrix is usually converted into consistent numerical values. The key idea is to construct scales representing preferences for the consequences, to weigh the scales for their relative importance, and then to calculate weighted averages across the preference scales.

Proponents argue that such tools are widely and successfully used in a wide range of disciplines, although they have rarely been applied to allocation decisions in health care. The key advantage of such tools is that they facilitate rational and transparent decisions based on a wide variety of “hard” and “soft” data and competing criteria (Wilson et al, 2006; Baltussen; Service Development and Funding Niessen, 2006). Thus such tools may help decision makers overcome many of the problems associated with other prioritisation methods. However critics argue that “scoring” is both arbitrary and inappropriately mechanistic (Wright, 1999 p31).

3 How can prioritisation incorporate equity and contribute to efforts to reduce inequalities?

Marks (2006) explored how local decision makers in the UK tackled inequalities in health and how the inequalities agenda was reflected in local monitoring and decision making processes. She found that evidence of effectiveness of interventions played a relatively small part in prioritisation decisions, and that other factors such as NHS priorities, availability of resources and local policies and strategies had a greater influence. “There was little discussion about which kinds of intervention that were most likely to narrow the health gap over specified periods, and therefore which interventions should be prioritised over both the longer and shorter term” (Marks, 2006 p 65). Marks noted that targeted and joint (intersectoral) services were often on the margins - focused on discrete separately funded initiatives - which left core services untouched and mainstream priorities unaffected. “This meant that existing patterns of decision making were not challenged” (ibid, p65).

Hauck et al (2004) note that ‘equity’ can be defined in at least seven ways , and conclude that, in principle, most equity concerns can be incorporated into an economic approach to priority setting with relative ease.

Cookson et al (2009) note that despite health rhetoric about equity, reviews reveal that in 500+ published economic evaluation studies of health interventions “distributional effects seem to have been completely neglected” (p232). The authors outline four approaches to explicit incorporation of equity considerations into economic evaluation in public health: (i) review by decision makers of background information on equity alongside economic data; ii) health inequality impact assessment of options under consideration; iii) analysis of the opportunity cost of equity; and iv) equity weighting of health benefits within economic models. Both Cookson et al (2009) and Hauck et al (2004) note the methodological difficulty of equity weighting, which requires operationalisation of concepts such as “need”.

Both Marks (2006) and Cookson et al (2009) conclude that greater efforts are required to embed the inequalities agenda into local decision making and prioritisation processes.

4 What learning from the literature may assist the redevelopment of the Northland DHBs prioritisation policy?

Effective prioritisation is unlikely to make a significant difference to population health (or health sector efficiency) if it is only applied to a small sub-set of funding decisions (Wright, 1999; Marks, 2006). “It should be recognized that major gains from prioritisation cannot come from careful allocation of the relatively small amounts of new money that become available” (Wright, 1999 p10), points out one New Zealand review.

Expectations for the prioritisation policy must be realistic (Wright, 1999). Ranking of all health services is not practical because it would be too ambitious and costly. Wright argues that reallocation of expenditure from some health services to others is what is realistically possible in the New Zealand context. The fundamental task is to identify interventions that *should* be funded but are not; and interventions that should *not* be funded but are.

The process by which decisions are reached is important because the legitimacy of decisions largely rests on the perceived appropriateness of the process used to reach them (McKie et al, 2008). The prioritisation process should be transparent (open), systematic (explicit) and should involve the public in some manner (Baltussen and Niessen, 2006; Mitton and Donaldson, 2003). A New Zealand critique concluded “The development of mechanisms for the ongoing involvement of the public, patients and key stakeholders should be an integral part of the prioritisation process” (Ashton et al, 1999 p 9).

Prioritisation should involve questions of equity as well as efficiency (Mitton and Donaldson, 2003). Values and ethics must be integrated into the process and tools.

Any prioritisation process should, in the end, always be guided by informed judgment (Ashton et al, 1999, p4). Prioritisation tools should not be seen as a formulaic or technocratic approach to priority setting, but rather as an aid to policy making (Baltussen and Niessen, 2006 p8).

The prioritisation process should be strongly embedded in the organizational context. A central role for an advisory panel comprising stakeholders such as health personnel, policy makers, finance staff, and community representatives has been recommended in the literature (Baltussen and Niessen, 2006). The prioritisation process must also be aligned with national priorities (Mitton and Donaldson, 2003), and with legislation and regulation governing health institutions.

