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Approaches to Prioritisation and Health Technology Assessment in New Zealand

**Burden of Disease Epidemiology, Equity and Cost-Effectiveness
Programme (BODE³)**

**WORKING PAPER
Version 1.0**

**Erin Holmes
Tony Blakely
George Laking**

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BODE³ Team*

* Contact Professor Tony Blakely (Programme Director of the BODE3 Programme, University of Otago, Wellington, New Zealand). Email: tony.blakely@otago.ac.nz

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Competing Interests

The authors have no competing interests.

Abbreviations

ACART	Advisory Committee on Assisted Reproductive Technology
ACC	Accident Compensation Corporation
CIC	Capital Investment Committee
CPAC	Clinical Priority Access Criteria
CSC	Core Services Committee
DALY	Disability-Adjusted Life Year
DHB	District Health Board
DHBNZ	District Health Board New Zealand
GDP	Gross Domestic Product
GHSNZ	Genetic Health Services New Zealand
HQSC	Health Quality and Safety Commission
HBL	Health Benefits Limited
HFA	Health Funding Authority
HTA	Health Technology Assessment
MMP	Mixed Member Proportional
MRG	Ministerial Review Group
NGO	Non-Government Organisation
NHB	National Health Board
NHC	National Health Committee
NSAC	National Screening Advisory Committee
NSTR	National Service and Technology Review Committee
NZGG	New Zealand Guidelines Group
NZHS	New Zealand Health Strategy
PHARMAC	Pharmaceutical Management Agency
PHO	Primary Health Organisation
RHA	Regional Health Authority
SPNIA	Service Planning and New Health Intervention Assessment

Glossary

Disability adjusted life year (DALY) A type of health adjusted life year (HALY) used in burden of disease studies that assess the cross-sectional or prevalent burden of disease. The sum of years of life lost (YLLs) and years of life lived with disability (YLDs).

Explicit prioritisation Resource allocation decisions that involve the development and application of specific principles or criteria (contrasts with **implicit priority setting**).

Horizontal prioritisation Resource allocation decisions involving prioritisation of interventions across disease areas (contrasts with **vertical priority setting**).

Implicit prioritisation Resource allocation decisions that are made in an unsystematic or opaque manner often by individual clinicians and administrators without reference to specific principles or criteria (contrasts with **explicit priority setting**).

Prioritisation Describes decisions about the allocation of resources between competing claims of different services, different patient groups or different elements of care.

Vertical prioritisation Resource allocation decisions involving prioritisation of interventions for the same disease (contrasts with **horizontal priority setting**).

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1 Introduction

This draft working paper introduces the reader to New Zealand, its government and its health care system. It also provides an overview of prioritisation approaches and health technology assessment in New Zealand – essential background for understanding the allocation of health care resources in the country.

The content of this working paper was originally written as part of a draft thesis chapter on the assessment and prioritisation of personalised medicines, specifically, genetic tests. As such, it has had limited peer review and is likely to change. However, we thought publication of the content in draft form might be useful to solicit feedback from a wider audience while also providing a useful resource for students and professionals looking for an overview of the history and current status of prioritisation and health technology assessment in the New Zealand health system.

Please note that section 3.4 on the *Prioritisation Landscape in 2014*, and in particular the sub-section 3.4.2 on *unforeseen impacts* is under construction with the general ideas and content provided as bullets for further expansion and explanation at a future date.

2 New Zealand Government and Health Care

A country with a democratic tradition that aspires to provide health services equivalent to countries with stronger economies, New Zealand has a health care system that employs innovative approaches to purchasing and provision; enabling it to maintain a relatively healthy population.

2.1 Introducing New Zealand

New Zealand is a comparatively geographically isolated developed nation with a population of approximately 4.5 million people distributed unevenly across two islands, pragmatically named ‘North’ and ‘South’¹. The country is home to people identifying with Māori (14%), Asian (11%), and Pacific (7%) ethnic groups, in addition to those of European/other descent (73%).(Statistics New Zealand, 2013). Like most countries in the developed world, New Zealand has an aging population, driven primarily by those identifying as European.

Though considered relatively ‘young’ when compared with human settlement on other landmasses, it is believed that people first arrived in New Zealand around 1300 AD, coming from the Pacific Islands and developing a distinct Māori culture focussed on kinship links and land (Te Ahukaramū Charles Royal, 2013). After an initial voyage to New Zealand by Abel Tasman in 1642, and later James Cook in 1769, the country was regularly visited by Europeans (Pākehā). In 1840 the Treaty of Waitangi was signed between the British Crown and various chiefs, bringing New Zealand into the British Empire and giving Māori equal rights with British citizens (it remains contentious whether this resulted in more or less rights than which they held previously). From this point forward thousands of settlers (mostly from England, Scotland and Ireland) began arriving in New Zealand, and in 1850 a Settler government was established (Te Ahukaramū Charles Royal, 2013; Woodward & Blakely, 2014).

During the following century the majority of New Zealand’s land transferred from Māori to European ownership as the result of differing interpretations of the Treaty of Waitangi, war and the introduction of a European economic and legal system. This shift in resources and accompanying marginalisation of Māori has had long-term implications for the welfare of the population today - addressing historical grievances and mitigating the effects of past decisions remains a focus of the government.

