

Improving access to primary care for Maori, and Pacific peoples

A literature review commissioned by the Health Funding Authority

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Executive summary

This report was commissioned by the Health Funding Authority to review the most relevant literature on strategies that improve Maori and Pacific peoples' access to primary health care services. Particular attention was to be paid to research and evidence based evaluation of strategies.

The Health Funding Authority commissioned a literature review from the Clearinghouse for Health Outcomes and Health Technology Assessment (NZHTA). From the references generated, those that appeared most relevant on the basis of their abstracts were retrieved for review in this report. While the search was of New Zealand and international databases, particular efforts were made to retrieve New Zealand research and evaluations. However, such material is rare, and where it is available, it has been given prominence in this report.

There are conceptual and methodological issues in measuring access to care and a range of measures have been used in different studies. Consensus is developing that traditional methods of measuring access, which focus on the ability to enter the system, must be supplemented by efforts to measure whether individuals have access to effective and appropriate health care. The need for culturally appropriate and high quality health services has been identified by both Maori and Pacific people as of prime importance.

In the past ten years New Zealand has seen significant changes in the governance, organisation and funding of primary health care services. While general practitioners are still significant providers of services, there is an increasing range of 'third sector' (neither government nor private) provision including partnerships between health providers and iwi, and between health providers and community groups. While rigorous evaluations of such projects are scarce, indications are that they are reducing barriers to care for target groups.

Delivering services away from traditional settings appears to be effective in engaging underserved populations with primary health care. In New Zealand marae-based services for Maori, and church-based services for Pacific people, have been well received by the communities in which they have been offered. Outcome evaluations of other community-based initiatives are scarce, but process evaluations suggest a high level of satisfaction with such services.

In addition to developing customised services for minority populations, the literature also discusses ways of enhancing existing services in order that they better meet the needs of traditionally underserved groups. Commentators endorse the need for mainstream services to develop an increased awareness of the culturally determined nature of behaviour; to recognise the impact of the power imbalances inherent between health professionals and patients; and to appreciate that attitudes to health, health promotion and treatment are culturally determined and may influence patients' responsiveness to health care advice.

Workforce development strategies figure in the literature as a key way to ensure that primary health care services are more accessible to minority groups. Such strategies include making available health care professionals of the same ethnicity as the client group, recruiting ethnic or bilingual lay health workers, and providing additional training for existing health workers.

Other strategies about which a small amount of material was retrieved include: home visiting services, language support, transport strategies, the use of technology, and multi-faceted strategies.

From its review of almost 100 of the more methodologically robust studies available, a British health research group identified some of the characteristics found more frequently amongst the programmes that have been shown to be effective. The more successful programmes:

- are systematic and intensive approaches
- are multifaceted
- use a multidisciplinary approach, collaboration between agencies and/or between lay and professional groups
- involve some face-to-face interaction
- give thought to whether group or individual strategies are more appropriate to achieve their objectives
- consider the setting within which the programme is to be delivered
- have undertaken some prior needs assessment to inform intervention design
- ensure interventions are culturally appropriate
- recognise the importance of the 'agent delivering the intervention' – be it health professional, education professional, outreach worker, ethnic health worker, volunteer or peer educator
- tailor support material for their purpose
- recognise that information alone is often insufficient
- use prompts or personal reminders to encourage people to use services or keep appointments.

1.0 Introduction

1.1 The task

This report was commissioned by the Health Funding Authority to review the most relevant literature on strategies that improve Maori and Pacific peoples' access to primary health care services. Particular attention was to be paid to research and evidence based evaluation of strategies.

1.2 The method

The Health Funding Authority commissioned a Level 1 literature review from the Clearinghouse for Health Outcomes and Health Technology Assessment (NZHTA). The brief to NZHTA was to conduct an extensive search of a wide range of sources and resulted in identification of a large number of references, abstracts, full text articles and relevant websites.

The references retrieved for review in this report were what seemed most relevant of those identified through the NZHTA search based on the information provided. They were supplied through the HFA Information Service.

1.3 The coverage and quality of the literature reviewed

Strenuous efforts were made to identify and retrieve New Zealand research evaluating the effectiveness of strategies to improve access to primary health services for Maori and Pacific people. Such material is rare, and where it is available, it has been given prominence in this report.

In the absence of a significant body of New Zealand material, research from other countries has been reviewed. The question of how relevant these studies are to the New Zealand situation remains unanswered. This question is particularly pertinent in respect to material from the United States where insurance coverage is a key focus in improving access for underserved populations. While health insurance coverage in New Zealand is limited in comparison with the United States, New Zealand does have only partial subsidies for primary health care with less than half the population eligible for subsidy, and that subsidy typically covers less than half the cost of a primary health care visit. So while insurance coverage is not an issue of great relevance to New Zealand's less advantaged population, health care costs and out of pocket expenses are an important consideration.

