

# **Māori Health Indicators**

A background paper for the project ‘Action oriented indicators for health and health systems development for indigenous peoples in Canada, Australia and New Zealand’

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## **1.0 Executive summary**

Robust Māori health indicator sets that are relevant and meaningful at the national, regional and local levels are a necessary foundation for the most effective planning, policy development, purchasing, service delivery and monitoring for improved Māori health outcomes. This paper outlines the health sector context to Māori health indicator set development, and describes principal Māori health indicator sets with a focus on Māori participation in indicator selection and development, the extent to which indicator sets reflect Māori concepts of health, and how indicators are being used. The paper draws on local literature and the results of interviews with thirteen key informants representing a range of health sector organisations at the national, regional and local levels.

Within the health sector a range of Māori health monitoring frameworks and indicator sets are in place that have largely been determined in a top down way with limited Māori input. It is therefore not surprising that these indicator sets are biased towards national and regional level information requirements, and that there is poor access for Māori stakeholders to information for local planning and decision-making. Further, it is apparent that information collection is largely accountability driven, and that current indicator sets are limited in their capacity to capture the state of Māori health in Māori terms.

Māori health monitoring frameworks that draw on known Māori models and are populated by a mix of universal and Māori specific indicators will be necessary to ensure that indicator sets reflect Māori understandings of health and can provide a comprehensive empirical base for planning and delivery of health services for Māori. This will rely upon strong Māori leadership and participation in monitoring framework and indicator set development.

## **2.0 Introduction**

Māori, the indigenous peoples of New Zealand, comprise 14.7% (526,281 people) of the total New Zealand population and are growing as a proportion of the population (Statistics New Zealand 2003). Māori vitality continues to be expressed through a

range of Māori driven initiatives, such as kōhanga reo (Māori language immersion pre-schools) and kura kaupapa Māori (Māori language immersion schools), which aim to improve Māori educational attainment and strengthen cultural integrity. The numbers of Māori children and youth who speak Māori have increased in the previous twenty year period (Te Puni Kokiri 2001), levels of Māori participation in tertiary education are higher than ever before (Ministry of Education 2005), and there is a strengthening presence of Māori within the professional workforce (Department of Labour 2005).

However, despite significant gains Māori remain marginalised in social, economic, cultural and political terms within New Zealand society. The extent of marginalisation is reflected in wide, and in some instances increasing, disparities between the state of Māori and non-Māori health (Ajwani, Blakely et al. 2003). While the major determinants of Māori health lie outside of the health sector, there is much that can be done within the sector to contribute to health status equity between Māori and non-Māori particularly in light of international and local evidence of ethnic disparities in healthcare (Kressin and Petersen 2001; Tukuitonga 2002).

A strategic approach to Māori health development, which enables informed planning, policy development, purchasing, service delivery, and monitoring will rely on the use of Māori health indicators that are able to accurately gauge the health and well-being of Māori. This paper is a background document for the project ‘Action oriented indicators of health and health systems development for indigenous peoples in Australia, Canada, and New Zealand’. The goal of the overall project is to conceptualise and pilot a health indicator development cycle that will contribute to effective health information, surveillance, and monitoring systems that contribute to improving the health of indigenous peoples.

This paper briefly outlines the health sector context to Māori health indicator set development, and then describes principal Māori health indicator sets with a particular focus on Māori participation in indicator selection and development, the extent to which indicator sets reflect Māori concepts of health, and how indicators are being used.

The paper draws primarily on local literature and the results of key informant interviews. Open-ended key informant interviews were carried out either face to face or by telephone with thirteen participants using an interview schedule. Interviewees were selected who were considered to be rich sources of information regarding the development and use of national, regional and/or local Māori health indicators. The key informant group included representation from a range of health sector organisations including the Ministry of Health, District Health Boards, Primary Health Organisations, Māori providers, and universities.

### **3.0 Māori concepts of health<sup>1</sup>**

The 1988 Royal Commission on Social Policy, guided by Māori expertise, identified Ngā Pou Mana (support structures) – four pre-requisites of Māori health (Henare 1988). The pre-requisites are: whanaungatanga - kinship relationships; taonga tuku iho – cultural heritage; te ao tūroa – environment; and, tūrangawaewae – land base. These ‘pre-requisites’ are among the factors identified by a number of writers as central to a secure Māori identity and wellbeing (Durie 1998).

The pre-requisites can be considered to underpin Māori understandings of health. Te Whare Tapa Whā (Durie 1998) is the most widely quoted Māori model of health. The model describes good health as the balance between four interacting dimensions: te taha wairua –spirituality; te taha hinengaro – thoughts and feelings; te taha tinana – the physical side; and, te taha whānau – the extended family. Health is likened to the four walls of a house, each wall representing one of the dimensions and each being necessary to ensure the stability of the house.

There are other models of Māori health, such as Te Wheke (Pere 1984). The common features of Māori models of health are that health is described as holistic in nature, locating individuals within the family context, recognising determinants of health (spiritual, cultural, social, and biological), emphasising continuity between the past and the present, and viewing good health as a balance between interacting variables. There is concern for ensuring access to cultural resources, and a secure Māori identity is

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<sup>1</sup> This section is adapted from Ratima, M. (2001). *Kia uuruuru mai a hauora: being healthy being Maori, conceptualising Maori health promotion.* Department of Public Health. Dunedin, Otago University: 305.

central to good health. In comparison to Western understandings of health, Māori concepts of health incorporate a spiritual dimension and a focus on cultural integrity.

