# "Hua Oranga" A Maori Measure of Mental Health Outcome

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### Nga Mihi

The tool outlined in this report was constructed with the assistance of a large number of groups and individuals. While it is not possible to identify all of those who took part, special mention must be given to the many tangata whaiora, whanau and service staff involved with the study. Only through their commitment, guidance and encouragement could this tool have been developed.

While the factors which impact on Maori mental health are complex, it is our sincere wish that this tool will, in some small way, contribute to achieving better mental health outcomes for Maori.

#### **Executive summary**

- Measures of outcome are needed in order to gauge the effectiveness of treatment and care. However, any measure of effectiveness is dependent on the validity of the tools used and their capacity to accurately consider Maori perspectives of outcome and Maori approaches to treatment and care.
- 2. Outcomes research within New Zealand is not well developed. However, there is sufficient international evidence to suggest that cultural variances will be important when determining the most appropriate outcome.
- 3. This Report describes "Hua Oranga" a Maori measure of mental health outcome. It has been informed through the testing of a draft measure initially suggested in "A Framework for Measuring Maori Mental Health Outcomes". This Report discusses the research process, recommendations, applications and limitations of the measure. A number of other issues, relevant to this study, are also examined.
- 4. The outcome measure described in this report is consistent with Maori concepts of health and wellness and has been developed through the application of an existing model, Te Whare Tapa Wha:
  - Te Taha Wairua (Spiritual Dimension)
  - Taha Hinengaro (Mental Dimension)
  - Te Taha Tinana (Physical Dimension)
  - Te Taha Whanau (Family Dimension)

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<sup>&</sup>lt;sup>1</sup> 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.

Each dimension is placed within a mental health context and provides a consumer focused, holistic measure of outcome.

- 5. Three outcome perspectives are considered. This triangulated approach presents an opportunity for views from three stakeholders to be explored, and then collated:
  - Clinical views
  - Tangata Whaiora/Client views
  - Whanau views
- 6. Clinical end points are employed to give greater specificity to outcome assessments. However, the tool may be applied at any point where an outcome is expected or anticipated. Five clinical end points are suggested in this Report:
  - Assessment
  - Inpatient Treatment
  - Outpatient Treatment
  - Community Care
  - Community Support

Guidelines for the clinical application of the tool are provided. Scoring mechanisms, triangulation methods and data interpretation procedures are also discussed.

- 7. While this tool is primarily a cultural measure of outcome, it is designed to complement more clinically focused, targeted measures.
- 8. Outcome measures have a number of potential applications. This tool will be of particular use when applied at a service level.
- 9. "Hua Oranga" is recommended as an appropriate outcome measure for determining responses of Maori clients to care and treatment in mental health settings.

#### Introduction

#### Purpose of the report

A framework for measuring Maori mental health outcomes was developed in 1997. It identified a number of fundamental principles which guided the construction of a draft measure of Maori mental health outcome.

Although the draft measure was based on a sound and extensive research process its application in a range of clinical/care situations remained to be tested. And, as a consequence, it was recommended that further research be conducted to test the draft measure, make modifications, and provide guidelines for it's clinical use.

Building on the work conducted in 1997, this current report outlines "*Hua Oranga*" – *A Maori Mental Health Outcome Measure*. The tool has a number of potential applications but will be most beneficial when applied at clinical and care levels. Both the features and clinical guidelines for the tool are described. Issues pertaining to the implementation of outcome measures and other related concerns are also discussed.

### Background

The following section provides a brief synopsis of A Framework for Measuring Maori Mental Health Outcomes.<sup>2</sup> It describes the framework, draft tool and concepts used to inform "Hua Oranga" - A Maori Measure of Mental Health Outcome.

#### Health outcomes and outcome measures

There is no universal definition of health outcome or health outcome measures. However, it is generally accepted that an outcome is the identifiable result (consequence) of an intervention or series of interventions on the health of an individual or group of individuals.

Outcome measures therefore refer to those tools or instruments designed to consider the effects of an intervention on the health of an individual. Typically this is achieved through the application of a questionnaire or schedule through which respondents are required to answer a range of outcome related questions. These questions are usually defined by the intervention and the desired outcome.

Although a number of definitions may be considered, it is these broad principles which have been used to shape this report.

### The 1997 report

In 1997, Durie and Kingi produced a report A Framework for Measuring Maori Mental Health Outcomes.<sup>3</sup> It was designed to discuss a range of issues related to the measurement of mental health outcome and to suggest an appropriate method through which Maori mental health outcome could be considered.

### A Maori Mental Health Outcomes (MMHO) Framework

As indicated, the MMHO framework was a key feature of the 1997 report and was used to guide the development of the draft measure of outcome. This was based on five underlying principles, three key stakeholders, four domains of outcome and five clinical end points.

The five principles were designed to highlight the key concepts which should underpin a measure of Maori mental health outcome. The principles are consistent with the particular needs of Maori, as well as the concerns arising from the nature of mental illness and the context within which it takes place. These principles are;

- wellness,
- cultural integrity,
- specificity,
- relevance; and,
- applicability.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Ibid.

The wellness principle provides a guide for the frameworks and reflects the overall purpose of any intervention. Cultural integrity is a prerequisite for any cultural measure and recognises the need to consider cultural norms and perspectives of outcome.

Specificity is needed in order to more precisely measure outcome and to more effectively target outcome measures. Relevance refers to the utility of outcome measures and the need to construct tools which are useful and appropriate. The applicability principle is consistent with the relevance principle and affirms the need for a practical and manageable outcome tool.

The need to account for both client and clinician impressions of outcome was further highlighted as well as the views of whanau. By balancing these three perspectives it was suggested that a more accurate impression of outcome could be obtained. The three key stakeholder groups therefore are:

- Clients
- · Clinicians, and
- Whanau<sup>5 6</sup>

Four domains of outcome were recommended. These reflected Maori concepts of health and well-being and were based on an accepted model of Maori health, Te Whare Tapa Wha. The model represents the holistic nature of Maori health and further asserts the need to consider more than just the psychological aspects of mental health.

Outcomes can... be measured in terms of a number of different illness dimensions: the biological has dominated for much of the last two centuries, but the emergence of subjective health status and quality of life measures in recent decades, has emphasised the importance of the psychological and social.<sup>7</sup>

The Te Whare Tapa Wha model includes;

- Taha Wairua (Spiritual Dimension)
- Taha Hinengaro (Mental Dimension)
- Taha Tinana (Physical Dimension)
- Taha Whanau (Family Dimension)

<sup>4</sup> For detail related to this see: Stedman, T. et al. (1997). Measuring Consumer Outcomes In Mental Health Field Testing of Selected Measures of Consumer Outcomes in Mental Health. Quality & Effectiveness Section, Mental Health Branch, Department of Health & Family Services, Canberra.

<sup>&</sup>lt;sup>5</sup> Jenkins also highlights the need to consider social pathology (including family influences) and psychosocial indicators when examining mental health. See footnote 48.

<sup>&</sup>lt;sup>6</sup> Also see: Mason, K. (1996). *Inquiry under Section 47 of the Health and Disability Services Act 1993 in Respect of Certain Mental Health Services*. Ministry of Health, Wellington: p 64 - 68.

McBeth, H. (1996). *Health Outcomes; Biological, Social and Economic Perspectives*. Oxford Science Publication, Oxford: p 27.

A major problem identified by the researchers in 1997 concerned the identification of a particular point at which to measure outcome, an issue frequently alluded to by other researchers.<sup>8</sup>

"... the identification of outcome requires the selection of a particular point in time at which to label and measure it – the outcome of a surgical operation might be defined either in terms of immediate success or the well-being of the patient six months later"  $^9$ 

It was therefore suggested that the treatment process be divided into five clinical end points reflecting the various treatment levels at which outcome may be measured. The clinical end points are aligned with contemporary service structures and appreciate the need for a dynamic tool, capable of responding to a number of consumer treatment variables. The recommended clinical end points were: assessment, inpatient treatment, outpatient treatment, community care, and discharge.

The following table highlights the main features of the MMHO framework and summarises the concepts described above.

Framework	1	The MMHO	) Framework
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Principles	Stakeholders	Domains of Outcome	Clinical End points
Wellness	Consumer	Taha wairua	Assessment
Cultural integrity	Clinician/carer	Taha hinengaro	Inpatient Treatment
Specificity	Whanau	Taha tinana	Outpatient Treatment
Relevance		Taha Whanau	Community Care
Applicability			Discharge

### A draft Maori mental health outcome measure

Based on the MMHO framework a draft measure of Maori mental health outcome was constructed. This tool took the form of three separate questionnaires or schedules; one designed for the client or tangata whaiora, one for the clinician/carer and one for the whanau/significant other. By obtaining the perspectives of these three key stakeholders a more balanced impression of outcome could be obtained.

A series of four "baseline" questions were recommended for each of the three questionnaires to reflect the four specific dimensions of health; "Wairua", "Hinengaro", "Tinana", and "Whanau".

The tables below illustrate these baseline questions from the perspective of each of the three key stakeholders.

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<sup>&</sup>lt;sup>8</sup> Howard. B. *et al* (1995). Use of Outcome Studies by a Managed Care Organisation: Valuing Measured Treatment Effects. In *Medical Care*, vol 33, No 4: p 221.

<sup>&</sup>lt;sup>9</sup> McBeth, H. (1996). *Health Outcomes, Biological, Social and Economic Perspectives*. Oxford Science Publication, Oxford: p 27.

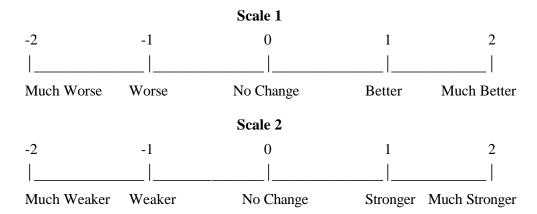
CONSUMER	<b>Baseline Questions</b>
Q1, Taha Wairua	Has the intervention made you feel stronger in yourself as a Maori ?
Q2, Taha Hinengaro	Has the intervention led to an improvement in the way you think feel and act ?
Q3, Taha Tinana	Has the intervention resulted in an improvement in your physical health?
Q4, Taha Whanau	Has the intervention led to an improvement in the way you get on with others, especially your whanau?

WHANAU	<b>Baseline Questions</b>
Q1, Taha Wairua	Has the intervention made your relative stronger in his/herself as a Maori ?
Q2, Taha Hinengaro	As a result of the intervention has your relatives patterns of thinking and behavior improved?
Q3, Taha Tinana	Has the intervention resulted in an improved standard of physical health for your relative?
Q4, Taha Whanau	As a result of the intervention, do you feel that your relative is more appropriate socially, including with the whanau?

CLINICAL	<b>Baseline Questions</b>
Q1, Taha Wairua	Did your intervention result in the patient being stronger in him/herself as a Maori ?
Q2, Taha Hinengaro	As a result of the intervention have the patients overall thoughts, feelings and behavior become more appropriate?
Q3, Taha Tinana	As a result of the intervention has the patients physical health improved ?
Q4, Taha Whanau	As a result of the intervention has the patients social and whanau functioning improved ?

### Scoring the draft measure

It was recommended that two simple scoring mechanisms or scales be used to rate the respondents answers. Scale 1 would be used for the questions pertaining to taha hinengaro, taha tinana and taha whanau. Scale 2 would be used exclusively for questions relating to taha wairua. The schedule would need to reflect both positive and negative consequences of treatment as well as no change. The two scoring scales below were accordingly recommended.



#### Applying the draft tool

The clinical end points were designed to assist with the application of the tool by breaking the treatment process up into five more manageable components: "Assessment", "Inpatient Treatment", "Outpatient Treatment", "Community Care", and "Discharge". The tool could be applied at any of these points, either independently or concurrently and as part of a more extensive outcome assessment process.

For example, a client undergoing a period of "Inpatient Treatment" would have the outcome of this intervention assessed when discharge from hospital was about to occur or had occurred quite recently. At that point the three key stakeholders (Client/Clinician/Whanau) would assess the outcome of the "Inpatient Treatment" by completing their respective questionnaires and rating their responses using the two scoring schedules. These three results/impressions would then be compared to determine the outcome or effect of the "Inpatient Treatment" in terms relevant to Maori mental health.

### The need for clinical testing

Though theoretically sound, the draft tool appeared limited in a number of respects. It did not fully describe how the tool should be applied nor did it provide complete guidelines for it's clinical use. Further, there was no guarantee that the tool would in fact measure outcome or that it would be relevant to Maori mental health consumers across a range of treatment/care situations.

As a result, further testing of the tool was recommended. Firstly, to address the identified limitations, secondly, to assess usefulness and practicality at clinical levels and, thirdly, to ensure that relevant refinements to the tool could be made. In order to ensure a relatively comprehensive assessment two rounds of testing were suggested.

The first round of testing would involve piloting the tool in a range of clinical settings, obtaining feedback from respondents, analysing responses, and, making relevant modifications.

The second round of testing would see the modified tool re-tested within the same settings but with a different range of clients, clinicians, and whanau. Comments from the second test round would, likewise, be analysed and a final Maori mental health outcome measure could then be constructed.

#### Mental health outcomes research

In many countries outcomes research is now well developed with entire organisations dedicated to the construction, validation, and application of outcome measures.<sup>10</sup> Within New Zealand outcomes research has proceeded at a somewhat slower pace with activity confined to a small number of dedicated researchers and clinicians. Since 1996 the New Zealand Health Research Council has also provided some thrust by emphasising the need for locally developed mental health outcome measures. 11 Recent political interest further added to this work when the 1996 Coalition government recommended a shift to outcome based purchasing strategies.<sup>12</sup>

This section briefly examines selected cases of outcomes research, trends, reviews and current projects. The issues discussed are those which are of particular relevance to this report.