2.2 Government in New Zealand

“In New Zealand, citizens expressed confidence and satisfaction in their national government and public services on average 10 percentage points higher than the OECD average”

¹ alternatively, *Te Ika-a-Maui* (North Island) and *Te Waipounamu* (South Island).

New Zealand's current system of government is described as a Westminster System of parliamentary democracy, with the Prime Minister as head of the government. The parliament is elected using mixed member proportional (MMP) representation, rather than "first past the post". Elections are held every three years, with voters submitting two votes; one for their local member of parliament and one for their desired political party. The number of seats each party gains in Parliament is decided by how much of the total party vote the party gets. The Prime Minister is not directly elected by the people but becomes Prime Minister usually through being the leader of the largest party in Parliament following a general election.

Members of the governing party(s) form the Cabinet, and get their authority from Parliament to make decisions about governing the country, including setting strategies to advance their policies. Cabinets, influenced by their parties and the electorates that put their Members into Parliament, may have ideological or interest group support that influence how they allocate resources. New Zealand usually has a centre-right or centre-left government.

Each government minister has areas of responsibility (portfolios), which often relate to a government department or ministry (known as the 'state sector' or 'public sector'). These public sector agencies provide advice to government ministers and frame and implement their policies. In 2011 there were 38 government departments or ministries (Wilson, 2013), of which the three most powerful were considered to be the Treasury, the Department of Prime Minister and Cabinet and the State Services Commission (Shaw, 2012). However, the power of these agencies is not obvious from public expenditure, with the most funding in 2012/13 allocated to Social Security and Welfare (\$22.7 billion), Health (\$14.5 billion), and Education (\$12.5 billion)(The Treasury, 2013), classifications which align more closely with the budgets and functions of the Ministry of Social Development, Ministry of Health and Ministry of Education, respectively.

It is acknowledged that the determinants of health are influenced by a variety of factors, not limited to the activities of a single or group of government departments or agencies. However, given this paper focuses on resource allocation decisions in health, the rest of this section concentrates on the funding, organisation and roles of different parts of the New Zealand health sector, and in particular the Ministry of Health.

2.3 Health and health care in New Zealand

"The majority of New Zealanders report being in good health"

Ministry of Health (2013b)

In New Zealand in 2011, the period life expectancy was 78.1 years for males, with 8.9 years (11%) spent in poor health, whereas for females it was 82.1 years, with 11.5 years (14%) spent in poor health (Ministry of Health, 2013a). However, the length of time spent in poor health for Māori was almost 1.8 times higher than for non-Māori, with more than half of Māori health loss occurring before middle age.

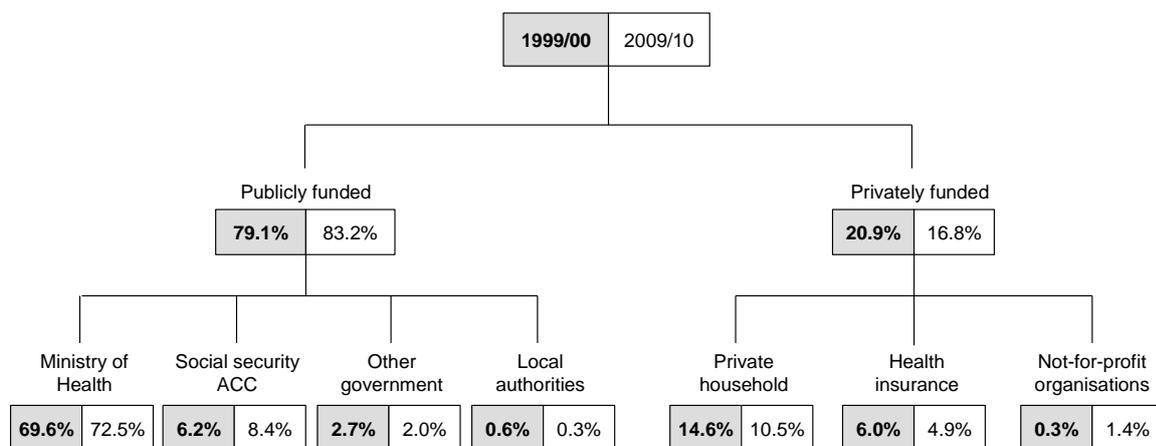
The major diseases contributing to health loss (ie, Disability-adjusted life years, DALYs) in New Zealand are cancers (17.5%) and vascular and blood disorders (17.5%), followed by mental disorders (11%), musculoskeletal disorders (9%) and injury (Ministry of Health, 2013a).

It is argued that the country is undergoing a ‘disability transition’, whereby the epidemiological picture is increasingly dominated by long-term conditions associated with disability across the life course rather than high case fatality. As such, it is thought that interventions and services to address tobacco, diet, physical activity and alcohol, as well as improvements in the safety of existing interventions could significantly improve population health (Ministry of Health, 2013a).

2.3.1 How is it funded?

Private funding of health care dominated in New Zealand up until at least 1925 (Ministry of Health, 2012). It was not until after World War II that public funding comprised 74% of total expenditure and eventually rose to 88% in the early 1980s (Ministry of Health, 2012). In the last three decades public funding of health services has remained relatively stable, fluctuating within 77% to 83% of total expenditure on health (Figure 1). The majority of money for public funding of health services comes from general taxation, with smaller amounts coming from other government agencies (most notably Accident Compensation Corporation – ACC). Further discussion of the government agencies that comprise the New Zealand health sector occurs later in this paper.