The main criticism of Māori models of health are that they do not take account of the diverse realities of Māori. That is, there are many Māori who are disconnected from iwi/tribal society. Māori models of health imply that those Māori who do not have access to Māori resources, such as tribal land, kinship networks and the Māori language, cannot expect to achieve good health. The critical point, however, is more to do with the form that good health might take. The pre-requisites and the models of Māori health together express what it is to achieve good health as Māori, and critical to achieving good health as Māori is access to Māori resources and thereby a secure Māori identity. Without access to Māori resources it would be difficult to achieve a secure Māori identity and, therefore, to be well as Māori. However, that does not exclude individuals from achieving good health as measured by other standards (Ratima 2001).

#### **4.0 The evolution of Māori health indicators**

Māori have repeatedly expressed concerns that while universal health indicators are important, they are limited in their capacity to capture the state of Māori health according to Māori concepts of health (Durie 1994; Pomare, Keefe-Ormsby et al. 1995). Generally indicators have focussed on the physical dimension of health, and to a lesser extent mental health, with other dimensions of well-being neglected. Other specific concerns are that universal indicators are disease rather than wellness centred, relate to hospital activities, fail to capture community-based activities, and have been developed for specific purposes as opposed to providing a comprehensive picture of the state of Māori health (Durie 1998). There are also concerns in relation to the quality of ethnic data. It is well recognised that due to inconsistencies in the collection and reporting of ethnic data, Māori are undercounted in health sector data. However, since 1995 it has been obligatory to record ethnicity on death certificates, and in 2004 the Ministry of Health introduced the Ethnicity Data Protocols (Ministry of Health 2004a). The protocols outline procedures for standardising collection, recording and output of ethnic data. It is intended that the protocols will be implemented across the entire sector, and they are designed specifically for collectors of ethnicity data (e.g. health professionals, clerks and administrators), users of ethnicity

data (e.g. for service planning, quality control, development of funding formulas) and health information software developers. The protocols are intended to contribute to the achievement of more accurate and complete ethnicity data in the sector.

There are compelling reasons for developing indicator sets that are better able to capture the state of Māori health and therefore provide quality data. The reasons include enabling informed planning, policy development, purchasing, and service delivery and the monitoring of health sector performance in meeting Māori health needs and addressing inequalities (Robson and Reid 2001). Importantly, there is also a Treaty of Waitangi rationale. The Treaty was signed between Māori and the British Crown in 1840 and reaffirmed some existing Māori rights, guaranteed the protection of specific Māori interests and legitimated the right to govern of the New Zealand Government (Durie 1998). The Treaty places a responsibility on the Government to ensure that health sector data are collected and reported in such a way as to benefit Māori health (Ministry of Health 2002a).

Māori have advocated for the development of broader indicators that complement universal indicators and are better able to capture what Māori consider to be positive health outcomes. Te Ara Ahu Whakamua (Te Puni Kokiri 1993), the Māori Health Decade Conference, identified preferred Māori health indicators which were linked to social (e.g. educational achievement and reduced crime rate), economic (e.g. value of resources in Māori ownership and economic success), cultural (e.g. Māori language usage) and political (e.g. Māori in positions of influence) determinants of health.

## **5.0 Key health sector structures**

The New Zealand Public Health and Disability Act 2000 defines the health sector structure, and provides the legislative framework for Māori health development within the sector. Section 3 (1) (d) of the Act specifically requires the facilitation of “...access to, and the dissemination of information to deliver, appropriate, effective, and timely health services, public health services and programmes, both for the protection and the promotion of public health, and disability support services...”. The Act contains a number of more general provisions that relate specifically to Māori.

Key health sector structures involved in Māori health indicator development and use are the Ministry of Health, district health boards (DHBs), Māori co-purchasing organisations (e.g. MAPO), Māori development organisations (MDOs), hospitals, primary health organisations (PHOs) and Māori health providers.

The Minister of Health has responsibility for developing the overall strategy for the health sector and also manages funding for some services. In terms of Māori health, the major role of the Ministry of Health is to advise the Minister of Health as to policy that will meet the Government's objectives for Māori health. The objectives are most comprehensively stated in He Korowai Oranga (Ministry of Health 2002a), the Māori Health Strategy. The Ministry of Health includes Te Kete Hauora, the Māori Health Directorate, as one of its nine directorates. The Māori Health Directorate is headed by the Deputy Director General Māori Health and is responsible for providing advice to the Government and liaising with other directorates in relation to Māori health (King 2000). Te Puni Kōkiri, the Ministry of Māori Development, has a role in liaison with and monitoring the performance of other government agencies, including the Ministry of Health, in service provision to Māori.

The New Zealand Health Information Services (NZHIS) is located within the Ministry and has responsibility for the collection, processing, maintenance and dissemination of health data. NZHIS functions include health information analysis, performance monitoring, and advice with regard to data usage (New Zealand Health Information Service 2005). Public Health Intelligence (PHI) is located within the Public Health Directorate of the Ministry of Health. PHI is responsible for monitoring the health of the population by analysing health outcomes, risks and determinants over time and examining inequalities in health across regional boundaries and between various population groups (Ministry of Health 2005a).

Following the 2000 reforms, the 21 DHBs were established with the primary function of meeting the health needs of those living within their district through purchasing health services on behalf of the Crown. The reforms aimed to move the sector towards a more planned and community-oriented system, and gave DHBs responsibilities in primary, secondary and tertiary care (Ashton 2005). The inaugural DHB elections were held in 2001. DHBs have up to 11 members, seven of whom are

elected. Up to an additional four members can be appointed by the Minister of Health. The Minister, in making appointments to the DHBs must seek to ensure that Māori Board membership is proportional to the number of Māori in the resident population of the DHB's region, and that there are at least two Māori Board members.

The Government's objectives for Māori health are reflected in funding agreements with DHBs. The DHBs are responsible for monitoring the service agreements with a range of providers (e.g. hospitals, PHOs, Māori providers), and as well deliver some health services.

