Health Impact Assessments: Issues and Implications for Whānau Ora

A Discussion Paper

Te Kani R Kingi
Te Pūmanawa Hauora
School of Māori Studies
Massey University
WELLINGTON

Wellington April 2005

Index

Introduction	3
Cross-sectoral Health Impact.	
A Health Impact Assessment	4
Conducting a Health Needs Assessment	5
Generic vs Culturally Specific Assessments	7
Cultural Considerations within a HIA	9
A Whānau Ora Policy Tool	11
Whānau and Health	11
Exploring Whānau Ora	14
Applying Whānau Ora	14
Stand Alone or Integration	15
Summary of Key Points	17
Bibliography	19

INTRODUCTION

The impact of non-health policies on population health outcomes has been known for some time. According to the National Health Committee, one of the single most significant determinants of health is income¹ - and, while other factors (such as access to health services) may also influence health and health outcomes, these types of studies reflect a growing interest in the multiple determinants of health. Moreover, the needs to carefully consider the manner in which policies for health are developed.

A Guide to Health Impact Assessment: A Policy Tool for New Zealand ² is in many ways a reflection of the need to develop policy from within a broad framework and recognises that health gains (or deficits) are influenced by the activities or interventions of other sectors. Moreover, that a complex array of personal and environmental factors will influence health outcomes.

An appreciation of these factors creates somewhat of quandary for the health sector, and for policy developers in particular, in that it is sometimes difficult to gage the effectiveness of health policies when the outcomes are quite often influenced by external factors, strategies, or legislation. Efforts to promote a more collaborative approach to health policy development have often focused on such issues and the need to think more broadly about the multiple determinants of health. Despite this, collaborative arrangements have not always been possible, and especially where sectoral outcomes are more tightly focused and may not include a health impact assessment.

_

¹ National Health Committee, (1998), *The Social, Cultural, and Economic Determinants of Health in New Zealand: Action to Improve Health*, National Advisory Committee on Health and Disability, Wellington. p. 23.

² Public Health Advisory Committee, (2004), *A Guide to Health Impact Assessment: A Policy Tool for New Zealand*, Ministry of Health, Wellington, New Zealand.

CROSS-SECTORAL HEALTH IMPACT

Factors outside the influence of health policies, though within other macro- and micro-policy areas, must be recognised as contributing, either positively or negatively to the state of Māori health.³

Examples that illustrate the extent to which non-health policies may affect health sector outcomes are not difficult to find. Efforts to promote responsible drinking behavior, for example, may be offset by legislation freeing up access to alcohol. Likewise, smoking cessation initiatives could suffer if cigarette taxation were reduced. These types of issues have a range of implications and in this regard it may seem unreasonable to assess the efficacy of health policies or interventions without considering what confounders might exist – that is, the impact of non-health sector decisions.

In recognition of this a more complex approach to the identification of health objectives or outcomes may be required. As an example, a national smoke-free initiative can be seen as ineffective if rates of smoking (or even uptake) continue to rise. However, legislative changes (such as those previously described) may not have been considered, as well, it may be unreasonable to expect a reduction in the total number of smokers – rather, a decrease in trends or uptake rates. Moreover, it can be sometime before the benefits of such initiatives can in fact be measured. In most instances immediate or short-term gains are unlikely.

A HEALTH IMPACT ASSESSMENT

Health impact assessments (HIA) are described as a formal activity that aims to predict the potential effects of policies on health and health inequalities. It assists with the analysis of policy alternatives, policy development, and is typically used by policy makers.⁴ Health Impact Assessments are designed to:

³ M. H. Durie, (1993), 'Māori Development and Purchasing Plans for Māori Health', *Proceedings of the Contracting Quality Health Care Conference, 15 March 1993*, Auckland.

⁴ Public Health Advisory Committee, (2004), *A Guide to Health Impact Assessment: A Policy Tool for New Zealand*, Ministry of Health, Wellington, New Zealand.

- help policy-makers use a sustainable development approach
- help policy-makers incorporate evidence into policy-making
- promote cross-sectoral collaboration
- promote participatory, consultative approach to policy-making
- improve health and reduce inequalities in health, and;
- help policy-makers consider Treaty of Waitangi implications⁵

In essence an HIA provides a mechanism through which a more collaborative and integrated approach to health policy development is facilitated. This approach is consistent with the notion of best possible outcomes and also promotes the more efficient use of resources.