Figure 1: Percentage shares of New Zealand’s total current health funding, 2000 and 2010



Source: Ministry of Health (2012)

For the year ending 30 June 2013, public expenditure in New Zealand totalled \$91 billion, with approximately \$14.5 billion (19.9%) spent on health services (The Treasury, 2013). This amounts to approximately 6.8% of gross domestic product (GDP) (The Treasury, 2013). As the market value of all officially recognised goods and services produced within a country in a specific time period, GDP is often used as an indicator of a country's standard of living. The higher a country's GDP per capita, the greater its health expenditure per capita is likely to be compared with other countries.

While there is no agreed optimal level of health care spending relative to GDP, public spending on health in New Zealand is higher than OECD countries with a similar level of GDP (Ministry of Health, 2012). New Zealanders often demand (and enjoy) the variety of health care services provided in countries such as Australia, United Kingdom, Canada and the United States (ranked among the 12 highest countries based on GDP by the World Bank in 2012), even though it is ranked at number 55 accompanied either side by countries such as Qatar, Kuwait, Romania, and Peru (The World Bank, 2012).

2.3.2 How are services organised and delivered?

The organisation of publicly funded health services in New Zealand has been subject to changes over the years in an effort to improve accountability, increase efficiency, and reduce escalating health expenditure (Quin, 2009). These have ranged from the 'purchaser/provider' market-oriented model introduced in 1993, to the devolved district health board (DHB) model that was established by the Labour Government in 2000 and which remains in place today. The New Zealand Public Health and Disability Act 2000 created DHBs for the purposes of making decisions regarding how health services are configured in the areas they service, including which services are to be funded, for whom and where they should be located (Laugesen & Gauld, 2012). These twenty district health boards receive government funding according to a population-based formula that takes into account socio-economic status, ethnicity, and age of their populations (Bryder, 2012).

Currently, the Ministry of Health allocates more than three-quarters of the public funds it manages through Vote: Health to DHBs, who use this funding to plan, purchase and provide health services, including public hospitals and the majority of public health services, within their areas (Ministry of Health, 2013d). DHB Shared Services is funded by the DHBs, and to a lesser extent the Ministry of Health, to undertake collective work on their behalf (Blue, 2014). Previously known as District Health Board New Zealand (DHBNZ), DHB Shared Services manages:

- networks (e.g. DHB Chief Executive Officer and General managers of Planning & Funding meetings),
- employment relations (e.g. wage round bargaining on behalf of DHBs),

- management of national agreements, projects and programmes (e.g. age-related care, community pharmacy services, combined dental and Primary Health Organization (PHO) services agreement) (Blue, 2014).

Most of the remaining public funding channelled through the Ministry (about 19%) is used to fund national services, disability support services, public health services, specific screening programmes, mental health services, elective services, Well Child and primary maternity services, Māori health services and postgraduate clinical education and training.

About 1.3 % (\$191 million in 2013/14) of Vote: Health funding is spent on running the Ministry which supports the wider health sector through activities such as policy advice and monitoring (Ministry of Health, 2013d). Advice from a Ministerial Review Group (MRG) commissioned in 2009 resulted in the addition of a number of other organisations in addition to the Ministry of Health, District Health Boards, and private and NGO providers. Specifically, the review established:

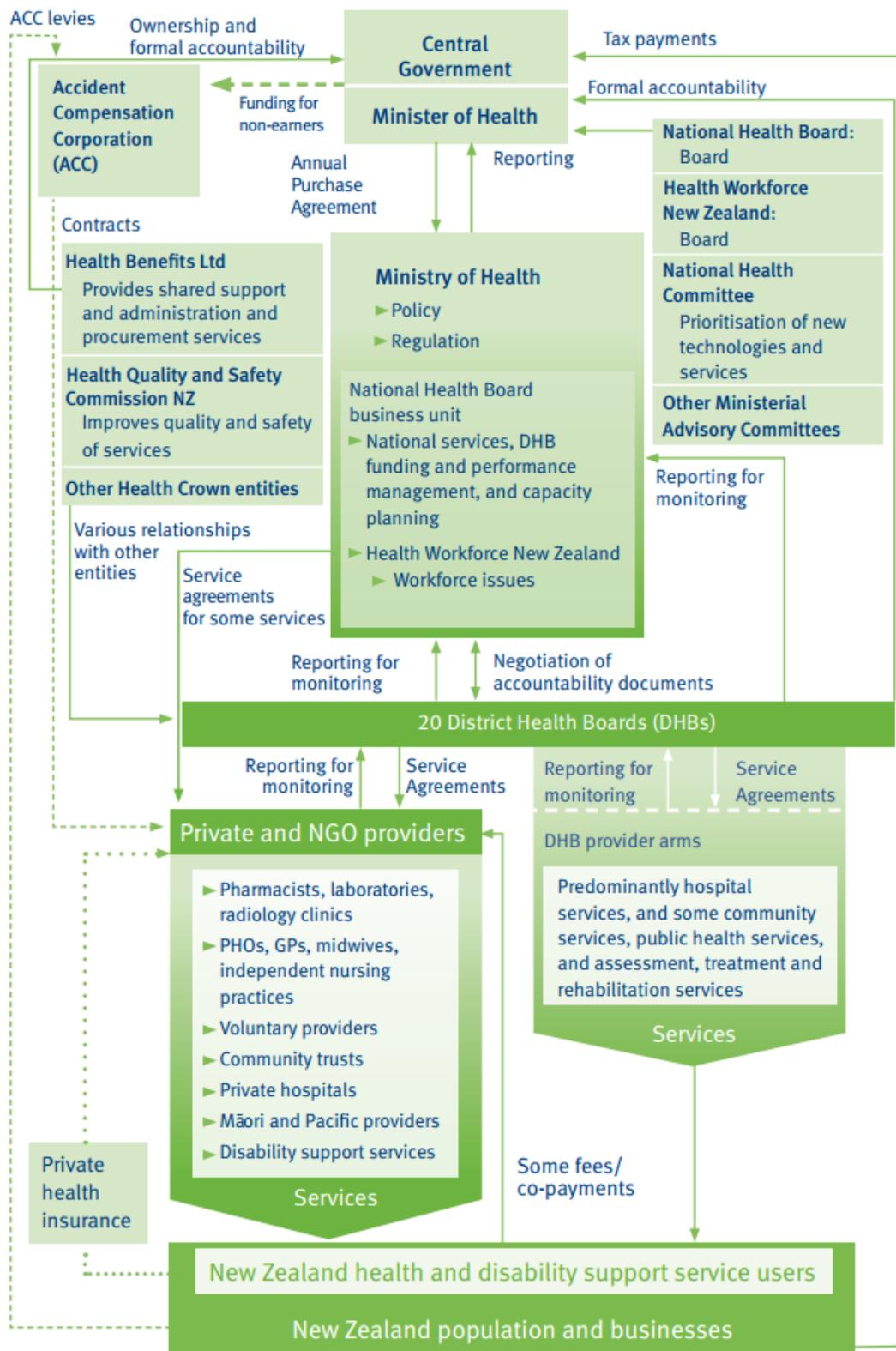
- Health Benefits Limited (HBL), whose goal is to reduce funding for non-clinical services by \$700 million over five years,
- an independent national quality agency, the Health Quality and Safety Commission (HQSC), and
- the reconfiguration of the existing National Health Committee (NHC) for the assessment and prioritisation of all significant new and existing diagnostics and non-pharmaceutical interventions (de Boer, 2011; Gauld, 2011) (Figure 2).

Additionally, the pharmaceutical management agency (PHARMAC), a pre-existing crown entity, took on responsibility for the assessment and prioritisation of medical devices and vaccines.

Previously PHARMAC was only responsible for pharmaceuticals. Each year PHARMAC negotiates its budget with District Health Boards. Also following the MRG review, the planning and funding for national services, strategic planning for IT, facilities and workforce, and monitoring of DHBs, was transferred to a new agency, the National Health Board and Business Unit, established within the Ministry of Health (de Boer, 2011). Within the National Health Board sits the Capital Investment Committee and the National Health IT Board. The former is responsible for a centrally-led process for the national prioritisation and allocation of health capital investment in the health sector in future years. The latter was created to coordinate IT purchasing and planning previously undertaken by 20 DHBs and various Primary Health Organisations (PHOs) (Gauld, 2011). Key to these new arrangements has been increased involvement of clinicians in governance and leadership positions within these agencies to address historical concerns that they had been side-lined in planning and decision-making (Gauld, 2011).

The Accident Compensation Corporation (ACC), while not funded from Vote: Health (instead from Vote: ACC), is still an important part of the New Zealand health and disability sector, providing comprehensive, no-fault personal injury cover for all New Zealand residents and visitors to New Zealand. As with PHARMAC and the NHC, this group also undertakes assessment and prioritisation to determine which health interventions should be publicly funded, though focusing specifically on interventions for injury. Likewise, there are other Ministerial Advisory Committees, including the Advisory Committee on Assisted Reproductive Technology (ACART) which makes recommendations regarding reproductive health technologies and the National Screening Advisory Committee (NSAC) which makes recommendations around screening programmes.

Figure 2: Structure of the New Zealand health and disability sector, 2010



Source: Ministry of Health (2013c)

2.3.3 Who decides what interventions and services should be delivered?

As touched on above, advice and recommendations around which interventions and services should be publicly funded in New Zealand is provided by many different actors. However, the actual decisions following these recommendations are made by a much narrower group, restricted primarily to the Minister of Health, PHARMAC, District Health Boards and ACC.

The Ministry of Health establishes and funds many programmes, including national services, through its business units (e.g. National Health Board Business Unit). While advice, recommendations and subsequent implementation usually come from the business units within the Ministry, funding decisions are primarily made by the Minister of Health. Likewise, while Committees such as the NHC, ACART, CIC and NSAC are advised by groups within the Ministry of Health, and use decision-making criteria, they are only advisory to the Minister of Health and rely on him or her to make a decision. This is in contrast to PHARMAC, District Health Boards and ACC where the assessment, prioritisation and final funding decision around interventions are made within the same entity with Ministerial devolved authority.