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Appendix Five: Review of Other DHBs' Prioritisation Policies

1 Appraisal

There was wide agreement in the scoping group (February 1020) that “equitable access to quality health and disability services” was the key determinant likely to be impacted by the prioritisation policy, through funding decisions made. Ensuring equitable access to quality health and disability services is core business for the DHB. For these reasons it was agreed that this determinant should be a key focus of the WOHIA (see Figure 1).

Table 1 below outlines the information gathering strand applicable to the review of DHB policies. This strand is one of four strands being applied to the appraisal phase this WOHIA.

Table 1: The information gathering strand

Actions	Those involved	Measures/ milestones
Analysis of prioritisation policies from DHBs: <ul style="list-style-type: none"> • NDHB • The three other Northern Regional DHBs • The three other Reducing Inequalities DHBs. 	NDHB Population Health Strategists	Analysis of key systems and processes linked to reducing inequalities and +/- impact on public and population health.

1.1 Appraisal Methodology

The methodology applied to the analysis of the prioritisation policies from other DHBs was in two parts:

Firstly there was a formal request made to the District Health Boards (as per table 1 above) by the GM Funding & Planning and Māori Health. The request was for electronic copies of DHBs prioritisation policies/tools/any key references. Participating DHBs were given information regarding Northland DHB's application of WOHIA to its prioritisation policy, to support their decision to supply the information requested.

Secondly the Population Health Strategist was tasked with eliciting from the documentation received, what key systems and processes linked to reducing inequalities and +/- impact on public and population health, were referenced or utilised within the policies or tools provided.

2 Why prioritise?

2.1 Operational Policy Framework

Prioritising health needs and services (MoH Operational Policy Framework 2010/2011) (sections 22(h) and 23(c) New Zealand Public Health and Disability Act (2000), CAB Min (02) 31/13, POL Min (03) 27/3, CAB Min (04) 42/5A.).

Each DHB must:

- use a principle-based framework that links directly to the principles of the New Zealand Health Strategy and New Zealand Disability Strategy to improve health outcomes and to reduce inequalities
- involve Māori in considering and responding to their needs, and support Māori capacity building throughout the development and implementation of the prioritisation process
- use a framework for the consultation of different groups and communities, such as Māori, Pacific peoples, ethnic peoples,⁶ people with a disability and non-governmental organisations (NGOs), in the service planning process
- collaborate with other DHBs in relation to regional and national services in regard to:
 - why decisions were made
 - who the decision-makers were
 - what the decision-making process was
 - if the community was involved in the decision-making process, how it was involved
 - if the community was not involved in the decision-making process, why it was not.

2.2 Regional Service Planning

Subsequent to decisions made by Cabinet (CAB Min (09) 37/13-15) there is a requirement for DHBs to develop regional service plans (RSPs).

The current national direction for initial regional plans is that priority be given to addressing:

- services that are currently vulnerable, or that can be expected to become so during the period of the plan because of workforce shortages, demand growth and/or funding issues
- services related to significant capital investment proposals that are expected in the next three years
- service configuration changes that will contribute to financial viability.

2.3 District Service Planning

At the local DHB level, DHBs use methods of prioritisation primarily to:

- allocate new or additional funding to services that are more effective in improving health and independence. Specifically, to meet the priorities identified at national, regional and district levels, and to reduce inequalities.
- allocate or reallocate resources when funding is constrained or retrenchment is necessary to meet budgets.
- create a nationally consistent approach by using the *Best Use of Available Resources* report.
- meet external/ government mandate requiring all Crown entities, which includes DHBs, to prioritise the key outcomes they intend to achieve (a necessary part of 'Managing for Outcomes' in the public sector).

⁶ The Office of Ethnic Affairs in *Ethnic Perspectives in Policy* defines 'ethnic' peoples as that group of people whose ethnic heritage distinguishes them from the majority of other people in New Zealand, including Māori and Pacific peoples.

3 Scope of Review

To satisfy this aspect of the appraisal phase of this WOHIA, prioritisation policies and processes were reviewed from:

- three Northern Regional DHBs (two partial responses)
- two other Reducing Inequalities DHBs (three requested)

There have been some limitations due to the receipt of dated or part policy references, or examples of current tools not referenced to an explicit prioritisation policy.

The four Reducing Inequalities DHBs (Northland, Whanganui, Lakes and Te Tai Rawhiti).are commonly grouped or referenced as they received additional funding based on their vulnerable, high needs , high Māori populations with high deprivation and low socio economic population status

4 Key systems and processes linked to reducing inequalities

Table 2 below notes the key findings from participating DHBs prioritisation documentation, linked to reducing inequalities.