Māori co-purchasing and Māori development organisations work with DHBs and Māori and mainstream providers to facilitate improved funding and delivery of services to Māori .

The New Zealand Primary Health Care Strategy (King 2001) was released in February 2001. PHOs are the local structures, funded and monitored by DHBs, that largely carry out work to achieve the Strategy's objectives. PHOs were first established in July 2002, and by April 2005, 90% of the population was reportedly covered by 77 PHOs (Ministry of Health 2005b).

The role of PHOs is to deliver a range of primary health care services to enrolled populations, essentially general practice and health promotion services, and services to improve access for high need groups. PHOs have been funded according to a formula that reflects the relative need of the enrolled population, taking account of age, sex, deprivation level and ethnicity. Additional 'Services to Improve Access' (SIA) funding has been available for PHOs that service high need populations, which includes PHOs with an enrolled population of over 50% Māori (Ministry of Health 2003).

The 1996 Coalition Government Agreement on Health required progress in terms of Māori provider development. As a consequence of the Agreement the Māori Provider Development Scheme was introduced in 1997. The Scheme allocates \$10 million per year to Māori provider and workforce development. The numbers of Māori providers delivering a range of primary health care services have increased from approximately

23 in 1993 to around 286. However, there are relatively few Māori health providers throughout the country and most Māori have no choice but to access mainstream providers, particularly for secondary health care. The Scheme is being reviewed in 2005.

## **6.0 Māori health information**

The Ministry of Health's Statement of Intent (Ministry of Health 2005c) identifies the importance of the collection, analysis and communication of information to promote evidence-based decision making. The New Zealand Health Strategy states the need for improved access to "...relevant information to improve decision making at both the health and disability sector level and at community level, enabling a greater role in decision making by communities" (King 2000). He Korowai Oranga (Ministry of Health 2002a) specifically identifies improving Māori health information as a key Government objective. This objective is supported in a range of other Government health strategy documents including the strategic information document *From Strategy to Reality – the WAVE Report* (The WAVE Advisory Board 2001) and the *Primary Health Care Strategy*.

The majority of health sector data collection occurs in one two ways, through service or patient-based information collection and through the New Zealand Monitor health survey programme.

Service-based data are collected through primary, secondary and tertiary health services. The Ministry of Health's *WAVE Report* (Ministry of Health 2001) has provided a plan for development of service or patient based information systems. This information focuses on clinical care outcomes, inputs (resources provided or consumed) and throughputs (volumes and times). While data collected from service or patient based information sources is essential for an evidence-based approach, a sole reliance on this type of data are limited as it does not provide information in relation to unmet need and broader health outcomes (Ministry of Health 2002b). Service-based data are currently most comprehensively collected and reported in relation to secondary services. The *WAVE Report* noted concerns that while primary health care providers are collecting substantial amounts of data, ethnicity data and some important health status data are not routinely collected. Further, there is a lack of consistency in

the type of database information is stored on, the extent to which providers mine data sets, and limited feedback from data review. The Report recommended reliable ethnicity data collection, annual auditing of ethnicity data, and strengthening Māori information technology workforce capacity.

The New Zealand Health Monitor is a Ministry of Health administered integrated population health survey programme carried out over a 10 year cycle. It is intended that regular surveys will be carried out with a 2-10 year frequency. Survey areas are planned to include general health, age-specific health, mental health, adult nutrition, child nutrition, health behaviour, and CATI rapid response surveys in specific areas of need. Recent or pending surveys in these areas include the New Zealand Health Survey, the Mental Health Epidemiology Survey, the National Drug Survey and the Fourth Form Smoking Survey. Data in relation to secondary services is more readily available through other sources, so the Health Monitor's focus is at the primary services level. This includes information in relation to coverage, responsiveness and cost (Ministry of Health 2002b).

Government documentation on the New Zealand Health Monitor makes a commitment to recognise Māori as Treaty partners, to consult with Māori in the design, fielding and analysis of component surveys, and to produce information that is relevant to Māori. However, despite this stated commitment the Health Monitor is primarily a tool to inform health sector strategic planning at the national level, rather than local or iwi levels, due to sample size issues which limit the ability to draw reliable estimates at district and local levels (Ministry of Health 2002b).

Other regular surveys that sit outside the Health Monitor are also useful sources of health data. One example is the Quality of Life Survey which measures the quality of life of residents in 12 New Zealand cities/districts as well as a sample living outside of the 12 cities/districts. The survey uses 56 quality of life indicators, which include measures concerned with knowledge and skills, economic development, safety, the built environment, social connectedness and civil and political rights. The survey aims to measure the quality of life and change in social conditions in New Zealand's large urban areas. The survey has been carried out on a two-yearly basis since 2000 with six cities/districts participating in the inaugural survey (Gravitas Research and Strategy Limited 2005).

The Ministry of Social Development (MSD), since 2001, has reported on indicators across ten domains to provide a picture of the wellbeing and quality of life of New Zealanders. The ten indicators are; social connectedness, safety, physical environment, leisure and recreation, cultural identity, civil and political rights, economic standard of living, paid work, knowledge and skills, and health. The five health specific indicators included in the Social Report 2005 (Ministry of Social Development 2005) are health expectancy, life expectancy, suicide, the prevalence of cigarette smoking, and obesity. Information from the report is examined by ethnicity and can be used to measure disparities across sectors.

## **7.0 Māori health indicator sets**

There is no universally agreed upon national Māori health monitoring framework and indicator set in use. The approach taken in this paper is to discuss indicator sets in relation to key national, regional and local health sector structures. Indicator sets are discussed in terms of Māori participation in indicator development, the extent to which current indicators reflect Māori concepts of health, and the way in which the derived information is used. The discussion draws primarily on the literature and findings from the key informant interviews.