What most of these decision-makers do have in common, however, is a specialised group of individuals responsible for funding recommendations about a specific type of intervention. The Minister of Health receives recommendations from ACART that focus on reproductive technologies, from CIC about major capital investments, and from NSAC about new screening programmes. Similarly, in PHARMAC advice, recommendations, and decision-making are restricted to pharmaceuticals, vaccines and medical devices, and in ACC advice and recommendations are restricted to interventions for injury.

The main exceptions are the advice and recommendations from the NHC and various teams in the Ministry of Health, as well as funding decisions made within DHBs. Recommendations from these groups are not restricted to a specific intervention type. The boundaries of their portfolios are often difficult to disentangle from those of others. This is because they provide advice and recommendations on various interventions in an effort to improve both technical and allocative efficiency through both vertical and horizontal prioritisation. These issues are explored further in the next section which is about different prioritisation approaches in New Zealand and how they have evolved.

3 Approaches to Prioritisation and Health Technology Assessment in New Zealand

Approaches currently used in prioritisation and health technology assessment in New Zealand have evolved from health sector reforms over the past two decades. The principles, criteria and processes used by organisations at local, regional and national levels have their origins in the activities of various organisations established since the 1990s and stem from a desire to shift from implicit to explicit approaches to prioritisation at all levels. However, despite the preference for explicit and evidence-based approaches to prioritisation, it appears New Zealand continues to struggle to apply and implement explicit approaches, particularly in horizontal priority setting. There also remains tension between ‘due process’ and ‘technical analysis’ (synonymous with health technology assessment) at all levels of the health system.

3.1 Shifting to explicit prioritisation

In the 1990s, organisations driving the shift from implicit to explicit approaches to prioritisation were the Core Services Committee (CSC) (from 1998 reconfigured as the National Health Committee), the Health Funding Authority (HFA), the New Zealand Guidelines Group (NZGG) and PHARMAC. While the first two entities made significant contributions to the prioritisation agenda, the second two entities were the first to introduce what we now know as the discipline of health technology assessment (HTA) to New Zealand and to provide the information for evidence-based resource allocation.

This was a time when decisions around healthcare spending were centralised. The notion of a list of core publicly funded services was rejected by the CSC in favour of a set of principles to guide decisions around resource allocation, and development of an explicit evidence base to support these decisions (de Boer, 2011). These four principles of effectiveness, equity, acceptability and efficiency were subsequently used by the HFA and Regional Health Authorities for purchasing decisions, with a fifth principle of promotion of Māori health, being added when the principles became used more widely (de Boer, 2011).

In addition to developing principles for prioritising health resources, the CSC also introduced a booking system to replace waiting lists, and worked with RHAs to develop Clinical Priority Access Criteria (CPAC). It was in 1999 that the New Zealand Guidelines Group (NZGG) was established by the CSC to provide the evidence base on what services should be publicly funded and to establish guidelines as the basis for determining access to services. Through systematically reviewing the literature, the NZGG contributed to the development of health technology assessment in New Zealand.

The other major contributor to New Zealand's experience in health technology assessment for prioritisation decisions was PHARMAC. While NZGG focussed primarily on clinical safety & effectiveness via systematic reviews, PHARMAC focussed on economic evaluations relying primarily on inputs from pharmaceutical companies and expert advisors. The former relied on a separate government agency (ie, the CSC) to make prioritisation recommendations and a final decision. Meanwhile, the assessment, recommendations and decisions were made in the same organisation in the case of PHARMAC.

In 1996 the CSC's scope was expanded to include public/population health and with the advent of the Health Funding Authority in 1998, the CSC was renamed the National Health Committee, with a revised terms of reference that included service reviews, and focussed on inequalities, disadvantaged groups and health impact assessment in addition to priority setting.

3.2 Localising prioritisation approaches

When the Labour government came to power in 2000, a shift towards de-centralised decision-making resulted in the creation of DHBs via the New Zealand Health Strategy (NZHS). During the next few years various tools were developed by DHB operational offices to balance national and local priorities and assist their Boards in decision-making, including *The Best use of Available Resources* and the *Service Planning and New Health Intervention Assessment (SPNIA)* frameworks.

3.2.1 The Best Use of Available Resources Framework

A preference for a common approach among individual DHBs initiated a joint DHB/Ministry initiative in 2003 based on the work by the NHC and HFA in the 1990s and developments internationally. This initiative culminated in *The Best Use of Available Resources* (Ministry of Health & DHBNZ, 2005) which aimed to provide “a framework for funders of health and disability services to gather and assess evidence about how services contribute to the principles of effectiveness, value for money and equity, and the achievement of Whānau Ora” (Ministry of Health & DHBNZ, 2005 p iv). The document also aimed to provide “a process that allow[s] decision-makers to make informed judgements about what services to fund, in a transparent and consistent way” (Ministry of Health & DHBNZ, 2005 p iv). The framework consisted of three phases; identification, analysis, and decision. This is not dissimilar to the process used by agencies such as the NHC and PHARMAC today.

The *identification phase* of prioritisation concerns the determination of what services the framework will be used to analyse.