CONDUCTING A HEALTH NEEDS ASSESSMENT

There are a number of ways a HIA can be conducted. However, the *Public Health Advisory Committee* describes four key processes:

- Screening⁶
- Scoping
- Appraisal
- Reporting and Evaluation

In brief, *Screening* is a process of selection and in determining whether or not a HIA is required or necessary. *Scoping* is the process which follows and once it has been determined that a HIA is warranted. It considers key issues that define the shape and scope of the HIA. This process allows policy makers to develop a written assessment plan of parameters and objectives - main health determinants and impacts as they relate to the policy proposal. *Scoping* questions may include:

⁵ Ibid.p3.

⁶ Public Health Advisory Committee, (2004), *A Guide to Health Impact Assessment: A Policy Tool for New Zealand*, Ministry of Health, Wellington, New Zealand.

- What are the aims of the HIA
- What will be the extent and boundaries of the HIA
- Who will conduct the HIA
- What stakeholders are involved in assessing the policy
- What is the geographical scope of the HIA
- What is temporal scope of the HIA
- What public or community concerns have been raised about the policy area
- Who are the key people to consult with
- Can an assessment plan be drafted to set out the key milestones and timeframes
- What are the HIA evaluation parameters
- What are the budget implications
- What methods could be applied
- Are there any statutory requirements associated with the policy⁷

Appraisal involves the application of either a "health lens" or "health appraisal" tool. Deciding on what tool is appropriate is largely determined by the *Screening* and *Scoping* process and what objectives and parameters are identified. The "health lens" tool is essentially a list of key questions, while the "health appraisal" tool is more comprehensive and includes and assessment of the health determinants, health inequalities, and a Treaty of Waitangi examination.

The final stage is *Reporting and Evaluation*. This involves an assessment of the information gathered from the *Appraisal* stage and determining what changes to the policy proposal may be required. For example, modifying the policy to enhance the positive impacts, modifying the proposal to reduce the negative impacts, determining whether or not more information is required (in order to make an informed judgment), or concluding that no modifications are needed. This stage also involves an evaluation of both the process and impact of the HIA.

⁷ Ibid.p.24

GENERIC VS CULTURALLY SPECIFIC ASSESSMENTS

As described an HIA permits a more collaborative approach to health policy development. This is warranted/required in that health outcomes, health objectives, health gains or deficits, are often influenced by the activities of other sectors.⁸ Tools which allow a policy assessment of health impacts are therefore of considerable value and consistent with the notion of collaboration, integration, and best possible outcomes.

By their very nature however, HIA tools (or any measurement tools for that matter) are constrained by the fact that they can only consider what they are designed to and cannot capture the full range of relevant issues of concerns. This is perhaps not a limitation of the tool itself but more a reality in that no instrument is able to consider every possible issue or contingency. This is not to say that they are not useful – quite the opposite – however, it does suggest the need to carefully consider what is assessed and accordingly what is not.

These types of issues are frequently considered from a social and health outcome perspective and when attempting to identify the consequences of treatment or interventions and what type and range of issues should be measured. In this regard it is generally agreed that generic measures, that is tools which consider a broad range of generically relevant concerns, are useful and assist with the assessment of efficacy. However, and more recently, concerns have been raised as to whether or not generic measures can in fact capture issues of cultural importance. That is, while they may

-

⁸ Te Puni Kōkiri, (1999), He Pou Tarawaho mo te Hauora Hinengaro Māori - A Framework for Māori Mental Health: Working Document, Ministry of Māori Development, Wellington. See also Te Roopu Rangahau Hauora a Eru Pomare, (1995), Hauora, Māori Standards of Health, GP Print Ltd, Wellington.
9 Durie, M.H and Kingi, Te K. R (1997), A Framework for Measuring Maori Mental Health Outcomes. A report prepared for the Ministry of Health, Department of Maori Studies, Massey University, Palmerston North.

consider a number of concerns that are universally consistent or valued, they are unlikely measure or investigate cultural preferences or needs.¹⁰

The issues which surround this are complex and often involve discussions on the reliability and validity of the instrument, sensitivity or focus.¹¹ However, examples which illustrate these problems are less involved and usefully describe the requirement to consider cultural perspectives.

As an example, a measure of outcome (say a questionnaire or schedule) may ask a patient a series of questions – these designed specifically to consider whether or not the intervention has been successful. In this instance the intervention is a surgical procedure (a hip replacement), with the tool (questionnaire) applied four to six months after the operation. This designed to consider whether or not mobility has been restored to the expected level. As with most procedures of this type the patient is elderly, and in this example a Māori male.