While the emphasis was on locating research that demonstrated a robust design, this too was in short supply, an experience shared by the team at the University of York which conducted an extensive search for research evaluating the effectiveness of interventions designed to reduce disparities in health. That team wrote:

“Overall the quality of evaluations considered was poor even when the difficulties of evaluating complex interventions given to disadvantaged populations are taken into account.” (NHS 1995 p35)

Another very recent paper (*Medical Journal of Australia*) confirms that:

. . . the evidence base for the outcomes of attempts to reduce health inequalities is quantitatively small and qualitatively poor. (Oldenburg et al 2000)

The NHS report identifies the major methodological shortcomings they encountered in reviewing the literature. Many hold true for the material reviewed for this report. These shortcomings include:

- studies giving only a limited description of the nature and content of interventions
- methods used to recruit study subjects, and the number of subjects, are unclear
- sample sizes are often too small to detect differences that are statistically significant and which therefore allow conclusions to be drawn about effectiveness
- many evaluations do not have a control group which makes it difficult to attribute any changes to the intervention
- when control groups are used, baseline measures are often lacking which leaves a question mark over the comparability of the control and intervention group
- follow-up periods were often too short to establish whether the benefits of an intervention were sustained

The team identified some further shortcomings which were not apparent in the material reviewed for this report. These are:

- outcome measures not always being appropriate to the intervention being studied
- in some studies the random allocation of people to different groups was broken in the reporting of results, seriously weakening the strength of evidence. (NHS 1995)

With the exception of the NHS review, very little meta-analytic or overview material was retrieved for the report.

1.4 This report

This report opens with an introductory chapter on issues arising in the measurement of access to health care services.

Subsequent chapters address strategies for overcoming barriers to access including service configuration, workforce development, location of services, enhancing existing services and other strategies.

The report concludes with a chapter on key factors in overcoming barriers to access to primary care services faced by Maori and Pacific peoples.

2.0 Measuring access to care

2.1 Conceptual and methodological issues in measuring access

Measuring access to health care in a system that is constantly changing is a challenging task, and one not only confronted in New Zealand.

Berk and Schur (*Health Affairs*) point out that even amongst peer-reviewed research published in recognised books or journals there is a wide diversity of findings on the extent to which vulnerable populations face barriers to accessing health services. Taken together these surveys paint a confusing and inconsistent picture of access to care. The reasons for this variation, the authors assert, lie in different methodological approaches to surveys, and in a lack of consensus about the conceptual definition of access.

The authors identify three main methodological differences contributing to the variation in findings as:

- variation in question wording – widely recognised to influence survey responses.
- the increasing use of telephone surveys in which response rates are generally lower and which therefore may have a disproportionately high number of respondents who are unusually interested in the topic of access to care, perhaps because of adverse experiences.
- conditioning effects – on longer surveys respondents learn that responding affirmatively to a question will generally lead to additional questions. Some respondents will answer in the negative to hasten the end of the interview. This phenomenon has been identified in surveys that are repeated several times with the same respondents. Of the surveys examined for this research the longest one recorded the lowest unmet need and the second longest one, the second lowest.

In addition to the complexities inherent in collecting data for measuring access to care, from a conceptual perspective there are a number of different ways to look at access. Some of the most common are:

- insurance coverage – a commonly used measure of access to care in the United States, insurance coverage is not an accurate measure of the amount of care received, but is considered an 'enabling characteristic' because it is highly correlated with use of services. It is also of particular interest to public policy makers as it is highly amenable to policy intervention. In practice however while lack of insurance is an indicator of potential access problems, many of the insured face other barriers to access.
- inability to obtain care – another measure of access to care is respondents' perception of whether or not they have been able to obtain the care they believe is necessary. This 'need' is clearly subjective and may understate or overstate medically defined need. Differences in reported unmet need could simply reflect differences in knowledge about appropriate care. The definition of the services is another factor affecting response – if people are thinking purely about unmet need in relation to GP services estimates may be lower than if other services – dental, prescription, optometry or mental health – are included.

- other access measures – two other less frequently used measures of access are use of hospital emergency services and health problem but no visit to health care service.

Berk and Schur make three recommendations for improving measurement of access and in particular for facilitating the analysis of trends. They are: a national clearinghouse to synthesise and disseminate research on the measurement of access; investment in methodologically rigorous research; and input from policymakers in order that researchers can conceptualise access in ways that produce research which can inform the policy process. (Berk and Schur 1998)

A US Professor of Health Economics, Miller (*Health Services Research*) identified some of the challenges of measuring access to care. These are:

- determining measure of access to care. Increasingly, a key question is not whether health services provide at least some level of service, but rather whether patients get appropriate services in appropriate amounts, in a timely fashion and at a suitable location. As integration of services increases, using quantity of care as a proxy for access to care becomes problematic because integration can potentially lower utilisation while improving quality of care. He writes:

As care becomes more clinically integrated access to care measures must take into consideration proactive secondary preventive care that may involve telephone communication; non-physician personnel use; and education, involvement and support of patient in self-care 'services' that might substitute for specialist visits or hospital stays that are sometimes markers for access to care. (Miller 1998 p 672)

- determining appropriate organisations to measure performance. Access to care comparisons were once solely made for policy purposes, but increasingly there is interest in providing consumers and purchasers with information they can use in choosing amongst providers. Whereas once it might have been sufficient to produce data measuring access to all providers it is becoming increasingly important to produce data that helps patients choose between providers.
- determining appropriate organisational characteristics to measure. A key challenge to researchers is the need to ensure that the characteristics of health providers that can affect access to care are accurately determined and measured. (Miller 1998)

In the same publication (*Health Services Research*), Gold and Stevens drew out of a symposium of '40 leading public and private sector researchers and policy analysts currently working on issues relevant to the topic' key themes and conclusions arising from discussions about measuring access to health services. While these key features were of particular relevance to the US health system at a time of moving towards managed care, the points are worthy of consideration by others faced with the task of measuring access to health services.

1. Access to care is a multi-dimensional concept that continues to evolve over time.

Traditional ways of measuring access have relied on population-based surveys asking individuals about their use of health services. Focusing on the ability to enter the system is no longer sufficient and attempts must be made to measure whether individuals have access to effective and appropriate health care. A distinction must

be made between access as a measure of system entry and access as a measure of the ability to get suitable care. 'While it remains critical to continue to monitor the former, it is also increasingly important to measure the latter. '

2. **Patients and clinicians differ in their views of access.** The clinical view of access focus on clinical outcomes and care appropriate to enhancing outcomes. While patients value good clinical outcomes, they also value convenience, timeliness and other service aspects of care.
3. **The concept of access and its measurement is value laden.** People disagree on what access means or should mean, in part because fundamental value judgments apply in selecting a way to measure it.
4. **Access measures are used for an increasing range of purposes.** Historically access measurement has been important for policy formulation. More recently access surveys are being used to encourage accountability and support consumer choice. Access measures will differ according to their intended use and user.
5. **Population-based surveys remain invaluable for measuring access.** The ability to monitor whether individuals can enter or access the health system remains important even as the focus expands to capture information on what happens to individuals once they are in the system and on the outcomes of the care they receive. In addition surveys can elicit information about how people perceive and feel about the system, and what is important to them. The survey method is also best suited to learning how personal characteristics like attitudes, beliefs, health status and cultural background influence access to care.
6. **Multiple information sources are essential to studying access in today's environment.** Surveys have limitations. Patients may not be able to report reliably on the detail of the services they accessed. It is important to improve patient information available from care providers as well as from funders. The use of such data in conjunction with patient surveys will give a much more complete picture.
7. **Geographically relevant and adaptable measures are needed but challenging.** Health systems are evolving and are not uniform. They change substantially across time and between regions. National level information can never provide a complete picture, and geographically specific surveys will always be required
8. **Population based surveys can be improved to address issues of access better.** Surveys need to concentrate more on the detail of the care provided to patients by health services and the experiences patients have once they have accessed services.
9. **Expanding concepts should not be at the cost of losing a focus on access.** Modifying the way access is conceptualised and measured comes at some risk that the concept of access becomes hard to distinguish from some related concepts like 'quality', 'satisfaction', 'effectiveness' or 'outcomes'. These risks may be minimised by distinguishing between access as a measure of initial entry versus a measure of ultimate system performance and outcomes.

These authors included a number of recommendations in their paper under three groupings: understanding the user, improving measures and methods; and building infrastructure. (Gold and Stevens 1998)

In a third article in the same publication (*Health Services Research*), US health policy researcher Eden described some of the larger population-based surveys measuring access to care in the US in 1998. Eden then makes some comments about noteworthy

aspects of survey design and draws some conclusions about the value of such surveys. These are some of the methodological features drawn to the reader's attention:

- several of the surveys are now designed with repeated data collection and respondent follow-up to allow trends to be monitored and the impact of changes in healthcare delivery to be analysed – this is particularly valuable given the pace and extent of change in health service delivery
- linkages between large national surveys, and between household surveys and 'follow back' surveys of health plans employers and medical providers have the benefit both of cost savings and the creation of a richer set of data for studying access to care
- the demand for information on how vulnerable and underserved populations are faring has led to many surveys over-sampling survey respondents who report barriers to care in order to ensure that sufficient data is available to analyse their experiences
- increased concentration on the managed care attributes of health plans rather than the outdated health plan labels is evident in many surveys
- survey researchers are experimenting with new ways to capture information on the nature and impact of barriers to care. (Eden 1998)

One means of measuring access to primary is to examine what are termed 'avoidable hospitalisations'. A potentially avoidable hospitalisation is one for a condition such as asthma or diabetes which might have been prevented altogether had it been successfully treated at an earlier stage in the primary health care setting. There has been some recent work done in New Zealand on measuring access to care by analysing avoidable hospitalisations. (Ministry of Health 1999)