The *analysis phase* used five principles to guide the evaluation and collection of evidence, three of which originate from the work of the CSC (effectiveness, equity, efficiency), and two which appeared in place of acceptability (Whānau Ora and costs and constraints). Each principle guides the analysis:

- Effectiveness: How effective is the service in improving health status compared to an alternative?
- Equity: How does the service address equity, that is reduce inequalities in health and independence?
- Efficiency: Does the service provide value for money compared to the alternatives?
- Whānau ora: How does the service contribute to the achievement of whānau ora?
- Costs and constraints: What will the service cost? Are there any constraints that might limit or prevent the implementation of this service?

(Ministry of Health & DHBNZ, 2005)

The *decision phase* is where decision-makers chose how to allocate new resources or alter existing patterns of resource allocation

The framework was piloted in five DHBs and by one Ministry of Health funder. The tool was used to:

- Guide allocation of an annual contestable fund,
- Choose between two competing services for a specified quantum of funding,
- Choose what services should be included in a contract with a local provider (two sites), and to
- Identify areas for possible disinvestment

However, only three of the sites completed their projects in the time available, and the other two did not complete (one site had to pull out due to time constraints). The tool was used against a background of competing demands on time, political context (where things were pre-prioritised), and in an environment with limited evidence and information available on services and interventions (National Health Committee, 2004). In this context, the evaluation identified that the framework had the following strengths:

- Could be adapted to different decision-making contexts, rather than a rigid formula to follow,
- Encouraged transparency and consistency,
- Principles in the analysis phase were really useful, but framing of the right prioritisation question needs to be emphasised,
- Checklist of sample questions to ask when considering each principle was particularly helpful, as it provided clear examples of how to translate these principles into practice,

And the following weaknesses:

- Most suitable for straightforward “A vs B” prioritisation decisions: making a clear choice between two (or more) competing options rather than other types of prioritisation decisions.

- Does not assist with how to make decisions around the “core” group of services currently funded and only empowers prioritisation at “the margin”. Perception that identification of items will always be politically driven.
- Differing interpretations of equity and Whānau ora has the potential to focus on certain groups at the expense of others – for instance equity for people with disabilities and cultural considerations of other ethnic groups, not just Maori.
- Social, political and acceptability considerations of a decision to the community should be shifted from the *decision phase* of the framework to the *analysis phase* because it needs to be considered by analysts in as much depth and detail as elements like effectiveness and equity.
- Amount of time involved in using the framework in full was probably unsustainable in the long term, support from central government was desired particularly to develop the technical expertise required in assessment.
- Presentation of the framework needed to vary depending on the stakeholder (e.g. analyst, clinician, decision-making).

3.2.2 Service Planning and New Health Intervention Assessment (SPNIA) framework

In parallel to the development and trial of *The Best Use of Available Resources framework*, the *Service Planning and New Health Intervention Assessment (SPNIA) framework* for collaborative decision-making was established by the National Health Capital Committee, sector clinicians and the NHC to address the shortcomings of the DHB system. The framework was governed by a joint Ministry/DHB group known as the National Service and Technology Review (NSTR) Committee, with secretariat support and some funding and advice supplied by the Ministry, but responsibility for the development and submission of business cases residing with DHBs. These business cases are not dissimilar to the referrals templates used by the NHC today (<http://nhc.health.govt.nz/referrals>), and combined with the *Best use of Available Resources framework*, the *SPNIA framework* has contributed to current horizon scanning and health technology assessment processes used in New Zealand, as will become clearer in the next section.

3.3 Implementing prioritisation decisions

During the 1990s and early 2000s New Zealand made progress towards explicit prioritisation approaches at local, regional and national levels. However, implementing the decisions following such approaches remained a major barrier. Following the global financial crisis in 2007-2008, increased urgency was placed on reducing government debt and improving economic growth by the newly elected National Government. In line with the Government’s manifesto, the Minister of Health

commissioned a Ministerial Review Group (MRG) in 2009 to provide advice on the quality and performance of the health system (Ministerial Review Group, 2009). The review found that:

”despite the best efforts of those involved, [the SPNIA] approach has struggled to address the issues raised by the NHC. Shortcomings arise in part because of the way the framework is governed and supported and in part because of the lack of influence over the funding decisions taken in response to its recommendations. For example, an individual DHB is still able to offer a new intervention, with the unavoidable risk of flow on to other DHBs, even if everyone else involved in the process considers that intervention too experimental and not clearly cost-effective”

(Ministerial Review Group, 2009 p 29).

To remedy the situation, the MRG considered that a single national agency separate from both DHBs and the Ministry was essential. It proposed that the NHC itself assume this role of assessing and prioritising all significant new diagnostic procedures and treatment interventions. In so doing, the NHC was to be strengthened to ensure it had capability to conduct evidence-based assessment of the costs and benefits of new and existing procedures and interventions.

The NHC would assess new interventions submitted by the Minister, the Ministry, the NHB or DHBs (either acting on their own or as sponsor of requests from other health organisations) for public funding. The budget for the NHC would be determined by the Minister as part of the budget process and would take into account savings from discontinuing existing interventions. The actual budget could then be passed through to the relevant funder (DHBs, NHB or the Ministry) as final decisions were made.

The MRG also recommended that PHARMAC assume responsibility for a budget for medical devices from DHBs, and then apply the same processes to these devices as it currently does for hospital pharmaceuticals.