#### Trends in outcomes research

Most outcomes research has historically focused on two types of health outcome measures: mortality and morbidity rates. Was life expectancy extended, was there a significant improvement in physiologic measures of health status or were there any unfavourable or disturbing side-effects or complications.<sup>13</sup>

More sophisticated measures of outcome have been developed to include aspects of health associated with patient satisfaction, social functioning and However, limiting factors, largely associated with a lack of universal applicability, have always been problematic, albeit inevitable.

Measures such as SF-36<sup>15</sup> have gained a degree of popularity due, in part, to a capacity to consider a broad range of health concerns. Despite this, it is unlikely that there will ever be one standardised, universally applicable, and accepted measure of outcome.16

For information related to health outcome research organisations see: The UK Clearing House on Health Outcomes http://www.leeds.ac.uk/nuffield/infoservices/UKCH/home.html.

<sup>&</sup>lt;sup>11</sup> Dvall, L. et al (1999). Maori Outcomes: Expectations of Mental Health Services. In Social Policy Journal of New Zealand, Issue 12, July 1999. Social Policy Agency, Wellington.

Steering Group. (1997). Implementing the Coalition Health Agreement. Ministry of Health, Wellington.

<sup>&</sup>lt;sup>13</sup> Howard, B. et al (1995). Use of Outcome Studies by a Managed Care Organisation: Valuing Measured Treatment Effects. In Medical Care, Vol 33, No 4.

<sup>14</sup> Ibid.

<sup>15</sup> Short Form 36 (SF-36), was designed for use in clinical practice and research, health policy evaluations, and general population surveys. The SF-36 includes one multi-item scale that assess eight health concepts. Further information may be obtained from: The RAND corporation, 1700 Main Street, PO Box 2138, Santa Monica.

<sup>&</sup>lt;sup>16</sup> Howard. B. et al (1995). Use of Outcome Studies by a Managed Care Organisation: Valuing Measured Treatment Effects. In Medical Care, Vol 33, No 4.

Although broad measures such as SF-36 are valuable and provide useful information, the trend has been toward the development of condition specific functional outcome measures.<sup>17</sup> That is, targeted measures of outcome valid in particular situations, conditions or with certain client groups.

### New Zealand mental health outcome reviews

A report commissioned by the Ministry of Health in 1994<sup>18</sup> examined literature related to outcome indicators in mental health. The study reviewed material from four sources: USA, UK, Australia and New Zealand. The focus was on the years between 1980 and 1994.

Findings from this project indicated that the approach to outcome measurement and application varied significantly between each of the four countries. In the USA many of the outcome and performance models had developed in a somewhat "ad hoc" fashion. In the UK the focus since 1980 has been towards the development of national performance indicators, whereby mental health would be a component. In Australia early work was particularly focused in three main areas. First, the development of clinical guidelines for each of the major psychiatric disorders, second, standards for area-integrated mental health services, and third, accreditation.

The report noted that no published New Zealand based research could be found. In addition, most of the unpublished literature was obtained directly through the Ministry of Health.

#### An Australian review of mental health outcome measures

In 1994 a review of health outcome measures was conducted, this time by a group of Australian researchers.<sup>19</sup> This review reported on 95 measures, each considered on the basis of potential suitability to mental health.

Eighteen symptom measures were considered, both self and clinically rated, though none were identified as being suitable. Twenty measures of functioning were also investigated and only one (RFS)<sup>20</sup> was deemed to be relevant. All of the 17 quality of life measures were discarded and of the remaining consumer satisfaction scales (8) and multi-dimensional scales (27) only four were considered to have useful potential. These were BASIS, 21 HoNOS, 22 SF-3623 and MHI.24 25

Ibid.

<sup>&</sup>lt;sup>18</sup> Peters, J. (1994). Performance and Outcome Indicators in Mental Health Service: A Review of Literature. A Report Prepared for the Ministry of Health, Ministry of Health, Wellington.

Andrews, G. Peters, L. Teesson, M. (1994). The Measurement of Consumer Outcome in Mental Health. Australian Government Printer, Australia.

The Role Functioning Scale. This has four domains, independent living and self care, immediate social network, extended social network and work.

Behavior and Symptom and Identification Scale. Thirty two items designed for inpatients with psychotic illness.

Although five measures were eventually identified, the suitability of these tools within a local context is uncertain, particularly as cultural related factors were not considered. While the use of overseas research is critical to the development of local measures of outcome, the wholesale application of international studies is likely to be problematic, particularly if they fail to consider the full range of factors unique to this country, and especially those which are culturally grounded.<sup>26</sup>

## The Mental Health Research and Development Strategy

The Mental Health Research and Development Strategy (MHR&D) was established by the Health Funding Authority in 1997. The project is currently administered by the Health Research Council of New Zealand and is also supported by the Ministry of Health and the Mental Health Commission. The MHR&D Project has been designed specifically to:

- 1. measure the incidence and prevalence of different mental health problems in New Zealand populations (epidemiology)
- 2. measure the cost of treating consumers with different kinds of mental health problems (casemix), and;
- 3. develop measures of outcome for consumers of mental health services (outcomes).<sup>27</sup>

With regard to outcomes research the following objective has been set.

"To assess and assist the implementation of systems for measuring outcomes of mental health services which will improve the planning, purchasing and delivery of mental health services in New Zealand".

Three goals are evident in this objective:

- 1. to place outcomes measurement within the context of overall service evaluation and purchasing practices
- 2. to ensure relevance and acceptance of outcome measurement to clinical practice and;

See foothole 15.

Health of the Nation Outcome Study. Twelve scales, designed as a nationwide measure for assessing services.

<sup>&</sup>lt;sup>23</sup> See footnote 15.

Mental Health Inventory. A 38 item measure.

<sup>&</sup>lt;sup>25</sup> For further detail see: Raphael, B. *et. al.* (1996). *Mental Health Outcomes*. A paper presented at the Integrating Health Outcomes Measurement in Routine Health Care Conference, Canberra, 13 August 1996.

<sup>&</sup>lt;sup>26</sup> For information related to cultural appropriateness see. Mc Horney. C. et al. (1994). The MOS 36-Item Short Form Health Survey (SF-36): III Tests of Data Quality, Scaling Assumptions, and Reliability Across Diverse Patient Groups. In Medical Care, vol 32, No 1.

<sup>&</sup>lt;sup>27</sup> Health Funding Authority (1998). June 1998 Report on the Mental Health Research and Development Project. In *Fostering Mental Health*. Health Funding Authority, Wellington.

<sup>&</sup>lt;sup>28</sup> http://www.research.org.nz/mentalhealth

3. to measure an appropriate range of domains (e.g. consumer satisfaction, life skills/functioning, clinical status, quality of life).

The MHR&D project provides a much needed focus for mental health outcomes research and will be valuable in two major respects. First, through the identification of appropriate outcome measures and, second, through the development of strategies by which these measures may best be used.

### McCarthy et al notes:

"Considerable clinical outcome research data has been collected and published in the academic literature, whereas little has been written about the use of outcome data for the administrative management of healthcare systems, that is, outcome management"<sup>29</sup>

#### The Mental Health Commission

"Constructing valid outcome measures is no small task, particularly in mental health and especially for Maori. However the benefits of such tools may be significant, not only in terms of quality assurance but also as a means of further validating Maori approaches to treatment and care. Not only are Maori providers likely to benefit but also funders and Tangata Whaiora" of the such tasks of the such tasks

Recommendations by the Mental Health Commission for mental health services raise a number of important issues relevant to this study. In particular, the Commission attempts to work within current government strategies and frameworks, identifying strengths, weaknesses and areas requiring enhancement. The recommendations of the Commission are made through an informed and structured research process and based on the advice of a number of mental health experts including a Maori advisory group.

The Commission articulated particular service development needs through the publication of its *Blueprint*, an evolving document, of which two have so far been released. When first published the blueprint made broad reference to outcomes and in particular ensuring the best possible outcomes for consumers.<sup>31</sup>

"Developing better outcome measures is a priority and the Commission will include evaluation of the development and use of outcome measures in its monitoring of the National Mental Health Strategy. Such outcome measures must be relevant to the concepts of health and well being of each individual and group using the services; for example services for Maori must have outcome measures relevant to Maori. The first step in planning for services focused on

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McCarthy, P. R. Gelber, S. Dugger, D. E. (1993). Outcome Measurement to Outcome Management, The Critical Step. In *Administration and Policy in Mental Health*, 1993, Vol.21(1):59-68.

Mental Health Commission (1999). New Zealand Mental Health Strategy – Review of Progress 1994 – 1999. Mental Health Commission, Wellington: p 22.

 $<sup>^{31}\,</sup>$  Mental Health Commission (1997). Blueprint for Mental Health Services. Mental Health Commission, Wellington: p 4.

achieving improved outcomes is consideration of the needs of those affected be mental illness, including the needs of their family/whanau."<sup>32</sup>

The second *Blueprint* document<sup>33</sup> makes further reference to mental health outcome measures and, in particular, their role in measuring effectiveness and the allocation of funding.

"Services cannot know if they are operating effectively unless they can systematically measure improvements in the health of the people who use the services. In the absence of measuring outcomes, it is difficult to determine whether funds are being spent in the most effective way." 34

In 1998, as part of its consultation process, the Commission also initiated a series of national hui. These were held in nine different locations throughout the country and with a range of Maori service providers. Hui participants were asked to comment on the Commissions *Blueprint* document, services provision issues, and workforce development needs.

Although a wide range of opinion was expressed, a document outlining the major themes of the hui suggested that the development of effective mental health outcome measures was a priority. It was further recommended that these types of performance measures would need to be consistent with Maori concepts of health and based on models such as Te Whare Tapa Wha.

"... outcome measures go beyond the immediate clinical parameters to encompass the wider measures of good health that Maori health services pursue. This model [Te Whare Tapa Wha] measures good outcomes for health and is not simply the removal of symptoms..." 35

The comments and recommendations of the Mental Health Commission emphasise two important considerations in terms of mental health and outcomes. First, outcome measures provide significant opportunities in terms of monitoring, funding, and services development. Second, Maori mental health services require to be measured against indicators which are appropriate and relevant to Maori.

#### Maori mental health outcome research

Outcomes research pertaining to Maori mental health is still at a developmental stage. This study aside, we are aware of only one other research project that has a specific Maori mental health focus.

Unlike this investigation the other study is collaborative research project which examines the outcomes that both Maori and non-Maori consumers may expect

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<sup>&</sup>lt;sup>32</sup> Ibid: p 9.

Mental Health Commission (1998). *Blueprint for Mental Health Services; How Things Need to be.* Mental Health Commission, Wellington: p 59.

Mental Health Commission (1999). New Zealand's National Mental Health Strategy; A Review of Progress 1994 – 1999. Mental Health Commission, Wellington.

Mental Health Commission (1998). Report of the Key Messages to the Mental Health Commission from the Hui Held February – April 1998. Mental Health Commission, Wellington: p 11.

from mental health services.<sup>36</sup> Furthermore it is designed to consider the utility of selected overseas instruments with Maori mental health consumers, and to determine whether modifications need to be made.<sup>37 38</sup>

Both studies will provide a much needed base for Maori mental health outcomes research. And while the approaches are quite different, the two studies are likely to complement rather than contradict each other.

However, neither should be viewed as a comprehensive solution to the problem of measuring mental health outcomes for Maori. The inherent limitations of all measures of outcome will ensure that ongoing development and refinement will be required, including those measures which have a cultural focus. Additional research will therefore be important.

### Methodology

This section describes the methodological process used to construct a Maori mental health outcome measure.

#### Aims and objectives

The aim of this study was to develop a Maori mental health outcomes measure, a consumer focused tool appropriate for routine use in clinical and care situations. It would largely involve the testing of a draft measure of outcome suggested in *A Framework for Measuring Maori Mental Health Outcomes*.

In achieving these aims a number of secondary objectives were identified. These were:

- to ensure high ethical standards;
- to consult widely with experts in Maori health, Maori mental health, and health outcomes development;
- to further modify the draft outcomes tool, appropriate for clinical testing;
- to identify an appropriate range of services in which to test the tool;
- to outline the study with key service representatives;
- to meet with each of the test sites and to conduct a series of training sessions on how to apply and test the tool;
- to test the tool within each test site (test round one);
- to obtain feedback on the tool and incorporate refinements where appropriate;
- to re-test the tool (test round two) and obtain further feedback;

<sup>&</sup>lt;sup>36</sup> Dyall, L. et al (1999). Maori Outcomes: Expectations of Mental Health Services. In Social Policy Journal of New Zealand, Issue 12, July 1999. Social Policy Agency, Wellington.

Dyall, L. Bidois, A. Gurney, H. Hawira, J. (1998), *Maori Expectations of Mental Health Services A Rotorua Viewpoint*, Overview of Focus Groups; Presentation Prepared for Participants, Interested Individuals and Organisations, 4 December 1998.

<sup>&</sup>lt;sup>38</sup> The instruments selected for this study included, Basis, Harbor View, Health of the Nations Outcome Study (HoNOS), Perceived Family Burden and Tangata Whaiora Scale.

- to prepare a final tool; and,
- to present and consult on the tool during the research process.

The following sections provide further detail about these objectives.

#### Ethical issues

The tool was piloted with the assistance of six separate institutions or test sites covering four wider regions (Greater Auckland, Waikato, Hawkes Bay and Wellington). As a result of this geographical spread the research team was required to submit ethical applications to four separate committees. An additional application was also submitted to the Manawatu/Wanganui ethics committee which acted as primary co-ordinators. Whereas this process was, at times, arduous and time consuming it did prove useful in terms of obtaining further expert comment. A number of valuable refinements were incorporated as a result of the ethical review process.

#### Consultation

A number of key individuals were identified and asked to comment on the outcomes measure and framework. Their input was particularly useful in the consideration of different theoretical perspectives and the alignment of the study with developments in the health and research sectors. (see Appendix 2 for detail)

#### Modification of the draft tool

Some modifications to the draft tool were made prior to testing. These had been suggested by reviewers of the 1997 report and as a consequence of various other consultation and review processes. The modifications were, nonetheless, still consistent with the MMHO framework and designed to enhance the draft tool and maximise the benefits of the testing process (see Appendix 2 for detail).