### **7.1 Ministry of Health**

At the national level, key informants noted that there are a multitude of potential Māori health indicators and a variety of relevant criteria for indicator selection within and outside of the health sector. National level Ministry of Health indicator sets are aligned to a range of core strategy documents and therefore key policy areas.

The Ministry of Health's Statement of Intent is the Ministry's core accountability document. The 2005/2006 Statement of Intent (Ministry of Health 2005c) has identified the enhancement of performance measures as a significant area of work required to enhance a robust indicator system, consistent with the Ministry's responsibility for health system performance monitoring. The Statement of Intent identifies societal outcomes necessary for the achievement of healthy New Zealanders

– better health, reduced inequalities, better participation and independence, and trust and security. A number of outcome indicators are aligned to each societal outcome. Key Māori health headline summary indicators include: differences between Māori and non-Māori life expectancy, independent life expectancy, health expectancy, infant mortality, vaccine-preventable disease, cervical and breast cancer mortality and staging; expenditure for Māori; and, Māori health workforce development.

Māori population health profile indicators have been developed to provide an indication of the health of Māori in relation to key policy areas as outlined in the New Zealand Health Strategy. These indicators were not designed to reflect Māori concepts of health, but rather, with input from the Māori Health Directorate, for ethnic comparative purposes. The report *An Indication of New Zealanders' Health (Public Health Intelligence 2004)* regularly tracks progress on over seventy universal population health indicators and, for almost all indicators, data are analysed by Māori ethnic group. Indicators are divided into the following sets: socio-economic determinants of health (e.g. unemployment and population with low income), risk factors (e.g. dietary fat intake and alcohol consumption), protective factors (e.g. physical activity and vegetable and fruit consumption), health outcomes for whole of life (e.g. health expectancy and avoidable mortality) and key life-cycle stages (e.g. children 5-14 years unintentional injuries), and, infectious disease outcomes (e.g. rheumatic fever and sexually transmitted diseases).

The Health and Independence Report (Ministry of Health 2003) provides information on progress towards implementing the New Zealand Health Strategy, drawing on data presented in the publication 'An Indication of New Zealander's Health'. The latter reports on indicators of overall health system achievement, including high level outcome measures by ethnicity (e.g. life expectancy at birth, disability requiring assistance, independent life expectancy, avoidable hospitalisation, and avoidable death) and indicators specific to certain diseases or risk factors by ethnicity. Māori specific health indicators used in the report include; Māori membership of DHB boards, formal partnerships between DHBs and Māori, number of Māori providers, Māori representation in the health workforce, Māori access to healthcare, and, expenditure on health services for Māori.

He Korowai Oranga (Ministry of Health 2002a), is the overarching strategic framework for Māori health and following consultation with Māori has been proposed by the Ministry as the Māori health monitoring framework. The aim of the Strategy is whānau ora (Māori families supported to achieve their maximum health and wellbeing). He Korowai Oranga identifies a range of measures of Māori health that include universal indicators (mortality, morbidity and disability) as well as broader indicators. The broader indicators are measures of socio-economic status, environmental factors, participation in society (including te ao Māori/the Māori world), a secure identity, and control over ones destiny.

Using He Korowai Oranga as the monitoring framework, the Ministry of Health intends to develop a national Māori health indicator set to assess progress towards achieving the goal of whānau ora. Consultation with Māori was carried out from May to August 2004. A summary of submissions document was released in mid-2005.

There are a range of key health sector strategy documents with associated Māori health indicators, such as the Primary Health Care Strategy and Reducing Inequalities in Health (Ministry of Health 2002c). One off reports are used to track progress in specific areas. As an example, the Ministry of Health's National Mental Health Strategy (Ministry of Health 1997) and the Mental Health Blueprint (Mental Health Commission 1998) led to the release in April 2002 of Te Puawaitanga (Ministry of Health 2002d), the Māori Mental Health National Strategic Framework. Five year indicators associated with the Framework are the percentage of Māori who access clinical and cultural support services, the active participation by Māori in mental health services planning and delivery, the percentage of Māori adult clients who have a choice of mainstream or kaupapa Māori community mental health services, and the percentage increase in the number of Māori mental health workers (including clinicians).

Some of the national indicator set data can be examined at regional or local levels. Obviously this would include health outcome data which is derived regionally and locally, but also some data collected through national mechanisms. For example national data for the indicator 'Tobacco smoking 15+ years', sourced from the New

Zealand Health Survey 2002/2003 and the ACNeilson quarterly consumer surveys, can be examined by DHB region.

### **7.1.1 Māori participation**

According to key informants there is very limited Māori involvement in national level indicator set development and the extent of Māori involvement is inconsistent across indicator sets. Māori are often not involved as members of the project team formulating indicators, and where Māori are involved it may be through a Māori reference group or in another advisory capacity. A concern was raised that where Māori are 'minoritised' within an expert advisory group, the Māori perspective is a minority view and therefore there is limited capacity for debate. Some respondents acknowledged government agency efforts to consult with Māori through national and regional hui (meetings) and by the dissemination of discussion documents to Māori. Both of these mechanisms were considered to be useful, though limited in terms of gaining Māori input.

Internally, the Ministry of Health directorate with primary responsibility for the development of a given indicator set should ensure partnership relationships are developed with recognised Māori health experts. There was some indication from key informants that even minimal Māori input does not happen consistently. Within the Ministry input may come from the Māori Health Directorate or a Māori health advisor. External and independent Māori input should also be sought from Māori stakeholders. However, at times the opportunity for meaningful input is not provided. For example, documentation may be received with insufficient time allowed to provide genuine comment or travel to consultation hui may be costly for those located in rural areas. There was a general concern that government agencies do not engage well with Māori to ensure meaningful participation in indicator development. Further, that while Māori may be involved in the process of indicator development, decisions regarding the actual selection of Māori health indicators are made by non-Māori.