He Taura Tieke, a publication co-ordinated by the Ministry of Health which is designed for service providers and gives a Maori perspective on access to health services. This report identifies the elements of effective health services valued by Maori as:

- technical and clinical competence, including the fitness of staff to serve Maori consumers sensitively, and the ability to be able to register concerns or complaints if expectations are unmet
- structural and systemic responsiveness, including services designed and delivered from a framework and philosophical base which includes the Treaty of Waitangi, Whare Tapa Wha, Whai te Ora mo te Iwi, and the Ottawa Charter
- consumer satisfaction, which for Maori is related to access, communication and information, informed choices, trust and respect, participation by Maori and seamless service provision. (Ministry of Health 1995)

In a paper on Pacifician's access to health services in New Zealand, Young reviews literature that suggests there are five dimensions that are useful to understanding the barriers to access faced by underserved groups in general and Pacific people in particular. They are:

- availability – the adequacy of supply in relation to the volume and type of needs
- accessibility – geographical access, distance, transport options and travel time
- accommodation – organisational features of the providers' services such as appointment systems and waiting times

- affordability – the relationship between the cost of service and the client's ability to pay
- acceptability – the client's attitudes about the personal and practice characteristics of the provider and the provider's attitudes about the characteristics of the client. (Young 1997)

2.2 Evidence for disparities in access and health status

NEW ZEALAND

A 1997 study (*NZMJ*) using data drawn from the Waikato Medical Care Survey 1991-2 compared patterns of contact with primary care services for patients of Maori and non-Maori background and found that annual rates GP contact for Maori were only slightly lower than for non-Maori. This near equivalence in rates of GP contact contrasted strikingly with the level of hospitalisation for Maori – almost double that for non-Maori – and the difference in mortality rates (30% higher for Maori). (Davis 1997)

In 1996 the Northern Regional Health Authority commissioned an immunisation coverage survey in Auckland and Northland (*New Zealand Public Health Report*). The study used a cluster sampling method developed by the World Health Organisation. The survey found that a smaller proportion of Maori children (45%) and Pacific children (53%) were likely to be fully immunised at the age of two than other children (72%). The strongest predictor of failure to complete immunisation by two was failure to receive the six-week immunisation on time. (Rainger et al 1998)

An analysis of data collected through the 1996/7 New Zealand Health Survey showed that after adjustment for self-reported health status, Maori were significantly less likely than New Zealand Europeans to visit a general practitioner, but there were no differences across income or subsidy groups. However, when frequency of GP visits was considered, the results showed that subsidised patients were more likely to visit the GP more often than Maori or low income groups. The authors concluded that a system of low income targeted government subsidies reduces but does not fully compensate for the barrier posed by doctor's fees. Furthermore, there appear to be barriers for Maori in addition to income. (Scott, Marwick and Crampton, 2002)

Drawing on national data sources Professor Laurence Malcolm (*NZMJ*) compared the national average per capita expenditure on GMS, ACC, laboratory and pharmaceutical services with the average per capita expenditure of eight health centres serving predominantly Maori and low income groups. Data were adjusted for age and community service card usage. The study found gross under utilisation of and expenditure on primary health care and related services by Maori and other New Zealanders in poor circumstances. He noted that poor access to primary health care is likely to be a significant factor in the high use of hospital inpatient services by this group. (Malcolm 1996)

A study of access to GP services in South Auckland (*NZMJ*) reached a different conclusion. A face-to-face interview administered to a random sample drawn from the population found that decreased general practitioner utilisation was associated with poor perceived health, longer time with a given practitioner, and long waiting times rather than with demographic factors or patient fees. (Gribben 1992)

A study of general practitioner attendance in Gisborne (*Soc. Sci. Med.*) found that lower income patients were more likely to attend the general practitioner closest to them.

Those who travelled furthest, exercising the choice to bypass closer options, were more likely to be from higher income households than those who attended a practice nearer to their home. (Hays, Kearns and Moran 1990)

A review of the access of Pacific people to health services in New Zealand (*Pacific Health Dialogue*) acknowledges the limited information available and draws together what research has shown about Pacific people's health service usage. The paper highlights the barriers of *acceptability* of health services to Pacific people in addition to geographical and financial barriers to access. (Young 1997)

As well as studies of disparities in access to health services there are many studies which show the differences in health status between Maori and non-Maori New Zealanders.