#### Identification of appropriate test sites

The researchers were particularly mindful of the need to select an appropriate range of test sites. Although all catered for Maori clients, the sites varied significantly in the range of services they provided and the particular clients they catered for. The groups were geographically and demographically disparate, reflecting an urban, rural and residential mix, as well as a wide range of clinical settings and varying degrees of acculturation and de-culturation.

Four services were initially selected and approached to participate in the study. A further two were subsequently added to provide the required diversity and to ensure an adequate response rate. (see Appendix 2 for detail.)

#### Service input

Once an appropriate range of services had been identified the research team held a series of hui with service representatives. These hui were designed to outline the objectives of the study and logistical issues associated with management. Hui participants included service managers, clinicians, support staff and Kaumatua (a complete list of individuals is attached in Appendix 2).

Further modifications to the tool were also incorporated as a result of this process.

#### Training of clinical staff

As indicated, a number of hui were conducted in order to provide service managers and senior staff with an overview of the study and the logistics involved with the pilot. However, further hui and training sessions were required at each of the test sites in order to instruct clinical staff in the application of the tool. These training sessions were arranged in Hamilton, Hastings, Porirua and two in Auckland. They provided clinical staff with the opportunity to familiarise themselves with the tool, to clarify their roles, and to debate broader issues related to outcome measurement.

#### Test round one

The initial round of testing was conducted in order to determine the tools performance across a range of clients, a range of clinical end points and at varying degrees of client acuity. Feedback from test round one was used to modify the tool prior to test round two.

#### Feedback and tool refinement

Each test site was given a number of "Stakeholder Packs". Each pack contained three questionnaires, one for the clinician, one for the tangata whaiora and one for the whanau member.

Clinical staff, at each site, were asked to collect a "Stakeholder Pack" from a designated staff member who was responsible for the collection and distribution of packs within each institution. Clinical staff would then approach tangata whaiora and ask if they were willing to participate in the study and if it was possible to involve a relative or someone they considered whanau. If consent was given, the whanau member was also asked to participate in the study. <sup>39</sup> Respondents were selected largely on grounds of convenience.

Following the completion of a particular clinical end point, e.g. an assessment, all three respondents would then complete the respective questionnaires. Following questionnaire completion, they were asked to evaluate the questionnaire using a separate evaluation form located on the reverse side. Immediately after both tasks were completed, all three questionnaires were place in an envelope, sealed, and returned to the designated staff member.

Once all of the packs had been completed (at each institution) they were mailed to the researchers for analysis.<sup>40</sup> In order to assist with this analysis a qualitative data capture program was utilised. It had been specifically modified in order to meet the particular requirements of the study.<sup>41</sup>

<sup>&</sup>lt;sup>39</sup> Signed consent forms were required as part of this.

In order to aid with the analysis of each questionnaire, evaluation forms and stakeholder packs were numerically coded.

<sup>&</sup>lt;sup>41</sup> Microsoft Access

After data from the first round of testing was analysed, modifications to the draft tool were made. A further consultation hui was also held with test site representatives to discuss the modifications, suggest additional changes, and to outline test round two. (Information Sheets, Consent Forms and Evaluation Schedules are detailed in Appendix 3.)

#### Test round two

The second round of tests were conducted in the same institutions but with an another group of clinicians, clients and whanau. Feedback was obtained in a manner consistent with that outlined in the process above. As most of the major concerns with the tool had been identified and addressed as part of test round one, it was decided to re-test the tool with a smaller, selected, cohort of respondents. This also reduced the work demands placed on clinical staff and management.

#### Final tool preparation

The two test rounds were the prime mechanisms used to prepare the final tool. However, an extensive consultation process and input from key informants was important in terms of identifying additional refinements. Prior to the preparation of this report, a draft document (research report) was sent to each participating institution. Staff were invited to comment on the measure and to suggest any final modifications.

#### Consultation presentations

During the course of this research a number of presentations were made in order to obtain direct feedback on the study and those modifications which were under consideration. Although not all of these presentations were in formal situations, in every instance relevant comments and concerns were noted and used to complement the two test rounds. (A full list of presentations is contained in Appendix 2.)

#### **Cultural perspectives on health outcomes**

"Mental Health workers and other service providers are concerned about the lack of monitoring of services, service quality and service achievements. Many new ideas are being trialed, but it is difficult to make comparisons as there is no data about success rates" 42

Outcome measures and outcome tools have a variety of uses and applications. Some are designed to assess outcome at a particular level or point and according to very detailed signs and symptoms, while others adopt a less specific global approach where broader impressions of outcome are favoured.

Consumer based measures, such as that described in this report, may also provide information relevant to a number of associated sectors and are useful in terms of service development, monitoring, policy formulation, staff development, staff deployment and, primarily, when determining the

Mas on, K, (1996), Inquiry Under Section 47 of the Health and Disability Services Act 1993 in Respect of Certain Mental Health Services, Ministry of Health, Wellington.p 97.

effectiveness of a particular treatment or intervention. <sup>43</sup> The usefulness of outcome measures are, however, constrained by a number of factors, in particular those inherent limitations which dictate the tools validity and applicability in certain situations or environments.

The following section examines a number of issues associated with measuring mental health outcome and the implications for Maori. The issues highlight the difficulties associated with considering cultural perspectives to outcome and why it is imperative to do so.

#### The utility of outcome measures

The usefulness and validity of health outcome measures has been complicated by the seemingly endless range of potential contingencies which must be considered. For those concerned with the measurement of mental health outcome, such problems are particularly troublesome and are often enhanced due to variations in expected outcome and disagreements regarding preferred outcome.

The move toward more targeted measures of outcome has, in many respects, reflected these problems and the associated difficulty of constructing universally applicable tools which are suitable in all situations, with all clients, under all circumstances and regardless of condition or expected outcome.

While much progress has been made in developing targeted or condition specific outcome measures it is unlikely that any one tool will be valid in all situations.<sup>44</sup> And, it is further unlikely that even targeted measures will be appropriate for all consumers.

Despite the need to construct measures of outcome which are more aligned to the specific needs of particular groups or populations no specific measures of Maori health outcome currently exist. As cultural factors are likely to influence perception of health and well-being they will need to be considered when determining outcome, otherwise the reliability of outcome assessment within Maori populations will provide incomplete answers. The following section discusses these issues in greater detail.

#### Cultural paradigms and outcome assumptions

"The sociological literature is replete with studies which show how physical and psychological signs and symptoms are interpreted very differently according to cultural and religious factors, social class, ethnicity, gender and the social networks in which people live. This means that what one individual, or group of individuals, define as being ill or healthy may be very different

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<sup>&</sup>lt;sup>43</sup> 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. p 28.

<sup>&</sup>lt;sup>44</sup> Howard, B. et al (1995), Use of Outcome Studies by a Managed Care Organisation: Valuing Measured Treatment Effects. In Medical Care, vol 33, No 4, J.B.Lippincott Company. p221.

from the definitions of others, even though the signs and symptoms may appear to be similar, 45

Outcome tools make assumptions with respect to what outcome is preferred or what aspects of well-being should be considered. Often, a series of standard questions will be asked and responses documented or rated. Based on this an outcome assessment will be made.

A problem occurs however, when the types of questions asked do not account for concepts or issues considered important to the client or necessary to their recovery. Furthermore the questions may refer to issues or use language that the respondents are unfamiliar with. This is particularly so for schedules or tools which have been developed within other cultural paradigms.

As indicated, cultural perceptions of health and well-being will also influence what a preferred outcome may be and tools which fail to consider such factors are unlikely to be appropriate for Maori. They may, in fact, examine concepts of health which are unimportant or which are defined on a narrow, medically based definition of health.

While Maori will benefit from measures which consider clinical aspects of outcome, culturally founded outcome preferences will likewise need to be explored so that a more complete assessment of outcome, aligned to Maori concepts of health, can be determined.

### Process, outcome and Maori mental health services

The activities and purpose of mental health services have been described in terms of three broad headings: inputs, process and outcomes. Until recently the focus of service description and evaluation has been largely directed toward input and process variables. Such mechanisms are often preferred because they depend on data which is more readily identified. 47 48

Unfortunately, process type measures have often been used as a somewhat unreliable "proxy" measure of outcome, the assumption being, that if an intervention took place in a timely, adequate, appropriate and acceptable manner, the outcome would be favourable. For the most part, health services have been funded in this manner, that is, based on what occurred rather than the health benefit produced. For Maori users of mental health services this approach has often failed to explain why many experience poorer outcomes despite receiving similar modes of treatment.

Davies, P. (1996), *The Sociology of Health and Illness*, In Health Outcomes; Biological, Social and Economic Perspectives, Oxford Science Publication, Oxford, pp 94-95.

<sup>&</sup>lt;sup>46</sup> Jenkins. R. (1996), *Measuring Outcomes in Mental Health: Implications for Policy*. In Mental Health Outcome Measures. Springer (NY).

Goldacre, M. (1996), *Health Outcomes from a Medical Perspective*, In Health Outcomes; Biological, Social and Economic Perspectives, Oxford Science Publication, Oxford, p 76.

<sup>&</sup>lt;sup>48</sup> Jenkins, R. (1990), *Towards a System of Outcome Indicators for Mental Health Care*, In British Journal of Psychiatry, p 500.

Culturally reliable measures of outcome provide two major opportunities to improve service effectiveness. First, by further validating Maori approaches to treatment and care and, second, by providing funders with clear evidence on which to base their purchasing decisions. Likewise, the value of the added cost of providing culturally relevant treatments may also be assessed.

The success of the outcomes approach will, of course, depend on the validity of the measures used, and their capacity to encompass the type and range of outcomes produced. This is particularly relevant to services which promote culturally defined notions of outcome.

A treatment plan may, for example, include interventions or processes designed to enhance a dimension of health which is culturally founded, such as wairua. A service may do so in a variety of ways and could include karakia or powhiri as part of a spiritual intervention. The outcome of this particular process might be significant and an important part of the client's treatment and recovery plan. Measures of outcome which neither consider the intervention nor outcome are likely to disadvantage services which operate within that type of cultural paradigm.

### Health outcomes and funding arrangements

"The health outcomes focus is about health system reform and a cultural change within the health system. It is concerned with the need to know which health interventions work, as against those that produce little or no health benefit, and to know which treatment alternatives for a condition are the most cost effective in producing health gains."<sup>49</sup>

It has been noted that outcome measures have a variety of uses and applications and, while a number of sectors have used these tools, recent national developments have directed attention toward their application at the funder level. The following section briefly examines the potential use of outcome measures in terms of health funding as they relate to Maori mental health services.

### Funding decisions and outcomes measures

"...health authorities have failed to address the central issue of whether the activity being paid for is worthwhile. They key question is not how many services are being provided or how long the people wait for them but whether these services lead to a significant improvement in health." <sup>50</sup>

Balancing health improvements within fiscal parameters is a problem faced by most governments. Limited resources, increasing costs, new technologies, and expanding consumer demands have further augmented these concerns often leading to situations where unpopular funding and prioritisation decisions are required.

Sansoni, J. *et al.* (1999) *Health Outcomes and Community Care*, Unpublished Conference Proceedings, Canberra, July 1999.

Goldacre, M. (1996), *Health Outcomes from a Medical Perspective*, In Health Outcomes; Biological, Social and Economic Perspectives, Oxford Science Publication, Oxford Ibid. p 70.

Increasingly, the provision of health services has become influenced by economic constraints perhaps more than any identified need or consumer demand. The introduction of new and often expensive technologies or procedures has added to financial concerns, as have individual calls for timely and appropriate access to the new treatments.

As funders become more concerned with making the best use of limited budgets, greater emphasis is being placed on determining the actual benefits of treatments, particularly, when the results are marginal or unproven. <sup>51</sup> Conversely, many feel that individuals should have the opportunity to access whatever treatment they wish, however marginal the benefits and no matter what the cost. The rationale being that, of all personal assets, health is one which should not be valued on the basis of an economic formula alone.

The application of consumer focused outcome measures may be seen as an obvious solution to this problem, given that many are designed specifically to determine the "health benefit" of a certain treatment, intervention or process.<sup>52</sup> For funders in particular, outcome measures present the opportunity to further ratify their spending decisions based on the benefit produced (outcome) rather than service provided (output).

While, in theory, this approach appears logical, a number of fundamental problems exist including the identification of appropriate measures. Problems are also likely to occur in the application of measures, the collection of data, and the development of formula for funding based on outcomes, the emphasis given to outcome results as opposed to other variables.

If outcome measures are to be incorporated as part of funding arrangements further research will be required, not only to determine the most appropriate tools but, also, to determine how these tools be applied.

Consultation conducted as part of this study suggested that funding was a major issue for many Maori mental health services. Further, a perceived lack of validity had contributed to funders unwillingness to invest in services which promote cultural aspects to treatment and care.

Reliable measures of Maori mental health outcome are likely to provide funders with clear evidence of the effectiveness of cultural interventions.

#### A four point approach to prioritisation

How outcome measures are used and applied will depend on a range of factors and, although it is impossible to provide advice on every potential situation, Jenkins <sup>53</sup> offers some useful advice particularly in terms of funding. In this

Howard. B. et al (1995), Use of Outcome Studies by a Managed Care Organisation: Valuing Measured Treatment Effects. In Medical Care, vol 33, No 4, J.B.Lippincott Company.

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.

<sup>&</sup>lt;sup>53</sup> Jenkins, R. (1996), *Measuring Outcomes in Mental Health: Implications for Policy*. In Mental Health Outcome Measures. Springer (NY).

regard, he describes the development of mental health outcome measures in terms of four distinct stages.

First: Outcome Measures used as single indices of health gain for individual patients or patient groups (e.g. HoNOS).

Second: The addition of cost information allowing for the calculation of cost effectiveness ratios so that different treatments can be compared in terms of their relative value for money.<sup>54</sup>

Third: The use of cost effectiveness data in relation to expected course and outcome for a particular diagnosis-related or outcome-related group. In this approach, experts and other key stakeholders would estimate a set of reasonable expectations for the clinical course of the patients with or without treatment. In effect, this is a process of calibration in which input data, output data and expected effects of treatments are combined in order to estimate the relationship between clinical and social functioning, and service inputs and investments.