3.4 The prioritisation and assessment landscape in 2014

By 2011 the NHC had been re-configured and as of 2014 it continues to build the capability to conduct evidence-based assessments. However, prioritisation and implementation following these assessments appears to remain slow. There have also been decisions since the 2009 MRG review which initial analysis suggests has had the unforeseen impact of stagnating the expertise and engagement of the wider health sector in health technology assessment and prioritisation in New Zealand (detailed below). Likewise, challenges are emerging as the implications of various decisions are realised by those undertaking this work. These issues have meant that many of the limitations

outlined by the previous NHC in the early 2000s, and again by the MRG nearly ten years later, may continue to exist in 2014.

3.4.1 Scope and approach of various actors

As of February 2014, in addition to the Ministry of Health and 20 District Health Boards, there is one agency and four committees with a role in the assessment and prioritisation of health resources in the New Zealand health sector (Table 1). Pharmaceuticals, vaccines, and medical devices fall within the purview of PHARMAC, procedures for assisted reproduction are addressed by ACART, screening programs are the responsibility of NSAC, and capital investments are covered by CIC. Assessment and advice on all other programmes, services, and health interventions is the responsibility of the NHC. Though, given the NHC's broad terms of reference, it would be within their scope to look at anything unable to be classified as a pharmaceutical, including procedures for assisted reproduction and screening programmes. However, it is not mandatory for all new interventions to be reviewed by the NHC, and DHBs and the Ministry of Health also do their own work in this space.

It is clear from comparison of the approaches used by the groups involved in health technology assessment and prioritisation that they have been influenced by the philosophical and political developments of the last two decades. In most instances, the principles of effectiveness, equity, efficiency and acceptability, developed initially by the CSC, and added to over the years by other groups, remain in some form, though their interpretation may have changed over time. It is also evident that the number of criteria and/or principles has grown, and that it is possible that many of the criteria may overlap – leading to potential 'double counting' (or implicit weighting) if one were to take a purely technical approach. When one considers other aspects of 'good evaluation criteria', it is also evident that very few of these sets of criteria are up to standard (detailed elsewhere).

Table 1: Actors involved in the assessment and prioritisation of health resources in New Zealand, 2014

Name	Role and Scope	Approach
Ministry of Health	Established in 1993 (from the Department of Health which had existed since 1903). Most business units provide recommendations to the Minister around the funding and implementation of different programmes and interventions that do not clearly fall within the scope of PHARMAC or the Committees below.	Policy problems are framed using a variety of different frameworks and analysts choose the framework that best suits the problem that needs to be assessed. The approach tends to be more about ‘due process’ than ‘technical analysis’, with sufficient information provided for the Minister to make a decision. Implementation of the decision is then passed back to the Ministry of Health to work out with DHBs.
Pharmaceutical management agency (PHARMAC)	Established in 1993, with gradual extension of scope in recent years to include vaccines and medical devices as well as pharmaceuticals.	<p>PHARMAC uses nine Decision Criteria to help it make funding decisions. A wide range of information is considered under these criteria. PTAC, the Pharmacology and Therapeutics Advisory Committee, gives PHARMAC advice on whether new medicines should be subsidised based on these criteria and, if so, what priority they should be given. The information to support an assessment against the criteria comes from pharmaceutical companies, clinicians, the public and their own HTA analysts. The nine criteria are:</p> <ol style="list-style-type: none"> 1. The health needs of all eligible people; 2. The particular health needs of Māori and Pacific peoples; 3. The availability and suitability of existing medicines, therapeutic medical devices and related products and related things; 4. The clinical benefits and risks of pharmaceuticals; 5. The cost-effectiveness of meeting health needs by funding pharmaceuticals rather than using other publicly funded health & disability support services; 6. The budgetary impact (in terms of the pharmaceutical budget and the Government’s overall health budget) of any changes to the Schedule; 7. The direct cost to health service users; 8. The Government’s priorities for health funding, as set out in any objectives notified by the Crown to PHARMAC, or in PHARMAC’s Funding Agreement, or elsewhere.

Name	Role and Scope	Approach
		9. Such other criteria as PHARMAC thinks fit.
National Health Committee (NHC)	Evolved from the Core Services Committee (CSC) and was reconfigured in 2009 following the MRG Review to look at all new and existing diagnostic and treatment services.	<p>The National Health Committee has eleven criteria and receives assessment reports prepared by a secretariat within the Ministry of Health to help evaluate whether an intervention should be publicly funded or not. The assessment reports are organised into four HTA domains and address questions to elicit information against each of the criteria. The domains are: Clinical safety & effectiveness, Cost-effectiveness, Societal & ethical issues, and Feasibility of Adoption. The eleven criteria are:</p> <ol style="list-style-type: none"> 1. Policy congruence 2. Health and independence gain 3. Equity 4. Affordability 5. Cost-effectiveness 6. Risk 7. Clinical safety and effectiveness 8. Materiality 9. Feasibility 10. Acceptability 11. Other criteria as the NHC sees fit
District Health Boards	Established in 2000 by the Health & Disability Strategy to make decisions regarding how health services are configured, including which services are to be funded.	The assessment and prioritisation approach is different in different DHBs. While some DHBs, such as Auckland, have their own assessment and prioritisation group (in this case the Auckland Clinical Practice Committee), others do not have similar resources and continue to prioritise on the basis of what was funded historically, instructions from central government, and/or lobbying by their own clinicians and/or patients. It was envisaged that the NHC might support DHBs to make decisions through the establishment of regional prioritisation networks (RPNs), however the establishment of these is still in progress.
National Screening Advisory Committee (NSAC)	Established following an NHC recommendation in 2002 to provide independent advice to the Director-General of Health on health and disability screening policy, practice and research,	<p>Eight criteria recommended by the NHC in 2003 to guide the assessment of the evidence to assist with making decisions about whether a screening programme should be established or an existing programme altered:</p> <ol style="list-style-type: none"> 1. The condition is a suitable candidate for screening. 2. There is a suitable test. 3. There is an effective and accessible treatment or intervention for the condition identified through early detection.