A generic series of mobility questions are then formulated and could include the following;

"As a result of the hip replacement are you now able to walk around the block"

A series of responses are also provided. These allow the surgeon to obtain a quick impression of outcome and simply require the patient to circle an appropriate response. An example (in relation to the question above) is given below;

"worse than before" "same as before" "better than before"

¹⁰ Kingi Te K.R. and Durie M.H. (2000), *Hua Oranga: A Māori Measure of Mental Health Outcome*. A report prepared for the Ministry of Health, Department of Maori Studies, Massey University, Palmerston North.

¹¹ S K Palmer, (2003), *Psychometrics: A Powerful Tool for Māori*, Unpublished Paper for Review, Massey University, Palmerston North.

Though simplistic, this example usefully illustrates a number of key issues. The first is that generic outcome preferences are identified and that an improvement in mobility (that is an improved ability to walk around the block) is a positive outcome – and one that most can appreciate. It makes sense and should be measured as an indicator of health outcome. However, another issue is also revealed and again concerns the notion of what is measured, or more importantly, what is not.

In this case, and while mobility is an important outcome of the surgery, it does not account for the full range of outcome preferences – especially those which are culturally derived. Therefore, a more relevant or additional question might be;

"As a result of the hip replacement are you now able to stand in one place for an extended period of time"

Again followed by the response options;

"worse than before" "same as before" "better than before"

This type of question may in fact hold greater significance for the koroua in that it reflects an activity that he is perhaps more familiar with. To this end, and while the capacity to walk around the block is important, of more relevance is an improved ability to whaikorero on the marae and to "stand in one place for a extended period of time". As well, a complete focus on physical outcomes may in fact miss the point as far as Māori are concerned. A more comprehensive assessment should therefore include questions that consider whether or not whānau relationships or connections have improved, how the surgery affected mental well-being, or the impact it had on his spiritual wellbeing.

CULTURAL CONSIDERATIONS WITHIN A HIA

The previous example is used to illustrate why cultural factors/outcomes or needs should be considered – further, that a failure to do so may in fact reduce utility, meaning, and application. As part of an HIA a range of mechanisms are included through which cultural factors can be considered. Within the *Screening* process it is recommended that

the determinants of health (including cultural factors) be considered as well as issues concerning the impact on vulnerable groups (which could include Māori). The opportunity to consider cultural factors is also included within the *Scoping* phase and in particular where the social and cultural determinants of health are assessed.

The *Appraisal* phase and the application of the "health lens" or "health appraisal tool" is perhaps the most obvious way in which cultural factors are explored. The "health lens" checklist specifically considers social and cultural factors, Te Whare Tapa Whā, and the principles of partnership, protection, and participation. The "health appraisal tool" is more comprehensive but likewise explores the level of Māori involvement in the development, implementation and review of the policy, the application of the principles of partnership, protection, and participation, as well as the potential impact of the policy on Māori health. The Matrix for Determinants of Health, Health Inequalities and Health Impact Matrix¹² (included as part of the health appraisal) likewise include mechanisms through which cultural issues are explored.

While the *Reporting and Evaluation* phase is perhaps less descriptive in terms of cultural considerations, there is certainly scope through which cultural concerns can be examined and reported.

The extent to which these various mechanism are employed is largely determined by the nature of the policy, the degree to which cultural issues are considered relevant, the skill of individual applying the HIA, as well as the extent to which informed advice (from key stakeholders or experts) can be obtained. Potentially, this can mean that the tool is applied in an inconsistent manner and depending on how the various aspects of the assessment (Screening, Scoping, Appraisal, Reporting and Evaluation) are interpreted. As well, it may be unreasonable to expect that all or any of the recommendations will be adopted.

¹² Public Health Advisory Committee, (2004), *A Guide to Health Impact Assessment: A Policy Tool for New Zealand*, Ministry of Health, Wellington, New Zealand. pg 42

Despite this, it is clear that HIA's are warranted, and that when applied correctly provide a valuable means through which cultural concerns can be considered as part of cross-sectoral policy development.

A WHĀNAU ORA POLICY TOOL

The current HIA guidelines are both well developed and culturally considered. The application of Te Whare Tapa Whā and the Treaty principles of partnership, protection, and participation provide useful frameworks and assist with the identification of cultural concerns. As shown however, the extent to which these issues are identified is determined by a range of factors – not least of which includes the focus and particular limitations of the instrument. And while mechanisms (such as Te Whare Tapa Whā and the Treaty) are used to identify cultural issues they are unlikely to capture the full range of concerns. As a consequence a complementary and broader focus on Whānau Ora has been suggested.