Fourth: To combine calibrated and cost effectiveness outcome with the wider view of which patients should receive priority for investment by health and social services. Furthermore, to base political, policy and planning decisions on these priorities.

#### Jenkins states that;

"The challenge for clinical practice now is to include outcome information in assessing the value of clinical work. The challenge for mental health service research will be to proceed from stage 1 to 4...in order to gain a complete and detailed understanding of how services can best help people who suffer from mental illness"

Though relatively generic, the four stages described by Jenkins will prove useful to those wishing to incorporate outcome measures at a funding level. And, whereas the model is yet to be fully developed, it does highlight the need for a considered and well-advised approach to the use of outcome measures particularly if they are used to make decisions concerning priority spending and investment.

#### Discussion

The issues discussed so far have highlighted the need to consider a range of variables when either developing or implementing health outcome measures. These concerns have further been linked to issues relevant to Maori and mental health. The following section provides an additional analysis of these concerns and raises a number of important questions which need to be considered when applying outcome measures, particularly at a service level.

### Identification of appropriate outcomes

This study has reinforced the view that notions of health and perspectives of outcome will vary and that cultural factors are likely to be a major influence. It

This approach is likely be limited in terms of severe mental illness where the disability and symptoms may not be entirely curable.

has also been noted that the inadequacies of existing measures may, in part, be attributed to their theoretical perception of what an ideal or preferred outcome might be.

The identification of an appropriate theoretical perspective is, therefore, a critical first step in development of outcome measures. This will ensure that outcome tools do in fact measure aspects of health which are important and relevant to those undergoing assessment.

The MMHO Framework was in many respects designed to consider these issues by identifying those components of health outcome relevant to the mental health needs of Maori consumers. If further measures of Maori health outcome are to be developed they will likewise need to consider what is being measured, why and whether or not it is relevant, given Maori understandings of health and sickness.

### Applying outcome measures

"... the mental health sector still lacks good information. At present too little reliable, consistent information is available about access to and utilisation of services, and almost nothing about the outcomes achieved. Better information is urgently needed to inform service planning and delivery at all levels..."<sup>55</sup>

Measures of health outcome are of little value unless they are used and are able to contribute to health gains.

Once appropriate measures of outcome are developed, it is important that relevant information is provided to those likely to benefit from them. This information should include guidelines for the tool's clinical application, as well as data management and collection procedures. At a service level, measures of outcome are particularly useful in developing treatment plans, monitoring progress, staff deployment and service development. However, benefits will fail to materialise if appropriate systems are not in place to facilitate the use of outcome measures in a positive way.

Changes within the health system have often gone unnoticed by Maori providers. As a consequence, many have failed to receive much of the information they require to meet their contractual and monitoring obligations. This problem is further augmented by low staff numbers, a lack of administrative support, and few opportunities for relevant training and development. <sup>56</sup>

Presentations organised to inform this study were conducted in numerous locations throughout the country and to a variety of audiences. Though most participants were able to appreciate the relevance of outcome measures, few were aware of how these tools could be used, and how they could contribute to service development.

Mental Health Commission (1999), New Zealand's National Mental Health Strategy; Review of Progress 1994-1999, Mental Health Commission, Wellington.

Mental Health Commission (1998), Report of the Key Messages to the Mental Health Commission from the Hui Held February – April 1998, Mental Health Commission, Wellington.

If outcome measures are to be useful, information concerning their use and application must be made available to Maori health services. Such information dissemination mechanisms will necessarily require a broad range of strategies.<sup>57</sup> The costs associated with this process, and training in particular, will also need to be considered.

#### Analysing outcome measures

As noted, health funders are likely to see significant benefits in the application of outcome measures. However, a number of important issues should be explored when designing an appropriate implementation process. Some points to consider are highlighted below.

Transparency – Methods by which data is gathered and used must be transparent. Services must have an adequate understanding of what the information is to be used for, their role, obligations, as well as the purpose of this process.

*Robust Systems* – Systems adopted to collect, analyse and review data must be robust and reliable.

*Validity* – The methods by which outcome is determined must be valid and reliable. For Maori mental health services this is an important consideration, especially if they emphasise treatments or processes which may not be considered through more established tools or measures.

Acceptability – Processes or procedures must be accepted if they are to be applied. They must be viewed as providing some value and benefit and must not significantly increase present workloads or administrative demands.

Consultation – Issues associated with transparency, robust systems, validity and acceptability will all benefit from active consultation, especially with Maori.

*Cost* – The cost required to store, maintain, analyse and disseminate data will need to be adequately considered. Well targeted investment here will ensure that the gains anticipated can be achieved.

#### Review

If outcome measurements are introduced it will be important that reviews of the process take place. There is much contention with respect to how outcome measures should be applied and what process will most effectively facilitate health gains. Due to this uncertainty (and the likelihood of further modifications to the health system) it is important that the application of outcome measures is regularly scrutinised and accordingly adjusted.

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<sup>&</sup>lt;sup>57</sup> Ministry of Health (1994), *Kia Whai te Maramatanga; The Effectiveness of Health Messages to Maori*, Ministry of Health, Wellington.

### "Hua Oranga" A Maori Mental Health Outcome Measure

The following section describes "Hua Oranga" a tool for measuring Maori mental health outcome. It has been informed through a number of processes and is consistent with the recommendations made in *A Framework for Measuring Maori Mental Health Outcomes*.

This section has been divided into two parts. The first part describes the various features of the Maori mental health outcome measure and the principal modifications suggested as part of the research process. The æcond part provides guidelines for the tool's clinical application.

#### Features of a Maori mental health outcome measure

#### Defining dimensions of outcome

The original draft measure of outcome required the application of three separate schedules, each containing four questions designed to examine aspects of mental health in terms of "wairua", "hinengaro", "tinana" and "whanau".

While this approach initially held promise, reviewers of the draft measure identified a number of difficulties. In particular, the questions were perceived as being too broad and ambiguous, thereby making interpretation of the questions difficult. As a primary response, the research team attempted to reconsider each question in order to provide greater clarity and less ambiguity. However, further problems arose when attempting to identify a single question that would effectively consider the four domains from a mental health perspective.

An analysis of similar measures of outcome indicated that a single question was an inadequate means of determining the outcome relevant to a particular domain. As a consequence it was decided to refine the draft measure so that four questions, instead of one, would be used to determine the outcome for each domain. Thus, each of the three schedules would ask four questions in terms of wairua, four questions pertaining to hinengaro, four questions concerning tinana and four questions regarding whanau.

Attention then turned to the format of the tool and the types of questions that would effectively elicit responses relevant to each domain. Although literature provided some guidance, it proved difficult to obtain the required detail through which to construct the necessary range of questions. Therefore, as a means of complementing this process, a number of presentations were conducted prior to the testing of the draft measure. Although not all of these were designed to consider the shape of the tool, this process did enable the construction of a secondary framework whereby specific questions relevant to each domain could be considered.

The framework represented an unbundling of the domains of outcome so that, for each, the key aspects could be captured. It is shown below.

As illustrated, each dimension reflects a particular aspect of outcome as it applies to each domain. Based on this secondary framework, questions were formed and submitted for testing.

Framework 2. Maori Outcome Dimension Framework

		Domains								
	Wairua	Hinengaro	Tinana	Whanau						
Dimension 1	dignity, respect	motivation	mobility/ pain	communication						
Dimension 2	cultural identity	cognition/ behaviour	opportunity for enhanced health	relationships						
Dimension 3	personal contentment	management of emotions, thinking	mind and body links	mutuality						
Dimension 4	spirituality (non-physical experience)	understanding	physical health status	social participation						

#### Wairua and mental health outcome

Of all aspects of outcome, wairua is perhaps the most difficult to measure. Much of the literature has tended to focus on spirituality and how this is linked to broader notions of religion or religious beliefs. Although for the most part this was the most common view expressed by respondents to this study, further investigation suggested that this domain was far more complex and that a broader range of variables would need to be considered.

As a consequence, the four wairua dimensions are based on relatively diverse criteria in order to capture the very disparate and individual perceptions of wairuatanga. It is unlikely that any one definition of wairua will be sufficient. Wairua means different things to different people, it is personal and considers aspects of well-ness which are often nondescript and intangible. However, the four dimensions provide a reasonable base through which the notion of wairua can be explored and, certainly, the results of this study support the approach.

#### Hinengaro and mental health outcome

Hinengaro is most closely aligned with the more usual measures of mental health outcome. It is a dimension that relates to thoughts, feelings and subsequent behaviours and has received the most sustained focus from mental health researchers and clinicians.<sup>58</sup>

The four dimensions of hinengaro are consistent with the need to measure aspects of psychological functioning and behaviour. As with wairua, these dimensions are based on broad criteria and recognise the need for a global measure suitable for a range of expected conditions.

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. p 49.

#### Tinana and mental health outcome

There is now a general acceptance that physical health can have a positive influence on mental well-being. <sup>59</sup> However, for Maori this relationship has always formed an integral part of how health is perceived <sup>60</sup> and divisions into mental and physical were seen as forced or contrived.

The four tinana dimensions consider this association by examining mt only one's physical status but also how this may be linked to mental health and opportunities to improve physical health. By considering these dimensions the physical consequences of an intervention are examined alongside other domains. It is inconsistent with Maori values to isolate mental well-being from physical well-being, and it is similarly unacceptable to administer psychological therapies/treatments with no regard for physical health.

#### Whanau and mental health outcome

During the course of this research many respondents emphasised the critical role of whanau in terms of outcome. Durie <sup>61</sup> notes that the pakeha ideal of being able to stand alone and be independent is actually an unhealthy position from a Maori perspective where inter-dependence has been the norm. In addition, collective identity, responsibility and reciprocity are predominant components of Maori whanau relationships, as opposed to the pursuit of individualistic desires and gains. <sup>62</sup>

The four whanau dimensions are designed to consider communication, relationships, mutuality and social participation so that the role of whanau is bought into the outcome equation. The dimensions do not presume to determine what a whanau might be, assume that all whanau relationships are the same or, even, that a close relationship is appropriate in all circumstances. Rather, the focus is on measuring the quality of the relationship between the client and the whanau, and, by extension, the relationship between whanau and the wider social environment.

#### Clinical end points

The testing process confirmed the need to target the tool and to apply the measure at particular clinical end points. As expected this would separate the treatment process into distinct and more manageable components, providing a more accurate link between a particular intervention and an outcome.

The five original clinical end points were "Assessment", "Inpatient Treatment", "Outpatient Treatment", "Community Care" and "Discharge". However,

<sup>&</sup>lt;sup>59</sup> Ministry of Health (1997), *Progress on Health Outcome Targets*. Ministry of Health, Wellington, p59.

<sup>&</sup>lt;sup>60</sup> Turbott, J. (1996), *Religion, Spirituality and Psychiatry: Conceptual, Cultural and Personal Challenges*, Department of Psychiatry & Behavioural Science, University of Auckland, Auckland

Durie, M. H. (1994), Whaiaora, Maori health development, Oxford University Press NZ, Auckland.

<sup>&</sup>lt;sup>62</sup> Durie, M. H. (1994), *Whanau, family and the promotion of Health*. Department of Maori Studies, Massey University, Palmerston North.

subsequent reviews of the framework suggested hat "Discharge" was an unreasonable end point for many tangata whaiora. Consequently it was recommended that this end point be changed to "Community Support" to allow greater flexibility and ensure that those with long term treatment plans were not discounted.

#### Three perspectives of outcome

Results from the two testing phases confirmed the utility of adopting a triangulated approach to measuring outcome; three questionnaires being used to obtain three different perspectives of outcome. However it was often suggested, and is now recommended, that a reasonably broad definition of whanau be applied and that this definition be left to the discretion of the tangata whaiora. As three different perspectives of outcome are required it is also inadvisable that clinical staff be nominated to complete the whanau schedule.<sup>63</sup>

#### Three schedules for measuring Maori mental health outcome

Much of this study has focused on the testing and modification of the three outcome questionnaires. The templates below are the final recommendations. These three questionnaires are generic baseline schedules. Therefore, in practice, the term "intervention" would be modified according to the particular end point under consideration, i.e. "Assessment", "Inpatient Treatment", "Outpatient Treatment", "Community Care" and "Community Support". 64

It is acknowledged that within many Maori mental health services clinical staff and tangata whaiora have, and promote, a relationship based on whanau concepts. This recommendation merely reflects the need for three different perspectives of outcome.

A supplement to this document has been produced and contains a full range of schedules as well as guidelines for the tools application.