Name	Role and Scope	Approach
	including cancer screening and genetic screening (National Screening Advisory Committee, 2014).	<ol style="list-style-type: none"> 4. There is high quality evidence, ideally from randomised controlled trials, that a screening programme is effective in reducing mortality or morbidity. 5. The potential benefit from the screening programme should outweigh the potential physical and psychological harm (caused by the test, diagnostic procedures and treatment). 6. The health care system will be capable of supporting all necessary elements of the screening pathway, including diagnosis, follow-up and programme evaluation. 7. There is consideration of social and ethical issues. 8. There is consideration of cost-benefit issues.
Advisory Committee on Assisted Reproductive Technology (ACART)	ACART is established under section 32 of the Human Assisted Reproductive Technology (HART) Act 2004 to provide the Minister of Health with advice on aspects of, or issues arising out of, kinds of assisted reproductive procedure or human reproductive research, including whether any established procedure should be modified or should cease to be an established procedure.	<p>ACART develop guidance for fertility services to follow and determine what can and cannot be provided in New Zealand through decisions around what procedures appear on the list of ‘established procedures’. These decisions are guided by the principles of the HART Act, which address:</p> <ol style="list-style-type: none"> 1. the health and well-being of children born as a result of the procedure 2. the preservation and promotion of human health, safety and dignity of present and future generations 3. the health and well-being of women involved in the procedure 4. informed choice and informed consent is essential prior to all procedures 5. donor offspring should be made aware of their genetic origins and be able to access information about those origins 6. the needs, values and beliefs of Māori should be considered and treated with respect 7. the different ethical, spiritual, and cultural perspectives in society should be considered and treated with respect
Capital Investment Committee (CIC) within the National Health Board	Established following the 2009 MRG Review, CIC is responsible for a centrally-led process for the national prioritisation and allocation of health capital investment in the health sector in future years.	<p>The CIC uses seven criteria for making its decisions:</p> <ol style="list-style-type: none"> 1. Policy congruence 2. Health gain 3. Equity 4. Affordability 5. Sustainability 6. Cost-effectiveness (Value for Money) 7. Risk

There have also been actions in recent years which have potentially stunted the evolution of health technology assessment and prioritisation, and these are explored further in the next section.

3.4.2 Unforeseen impacts

This section is tentative and incomplete at this stage but will cover and provide evidence to support, among other things:

- *Demise of NZGG and NZHTA undermining assessment capacity in NZ as resources are dispersed throughout NZ and expertise is disconnected from current assessment efforts. Since 2009, New Zealand's capacity and capability in health technology assessment has been significantly reduced with the disbandment of both the New Zealand Guidelines Group (NZGG) and Otago University's New Zealand Health Technology Assessment (NZTA) group, both of which provided assessment support to the Ministry of Health and wider health sector.*
- *Horizontal prioritisation is a particularly desirable outcome, whereby the Minister, Ministry and DHBs would like to be able to prioritise across diseases and services, not just within them. This will be difficult and potentially inefficient for as long as the assessment and prioritisation of different 'intervention types' is undertaken by different actors. For instance, currently it is not possible to prioritise investment in a new procedure against a new pharmaceutical, even if spending the same amount on the procedure would result in greater incremental benefits than the pharmaceutical.*
- *Artificially distinguishing between procedures, screening programmes and medical devices is unworkable in practice. This is because in order to assess a procedure that happens to use a medical device, one needs to assess the medical device. Likewise, one cannot assess a screening programme without consideration of the effectiveness of subsequent interventions for treating the identified condition (whether this be a drug or some other treatment). The NHC appears to recognise this with their focus on 'pathways/models of care' and 'mega-analyses' – but it remains unclear how the findings from this work will inform other assessment and prioritisation groups that actually have the mandate in these different areas (eg, PHARMAC, Ministry of Health, DHBs).*
- *The WHO definition of medical device, which is the definition used internationally, includes diagnostic tests. This is a problem as it means that some medical devices will fall within the scope of PHARMAC, the NHC and ACART. These, along with wider definitional ambiguities, aren't necessarily problems, but are definitely things that require attention.*

3.4.3 Implementation remains elusive

- *This section will look at the challenges still faced around implementation – specifically by the NHC, who still do not hold a budget and while pursuing some innovative approaches to ensure adoption, may still struggle to ensure implementation.*

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