A recent report by the Maori Health Group of the Health Funding Authority contains a wide range of statistics illustrating the contrast in health outcomes for Maori in comparison with other New Zealanders. (Health Funding Authority 1999)

A recent paper (*yet to be published*) examined mortality records from 1991-1994. The authors found significant disparity in age-standardised mortality between Maori and people of other ethnic origins for all age groups. The mortality rates for Pacific people were lower than for Maori, but higher than for people of other ethnic groups. Deprivation accounted for a large portion of the disparity, particularly in younger age-groups. However, the researchers found that five to 24 percent of the inequalities in mortality were related to ethnic inequalities. (Blakely et al 2000)

A 1993 study of mortality and social class (*NZMJ*) examined the changes in mortality rates for Maori and non-Maori men over a 10 year period. Between 1975-7 and 1985-7 the researchers found a 54% decline in Maori mortality and a 23% decline in non-Maori mortality, however the Maori mortality rate was still 2.8 times the non-Maori rate. Differences in social class explained a significant proportion of this difference, but a substantial portion remained attributable to ethnicity alone. (Pearce et al 1993)

An earlier study (*NZMJ*) which examined differences in mortality rates between Maori and non-Maori males also found that while much of the difference was attributable to social class, a substantial proportion could only be explained by ethnicity. (Pearce et al 1984)

OTHER COUNTRIES

Other papers retrieved for this review describe research identifying barriers to access to primary health services faced by members of disadvantaged groups in other countries. Bhopal 1998 (*BMJ*) presents a review of a large number of studies indicating inequalities in health and health care access related to race and ethnicity. Other studies include those by Zuvekas, McNamara and Bernstein 1999 (US, *Journal of Ambulatory Care Management*); Bates and Wolinsky 1998 (US, *Pediatrics*); Miller 1998 (US, *Health Services Research*); Free et al 1999 (UK, *Family Practice*); and Firebrace 1998 (*Australian Journal of Primary Health*).

3.0 Governance and provision of primary care services

Historically, primary health care services in New Zealand have been provided predominantly by general practitioners with private business approaches to funding for practitioner and staff reimbursement and fee-for-service charging and subsidy arrangements. Over the past ten years an increasing number of primary care providers have developed a different approach to both organisation and funding. (Crampton et al 2000)

In recent years concerted efforts have been made by government to honour the commitments made in the Treaty of Waitangi and to ensure that Maori are much more actively involved in designing and delivering health services to meet the needs of Maori people. The concept of partnership has achieved wide currency, and the changing patterns of primary healthcare governance and provision are, at least in part, an attempt to put a partnership philosophy into practice.

3.1 Health care organisation in New Zealand

Very little peer-reviewed or academic literature on health care organisation in New Zealand has been retrieved for this report. The descriptive material that is available suggests that there is a move towards health care partnerships between traditional providers and iwi or urban Maori communities, as well as towards greater integration of services.

A recent paper by Crampton, Dowell and Bowers (*NZMJ*) aimed to describe the characteristics of selected third sector (non-government and non-profit) primary health care organisations. Data were collected from 15 third sector primary care providers which were members of the Health Care Aotearoa network. The research revealed that the populations served by the third sector providers were young, and the ethnicity profile was highly atypical with only 21% European. Patients included a high proportion of Community Card holders, and registered patients tended to live in highly deprived areas. These authors concluded that third sector organisations provide services for populations that are disadvantaged in many respects. They write:

It is likely that New Zealand will continue to develop a diverse range of primary health care organisational arrangements. Effort is now required to measure quality and effectiveness of services provided by different primary care organisations serving comparable populations. (Crampton and Dowell 2000 p92)

Brown and Crampton (*Health Policy*) also highlight the absence of proper evaluation of the new partnerships that are emerging between health providers and Maori. In 1997 they wrote this:

As examples, the Northern RHA has three co-ordinated and co-purchasing organisations (called MAPOs) funding Maori health providers; the Central RHA has 50 'health nests' (called Hauora Oranga) involving Maori health providers; and the Midland RHA has four Maori joint venture boards that are progressing towards integrated care. These initiatives may meet the political objectives of Maori in a way that is consistent with

Maori expectations concerning health care, but on the other hand it is certain that this matter has yet to be evaluated. (Brown and Crampton 1997 p100)

In a paper for the 1995 'Bringing together strategies to improve Maori health' conference Maori health policy maker Lorna Dyll reflected on the structural changes to the health system since the previous conference two years before, and gave a presentation reinforcing the principles on which services for Maori must be based, irrespective of the organisational structures within which they are provided. The principles underpinning Maori health policy must be:

- Tino Rangitiratanga – Maori have a right to determine their own destiny
- 'he tangata, he tangata' – health is about people, not solely about resources and waiting lists
- 'tatau tatau' – health and health service provision is a collective responsibility.

The principles underlying service delivery must be:

- choice – there should be a range of services purchased and provided, services delivered from a Maori kaupapa should not be seen as separatist or duplication, but rather as the provision of options
- relevance – services should be culturally relevant and able to address actual needs
- integration – services should integrate with one another, rather than stand alone. Purchasing should strengthen intersectoral relationships and unite funding that is available for Maori health development
- quality – all services purchased should define the outcomes to be achieved for Maori
- cost-effectiveness – services should provide value for money. (Dyll 1995)

EVALUATIONS OF PARTNERSHIP PROJECTS

Two papers (*Australian and New Zealand Journal of Public Health; European Respiratory Journal*) retrieved for the review describe an asthma self-management action plan developed and evaluated in partnership by Hauora Runanga, a tribal health council in the Wairarapa, and the Wellington Asthma Research Group based at the Wellington School of Medicine.