### **Q1.** As a result of the INTERVENTION do you feel: (Please Circle One)

a)	more valued as a person ⇒=	$\Rightarrow \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in yourself as a Maori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within yourself⇒=	$\Rightarrow \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

Much more

More

No Change

Less

Much less

### Q2. As a result of the INTERVENTION are you: (Please Circle One)

d) healthier from a spiritual point of view

a)	more able to set goals for yourself $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
	manner					
c)	more able to manage unwelcome thoughts $\Rightarrow \Rightarrow$ and feelings	Much more	More	No Change	Less	Much less

d) more able to understand how to deal with Much more More No Change Less Much less your health problem

### Q3. As a result of the INTERVENTION are you: (Please Circle One)

a) more able to move about without pain or distress	Much more	More	No Change	Less	Much less
b) more committed to having good physical health	Much more	More	No Change	Less	Much less
c) more able to understand how physical health improves mental well-being	Much more	More	No Change	Less	Much less
d) physically healthier $\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

Q4.	Q4. As a result of the INTERVENTION are you: (Please Circle One)									
a)	more able to communicate with your Whanau	Much more	More	No Change	Less	Much less				
b)	more confident in your relationships with other people	Much more	More	No Change	Less	Much less				
c)	clearer about the relationship with your Whanau	Much more	More	No Change	Less	Much less				
d)	more able to participate in your community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less				

### **Q1.** As a result of the INTERVENTION does your relative feel: (Please Circle One)

a)	more valued as a person	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in his/herself as a Maor	ri	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/herself	$\stackrel{\cdot}{=} \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

### Q2. As a result of the INTERVENTION is your relative: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
	mumer						
c)	more able to manage unwelcome thoughts and	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
	feelings						
<b>d</b> )	more able to understand how to deal with their	$\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

### Q3. As a result of the INTERVENTION is your relative: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health ⇒⇒	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health ⇒⇒ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow\Rightarrow$ $\Rightarrow\Rightarrow$ $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

### Q4. As a result of the INTERVENTION is your relative: (Please Circle One)

a)	more able to communicate with the Whanau $\implies$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\implies$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

health problem

a)	more valued as a person	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger as a Maori ⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/hersel	$f \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	⇒⇒	Much more	More	No Change	Less	Much less

### **Q2.** As a result of the INTERVENTION is the patient: (Please Circle One)

a) more to set goals for him/herself $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$	$\rightarrow \rightarrow  $	much more	More	No Change	Less	widen less
b) more able to think, feel and act in a positive	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

- c) more able to manage unwelcome thoughts and  $\Rightarrow\Rightarrow$  *Much more More No Change Less Much less* feelings
- d) more able to understand how to deal with their  $\Rightarrow\Rightarrow$  *Much more More No Change Less Much less* health problem.

### **Q3.** As a result of the INTERVENTION is the patient: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

### Q4. As a result of the INTERVENTION is the patient: (Please Circle One)

a)	more able to communicate with the Whanau $\implies$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

#### Scoring mechanism

Although the 1997 Report suggested a scoring mechanism through which each question could be rated and compared, there were two reasons why scoring schedules were omitted from the testing process.

In the first instance, there is some evidence that scoring schedules which are located on questionnaires may potentially influence the answers given by respondents. For this reason it was anticipated that the final measure would not contain a scoring schedule. Instead, a schedule would be kept as a separate appendix and applied after the tool was completed. As the researchers were keen to trial the tool in a manner that would mirror its actual application it was decided not to provide a scoring schedule with the test tool.

Secondly, the researchers were primarily concerned with eliciting comments relevant to the questions asked, and to distinguish whether or not these questions reflected concepts of health outcome relevant to Maori and appropriate for mental health.

Accordingly, the scoring method was developed through another process. Key to this was a thorough examination of similar measures of outcome and consultation with others involved in outcomes research and questionnaire design.

As a consequence, it was recommended that the scoring schedule be kept simple and uncomplicated to enhance the ease at which the tool could be applied. The scoring schedule would, furthermore, need to be aligned with the types of questions asked and possess the capacity to measure both positive and negative outcomes of treatment as well as no change. In order to simplify the scoring process a single scoring schedule was developed, rather than the two which were originally suggested.

This single five point scoring schedule is therefore recommended.

<u>RESPONSE</u>	<u>SCORE</u>
" Much More "	+2
" More "	+1
" No Change "	0
" Less "	-1
" Much Less "	-2

-

<sup>&</sup>lt;sup>65</sup> For detail related to this see. Shanks, J. (1994), "Outcomes in Mental Health" in (eds.) Delamothe, *Outcomes into Clinical Practice*. BMJ Publishing Group.

## Guidelines for the clinical application of a Maori mental health outcome measure

#### **Overview**

As indicated, the three outcome schedules are designed to be used as a single measure of outcome. Responses are obtained from the three key stakeholders and with the aid of the scoring schedule used to create an overall impression of outcome. A range of clinical end points are prescribed and represent treatment end points at which the tool may be applied. <sup>66</sup>

#### Completing the outcome schedules

Each of the three respondents (clinician, client, whanau member) should complete the respective questionnaires by answering each question and circling the most appropriate response. With the aid of the scoring schedule, these responses may then be converted into a numerical score. By adding the respective scores a **total score** for each of the three respondents is obtained.

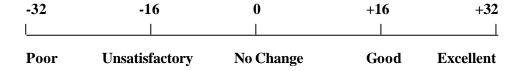
#### Compiling the total scores

It is suggested that the three **total scores** are added to produce a **combined score**. This **combined score** would then be averaged (i.e. divided by three) to produce an **outcome score**. As three distinct and equal impressions are required the three total scores are not weighted.

#### Interpreting the outcome score

The **outcome score** would be used to indicate the overall outcome. Obviously, a high score would indicate a more positive outcome. Conversely, a low or negative score would suggest that the outcome was less satisfactory.

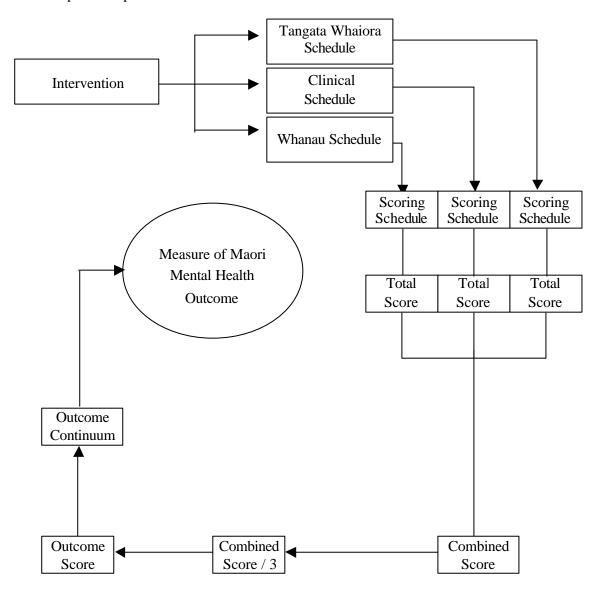
In order to provide interpretive guidelines for this process, an outcome continuum, below, is suggested. Based on the recommended method of application an **outcome score** range of + or - 32 is possible. This continuum has been constructed to reflect the range of outcome scores which are possible.



<sup>66</sup> It should be noted that the clinical end points provide a guide based on established treatment processes. However, the tool may be applied autonomously in order to establish the outcome of a specific intervention.

### Diagrammatic process representation

The following diagram has been constructed to further illustrate the application and interpretation process.

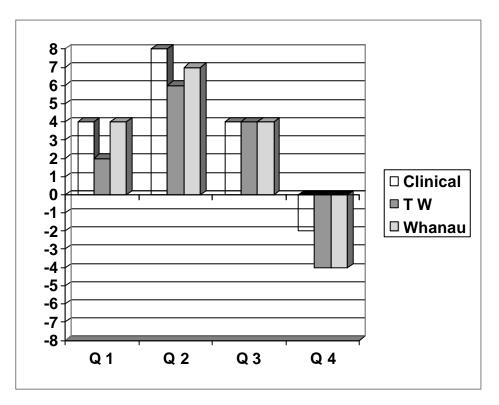


### Further Interpretation of the Outcome Scores

The **outcome score** provides an overall impression of outcome. However, a more precise examination of the relative scores may assist with identifying specific aspects of therapy which could be enhanced or further supported.

Graph 1 is a hypothetical example of scores from the three key stakeholders.

Graph 1



Based on the responses described above an **outcome score** of +11 (i.e. 14+8+11=33, 33/3=11) is obtained, and is a reasonably favourable result. However, a closer analysis of this data suggests that outcome, in terms of the "whanau" dimension (question 4) is less desirable and therefore particular attention should be applied to enhancing this dimension. Likewise, the chart also illustrates that the "tinana" dimension (question 3) of outcome was particularly favourable. This would suggest that the treatment process was especially successful in terms of addressing the physical aspects of mental health outcome.

This type of data analysis may be used to supplement the outcome score and to provide a more detailed impression of the treatment process. It is a discretionary option that should be used when appropriate and in circumstances where a more comprehensive assessment is required.

#### Periodic outcome assessment and interpretation

At another level clinicians may wish to incorporate the tool as part of a longer term outcome assessment process. For example when attempting to assess the utility of a particular treatment plan or approach.

The graph on the following page illustrates how the tool may be applied over a five week period.<sup>67</sup> Here the results from each of the four health dimensions

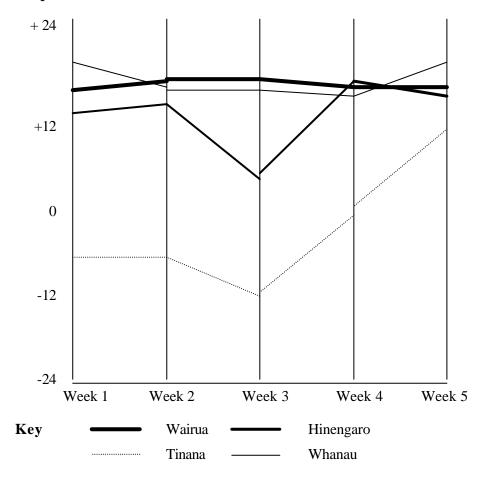
<sup>&</sup>lt;sup>67</sup> This duration may vary according to the clients particular situation and needs.

are compiled and plotted on a graph. <sup>68</sup> By examining this data a clinician is able to determine what particular health dimensions require enhancement. Accordingly, various treatment options may be trialed in order to determine if these needs are now being met.

As Graph 2 illustrates, "Week 1" shows a favourable outcome in all aspects of care, except "Tinana". By modifying care plans a clinician is able to incorporate mechanisms specifically designed to enhance physical health. The success of this approach can therefore be monitored on a weekly basis. Likewise, any adverse consequences can be determined.

Again, this is a discretionary option which may be used as part of a more comprehensive quality assurance process.





 $<sup>^{68}</sup>$  In this example dimension scores for each of the three key stakeholders should be added together. In this manner four scores are produced with a range of  $\pm$ 24. As with the other examples a positive score is an indication of a favourable outcome. A low or negative score would indicate that the outcome was poor.

#### **Conclusions**

#### Parallel outcome measures

The "Hua Oranga" measure is a cultural tool designed specifically to consider aspects of mental health outcome relevant to Maori mental health consumers. The global design of the measure is designed to enhance the tool's utility across a range of expected situations.

However, this measure is also designed to be used in conjunction with more condition specific measures of outcome, for example, the "Hamilton Rating Scale" for depression. As Maori clients are likely to benefit from such tools, they should be utilised, where appropriate, or as part of a more comprehensive outcome assessment.

The "Hua Oranga" measure will therefore be of most use when applied along side existing clinical tools or in situations where a culturally related outcome is relevant or expected.

#### Limitations

A number of limitations were identified as part of the testing process. As the tool relies on the interpretation of a number of questions it assumes that the respondents have the capacity to document an informed response. In this respect the tool appeared to be less useful with clients who were unable to read or whose functioning was significantly impaired. Likewise, some tamariki<sup>69</sup> found interpretation of the schedule difficult, to such an extent that "Hua Oranga" is not recommended for children under the age of 15 years.

#### Further work

While this study has produced a completed measure of outcome, further research opportunities exist. Obviously the limitations of the present measure will need to be addressed in order to increase it's utility. As with most measures of outcome, this tool will also benefit from periodic refinement and scrutiny. In a more immediate sense, further work is required to consider the long term management of data. The potential of constructing a computerised and integrated system of measurement and data collection should also be explored.

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## Appendix I

Appendix 1 documents the findings of the two test rounds. As indicated, the responses and comments gathered here were used to refine the draft measure and prepare the final tool.

#### Phase 1 - Results

#### Phase 1, Response rates

The following table provides a numerical breakdown of the respondents involved in the initial test round. The non-equivalent number of key stakeholders was largely attributed to the small number of partially completed forms. The qualitative nature of this research ensured that this variation was not significant in terms of drawing relevant conclusions and recommendations. Reasons for uncompleted forms were noted and provided valuable information with regard to the application of the tool.

**Table 1.** Phase 1 Response rates

	Client	Clinical	Whanau	TOTAL
Assessment	11	11	8	30
Inpatient Treatment	12	12	9	33
Outpatient Treatment	11	11	11	33
Community Care	13	13	13	39
Community Support	12	12	11	35
TOTAL	59	59	52	170

#### Phase 1, Statistical responses

As described an evaluation from was used in order to assess the tool and determine what modifications were required. The following table provides a statistical breakdown of these results and is used to provide an overall impression of how the tool was viewed.

The "perception" column relates to the respondents understanding of the questions. That is, "do you fully understand the question". The "relevance" column indicates whether or not the respondent perceived the questions to be relevant in terms of measuring Maori mental health outcome. Further qualitative comments were obtained from those who did not understand the question or who did not think it was relevant in terms of measuring outcome. Findings from these comments are described in the following section.

**Table 2.** Phase 1 Statistical responses

	CLIN	ICAL	CLI	ENT	WHA	NAU
DOMAIN	Perception	Relevance	Perception	Relevance	Perception	Relevance
Question 1	93 %	80 %	88 %	80 %	96 %	91 %
Question 2	90 %	83 %	88 %	88 %	96 %	89 %
Question 3	86 %	81 %	91 %	88 %	92 %	79 %
Question 4	96 %	90 %	88 %	88 %	100 %	90 %

#### Phase 1, Summary

The first round of testing revealed a high degree of satisfaction with the tool. Indications were that it was both comprehensible and relevant in terms of measuring Maori mental health outcome. As a consequence wholesale changes to the tool were not required.

A number of respondents did, however, suggest refinements and modifications. Several comments alluded to particular sections requiring clarification and to questions which appeared to be ambiguous or vague. These issues resulted in modifications to the tool.

#### Phase 1, Wairua and mental health outcome

The first series of questions were designed to consider spiritual aspects of mental health outcome. The design of these questions were however the most difficult to construct. This primarily due to a lack of detailed literature and a lack of consensus concerning the interpretation and definition of this concept.

Comments received from respondents indicated that the initial test tool had captured most of the essential characteristics of wairuatanga (spirituality). Despite this some modifications were suggested. Many of the comments revealed the need to more fully consider wairuatanga from a mental health perspective. Further, that the focus should be on enhancing wairua in a manner consistent with mental well-being. It was acknowledged that a diversity of interpretations would be expected and that the questions should remain generic. It was also recommended that the questions be phrased in a more positive manner and focused on wellness not illness.