The most comprehensive recent consultation on Māori health indicators was on the discussion document 'Developing a Monitoring Framework and Strategic Research

Agenda for He Korowai Oranga'(Ministry of Health 2004b). The document was made available in hard copy and on Ministry of Health and Māori health websites. Five hundred letters were mailed to Māori health stakeholders inviting their feedback through written submission or hui participation. Three hundred submission booklets were mailed out and seven hui were held throughout the country (Hamilton, Gisborne, Pamerston North, Nelson, Christchurch, Auckland and Paihia). Hui participants included iwi representatives, Māori DHB managers, Māori health provider representatives, Māori health researchers and Māori individuals. Approximately 113 people participated in hui and 13 written submissions were received. Hui commentaries were sent to all hui participants. A reference group was also established to provide expert advice, and membership included Māori researchers, policy makers, and community, iwi and disability representatives. As noted earlier, a summary of submissions document was released in mid-2005.

A number of themes relevant to indicator development at all levels (national, regional and local) were identified at the consultation hui. Generally, the need for ethnicity data collection across sectors to enable intersectoral information collection was emphasised, as was the importance of the collection of both quantitative and qualitative data. Consultation stressed the need to ensure that information is available to meet specific local and iwi needs and that a kaupapa Māori or Māori centred approach to data was used whereby Māori are located as the norm, and therefore Māori concerns are prioritised as opposed to being an 'add on'.

There were concerns raised that the current data collected did not fit with information requirements and that selected indicators should reflect Māori priorities, with Government and other stakeholder priorities secondary. The importance of the ongoing involvement of iwi, hapū and other Māori organisations in indicator development was highlighted. There was recognition that indicators that are able to monitor disparity and inequalities are important, however, there was a strong call for positive indicators. Both collective and individual measures were considered to be important. Importantly, the usefulness of monitoring information and its ability to influence decision-makers, such as DHBs, was considered to be critical.

Two distinct types of indicators were identified, mainstream indicators and indicators which reflect iwi, hapū and Māori priorities. Mainstream indicators were identified as indicators related to demographics, inequalities, socio-economic factors, and general health status. These indicators included mortality and morbidity rates, health service utilisation, resourcing, service development, and socio-economic factors. It was also acknowledged that the development of robust Māori-specific indicators would require some effort. Potential areas for indicator development identified included wairua (aspects related to spirituality), te reo (Māori language), tikanga and kawa (Māori process), values, whakapapa knowledge (geneology), and marae participation (traditional Māori community centres). There was recognition that it may not be appropriate to measure all relevant Māori health indicators, such as wairua (spirituality).

Key specific areas for data collection identified related to: the health needs and unmet needs of whānau; whānau relationships; whānau knowledge as to health service options; whānau access to health care throughout the care continuum; participation in Māori institutions and cultural activities; and, the extent to which whānau are unable to access all basic necessities and are forced to choose (for example between buying food and keeping warm).

### **7.1.2 Māori concepts of health**

According to interviewees currently used national level health indicator sets, while useful, do not reflect Māori values and concepts of health. Rather, the national indicator sets measure health in a narrow sense and relate mainly to disease status and risk factors, rather than health states. Interviewees were concerned at the lack of Māori specific indicators that are able to capture health in Māori terms.

### **7.1.3 Use of information**

According to the Ministry of Health, Māori health data are used to: monitor health status, the performance of DHBs and health services (utilisation, access, coverage, quality, responsiveness and cost) and health system responsiveness; inform policy and planning cycles; inform funding of service areas retained centrally; provide health

information; identify risk and protective factors; identify disparities; understand determinants; and, understand unmet need (Ministry of Health 2002b).

Participants in the Ministry of Health Monitoring Framework consultation process identified a range of uses for Māori health information. Alongside identifying Māori health status and needs, information would be used to inform prioritisation, planning, policy and guideline development, funding applications, resource allocation and best practice. Information would also be used to monitor contracts and performance, evaluate the success of interventions and services, and monitor the performance of the Government and its agencies.

Interviewees indicated a range of uses of national Māori health data, consistent with those identified above. Two interviewees noted that Māori health data has been used to monitor disparities, and in some areas disparities data have motivated a shift in resources, the most obvious example being in the area of Māori provider development. It was acknowledged that without good disparities data it is difficult to motivate positive change, though having the data does not guarantee change.

There were concerns however that the Ministry of Health generates an extensive list of indicators and collects a huge amount of data. According to key informants, much of the data that is gathered is not used. Further, while the New Zealand Public Health and Disability Act 2000 makes provision for Māori access to health sector information, in practice access varies widely.

## **7.2 District Health Boards**

The Ministry of Health's formal monitoring systems require DHBs, for accountability purposes, to prepare a district strategic plan and a district annual plan. The district strategic plan outlines the DHBs' medium to long term goals for population health, the district annual plan sets out shorter term objectives and the range of services to be funded or provided to meet those objectives. The district annual plan also contains indicators of DHB performance in key areas, and DHB targets for each indicator (Ministry of Health 2005d).

The Ministry of Health's annually updated Crown Funding Agreements with DHBs sets out a framework for accountability by which DHBs are required to regularly report against approximately 36 indicators (Ministry of Health 2005d). The measures are focused on areas DHBs are responsible for funding and are supplemented by a small selection of risk based indicators in developmental areas such as workforce, prioritisation and service coverage. The indicators are a mix of qualitative, output and outcome measures. A number of these indicators relate specifically to Māori and are concerned with; engagement with Māori in DHB decision making and strategies for Māori health gain, Māori health workforce and provider development, improving mainstream effectiveness for Māori, change over time in the percentage of DHB expenditure on Māori providers, progress towards implementing the Reducing Inequalities in Health Intervention Framework (Ministry of Health 2002c), participation by Māori in decision-making within primary health, and, progress towards improving Māori mental health. Health outcome data are examined by ethnicity where ethnic data are available, for example in relation to child health, older peoples' health, oral health, diabetes, cardiovascular disease and cancer.