Whānau and Health

While Whānau Ora has appeared as an objective of Māori health policy¹³ - defining it has been more difficult. Often, notions of Whānau Ora are shaped by individual experiences, perspectives, or knowledge, and accordingly defy precise explanation. Several examinations of Whānau Ora have been undertaken and although they usefully consider key concepts and criteria it is unclear as to how well these fit within the context of a Whānau Ora Policy Tool.

¹³ Ministry of Health, (2002), *He Korowai Oranga – Māori Health Strategy*, Ministry of Health, Wellington.

Part of the problem concerns the definition of Whānau itself and the fact that it has often been difficult to prescribe it's characteristics – particularly within a modern context.¹⁴ Metge notes:

Most of the changes currently in progress are changes in the structure of the parent-child family, which is the major building block of the whānau: a decrease in the number of children per mother, increases in the proportion of de facto compared to de jure marriages, in the frequency of marital break-up, in the proportion of children living with one parent, in blended families or moving between two parental homes ¹⁵

Another issue concerns the manner in which Whānau and Ora (or health) are linked and the implications of this. In an attempt to more effectively draw the relationship between the two, Durie describes five key functions of whānau: manaakitanga (the capacity to care); tohatohatia (the capacity to share); pupuri taonga (the capacity for guardianship); whakamana (the capacity to empower); and whakatakoto tikanga (the capacity to plan ahead). In a similar way, other researchers have also developed specific frameworks through which the principles of whānau are linked to health. An example of this is the *Whakapiripiri Whānau Framework*, developed by Te Pūmanawa Hauora in 1996 and as a means of understanding the relationship between whānau and health.

¹⁴ See G. H. Smith, (1995), 'Whakaoho Whānau', in *He Pūkenga Kōrero*, vol. 1, no. 1, Department of Māori Studies, Massey University, Palmerston North, pp. 18-36. See also R. Walker, (1990), *Ka Whawhai Tōnu Mātau: Struggle Without End*, Penguin, Auckland, p. 63.

¹⁵ J. Metge, (1999), 'Changing Whānau Structures and Practices', in Te Pūtahi ā Toi (ed.), *Proceedings of Te Hua o te Whānau: Whānau Health and Development Conference*, Ministry of Health, Wellington.

¹⁶ M. H. Durie, (1997), 'Whānau and Whānaungatanga', in P. Te Whaiti, M. McCarthy, and A. Durie (eds.), Mai I Rangiatea: Māori Well-being and Development, Auckland University Press, Auckland, pp. 9-12.

¹⁷ Te Pūmanawa Hauora, (1996), *Oranga Whānau* - *Māori Health and Well-being, and Whānau*, Department of Māori Studies, Massey University, Palmerston North, p. 32.

Table 1 Whakapiripiri Whānau Framework

PRINCIPLES	HEALTH IMPLICATIONS
Tātau Tātau (collective responsibility)	Healthy Development Access to informal health support Reduction in levels of stress Access to resources to promote a healthy lifestyle Safe environment
Mana Tiaki (guardianship)	Health Development Improved mental well-being Access to resources to promote a healthy lifestyle Enhanced quality of life Enhanced spiritual well-being
Manaakitanga (caring)	Enhanced quality of life Healthy Lifestyles Healthy policy development Healthy practices Models for health promotion
Whakamana (enablement)	Healthy development Improved mental health Access to health services Access to resources to promote good health Health promotion
Whakatakoto Tūtoro (planning)	Opportunities for early intervention Healthy policy development Access to resources to promote good health Improved access to health services Planning for health needs
Whai Wāhitanga (participation)	Improved access to health services Healthy lifestyles Health promotion Access to resources to promote good health Informal health support

Source: Te Pūmanawa Hauora, 1996: 32

These types of models are useful in that they consider the potential of whānau as a health promotion mechanism, while at the same time appreciating whānau diversity. What is less clear, however, is the extent to which these types of frameworks can be applied and used to inform a Whānau Ora Policy Tool. In this regard a more refined definition of Whānau Ora may be required. Specifically, one that provides a means through which both the positive and negative impacts of policy (on Whānau Ora) can be considered.

Exploring Whānau Ora

While it is not possible (at least within the scope of this paper) to provide a comprehensive definition of Whānau Ora it is nevertheless possible to consider how it may fit within an HIA or policy context. In this regard, and when using the HIA as a broad template or guide, it is clear that in order to progress the idea of a Whānau Ora Policy Tool, a more thorough understanding of Whānau Ora will be required.