#### Phase 1, Hinengaro and mental health outcome

This dimension, more than any other, is most closely aligned with the purpose of mental health treatment. The comments received were to reflect this with a number of relevant modifications being suggested. Many of the concerns related to the manner in which the various questions were phrased and the options presented in which to measure improvements or declines in mental health status.

There was particular concern with regard to the ambiguity of some questions and their purpose. As a consequence, some questions required greater

clarification and adjustment in language. This was particularly relevant to the Tangata Whaiora and Whanau schedules.

#### Phase 1, Te Taha Tinana and mental health outcome

Though most of the respondents were clear about the relevance of physical health to mental well-being a number of comments suggested that refinements were required. Again it was felt that the relationship between mental and physical well-being could be made more explicit. Further, it was felt that the questions should be phrased in a manner which suggested the benefits of improving physical activity or fitness.

Many of the comments affirmed the need to consider the physical dimension of treatment and, in particular, as it related to the side effects of some medications. Many of the whanau comments suggested that more physical activity was required as part of treatment and as a means of reducing stress and boredom. A small number did not understand these series of questions or viewed them as being irrelevant. One respondent felt the questions were worded too simply, another that they were too difficult.

#### Phase 1, Whanau and mental health outcome

Many positive responses were received with respect to the whanau aspect of outcome. Most of the respondents highlighted the need to consider this perspective and the value of utilising whanau input. Very few negative comments were made with regard to this section, however, it was felt that some clarity was needed with regard to defining whanau. Some, particularly whanau respondents, felt that the series of questions needed to be expanded allowing for a broader range of assessment. One comment highlighted the need to tailor the questions to the clients particular circumstance, for example, how the clients relationships are developing with others in the community.

## Phase 1, Discussion

The results from the first round of testing suggested that the tool would be most appropriate when used in specific situations. Ideally, when the cultural needs of the client were relevant in terms of their treatment or care. In this regard, concern was expressed about the appropriateness of the tool to those with significant mental impairment or with little cultural knowledge.

The application of the tool appeared to proceed with little difficulty and few comments were received about its length or feasibility in practical clinical situations. Many of the logistical problems centered around accessing whanau or those able to provide this type of perspective.

A number of respondents suggested improvements related to process issues rather than outcome measurement. Some of the responses obtained from the "further comments" section of the evaluation form also concerned process issues or dissatisfaction with the service. As a consequence some modifications to the evaluation forms were required.

Though the vast majority of the clinical respondents were happy to test the tool, one respondent felt irritated that they were not consulted prior to testing having missed the numerous presentations and training sessions conducted by the researchers. Whereas this type of comment was rare, it did suggest that

appropriate "buy in" from clinical staff would be required. The benefits of the tool would need to be clear and staff, in particular, would need to see its relevance.

Overseas studies have confirmed the need to construct measures which are viewed by the user group as being relevant and beneficial. The application of the present tool will likewise be influenced by its acceptance within the Maori community. Providing adequate and timely information with regard to the use and application of the tool is likely to benefit the manner in which the tool is perceived.

#### Phase 2 - Results

#### Phase 2, Response rates

The following table provides a numerical breakdown of the respondents involved in the second and final test round.

**Table 3.** Phase 2 Response rates

	Client	Clinical	Whanau	TOTAL
Assessment	8	8	8	24
Inpatient Treatment	8	8	8	24
Outpatient Treatment	2	2	2	6
Community Care	1	1	1	3
<b>Community Support</b>	6	6	6	18
TOTAL	25	25	25	75

#### Phase 2, Statistical responses

As with phase 1, an evaluation from was used in order to assess the tool and determine what modifications were required. The following table provides a statistical breakdown of these results and is used to provide an overall impression of how the refined tool was viewed.

As noted, the "perception" column relates to the respondents understanding of the questions. The "relevance" column indicates whether or not the respondent viewed the questions relevant in terms of measuring outcome. As with the first test round, comments gathered here were used to determine relevant modifications and methods of application.

**Table 4.** Phase 2 Statistical responses

	CLIN	ICAL	CLI	ENT	WHA	NAU
DOMAIN	Perception	Relevance	Perception	Relevance	Perception	Relevance
Question 1	96 %	92 %	92 %	92 %	96 %	96 %
Question 2	96 %	100 %	92 %	96 %	85 %	96 %
Question 3	85 %	96 %	92 %	96 %	92 %	85 %
Question 4	96 %	100 %	96 %	96 %	96 %	96 %

#### Phase 2, Summary

The second round of testing was conducted with a smaller/selected range of respondents. As anticipated, the initial refinements identified through the first test round generally improved the manner in which the tool was both comprehended and perceived. As a consequence no modifications to the schedules were made. However, much valuable information was gathered with respect to the application of the tool, it's strengths and limitations.

#### Phase 2, Wairua and mental health outcome

Few respondents suggested changes to the series of questions related to wairua. However, several noted that the questions could be difficult to interpret and that some clients would have problems understanding some of the concepts. As a consequence it was suggested that the 'wairua' questions would be less relevant to those tangata whaiora who were significantly impaired or who were not comfortable in cultural settings. Likewise, it was noted that tamariki may find interpretation difficult.

#### Phase 2, Hinengaro and mental health outcome

Of all the dimensions "hinengaro" appeared to be the least problematic. However, two respondents suggested that the questions needed to be more tailored to the specific needs of the tangata whaiora and the type of treatment they were undergoing.

#### Phase 2, Tinana and mental health outcome

Most respondents confirmed the need to consider the physical dimension of mental health outcome. Some further suggested that the types of questions asked should be more specific to the needs of tangata whaiora and the type of treatment they were receiving. Only one respondent made the comment that the physical dimension was irrelevant to tangata whaiora in terms of outcome.

## Phase 2, Whanau and mental health outcome

A number of positive responses were received with respect to the whanau dimension. As with the previous round of tests whanau, in particular, welcomed the opportunity to input and to express their views. Clinicians also

commented that it enabled them to consider an aspect of health outcome which was not always given attention. Some difficulty was however encountered by clinicians when attempting to access some whanau members. It was suggested that a reasonably broad definition of whanau should be applied, and that the tangata whaiora's particular situation should be considered.

#### Phase 2, Discussion

No alterations to the questionnaires were made as a result of second round of tests. As expected the initial modifications were successful in terms of addressing the main difficulties with the schedules. Although some respondents suggested specific changes it was decided not to incorporate these as it would detract from the generic nature of the tool. Furthermore, such changes could potentially reduce the tools relevance to those majority of respondents who found it useful in it's current form. Again it was noted that the tool could be used as a complement to more specific measures of outcome thereby addressing some of these concerns.

Despite the fact that no amendments to the schedules were made, the information gathered provided good data with respect to the application of the measure and the limitations which might be encountered. As previously noted, the interpretation of some questions was problematic for a small number of respondents. In particular, tamariki, those with a less secure cultural identity, and those tangata whaiora whose mental capacity was significantly impaired. However, it was acknowledged that the triangulated approach to the outcome assessment may reduce these difficulties.

Like the previous round of tests, tangata whaiora and whanau were most enthusiastic about the measure, particularly as it provided them with new opportunities to voice their impressions of care and outcome. Clinical staff also commented that the tool enabled them to reflect on aspects of outcome not usually considered.

Appendix II

Maori consultation schedule

Formal Presentations	No. Attendees*	Date
Mental Health Commission (Maori Expert Panel)	14	28 April 1998
Maori Mental Health Services (Test Site Consultation Hui)	30	26 August 1998
Maori Mental Health Issues (Gisborne)	80	26 November 1998
Association of Maori Medical Practitioners Conference	80	22 April 1999
Dip. Addition Studies Students	30	27 April 1999
Maori Mental Health Services (Test Site Consultation Hui)	30	14 July 1999
Maori Child, Adolescent and Family Services Conference	80	20 July 1999
Dip. Addition Studies Students	30	17 August 1999
Dip. in Business Management and Maori Health Students	30	28 September 1999
The Treasury (Wellington)	30	24 November 1999
Realising Recovery Conference (Wellington)	50	30 November 1999
Nga Oranga o te Rae (Palmerston North)	25	15 December 1999

Site Presentations	No. Attendees*	Location
Manawanui Maori Mental Health Services	40	Pt. Chevelier, Auckland
MOKO Services Waitemata Health	20	Waitakere City, Auckland
Whai Ora Maori Mental Health Services	30	Te Awamutu, Waikato
Te Puawai o te Whanau Healthcare Hawkes Bay	25	Hastings, Hawkes Bay
Te Whare Marie Capital Coast Health	20	Porirua, Wellington

<sup>\*</sup> Estimates

#### Consultation hui participants (2) – Massey University

Prof. Mason Durie Te Putahi-a-Toi Palmerston North Te Kani Kingi Te Pümanawa Hauora Palmerston North Te Whare Marie Ani Sweet Porirua Te Whare Marie Lisa Cherrington Porirua Materoa Mar Te Whare Marie Porirua Pikau Arthur Te Whare Marie Porirua Wi Keelan Auckland Central Auckland Bob Elliot Hauora Waikato Hamilton Wayne Mulligan MOKO-Waitemata Health Waitakere City Iona Edmonds MOKO-Waitemata Health Waitakere City Rawinia Hape Te Puawai o Te Whanau Hastings Wiremu Stirling Te Wahanga Hauora Maori Hastings Mere Hammond Te Puawai o Te Whanau Hastings Awhi Ropiha Health Care Hawkes Bay Hastings Winston Maniapoto Auckland Healthcare Auckland

Karen Steele Te Pümanawa Hauora Palmerston North Te Putahi-a-Toi Maureen Holdaway Palmerston North Tony O'Brien Palmerston North Massey University Ani Wharekura Whai Ora Te Awamutu Whai Ora Te Awamutu Cindy Hewitt Pue Whakaruru Whai Ora Te Awamutu Maise Whakaruru Whai Ora Te Awamutu

MOKO-Waitemata Health

Te Whare Marie

Te Whare Marie

Porirua

Porirua

Waitakere City

Louise Ihimaera Te Puawai o Te Whanau Hastings
Margaret Hiha Healthcare Hawkes Bay Hastings
Paddy Brooking Te Puawai o Te Whanau Hastings
Jim Whaanga Te Puawai o Te Whanau Hastings
Trevor Taurima Healthcare Hawkes Bay Hastings

Diana Rangihuna

Rongo Larkin

Tui Taurua

#### **Appendix III**

#### Clinical Information Sheet

#### Who are the researchers?

The main researchers are both from the School of Maori Studies, Massey University.

Te Kani Kingi is a Research Fellow in Te Pumanawa Hauora and Professor Mason Durie is a psychiatrist and Head of School.

#### *How can they be contacted?*

Te Kani Kingi Research Fellow Te Putahi-a-Toi / School of Maori Studies Massey University Palmerston North Ph (06) 350 5799 extn: 2539

#### What is the study about?

We are trying to find out a suitable way to measure the effects that psychiatric treatment or care has on the health of the patients/clients. To do this we have written a short questionnaire and now want to see how accurate the questions are.

This is the second and final test of this measure. Information gained from the first test has been used to refine the questionnaires on page three. Based on the comments made in this test a final measure will be developed.

#### What will I be asked to do?

You may have been involved in the previous study and had the aims explained to you as well as your role. However here is a brief summary.

Three questionnaires will be used. The questionnaires are designed to consider the perspectives of three "key stakeholder" groups, "Clinical" "Whanau" and "Patient/Tangata Whaiora". These perspectives will target a number of clinical end points. For ease of use each series of clinical end point questionnaires, such as these, have been colour coded. You will be asked to sign the consent form on "page 2" and to complete the questionnaire on "page 3" and then provide feedback using the "Evaluation Form" on "page 4" at the back. REMEMBER, Your comments on "page 3" are with respect to your observations of the client. "Page 4" is designed to **evaluate the questions on "Page 3"**.

In addition you will also be asked to approach selected clients and a relative/carer/Whanau member to participate in the study. You will be asked to supply them with a form similar to this. If they decide to participate in the study they will also be asked to complete a similar consent form and then proceed to fill in the questionnaire and evaluation form. REMEMBER, only after all three "key stakeholders" agree to participate can the study continue. The decision of the client is, however, paramount.

#### What happens next?

You will need to be present with the Whanau and patient when outlining the project (this is to answer any queries they may have). Once completed, you will need to return the questionnaires to the envelope they were supplied in. The envelopes have been numbered and this number will correspond with the number on the questionnaires.

Please ensure that all **three** questionnaires are returned to the envelope. IMPORTANTLY, please ensure that you seal the envelope in their presence before forwarding the envelope to your SERVICE CONTACT PERSON.

#### What are the benefits of the research?

This research will lead to the development of a method for measuring the benefits of treatment for Maori. It is likely to lead to higher standards of treatment and care and will help ensure that services are focussed on clients. N:B This study is not designed to measure your performance or the performance of the service, rather the effectiveness of the tool described.

REMEMBER: You have no obligation to take part in this study – you have the right to decline. Those who agree to be participate;

- can refuse to answer any questions or stop at any time.
- may ask any questions they want about the study.
- will not be identified and responses will remain confidential.

You may have already been asked to complete this consent form. However we ask that you please take the time to complete this form for every case.

I have read the information sheet for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask more questions at any time. I may also request the assistance of an interpreter if needed.

I understand that I am free to withdraw from the study at any time, or to decline to answer any particular question in the study. I agree to provide information to the researchers on the understanding that it is completely confidential.

I agree to participate in this study under the conditions set out in the information sheet.

Name:	Signed:	
Address:		
Phone: ( )	Date: / /	

#### Tangata Whaiora Information Sheet

#### Who are the researchers?

The main researchers are both from the School of Maori Studies, Massey University. Te Kani Kingi is a Research Fellow in Te Pumanawa Hauora and Professor Mason Durie is a psychiatrist and Head of School.