DHB performance monitoring in non-priority areas is informed by service utilisation data and health status data derived from mortality registers, health surveys and epidemiological studies among other sources.

While selected indicators are developed at the national level and are aligned to the New Zealand Health Strategy, some interviewees indicated that there is some limited opportunity for DHB input. It was noted by some interviewees that the indicators are mainly output and volume oriented, and enable comparisons between DHBs. Further, that clinical measures are focused on assessing DHB performance as a business measure, rather than health outcomes and that there is a lack of indicators that are centred on Māori health needs specifically. It was also noted that any work on Māori-specific indicators tended to be driven by areas with specific responsibility for Māori health (e.g. Māori units within DHBs) as opposed to areas with responsibility for indicator development or monitoring generally.

The extent to which DHBs have given attention to Māori health indicators varies by DHB. One respondent indicated that their local DHB had done little if any work in

this area as its focus had been on general infrastructure and organisational development since its establishment, while another gave examples of DHBs that had made some progress. One DHB interviewee provided a draft paper on Māori health indicators. The outlined indicators fell into the following categories: organisational indicators (rates of DNA, accuracy of ethnicity data recording, use of Māori Health Advisory Committee); cultural competence (Treaty training workshop attendance, recruitment policy prioritising the appointment of Māori staff to a representative level, cultural support service development); risk and protective factors (immunisation rates, implementation of prevention programmes, Māori enrolments in PHOs); and, health outcome measures (acute psychiatric admission rates, suicide and suicide attempt incidence reduction, development of identifiable Māori psychiatric in-patient services, acute admissions for asthma) (Koea 2004). A concern was raised that while some DHBs were interested in developing Māori-specific indicators they lacked capacity in this area. Respondents indicated that monitoring by DHBs was a huge and resource intensive area of activity, but that little if any investment had been directed towards developing distinctive indicators for Māori and the concept of Māori-specific indicators was relatively new.

Overall it is apparent that since the establishment of DHBs efforts have focused on infrastructure development, and while there is recognition that much work is required in the area of indicator development (including indicators relevant to Māori), that work has yet to be clearly scoped.

### **7.2.1 Māori participation and Māori concepts of health**

Interviewee responses indicated that generally there is a lack of external Māori input into indicator development. Any advice or Māori input is sought from internal sources, such as the office of the General Manager Māori. According to respondents, current indicators are not informed by Māori concepts of health.

### **7.2.2 Use of information**

Generally respondents agreed that data was used for accountability purposes, and some respondents noted that information informed planning. However, others were

concerned that despite a lot of Māori health data being collected, the data are not being utilised to inform policy and service development, service planning and purchasing and decision-making. Further, within hospitals at the department level data are not linked to departmental performance monitoring or used to focus day to day activities.

### **7.3 Auckland Regional Public Health**

Auckland Regional Public Health (ARPH), which provides public health services in the Auckland region, have developed a set of Māori public health indicators which were released in mid-2005 (Auckland Regional Public Health Service 2005).

#### **7.3.1 Māori participation**

An initial consultation was carried out to seek Māori views on whether the organisation should carry out the project, and what monitoring framework should be used and following developmental work a marae-based feedback hui was held. A Māori tikanga advisory group, Ngā Pou Āwhina, was established and the project team was comprised of Māori and non-Māori members.

#### **7.3.2 Māori concepts of health**

Following consultation with Māori, the Māori health promotion schema Te Pae Mahutonga was selected as the monitoring framework. The Schema is concerned with the creation of a climate within which Māori potential can be realised and is broad enough to take account of consultation feedback that gave some priority to the incorporation of wide-ranging social and environmental indicators. The Schema, which is based on Māori concepts of health, identifies factors that are fundamental to the achievement of good health for Māori - leadership, autonomy, access to the Māori world, environmental protection, healthy lifestyles, and participation in society. The challenge in using Te Pae Mahutonga is that it is very broad in scope and therefore difficult to populate with indicators. The Schema is also wellness focused, and therefore morbidity and mortality indicators are not easily accommodated within the framework. To address this latter point, an additional component has been added to the framework – ‘Mauiui/illness’. Alongside universal indicators (e.g. demographic,

risk factor, protective factor, health outcome), determinants indicators (e.g. cultural, political and environmental) are also incorporated within the framework.

#### **7.4 PHOs and Māori health providers**

According to interviewees, since their establishment PHOs have focused on infrastructure development, and it is only now that serious attention has turned to indicator development.

Generally, universal health indicators are used at the primary health care level by PHOs and Māori providers. Indicators are set at the national level and align with national strategies, in particular the Primary Health Care Strategy and guideline documents (eg diabetes guidelines). The Ministry of Health has developed a monitoring framework for the implementation and outcomes of the Primary Health Care Strategy, a major component of this framework has been developed to monitor PHOs. DHBs have contracts with PHOs and Māori providers for service delivery. Providers are generally required to demonstrate specific volume related outputs using universal indicators. Indicators may be linked to specific funding streams such as Diabetes “Get Checked” or SIA funding. The six main features of PHO monitoring are: service provision – number of services by client age, deprivation level, ethnicity, type of practitioner seen and fees charged and paid; ambulatory sensitive hospitalisations; specific PHO programmes provided; enrolment data; clinical performance; and, referred services. Universal clinical measures (blood pressures, referrals to outpatients, HB1Ac, hospital admissions) and service utilisation indicators (e.g. number of consultations and repeat consultations) are routinely used. DHBs are in the process of developing and improving indicators for use by PHOs.