The main conclusions and key learnings are:

- 4.1 While the national prioritisation principles developed in 2004 are generally being applied in the DHB policies and tools subject to this review, DHBs are adopting wider definitions eg:
 - under inequalities it has been recognised by DHBs that equitable access to a qualified/quality workforce will be a key driver
 - regional/geographic equity emerges more strongly as we increase regionalisation or centralise services.
- 4.2 All DHB policies and processes reviewed target reducing inequalities and population health impacts as key drivers with some positive variations reflecting the variation in local health needs assessment. However while some acknowledge that health inequalities are fundamentally linked to inequalities in other sectors, only one DHB has strongly embedded this into their prioritisation process.
- 4.3 Whānau ora related principles and criteria have been generally well adopted and explicitly included in assessment/prioritisation criteria and weightings.
- 4.4 There is adherence to the four national prioritisation principles.
- 4.5 A comprehensive prioritisation tool has been developed by one DHB guiding new thinking and the development of explicit criteria and sub criteria for equity indicators:
 - regional equity
 - geographic equity
 - population equity
- 4.6 Wider descriptors relating to inequalities are emerging.

Table 2: Key findings from DHBs' prioritisation documentation: reducing inequalities

DHB by type	Links to reducing inequalities	Comments/analysis
NDHB	<p>Include the four national principles and national tools eg HEAT.</p> <p>2005 guideline.</p> <p>Aligns work force capacity and inequality.</p> <p>Scored template trialled 2008/09.</p> <p>Reference to DHB obligations and funding and planning cycle.</p>	<p>Policy and recommended process strongly geared towards reducing inequalities, and a principles based approach.</p>
Northern Regional DHB 1	<p>Include the four national principles and tools.</p> <p>Policy and processes updated 09/10 and out years.</p> <p>Explicit reference to DHB obligations and funding and planning cycle.</p> <p>Application of process subject to peer review.</p> <p>A multi-agency prioritisation group representing community, financial, economic with terms of reference required.</p> <p>There is an appeals process.</p>	<p>Process and scoring tools include Whānau ora and equity as areas requiring assessment and scoring.</p> <p>While there is a well defined process from a DHB operational perspective the guidelines are light on reducing inequality definitions and guidance.</p> <p>However, strong criteria for Whānau ora and improving the health status of Māori.</p>
Northern Regional DHB 2	<p>Introduces enablers eg building capacity and capability within the sector, provider performance and monitoring.</p>	<p>Reviewed current contract review tool.</p> <p>Highest weighting applied to reducing health inequalities.</p>
Northern Regional DHB 3	<p>Includes the four national principles reflected in current (2009) guidelines/criteria for disinvestment ranking. The catalyst for the current policy direction is finding essential savings.</p> <p>Introduces risk criteria:</p> <p>Downstream or collateral impact.</p> <p>Increasing disparities in health status.</p>	<p>A comprehensive set of documented criteria and subcriteria developed, inclusive of strong equity indicators:</p> <ul style="list-style-type: none"> • regional equity • geographic equity • population equity.
Reducing Inequalities DHB 1	<p>Includes the four national principles in DAP insert description (2009/10).</p> <p>Health inequalities linked back to Health Need Assessment.</p>	<p>Descriptions acknowledge inequalities in other sectors and their contribution to health inequalities.</p> <p>Health inequalities defined to include:</p> <ul style="list-style-type: none"> • shorter lifespan • earlier onset of chronic disease • higher infant mortality rates • higher rates of suicide • disease(s) associated with poverty.
Reducing Inequalities DHB 2	<p>Include the four national principles.</p> <p>Prioritisation process and checklist</p>	<p>The scored prioritisation tool applies maximum scoring to:</p> <ul style="list-style-type: none"> • by Māori for all service

DHB by type	Links to reducing inequalities	Comments/analysis
	<p>updated 2009.</p> <p>Have documented guidelines for needs-based programmes to address health inequality.</p>	<ul style="list-style-type: none"> • inequalities greater than for the rest of NZ • targeted specifically to those with the poorest health and highest need.

5 Positive and negative impacts on population health

Table 3 below notes the key findings from participating DHBs' prioritisation documentation, linked to positive and negative impacts on population health. The main conclusions/key learnings are:

- 5.1 There is a variety of references assessing the +/- impacts on population health but only one participating DHB requires a comprehensive population impact assessment as part of their funding proposals.