#### *How can they be contacted?*

Te Kani Kingi Research Fellow Te Putahi-a-Toi / School of Maori Studies Massey University Palmerston North Ph (06) 350 5799 extn: 2539

You are invited to take part in this Maori Mental Health Outcomes study in which we are trying to find a way of measuring the effects of psychiatric treatment or care on health. To do this we have written a short questionnaire and now want to see how good it is. We have already tested this questionnaire once before, but now want to test it again to see if the changes we have made make it any better.

If you want to take part in this study you will be asked to fill in the questionnaire on "page 3" and then to tell us what you think of it using the "Evaluation Form" on "page 4". This is on the back page.

A relative or close friend and your health worker will also be asked to fill out another questionnaire. All three questionnaires will then be put in an envelope which will then be sealed. The envelope will be sent straight to us. You will not need to write your name or address on the questionnaire. The consent forms will be removed from the questionnaires by the researchers. Filling out your part of the questionnaire will only take about 5 minutes.

Your relative and your health worker will also be asked to take part and to fill in similar questionnaires and evaluation forms. The health workers have already agreed to take part in the study. However, the study will only go ahead if you agree. Your view will be considered first.

This study is taking place in five other sites around the North Island. In total about 30 tangata whaiora, like yourself, will be asked to take part.

This research will lead to a way of measuring the benefits of treatment for Maori. It is likely to lead to better care and will help ensure that services are focused on clients.

## You do not have to take part in this study - You can;

- refuse to answer any questions or stop at any time.
- ask any questions you want about the study.
- not be identified and your name will not be recorded anywhere.

Taking part in this study will not in any way affect your access to services.

# Please feel free to contact the researchers at a later date to see how the study is going. Contact numbers of patient advocates are as follows.

Auckland	(09) 623 5799
Waikato	(07) 834 3960
Hawkes Bay	(06) 8772010
Wellington	(04) 5700850

I have read or have had read to me the information sheet for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask more questions at any time. I may also request the assistance of an interpreter if needed.

I understand that I am free to pull out from the study at any time, or not to answer any particular question in the study, and that this will in no way affect my access to health services. I agree to give this information to the researchers on the understanding that it is completely confidential.

I agree to participate in this study under the conditions set out in the information sheet.

Name:	Signed:	
Address:		
Phone: ( )	Date: / /	

#### Whanau Information Sheet

#### Who are the researchers?

The main researchers are both from the School of Maori Studies, Massey University.

Te Kani Kingi is a Research Fellow in Te Pumanawa Hauora (The Health Research Unit) and Professor Mason Durie is a psychiatrist and Head of School.

#### How can they be contacted?

Te Kani Kingi Research Fellow Te Putahi-a-Toi / School of Maori Studies Massey University Palmerston North Ph (06) 350 5799 extn: 2539

#### What is the study about?

You are invited to take part in this Maori Mental Health Outcomes Study in which we are trying to find a way of measuring the effects of psychiatric treatment or care on health. To do this we have written a short questionnaire and now want to see how accurate it is.

This is the second and final test of this questionnaire. Information gained from the first test has been used to refine the questionnaires on page three. Based on the comments made in this test a final measure will be developed

#### What will I be asked to do?

If you wish to take part in this study you will be asked to fill in the questionnaire on "page 3" and then give feedback using the "Evaluation Form" on "page 4" at the back. Your relative (who is here for treatment) and their health worker will also be asked to complete separate questionnaires. All three questionnaires will then be placed in an envelope which will be sealed in front of you. The envelope will be sent straight to us.

You will not need to write your name or address on the questionnaire. The consent forms will be removed from the questionnaires by the researchers. Filling out your part of the questionnaire will only take about 5 minutes. REMEMBER, Your comments on "page 3" are with respect to your observations of your relative. "Page 4" is designed **to evaluate the questions on "Page 3"**. This is the main purpose of this study.

### Who else will be involved?

As noted, your relative and their health worker will also be asked to take part and to fill in similar questionnaires and evaluation forms. The health workers have already agreed to take part in the study. The study will only continue when you and your relative agree to take part. The view of your relative, however, will be considered first.

This study is taking place in five other sites around the North Island. In total about 30 tangata whaiora, like your relative, will be asked to participate.

#### What are the benefits of the research?

This research will lead to a way of measuring the benefits of treatment for Maori. It is likely to lead to better care and will help ensure that services are focused on clients.

#### **REMEMBER:** You do not have to take part in this study – You can;

- refuse to answer any questions or stop at any time.
- ask any questions you want about the study.
- not be identified and your name will not be recorded anywhere.

# Taking part in this study will not in any way effect your relatives access to services.

# Please feel free to contact the researchers at a latter date as to the development of the questionnaire and this study.

I have read the information sheet for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask more questions at any time. I may also request the assistance of an interpreter if needed.

I understand that I am free to withdraw from the study at any time, or to decline to answer any particular question in the study, and that this will in no way affect my relatives access to health services. I agree to provide information to the researcher on the understanding that it is completely confidential.

I agree to participate in this study under the conditions set out in the information sheet.

Name:		Signed:	
Address:			
Phone: (	)	Date://	

Did you fully understand the questions being asked in question 1?  YES COULD BE IMPROVED If COULD BE IMPROVED, How?  Did you feel the questions asked in question 1 were relevant as a way of measuring the outcome of the treatment or care?  YES COULD BE IMPROVED If COULD BE IMPROVED If COULD BE IMPROVED, How?	Did you fully understand the questions being asked in question 2?  YES COULD BE IMPROVED If COULD BE IMPROVED, How?  Did you feel the questions asked in question 2 were relevant as a way of measuring the outcome of the treatment or care?  YES COULD BE IMPROVED If COULD BE IMPROVED If COULD BE IMPROVED, How?
Did you fully understand the questions being asked in question 4?  YES COULD BE IMPROVED If COULD BE IMPROVED, How?  Did you feel the questions asked in question 4 were relevant as a way of measuring the outcome of the treatment or care?  YES COULD BE IMPROVED If COULD BE IMPROVED If COULD BE IMPROVED, How?	Did you fully understand the questions being asked in question 3?  YES COULD BE IMPROVED If COULD BE IMPROVED, How?  Did you feel the questions asked in question 3 were relevant as a way of measuring the outcome of the treatment or care?  YES COULD BE IMPROVED If COULD BE IMPROVED If COULD BE IMPROVED, How?
I leade bileily accelled the	Patients DSM-IV Diagnosis (if known)  Patients DSM-IV Diagnosis (if known)  Patients age (if known)  Male/Female

Did you fully understand the questions being	Did you fully understand the questions being
asked in question $1  ?$	asked in question 2 ?
YES COULD BE IMPROVED	YES COULD BE IMPROVED
If COULD BE IMPROVED, How?	If COULD BE IMPROVED, How ?
Did you feel the questions asked in <i>question 1</i> were relevant as a way of measuring the outcome of the treatment or care?	Did you feel the questions asked in <i>question 2</i> were relevant as a way of measuring the outcome of the treatment or care?
YES COULD BE IMPROVED	YES COULD BE IMPROVED
If COULD BE IMPROVED, How?	If COULD BE IMPROVED, How?
Did you fully understand the questions being	Did you fully understand the questions being
asked in question $4?$	asked in question $3$ ?
YES COULD BE IMPROVED	YES COULD BE IMPROVED
If COULD BE IMPROVED, How ?	If COULD BE IMPROVED, How ?
Did you feel the questions asked in <i>question 4</i> were relevant as a way of measuring the outcome of the treatment or care?	Did you feel the questions asked in <i>question 3</i> were relevant as a way of measuring the outcome of the treatment or care?
YES COULD BE IMPROVED	YES COULD BE IMPROVED
If COULD BE IMPROVED, How?	If COULD BE IMPROVED, How?
· 	
<del></del>	
Are there any further comments you wish	to make about the QUESTIONS on page 3?

#### Checklist to clinician

- 1. Three sets of questionnaires are contained in this pack. one "clinical", one "whanau" and one "tangata whaiora"
- 2. "Whanau" may also be a significant other, or someone the client identifies as being "whanau"
- 3. Consent <u>must</u> be obtained from <u>both</u> the whanau and client in order for the study to proceed. the client decision is however paramount
- 4. All three questionnaires <u>must</u> be completed by <u>all</u> of the respondents
- 5. Allow sufficient time for both the client and whanau member to consider the information sheet and form.
- 6. Once all three forms have been completed they should be placed back in this envelope and sealed.
- 7. Completed packs should then be returned to the service contact person at the next convenient time.
- 8. This is just a brief checklist. Please take time to read the clinical information sheet before applying the tool.
- 9. Thank you once again for your assistance.

#### **Checklist to co-ordinators**

- 1. Firstly, thank you for agreeing to administer these questionnaire packs
- 2. Each pack (envelope) contains three questionnaires for each of the three key stakeholders
- 3. Please inform clinicians/carers that the study has now started and that possible respondents should be identified
- 4. Please distribute packs to those clinicians who have indicated that they have identified possible respondents.
- 5. Once the forms have been completed clinicians will then seal them (back in the envelope) and return them to you. N.B please be sure to hand out the packs "un-sealed"
- 6. Once you have received the required number of returns please place them in the courier bag supplied so that it may be returned to us.
- 7. Your role in this study is crucial but should not demand too much of your time. However as you are most familiar with the study you may be required to answer any small queries that staff may have.

Some definitions which may assist you follow.

#### Clinical end point definitions

*Assessment* – New Case, Completion of Process. End point is when assessment is completed.

*Inpatient Treatment* – Period in Hospital. End point is when the Patient is Discharged from Hospital.

Outpatient Treatment – Includes Therapy, Medication, Outpatient Clinics and Hazard Intervention. End point is after about six months of care. N.B This does not mean you will have to wait six months before testing the tool.

Community Care – Includes Clinical and non-Clinical, Day Programmes, Coordinated Health Care, Home Visits, Attendance at a day center/programme in the community, support for chronic, full time residential care.

Community Support – Residential Care in the community. End point is after a six month period of care. N.B This does not mean you will have to wait six months before testing the tool.

#### Acknowledgements

He mihi nui ki a koutou nga kaiwhakahokia ki roto i tenei purongo.

The authors of this report would like to thank all those people and organisations too numerous to mention by name who assisted with the testing of this measure. Our thanks to the participants of the various hui, seminars, workshops and consultation processes. Assistance from our colleagues in Te Putahi-a-Toi, School of Maori Studies (Massey University) is also gratefully acknowledged. Tena Koutou.

We would like to thank Frances Te Kani for her contribution to this research. Her management and organisational skills greatly assisted the development of this study.

Finally, we would like to acknowledge the support of the Ministry of Health, The Health Funding Authority, The Mental Health Research and Development Project, Eli Lily and Massey University.

# Schedules and Guidelines for the Application of "Hua Oranga" A Maori Measure of Mental Health Outcome

Te Kani Kingi and Mason Durie Massey University, School of Maori Studies, Te Pumanawa Hauora Palmerston North

#### Introduction

This document is based on the recommendations suggested in "*Hua Oranga – A Maori Measure of Mental Health Outcome*". It is designed to assist with the application of the "Hua Oranga" measure and to provide guidelines for it's clinical use. It contains a full series of questionnaires and scoring schedules.

The tool is designed to be a quick, easily administered measure of outcome, appropriate for routine clinical use. It may be used as a specific cultural measure of outcome or combined with other, more targeted, clinical tools. Application of the tool should take no longer than 10-15 minutes.

Further detail related to the construction of this measure may be obtained by referring to "Hua Oranga – A Maori Measure of Mental Health Outcome" or "A Framework for Measuring Maori Mental Health Outcomes"

#### Overview

"Hua Oranga" is a cultural measure of mental health outcome, designed specifically for Maori consumers of mental health services.

The measure requires the application of three separate questionnaires, one designed for the client, one for the clinician, and one for a designated whanau member. Each respondent is required to complete their respective questionnaire. With the aid of a scoring schedule a numerical score is produced for each respondent. These scores are then compiled and divided by three. The resulting score is then used to provide an indication of overall outcome. An outcome continuum is provided in order to assist with this process.

#### Three perspectives of outcome

As indicated, "Hua Oranga" requires the application of three separate questionnaires; one each for the client, clinician, and designated whanau member. The clinical schedule is designed to be used by any health professional involved with the treatment and care of Maori mental health consumers. The whanau schedule is to be completed by a relative of the client

<sup>&</sup>lt;sup>1</sup> Kingi Te K. R and Durie, M. H. (2000), *Hua Oranga – A Maori Measure of Mental Health Outcome*, School of Maori Studies, Massey University, Palmerston Nth.

<sup>&</sup>lt;sup>2</sup> 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.

and must be an individual whom the client nominates. The designated whanau member may not necessarily be a blood relative and could be a close friend or some other associate. As three distinct perspectives of outcome are required for this measure the whanau respondent should neither be a service staff member nor another consumer.

## Clinical end points

Five clinical end points are prescribed. These are guidelines designed to assist with the application of the tool by breaking the treatment process up into five, "Assessment", "Inpatient Treatment", more manageable, components: "Outpatient Treatment", "Community Care", and "Community Support". The tool may be applied at any of these points, either independently or concurrently and as part of a more extensive outcome assessment process. The tool may also be used at any point where an outcome from a particular intervention is expected. Clinical end point definitions are described on page five.

## Applying "Hua Oranga"

Each respondent should complete their respective questionnaire simply by answering each of the questions and circling the most appropriate response. With the aid of the "Scoring Schedule" each response can be converted into a numerical score.

These numerical scores should be totaled for each of the three respondents. These three scores should then be added and then divided by three to produce an "outcome score". This "outcome score" should then be compared to the "Outcome Continuum" thus providing a final indication of outcome. N.B. Both the "Scoring Schedule" and "Outcome Continuum" should not be viewed by either the client or whanau member during the assessment process. Rather, they should be kept as a separate appendix and produced only after all respondents have completed their schedules.<sup>3</sup>

The outcome score provides an overall impression of outcome. However, a more detailed analysis of the individual scores, as they relate to particular questions or stakeholders, may provide more detailed information concerning to the effectiveness of a particular clinical end point or intervention. It is suggested that this type of analysis be conducted at the clinicians discretion and when required. Further detail concerning this process may be obtained from "Hua Oranga – A Maori Measure of Mental Health Outcome".