A Māori provider raised the concern that indicators are developed at the national level and providers are compelled to collect the data. The provider also indicated that their organisation had recently challenged a number of the indicators, and that as a result there had been some consultation which was a new development. However, generally it was considered that providers are not engaged or given opportunities to negotiate indicators. Respondents were concerned that indicators are based on outputs rather than outcomes (such as the number of client contacts, how many services are

delivered), and that work is required to understand how to measure outcomes. It was noted that intermediary indicators are regularly used, such as cholesterol levels or improved functioning. It was also noted by interviewees that some outcomes are intangible and therefore difficult to measure.

Concern was raised that indicators at the primary care level are not sufficiently broad, as Māori health is not only concerned with physical health but also mental and emotional wellbeing, access to financial resources, employment, and achieving control and balance in life. However, a Māori provider indicated that their organisation collected broader data, such as socio-economic indicators, the number of staff that speak Māori, and the number of women who make their own containers for placenta for burial, but that this information is not formally reported and is used for organisational planning purposes. There was concern from a Māori provider that some indicators do not align with a Māori provider approach. For example, Māori women's participation in parenting pregnancy courses was used as a measure of service effectiveness, however Māori women preferred information delivered in their homes with whānau present. Also, that reporting based on 'head counts' of patient contacts is inappropriate for a rural Māori provider where whānau are spread across a wide geographical area unless rurality is taken into account when considering the data. Interviewees indicated the need to develop Māori-specific indicators that can be embedded at the community level, and reflect the context in which the service is provided, for Māori primary care provision.

Providers were concerned at the substantial costs for indicator related development and training, data collection and analysis. While larger PHOs have capacity for data analysis, this is not the case for smaller providers and in particular Māori providers. Compliance costs for Māori providers was highlighted at the Ministry of Health Monitoring Framework consultations as an issue of concern. In particular, concerns were raised about potential for increased monitoring leading to increased compliance costs, while not improving the information available to inform Māori provider activities.

#### **7.4.1 Māori participation**

Generally respondents indicated a lack of Māori input into primary health care indicators. A Māori provider noted that Māori are invited to Ministry of Health consultation hui, but that generally the consultations were not geographically accessible for those in rural areas. According to the respondent this leads to the same small group of Māori, usually managers or doctors, normally attending. The Provider also noted that relatively little time is spent on the development of the Organisation's own indicators as it is a time consuming process, and the Provider is constrained by limited resources and lack of appropriate skills. The Provider gave an example whereby they had developed a Māori-centred health promotion indicator set, which was presented and rejected by the funder. The Provider considered that fundamental cultural difference in concepts of health and health promotion led to non-acceptance of the proposed monitoring framework and indicator set.

#### **7.4.2 Māori concepts of health**

Interviewees agreed that current primary health care indicators do not reflect Māori concepts of health.

#### **7.4.3 Use of information**

Repondents indicated that data are used to meet contractual reporting requirements, to report to the community and to inform planning, service development, and practice. A general concern was raised that Māori health providers and iwi have difficulty in accessing Māori health data, and that when it is available it is not in a form that is able to be easily interpreted.

A PHO respondent indicated that data are collected by general practitioners on practice management systems, and selected data are analysed by the PHO for feedback to general practitioners. Data collection has enabled benchmarking, and comparisons with practices that have similar client demographics. According to that respondent, ethnic data collection has enabled the identification of gaps in optimum

care and health outcomes for Māori in some clinics, and enables the PHO to target these services to facilitate improved performance.

## **7.5 Researchers**

Winiata (Winiata 1988), recognising a Māori concern to develop indicators that are able to measure the vitality of Māori collectives, proposed indicators of hapū (sub-tribe) and iwi (tribal) wellbeing which measured access to tribal resources. Te Ngāhuru (Durie, Fitzgerald et al. 2002), a Māori outcomes schema, draws on the work of Te Hoe Nuku Roa (Durie, Black et al. 1995; Te Hoe Nuku Roa Research Team 1999), a Massey University longitudinal study of Māori households that aims to provide an empirical base for the planning of Māori policy, programmes, and services. Te Ngāhuru identifies Māori development outcome categories (secure cultural identity, collective Māori synergies, Māori cultural and intellectual resources, the Māori estate) and associated indicators that are intended to assist in gauging progress towards Māori development goals. Ten outcome goals are identified: positive participation in society as Māori; positive participation in Māori society; vibrant Māori communities; enhanced whānau (extended family) capacities; Māori autonomy; Māori language usage in multiple domains; practise of Māori culture, knowledge and values; regenerated Māori land base; guaranteed Māori access to clean and healthy environments; and, resource sustainability and accessibility. While recognising the importance of a range of generic indicators in measuring Māori development, only Māori specific measures are identified in the report.

Given the Māori view that Māori health indicators should be broad, Te Ngāhuru indicators may usefully complement universal health indicators. The types of indicators identified in Te Ngāhuru are, for example, Māori language ability, marae (Māori community centre) attendance, numbers of whānau trusts, the number of Māori service providers, the number of children attending Māori immersion schools, and the valuation of Māori land holdings.

## **8.0 Indicators compendium**

A compendium of Māori health indicators is attached which draws together indicators currently used by key health sector structures for which regular data sources are available (Attachment 1). The compendium uses a traditional typology based on that used in the Government population health report *An Indication of New Zealander's Health* (Public Health Intelligence 2004), and expanded to include demographic, determinants and health service indicators. The compendium classifies indicators into the following five domains. Demographic: characteristics of the population. Determinants: this domain recognises that there are broad social, economic, cultural, environmental and political determinants of health that structure health status inequalities. Risk factors: factors that predispose to poor health outcomes. Protective factors: there are factors that predispose to positive health outcomes. Health outcomes: health status outcomes are broken down into either whole of life or age-specific outcomes. Health services: relates to health service coverage and therefore issues of access, use, need, and the responsiveness of the health system to Māori. The list of indicators is not intended to be definitive, but rather to provide an indication of the range of measures that are currently being used to gauge the state of Māori health.