To avoid confusion, albeit ongoing debate, it should be stressed that this understanding will not necessarily constitute a definitive response or necessarily provide an absolute definition of Whānau Ora. Rather, a mechanism, template, or structure through which the outcomes of policy can be measured against Whānau Ora. This approach will likely build on the considerable work already conducted around Whānau Ora and may also include references to Te Whare Tapa Whā and Treaty of Waitangi Principles. Importantly however, these ideas will need to be placed within the context of a policy assessment tool and designed to take advantage of the policy process.

Applying Whānau Ora

Defining Whānau Ora, or at least offering some parameters or scope, is important in that it provides a point of direction and focus and establishes a means through which positive or negative influences are considered. Without yet understanding what is meant by Whānau Ora it is not possible to fully describe how it may be applied. Despite this, some key issues for consideration are evident. For example;

- Who should use a Whānau Ora Policy Tool ? are the criteria established as part of the HIA sufficient or are alternatives required ?
- When should a Whānau Ora Policy Tool be applied? in every situation ?, or only in certain settings?, how is this determined?, how is consistency of application maintained?
- Is a checklist or framework, similar to that of an HIA needed, or an alternative? – is a more qualitative or interpretative approach appropriate?

- How should the positive impacts of a policy on Whānau Ora be maintained? – how should negative influences be reduced?, how are amendments to policy made?
- How are experts (both internal and external) identified and approached for input? are they sufficiently qualified and representative?, what are the cost implications (particularly in terms of consultation), how will effective consultation/input impact on time-lines?
- If a Whānau Ora Policy Tool is applied, how can it be evaluated? will existing frameworks/mechanisms be sufficient?, or will alternatives be required?

Stand Alone or Integration

Another issue that arises from this discussion concerns the manner in which a Whānau Ora Policy Tool is applied or developed. Again and when considered within the context of an HIA, two options are available.

First, a focus on Whānau Ora could be included within the existing HIA process. There are numerous advantages to this in that the current HIA document provides a robust and well considered structure. Guidelines and processes are accurately presented and provide the type of detail required. Additionally, integration in this manner allows Whānau Ora (potentially at least) to be considered as part of a more routine process – reducing the risk that it is applied as an add-on or alternative.

The potential problems of integration can be viewed in a number of ways and include logistical, technical, and philosophical considerations. Logistically, it is unclear as to how well the addition of a Whānau Ora component will complement or alternatively complicate the HIA process. Furthermore, whether or not this will add additional time or confusion to the process. Technically, it is also uncertain as to the extent to which Whānau Ora considerations can in fact be included within the existing HIA. That is, if an alternative approach to the assessment of Whānau Ora is devised, there is no guarantee that it will "fit" within the existing process. Philosophically, it may also be

undesirable to include Whānau Ora within the current HIA process, particularly as Māori have often resisted attempts at so-called integration, cultural enhancement or alignment, preferring instead a more distinct method.

A second approach therefore is to develop a Whānau Ora Policy Tool in a more discrete or original way. The advantages of this, is that it allows greater flexibility in the design and application of the tool and permits a more innovative approach to the entire process. This method may suit in that the concepts outlined in the HIA document can be considered, applied, and developed - but from within a context specific to Whānau Ora, and without the need to conform to a rigid of set parameters.

The disadvantages are that it may not sufficiently build on the HIA work and therefore remain isolated and unused. As well, and if a completely new direction is taken, the considerable theory (particularly around application and process) may be lost – significantly hindering the tools utility.

SUMMARY OF KEY POINTS

There are obviously a number of issues to consider when devising a Whānau Ora Policy Tool, and, while many have been raised in this paper it is certain that more exist and that a further input, consultation, and guidance is required. Despite this, a number of issues have been raised and are likely to assist with the identification of possible options.

It is clear that HIAs are useful and facilitate a more collaborative approach to health policy development. The rationale behind them is sensible and appreciates the fact that health outcomes and/or objectives are often influenced by non-health sector activities. *A Guide to Health Impact Assessment: A Policy Tool for New Zealand* is a well considered document and provides a mechanism through which many of these issues can be considered in a structured and formatted way.

The application of the tool, and how well it will actually work in practice, is still somewhat unknown (despite the use of case-studies). The protocols or procedures developed for application are usefully descriptive, although (and at the end of the day) require interpretation, access to expertise, collaboration, good will, and buy-in. To this end, application and outcomes (from the HIA process) are likely to vary. This should not be viewed as a fatal flaw or indeed a significant limitation – rather a reality which may be addressed (somewhat at least) through better education and training.