There is scope for including broader evaluation framework(s) aligned to DHBs' strategic direction and the health outcomes they are seeking for their population, particularly their high needs populations which need to be clearly defined.

- 5.2 All priority population groups/ vulnerable communities need to be identified and included.
- 5.3 Population health impacts documented as principles are not defined or linked to operational processes. They are typically portrayed as aspirational rather than intentional.
- 5.4 Other considerations identified e.g. wider consideration of population health gain vs "impact on individuals" and assessment of patient experiences".

Table 3: Key findings from DHBs' prioritisation documentation: positive and negative impacts on health

DHB by type	Positive and negative impacts on population	Comment and analysis
NDHB	<p>Documented principles include (eg of specific references).</p> <p>Health gain/equity of outcome.</p> <p>Partnership in the delivery of and utilisation of health and disability support services.</p> <p>Improve independence for Māori with disabilities.</p> <p>Improve opportunities for Māori to participate in wider society as well as te ao Māori.</p>	<p>Prioritisation process is implied in the documented policy and guideline, and qualitative templates used 2007/08, 2008/09.</p> <p>In addition to the national principles, Northland DHB added a requirement that funding decisions be aligned to the "Leading for Outcomes Life Course Continuum".</p>
Northern Regional DHB 1	<p>Scope of population impact explicitly includes wider reference to migrants and refugees and those with disabilities.</p> <p>Comprehensive population impact assessment required within the content of funding proposal templates.</p> <p>Whānau Ora principles and impact assessed</p>	<p>Documented prioritisation processes communicate alignment between the DHB's strategic direction and the health outcomes they are seeking for their population, particularly their high needs populations which are</p>

DHB by type	Positive and negative impacts on population	Comment and analysis
	within policy and processes.	defined.
Northern Regional DHB 2	Have added population health criteria requiring assessment related to patient experience: <i>"improving engagement with high need populations"</i> , and <i>"improving access to populations with high needs"</i> .	Have developed contract review prioritisation criteria and weightings. Highest weighting for improving population outcomes and impact.
Northern Regional DHB 3	Explicit assessment of: <ul style="list-style-type: none"> • health gain and quality of life indicators • performance impact of early intervention. 	Comprehensive guidelines and criteria and subcriteria developed and include assessing health gain and anticipated impact on target population(s) and access.
Reducing Inequalities DHB 1		Response limited to DAP insert which focuses on the impact of health inequalities.
Reducing Inequalities DHB 1	Prioritisation criteria to be assessed include <i>the benefits to individuals – quality of life years</i> .	Maximum scoring targeted specifically to those with poorer health and highest need, but no explicit definitions or links to priorities.

6 Summary of additional review findings

In New Zealand fiscal constraints mean that the health sector is increasingly being asked to focus on efficiency and the best use of available resources. In such a context, an evidence-based approach to prioritisation and strategic planning is essential, if we are to achieve maximal health gains for people, given the pressure on currently available resources.

The Northern DHBs typically define exemptions from the prioritisation process.

Exemptions included examples such as:

- Ministry directed and required (either with or without funding)
- other key projects that are essential for the organisation to continue to function effectively
- projects that must be done in order to facilitate a number of other critical projects
- initial high level prioritisation of budget upon receipt of December funding envelope.

There is evidence in the policy or processes reviewed that the other Northern Regional DHBs have updated their prioritisation tools to make explicit the link between DHBs' legislative and contractual obligations and have included fiscally- and/or operationally-driven criteria, as they initiate line-by-line reviews to address financial pressures.

Strong financial drivers have emerged since 2005, such as in prioritisation policies and tools reviewed:

- sustainable investment
- performance and monitoring
- investment cost effective (VFM)

- reduce need for other health and social systems
- reduce acute demand
- return on investment.

Compared to the Northern DHBs the “reducing inequalities” DHBs continue to predominantly adopt principle based policy and processes with strong reference to Health Needs Assessment and less reference to financial impacts.

Three of the six prioritisation policies reviewed make some reference to having fair and transparent or robust processes, but only two DHBs make this explicit, linking policy with clearly defined processes and/or well defined criteria.

There is some evidence that processes are being refined to ensure process and results stand up to external scrutiny in the current environment.

Two Northern DHBs have incrementally updated their policies and tools to embed disinvestment guidelines adding weightings, and complex decision-making matrices.

There appears to be an opportunity for including wider public health analysis and assessment of positive and negative impacts at intersectoral, national and regional levels in prioritisation policy processes, strengthening alignment with the 2010/11 *Operating Policy Framework*.