The programme involved local marae committees contacting people with asthma in their area and inviting them to take part. Following enrolment, programme participants were met by doctors and community health workers and were shown how to complete diaries of daily asthma symptoms and how to use peak flow meter and record peak flow rates. A further clinic was then held to introduce the credit-card sized asthma self-management plan which was explained by a doctor. The clinics were followed up by support from community health workers.

The evaluation found there had been a significant reduction in asthma morbidity following the introduction of the self-management plan. Follow-up studies one and two years after the completion of the programme found that participants were still showing the benefits of reduced asthma morbidity. A six year follow-up was also undertaken which showed that although those participants able to be contacted had reduced severe asthma morbidity, and emergency use of health services, the benefits were less

than those observed at the two-year follow up. In particular asthma self-management, and the use of prophylactic medication had deteriorated. The authors of the study concluded that to obtain enduring benefits from a self-management system of care continued reinforcement of self-management skills seems to be an essential component of any follow-up. (D'Souza et al 2000)

In addition to the improvements in asthma morbidity, the programme was found to have four key benefits: cultural affirmation, improved access to other health services; a greater sense of control for participants; and positive impacts on the extended family. The authors found that the programme benefits were not due simply to the introduction of the asthma self-management plan but also to the partnership approach employed by the programme. (Ratima et al 1999:)

A programme to improve the asthma management of children in a remote indigenous community in Australia was implemented in a partnership between an indigenous community controlled health care centre and paediatric respiratory physicians (*Journal of Paediatric and Child Health*). Indigenous health care workers referred indigenous children with respiratory concerns for prospective evaluation by paediatric respiratory physicians. Current asthma management amongst the children was poor as was knowledge of asthma. Although the programme was apparently not formally evaluated, the authors claim that the intervention resulted in asthma management being optimised in 88% of the children seen. (Chang et al 2000)

One formative and process evaluation (*Social Science and Medicine*) of a community development partnership for health promotion between a health group and an urban Maori community in New Zealand was supported by a detailed literature review, and included a number of recommended procedures for the development of partnerships applicable to health and other areas.

This partnership was between the South Auckland Diabetes Project and Whaiora Marae. The partnership planned and organised a health screening and education programme and promoted it within the marae community and the wider Maori community of Otara; planned and organised a major event to launch the education and exercise programme; developed a job description to establish a health liaison worker position; and applied to the relevant government health funding body for salary and costs to establish the position under the marae's administration.

The researchers found that evaluating the initiative was not straightforward. Issues that emerged included:

- Conflicting paradigms of medical research, quantitative assessment and community development. A tension developed between trying to maximise the community development aspects of the initiative while satisfying the need for quantitative evaluation. An example of this was that the time taken for the researchers to collect pre-intervention baseline data on a sufficiently large sample was such that there was a loss of momentum and immediacy when the intervention finally occurred
- Building trust. Trust, and the lack of it quickly revealed itself as an issue. Distrust, cynicism and suspicion were frequently encountered in promoting the partnership agenda, primarily from those who were not prepared to trust the motives of the dominant culture member. The researchers identified the factors responsible for the lack of trust as the history of colonisation; prior experience of government funding bodies; inadequate funding for Maori programmes in the past; experience of previous research as offering little return to the community studied; and a

perception of self-serving agendas on the part of bureaucrats. The presence of different interest groups at the marae also contributed.

- The value placed on a health programme. It was not easy to promote health protection as a priority amongst the community the intervention was designed for. It was hard to get people to think proactively about their health, and difficult to encourage Maori who were part of a scattered urban community to adopt health promoting lifestyle changes. The researchers identified a number of reasons for this apathy, particularly apparent amongst men.

These authors make a number of recommendations for building partnerships between urban Maori and health groups. (Voyle and Simmons 1999)

DESCRIPTIONS OF PARTNERSHIP PROJECTS

The Health Funding Authority recently released *Pathways in action: partnerships for Maori health gain*, a national Maori health strategy. The strategy is designed to foster the development of a range of health providers and projects responsive to Maori needs. The strategy was formulated to bring some consistency to the provision of Maori health services and to stimulate innovation. (Health Funding Authority 1999)

Two directories of Maori health providers describe some of the projects being fostered under the strategy. (Tu Ake Productions 1998; 1999)

In a joint venture with Good Health Wanganui, the Health Committee of Ratana Pa initiated a dental health project for a community which had identified oral health as a major health problem. While the project appears not to have been formally evaluated, a paper (*New Zealand Dental Journal*) describing the initiative identifies the factors for its success. They include:

- the intensive involvement of the Maori Health Community worker at Ratana Pa
- the co-operation with the Dental Centre of Wanganui Base Hospital in making available facilities, equipment and materials
- community ownership and control of the project
- the dentist who undertook the work was Maori
- whanau members were welcome during treatment
- the recognition by the Central Regional Health Authority of the need to address the dental health status of Maori. (Broughton 1995)

Other papers retrieved on the subject of health care organisation are largely descriptive, and include:

- a paper outlining the process of establishing a primary care network for the Bay of Plenty (Simon 1995)
- a paper describing a partnership between Te Runanga o Raukawa and Central Regional Health Authority to provide a iwi-based health service based in Otaki and Palmerston North (Manchester 1996)
- a description of the partnership between the Ngati Hine iwi and North Health resulting in the Ngati Hine Health Trust (Ngati Hine Health Trust, 1996)
- a Ministry of Health descriptive piece on a partnership between Western Bay Health and Te Puna Haurora Kaupapa Maori Services to deliver both inpatient and community based services to Maori (Ministry of Health, undated)

- a partnership between the Waiparaira Trust and more than 60 local GPs based in West Auckland who have formed an association called Integrated Primary Care Services Limited (IPCS). The aim is improved access and the provision of more comprehensive and culturally effective service. (Ministry of Health, undated).

3.2 Other countries

Miller (*Health Services Research*) examined peer reviewed literature for evidence of the impact of health sector organisational change on the access to care of vulnerable populations. He found that a shift towards more integrated clinical management of all services for specific types of patients across time may improve access to care. Additionally, he found that the increased importance of capitated provider organisations within the health system had the effect of restricting access in some ways, and expanding it in others.

Miller, writing of course in the context of health service provision in the US, identified the following as organisational arrangements that can affect access to care for vulnerable HMO enrollee populations:

- which organisation controls care and how much potential control that organisation has over physician decision making
- how HMO or capitated physician organisations control care
- how HMO or capitated physician organisations compete to attract or retain patients. (Miller 1998)

Several papers retrieved for this review discuss issues of partnership with indigenous people in the provision of health services in other countries. These papers include:

- a outline of projects under the Models that Work campaign designed to publicise strategies that reduce barriers to primary health care services. Analysis of successful projects suggests that one of the components of models that work is community partnerships of a range of types (Crump et al 1999)
- a 1998 paper which describes the challenges faced in establishing a partnership with an aboriginal community group in the Northern Territories of Australia to provide health services to a widely dispersed extremely underserved population (Burns et al 1998)
- a paper about the Indian Health Service (IHS) which provides free comprehensive health services to eligible American Indians and Alaskan Natives regardless of their ability to pay shows that while the presence of the IHS has markedly improved the health status of American Indians, overall people who use the IHS and non-IHS providers have higher level of health care service use than those who rely on IHS alone (Cunningham 1993)
- a description of initiatives and changes made in remote primary healthcare service delivery in Central Australia. The changes include a move from centralised management to an increasingly decentralised participatory management model (Wakerman and Field 1998).

Another paper is concerned with a partnership initiative designed to improve health services for minority populations. This is a description of a local level partnership between an African-American community and the Johns Hopkins Academic Health Centre. Essential characteristics include community based ownership and leadership of programmes (Levine et al 1994).

4.0 Location of service delivery

4.1 Marae based health programmes

A number of papers retrieved for this review describe, and in some cases evaluate marae-based programmes. None however compare programmes delivered on marae with comparable programmes delivered in other locations which means that it is not possible to isolate the influence of location on programme outcome as distinct from other programme elements.

The Wairarapa asthma self-management programme (*Australian and New Zealand Journal of Public Health*) shown in Chapter 3 to have had some long term health and social benefits for participants was a marae-based programme. The evaluation showed that participants were positive about the overall programme, and in particular they liked seeing the doctor on a marae and found the marae to be a more relaxed and informal location than a GP clinic. A distinguishing feature of the programme was that Maori processes were followed throughout. One of the benefits of the programme was found to be cultural affirmation for participants. Ratima et al write:

Cultural affirmation refers to the capacity of a service not only to be safe in cultural terms but also to positively affirm Maori beliefs, values and practices. In the case of this programme the value of Maori culture was reinforced through the delivery of services in Maori settings and by adhering to Maori processes. (Ratima et al 604)

A key feature of the dental health project at Ratana Pa was the provision of services at the Ratana Pa site. Although not formally evaluated, Broughton (*New Zealand Dental Journal*) identified the provision of services in the familiar and supportive environment of a marae as a key reason for the success of the project. (Broughton 1995)

A description of the Te Runanga o Raukawa's Whanau Ora programme (*Kai Tiaki: Nursing New Zealand*) provides a community health service based on the 20 marae in the region. The service provides health promotion and education, immunisation, cervical screening and vision and hearing testing. The project manager made this comment:

'We have picked up many people who haven't been to a GP for years . . . by taking our services to marae, kohanga reo and into people's homes we have been able to reach people who have been slipping through the health net.' (Manchester 1996 p15)

CHURCH-BASED HEALTH PROGRAMMES

Two papers are concerned with urban church-based programmes designed to improve the health of Pacific people and to reduce the risk of diabetes.