"Hua Oranga" is not recommended for children under the age of 15 years or with clients whose functioning is significantly impaired. When applying the tool, clinicians may be required to clarify certain words or concepts. Though this is permissible, clinicians should take care not to influence the response of either the client or whanau member.

## Clinical end point definitions

Assessment – New Case, Completion of Process. End point is when assessment is completed.

<sup>&</sup>lt;sup>3</sup> There is some evidence to suggest that viewing these scoring schedules prior to the completion of the tool may potentially bias the responses given.

*Inpatient Treatment* – Period in Hospital. End point is when the Patient is Discharged from Hospital.

Outpatient Treatment – Includes Therapy, Medication, Outpatient Clinics and Hazard Intervention. End point is after about six months of care. N.B This does not require waiting six months before applying the tool.

Community Care – Includes Clinical and non-Clinical, Day Programmes, Coordinated Health Care, Home Visits, Attendance at a day center/programme in the community, support for chronic, full time residential care.

Community Support – Residential Care in the community. End point is after a six month period of care. N.B This does not require waiting six months before applying the tool.

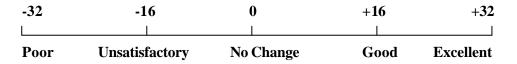
#### **Assessment Schedules**

#### Scoring Mechanisms

#### Scoring Schedule

	<b>SCORE</b>
<b>→</b>	+2
<b>→</b>	+1
<b>→</b>	0
<b>→</b>	-1
<b>→</b>	-2
	<b>→</b> →

## Outcome Continuum



## Tangata Whaiora Schedule

Ol As a result of the	ASSESSMENT do vou	<i>feel:</i> (Please Circle One)

a)	more valued as a person $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in yourself as a Maori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within yourself	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q2. As a result of the ASSESSMENT are you: (Please Circle One)

a)	more able to set goals for yourself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with your health problem	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the ASSESSMENT are you: (Please Circle One)

a)	more able to move about without pain or distress	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health ⇒=	> Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow$ = improves mental well-being	> Much more	More	No Change	Less	Much less

## Q4. As a result of the ASSESSMENT are you: (Please Circle One)

a)	more able to communicate with your Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in your relationships with other $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with your Whanau⇒⇒	Much more	More	No Change	Less	Much less
d)	more able to participate in your community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Whanau Schedule

health problem

a)	more valued as a person	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in his/herself as a Mac	ori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/hersel	$f \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q2. As a result of the ASSESSMENT is your relative: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with their	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the ASSESSMENT is your relative:(Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow\Rightarrow$ $\Rightarrow\Rightarrow$ $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q4. As a result of the ASSESSMENT is your relative: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## **Clinical Schedule**

health problem.

a)	more valued as a person	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger as a Maori     ⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/hersel	f ⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## **Q2.** As a result of the ASSESSMENT is the patient: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with their	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the ASSESSMENT is the patient: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## **Q4.** As a result of the ASSESSMENT is the patient: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

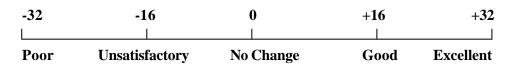
# **Inpatient Treatment Schedules**

## Scoring Mechanisms

## Scoring Schedule

RESPONSE		<b>SCORE</b>
" Much More "	<b>→</b>	+2
" More "	<b>→</b>	+1
" No Change "	<b>→</b>	0
" Less "	<b>→</b>	-1
" Much Less "	<b>→</b>	-2

## Outcome Continuum



## Tangata Whaiora Schedule

a)	more valued as a person $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in yourself as a Maori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within yourself	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
4)	healthier from a spiritual point of	of view	$\Rightarrow\Rightarrow$	$\Rightarrow \Rightarrow  $	Much more	More	No Change	Less	Much less

## Q2. As a result of the INPATIENT TREATMENT are you: (Please Circle One)

a)	more able to set goals for yourself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with your health problem	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the INPATIENT TREATMENT are you: (Please Circle One)

a)	more able to move about without pain or distress	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health ⇒⇒	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health ⇒⇒ improves mental well-being	Much more	More	No Change	Less	Much less

## Q4. As a result of the INPATIENT TREATMENT are you: (Please Circle One)

a)	more able to communicate with your Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in your relationships with other $\Rightarrow \Rightarrow$ people	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with your Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in your community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Whanau Schedule

a)	more valued as a person =	⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in his/herself as a Maori		$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/herself =	⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point of	view	$\Rightarrow\Rightarrow$	$\Rightarrow \Rightarrow  $	Much more	More	No Change	Less	Much less

## Q2. As a result of the INPATIENT TREATMENT is your relative: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

# health problem

d) more able to understand how to deal with their  $\Rightarrow \Rightarrow Much more More No Change Less$ 

## Q3. As a result of the INPATIENT TREATMENT is your relative: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow\Rightarrow$ $\Rightarrow\Rightarrow$ $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q4. As a result of the INPATIENT TREATMENT is your relative: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

Much less

## **Clinical Schedule**

a)	more valued as a person	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger as a Maori     ⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/herself	$f \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point of	of view	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

# Q2. As a result of the INPATIENT TREATMENT is the patient: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with their health problem.	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the INPATIENT TREATMENT is the patient: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow \Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Q4. As a result of the INPATIENT TREATMENT is the patient: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

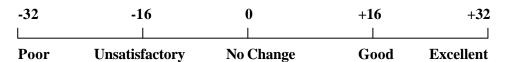
# **Outpatient Treatment Schedules**

# Scoring Mechanisms

## Scoring Schedule

RESPONSE		<b>SCORE</b>
" Much More "	<b>→</b>	+2
" More "	<b>→</b>	+1
" No Change "	<b>→</b>	0
" Less "	<b>→</b>	-1
" Much Less "	<b>→</b>	-2

# Outcome Continuum



## Tangata Whaiora Schedule

health problem

a)	more valued as a person $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in yourself as a Maori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within yourself	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
4)	healthier from a spiritual point	of view	$\rightarrow \rightarrow$	l	Much more	More	No Change	Less	Much less

## Q2. As a result of the OUTPATIENT TREATMENT are you: (Please Circle One)

a)	more able to set goals for yourself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with your	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the OUTPATIENT TREATMENT are you: (Please Circle One)

a)	more able to move about without pain or distress	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow \Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Q4. As a result of the OUTPATIENT TREATMENT are you: (Please Circle One)

a)	more able to communicate with your Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in your relationships with other $\Rightarrow \Rightarrow$ people	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with your Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in your community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Whanau Schedule

a)	more valued as a person =	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in his/herself as a Maori		$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/herself =	⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point of	view	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q2. As a result of the OUTPATIENT TREATMENT is your relative: (Please Circle One)

a)	more able to set goals for him/herself $\implies$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with their health problem	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the OUTPATIENT TREATMENT is your relative: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health ⇒⇒	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health ⇒ ⇒ improves mental well-being	Much more	More	No Change	Less	Much less
	improves mental well-being					
4)	nhysically healthier ⇒⇒ ⇒⇒ ⇒⇒	Much more	More	No Change	Less	Much less

## Q4. As a result of the OUTPATIENT TREATMENT is your relative: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## **Clinical Schedule**

a)	more valued as a person	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger as a Maori ⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/hersel	$f \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

# Q2. As a result of the OUTPATIENT TREATMENT is the patient: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
4)	feelings more able to understand how to deal with their		Much more	More	No Change	Less	Much less
d)	health problem.	$\Rightarrow\Rightarrow$	mun more	111016	110 Change		much tess

## Q3. As a result of the OUTPATIENT TREATMENT is the patient: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health ⇒⇒ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q4. As a result of the OUTPATIENT TREATMENT is the patient: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

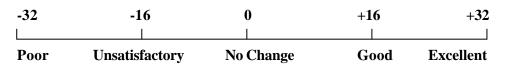
# **Community Care Schedules**

## Scoring Mechanisms

# Scoring Schedule

RESPONSE		<b>SCORE</b>
" Much More "	<b>→</b>	+2
" More "	<b>→</b>	+1
" No Change "	<b>→</b>	0
" Less "	<b>→</b>	-1
" Much Less "	<b>→</b>	-2

## Outcome Continuum



## Tangata Whaiora Schedule

a)	more valued as a person $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in yourself as a Maori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within yourself	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	⇒⇒	Much more	More	No Change	Less	Much less

## Q2. As a result of the COMMUNITY CARE are you: (Please Circle One)

a)	more able to set goals for yourself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with your health problem	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the COMMUNITY CARE are you: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow \Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Q4. As a result of the COMMUNITY CARE are you: (Please Circle One)

a)	more able to communicate with your Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in your relationships with other $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
	people					
c)	clearer about the relationship with your Whanau⇒⇒	Much more	More	No Change	Less	Much less
4)	more able to participate in your community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
u)	There use to participate in your community $\rightarrow \rightarrow [$					

## Whanau Schedule

health problem

Q1. As a result of the	<b>COMMUNITY CARE</b>	does your relative	feel: (Please	Circle One)

a)	more valued as a person ⇒=	$\Rightarrow \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in his/herself as a Maori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/herself ⇒=	$\Rightarrow \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
4)	healthier from a spiritual point of vi	iew →→	$\rightarrow \rightarrow$	Much more	More	No Change	Less	Much less

## Q2. As a result of the COMMUNITY CARE is your relative: (Please Circle One)

a)	more able to set goals for him/herself $\implies$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
۵)	manner more able to manage unwelcome thoughts and	1	Much more	More	No Change	Lass	Much loss
c)	feelings	$\Rightarrow\Rightarrow$	mun more	More	110 Change	Less	much tess
d)	more able to understand how to deal with their	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the COMMUNITY CARE is your relative: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health ⇒⇒ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow \Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Q4. As a result of the COMMUNITY CARE is your relative: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## **Clinical Schedule**

a)	more valued as a person	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger as a Maori     ⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/hersel	$f \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	⇒⇒	Much more	More	No Change	Less	Much less

## Q2. As a result of the COMMUNITY CARE is the patient: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with their health problem.	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the COMMUNITY CARE is the patient: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less

## **Q4.** As a result of the COMMUNITY CARE is the patient: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

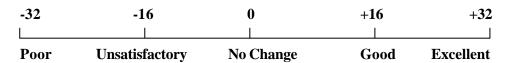
## **Community Support Schedules**

# Scoring Mechanisms

## Scoring Schedule

RESPONSE		<b>SCORE</b>
" Much More "	<b>→</b>	+2
" More "	<b>→</b>	+1
" No Change "	<b>→</b>	0
" Less "	<b>→</b>	-1
" Much Less "	<b>→</b>	-2

## Outcome Continuum



## Tangata Whaiora Schedule

a)	more valued as a person $\Rightarrow \Rightarrow$	$\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in yourself as a Maori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within yourself	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	$\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

# Q2. As a result of the COMMUNITY SUPPORT are you: (Please Circle One)

a)	more able to set goals for yourself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with your health problem	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the COMMUNITY SUPPORT are you: (Please Circle One)

a)	more able to move about without pain or distress	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
	improves mental well-being					

## Q4. As a result of the COMMUNITY SUPPORT are you: (Please Circle One)

a)	more able to communicate with your Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in your relationships with other $\Rightarrow \Rightarrow$ people	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with your Whanau⇒⇒	Much more	More	No Change	Less	Much less
d)	more able to participate in your community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Whanau Schedule

health problem

Q1. As a result of the COMMUNITY SUPPORT does your relative feel: (Please	Circle One)	
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a)	more valued as a person $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger in his/herself as a Maori	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/herself $\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
<b>d</b> )	healthier from a spiritual point of view	$v \rightarrow \rightarrow$	$\rightarrow \rightarrow$	Much more	More	No Change	Less	Much less

## **Q2.** As a result of the COMMUNITY SUPPORT is your relative: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive manner	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to understand how to deal with their	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q3. As a result of the COMMUNITY SUPPORT is your relative: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health $\Rightarrow \Rightarrow$ improves mental well-being	Much more	More	No Change	Less	Much less
d)	physically healthier $\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## **Q4.** As a result of the **COMMUNITY SUPPORT** is your relative: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## **Clinical Schedule**

a)	more valued as a person	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	stronger as a Maori     ⇒⇒	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more content within him/hersel	$f \Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
d)	healthier from a spiritual point	of view	$\Rightarrow\Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less

## Q2. As a result of the COMMUNITY SUPPORT is the patient: (Please Circle One)

a)	more able to set goals for him/herself $\Rightarrow \Rightarrow$	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more able to think, feel and act in a positive	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
	manner		Muchman	Mana	No Change	Lagg	Much loss
c)	more able to manage unwelcome thoughts and feelings	$\Rightarrow\Rightarrow$	Mucn more	More	No Change	Less	Much less
d)	more able to understand how to deal with their	$\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
-)	health problem.						

## Q3. As a result of the COMMUNITY SUPPORT is the patient: (Please Circle One)

a)	more able to move about without pain or distress $\Rightarrow$	Much more	More	No Change	Less	Much less
b)	more committed to having good physical health $\Rightarrow\Rightarrow$	Much more	More	No Change	Less	Much less
c)	more able to understand how physical health ⇒⇒ improves mental well-being	Much more	More	No Change	Less	Much less
	improves mentar werr-being					
d)	physically healthier $\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less

## Q4. As a result of the COMMUNITY SUPPORT is the patient: (Please Circle One)

a)	more able to communicate with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
b)	more confident in relationships with other people $\Rightarrow$	Much more	More	No Change	Less	Much less
c)	clearer about the relationship with the Whanau $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less
d)	more able to participate in the community $\Rightarrow \Rightarrow$	Much more	More	No Change	Less	Much less