It was also noted that cultural factors need to be considered as part of a HIA. And, that a failure to do so may in fact disadvantage Māori. Specifically, by not taking into account all of what is important or relevant to Māori. Depending on how the current/proposed HIA tool is viewed it may be successfully argued that sufficient mechanisms are included and that Māori concerns have been considered. Certainly, the application of the Treaty principles and Te Whare Tapa Whā is evidence of this.

The proposed Whānau Ora Policy Tool should therefore be considered within the context of the existing HIA tool and whether or not the current mechanisms for Māori input are adequate. There are many potential arguments to suggest that it does in fact go far

enough, however, and if it does not, then the option of a Whānau Ora Policy Tool should be explored.

The manner in which a Whānau Ora Policy Tool is developed and applied requires some consideration. It was suggested that it could either be included as part of an existing (albeit modified) HIA or as a stand alone instrument. There are both benefits and risks to each approach and there may in fact be alternatives not currently explored. In any event, options for development must take into account a number of concerns and variables, not the least of which includes an understanding of Whānau Ora and the manner in which these concepts are used to guide or consider policy development. That is, a mechanism will need to be created through which policy can be assessed against Whānau Ora. There are of course numerous options for this; however, the inclusion of a case-study (both as a test and an exempla) is likely to provide positive guidance.

As a final point, it should be stressed that the emphasis placed on Whānau Ora centers on the need to ensure that policy objectives (positive or negative) are assessed in an appropriate and meaningful way. That without the inclusion of cultural perspectives, preferences, or outcomes, assessments are likely to be incomplete and therefore (potentially at least) negatively impact on Māori. In this way Whānau Ora allows for a more comprehensive approach to the assessment of policy design, practice, and outcomes.

BIBLIOGRAPHY

M. H. Durie, (1993), 'Māori Development and Purchasing Plans for Māori Health', *Proceedings of the Contracting Quality Health Care Conference, 15 March 1993*, Auckland.

M. H. Durie, (1997), 'Whānau and Whānaungatanga', in P. Te Whaiti, M. McCarthy, and A. Durie (eds.), *Mai I Rangiatea: Māori Well-being and Development*, Auckland University Press, Auckland, pp. 9-12.

M.H Durie and Te K. R Kingi, (1997), *A Framework for Measuring Maori Mental Health Outcomes*. A report prepared for the Ministry of Health, Department of Maori Studies, Massey University, Palmerston North.

Te K.R. Kingi and M.H. Durie (2000), *Hua Oranga: A Māori Measure of Mental Health Outcome*. A report prepared for the Ministry of Health, Department of Maori Studies, Massey University, Palmerston North.

J. Metge, (1999), 'Changing Whānau Structures and Practices', in Te Pūtahi ā Toi (ed.), *Proceedings of Te Hua o te Whānau: Whānau Health and Development Conference*, Ministry of Health, Wellington.

Ministry of Health, (2002), *He Korowai Oranga – Māori Health Strategy*, Ministry of Health, Wellington.

National Health Committee, (1998), *The Social, Cultural, and Economic Determinants of Health in New Zealand: Action to Improve Health*, National Advisory Committee on Health and Disability, Wellington.

S K Palmer, (2003), *Psychometrics: A Powerful Tool for Māori*, Unpublished Paper for Review, Massey University, Palmerston North.

Public Health Advisory Committee, (2004), *A Guide to Health Impact Assessment: A Policy Tool for New Zealand*, Ministry of Health, Wellington, New Zealand.

G. H. Smith, (1995), 'Whakaoho Whānau', in *He Pūkenga Kōrero*, vol. 1, no. 1, Department of Māori Studies, Massey University, Palmerston North, pp. 18-36.

Te Puni Kōkiri, (1999), He Pou Tarawaho mo te Hauora Hinengaro Māori - A Framework for Māori Mental Health: Working Document, Ministry of Māori Development, Wellington.

Te Pūmanawa Hauora, (1996), *Oranga Whānau - Māori Health and Well-being, and Whānau*, Department of Māori Studies, Massey University, Palmerston North

Te Roopu Rangahau Hauora a Eru Pomare, (1995), *Hauora, Māori Standards of Health*, GP Print Ltd, Wellington.

R. Walker, (1990), Ka Whawhai Tonu Mātau: Struggle Without End, Penguin, Auckland.