## **9.0 Māori health indicator issues**

Interviewees agreed that universal health indicators are relevant to Māori and are of value, however it was emphasised that these indicators alone are insufficient to capture the health and wellness of Māori. The central criticisms are that universal indicators are illness rather than wellbeing centred, are primarily developed to support national and regional rather than local level planning and action, and have a narrow focus (on physical and sometimes mental health only) which is inconsistent with expansive Māori concepts of health. According to participants, indicator selection is often driven by information collection systems. That is, indicators are selected in areas where it is relatively easy to collect data such as service utilisation, hospitalisations and mortality. It is also not sufficient to focus measures on volumes and outputs. As an example of an alternative measure, tracking patient journeys

enables measurement of the quality of care, appropriateness of referrals and provider processes for patient management.

Interviewees raised the concern of respondent burden and the extensive compliance costs of reporting for service providers, and in particular for small Māori providers. A linked concern was that despite extensive data collection requirements much of the data collected is not used and is not accessible to Māori. Realisation of the potential contribution of information systems to improved health outcomes is reliant upon a feedback loop where data received from the provider and community level is fed back in a meaningful and understandable form as a basis for informed decision-making, service development and practice. A more general issue raised was the importance of quality ethnicity data collection across sectors.

One participant was concerned that though there is a place for indicators, as summary measures they should not be relied on entirely as they are not able to provide a comprehensive picture of the state of health. That is, indicators are high level summary measures and a sole reliance on indicators leads to a loss of data. An alternative was proposed, this was a balance between the use of indicators and the collection of rich micro data sets that allow for the extraction of specific information that may be required at different times and for different purposes and that this approach is appropriate in the context of well developed data management technologies.

Both regional and local level health sector stakeholders expressed concern that health indicator development is top down, and not well attuned to the local context and local concerns. Further, that there are inadequate opportunities for Māori to lead and have significant input into Māori health indicator development at all levels. Indicator systems should be geared towards community visions for health and wellbeing, enabling providers to meet community needs, and to the ability of communities to respond to measures. Therefore, measurement systems must be relevant and this relies on input from all levels and in particular from Māori communities and Māori providers. The use of non-Māori defined boundaries for local and regional data

analysis (eg DHB regions) as opposed to Māori boundaries (eg iwi boundaries) was identified in interviews as problematic.

Areas for further work include the development of more sophisticated Māori health indicators that are consistent with Māori concepts of health, are positive in nature, relate to social, economic, cultural, environmental and political determinants of health (including institutional racism), and are able to track patient journeys. Indicators that are able to gauge inequalities, as well as indicators that do not rely upon comparisons with non-Māori are required. Given that the Māori health sector is in the developmental phase, intermediate indicators that track provider characteristics (including the Māori competency of mainstream providers) and Māori health workforce development will remain important. Measures that can be linked to conditions that may be prevented through primary health care will also be necessary. For Māori, indicators should reflect not only individual, but also collective measures of Māori health. The development of sophisticated indicators is however a time and resource intensive process and indicator selection needs to take account of the capacity of data collection and management systems.

## **10.0 Concluding comments**

There is currently no one agreed upon Māori health monitoring framework or indicator set used in the sector to gauge the state of Māori health. Instead, a range of independent monitoring frameworks and indicator sets are in place, largely determined in a top down way and with limited Māori input. There is however, increasing recognition of the need to develop a range of Māori health indicators that are better able to capture the health status of Māori in Māori terms and are relevant to Māori priorities and local contexts.

There are four main issues that have arisen from this paper which reinforce understandings of Māori health indicators.

First, there is a wealth of Māori health data being generated using universal indicators. However, it is apparent that the data are not being used consistently as a basis for evidence-based decision-making at all levels and the emphasis is often on data collection and use for accountability purposes. Further, if data were to be examined at

regional or local levels and presented in straightforward ways, this would enable knowledge transfer to Māori providers, iwi, Māori communities, and other Māori health stakeholders to inform local planning and decision-making.

Second, Māori participation and input into Māori health indicator selection and development is very limited, and this constrains the sector's capacity to develop meaningful indicators that are locally relevant and match iwi and Māori community priorities. While there has been progress in some areas, more attention to building and strengthening processes that facilitate consistent and meaningful Māori input into indicator selection and development is required.

Third, Māori health monitoring frameworks should draw on known Māori frameworks and be populated with a mix of universal and Māori specific indicators in order to ensure that indicator sets adequately reflect Māori understandings of health. Māori specific indicators are intended to complement universal measures (including measures of disparities) and will be important in providing a picture of the state of Māori health that is relevant to Māori, and can provide a comprehensive empirical base for the planning and delivery of Māori health services. While there has been some work towards the development of Māori specific indicators, it is preliminary and these types of measures are not yet in use in any consistent way to measure the state of Māori health.

Fourth, accurate ethnicity data collection across sectors is important if broad indicators are to be used to gauge the state of Māori health in Māori terms.

As a final comment, when considering Māori health indicators within the New Zealand context it is apparent that the current indicator sets are essentially Government driven measures that are intended to assess progress towards State-defined objectives for Māori health. Those indicator sets are not well aligned to Māori health aspirations and concepts of health. Māori leadership and participation will be required to drive the development of robust Māori health indicator sets that enable not only monitoring of the Government's progress towards addressing inequalities and Māori health needs, but also as a basis for Māori planning for healthy Māori futures.

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