A paper by Simmons et al (*Diabetic Medicine*) described a controlled study of the impact of an intervention programme of health and diabetes education and exercise. Both the intervention and control groups were Samoan church congregations in South Auckland. Key findings were a reduction in waist circumference and no weight gain in the intervention group over a two year period, an increase in diabetes knowledge and an

increase in the proportion of the population exercising regularly. None of these improvements were observed in the control group. (Simmons et al 1998)

Swinburn, Amosa and Bell (*Pacific Health Dialogue*) described the establishment of the Samoan Ola Fa'atauta project which aimed to assess the current health of three church communities and to measure the impact of nutrition, exercise and educational programmes. With a quasi-experimental design, intervention activities included physical activity, nutrition education, diabetes support group, encouragement from ministers and their wives. Although the paper makes it clear that both process and outcome evaluation were a key feature of the project the paper does not report on the outcomes. (Swinburn et al 1997)

4.2 Community health centres

In the literature the term community health centres appears to be applied to a wide range of services from fairly traditional health services based around the practice of one or more GPs, to centres offering a wide range of services delivered by a variety of health professionals and community health workers, often from a range of locations. For the purposes of this report it is the services towards the latter end of this continuum that are of interest.

Hauora Hokianga describes itself as 'an integrated extended primary health service' (*unpublished source*) which provides health services at no cost to the patient. The service is provided from the Health Centre at Rawene on a daily basis and from nine clinics in outlying communities on a regular basis. In 1997/98 Hauora Hokianga was responsible for providing health care for almost 10,000 people. Services included community health services provided by eight community health nurses, community mental health services, home support services, a mobile dental service, GP services. The hospital in Rawene also provided a small number of maternity, acute and continuing care beds as well as physiotherapy, radiography and counselling services. Statistics collected by the service showed a steady increase in the number of people using the services, and were supplemented by comment that the proportion of Maori using the services was also increasing. (Hauora Hokianga)

A community nursing service for Pacific Island families was established under the auspices of the Canterbury Union and Community Health Clinic in 1997 (*Kai Tiaki: Nursing New Zealand*). A weekly clinic at the centre is supplemented by up to 30 community consultations. Although the project does not appear to have been formally evaluated, indicators such as a fall in rates of 'did not attend' for Pacific patients with specialist appointments seem to suggest that one of the goals of the service – that of linking Pacific people with mainstream providers – is being achieved. The rate of 'did not attend' amongst Pacific people with appointments at the Union Clinic fell below that of the general clinic population within a year of the service being established. (O'Conner 1998)

An unpublished paper reports on the establishment of a joint initiative between a community health centre and a large Aboriginal employer in the town of Bourke, located in NSW Australia 375 kilometres from the nearest city. Bourke had 3.5 GPs and a 42 bed hospital, but many local Aboriginal people chose not to use the service for a range of reasons including distance to travel and location (not in a part of town that Aboriginal people used), and possibly the fact that, despite the presence of Aboriginal health workers, the services delivered were traditional in nature. Although these issues were recognised they were not addressed until Bourke was chosen to participate in a primary

health care transition project in 1999. The aims of the project were to develop a best practice model for primary health care which would best meet the needs of those in small rural remote settings. Several steps were taken to improve Bourke's service to its indigenous population:

- a transition officer was appointed for 12 months
- a comprehensive primary health care training was provided to staff
- two new primary health care nurse positions were appointed.

The health centre then approached the employer and found a great deal of support for the concept of an on-site health service. A process evaluation of the on-site service has been completed showing a high level of interest in and acceptance of the service by workers and their families. Difficulties have included the lack of totally suitable or dedicated space and lack of a male health worker. (Linke and Both 2000)

An evaluation of a three-and-half-year demonstration project (*West Journal of Medicine*) to establish regular, culturally sensitive, community-based medical contact with diabetic patients who had a history of non-adherence to treatment regimes dramatically improved the amount and quality of medical care received by the patient. (Humphrey et al 1997)

4.3 Home visiting

In the review of research into the effectiveness of health service interventions in reducing variations in health, home visiting was found to be a component of many successful interventions, although there was evidence that some target groups valued the social contact provided by services provided in other settings. (NHS 1995)

5.0 Enhancing existing services

5.1 Improving cultural awareness and sensitivity

Very little research or evidence based material was retrieved that evaluated the effects of making existing health services more sensitive to the cultures of those who use them. However, several papers comment on the need to do so.

A case study of Auckland Healthcare's response to the need to provide more culturally sensitive services to Maori was presented by Naida Pou at the 1995 conference 'Bringing together strategies to improve Maori health'. Pou describes the first and most significant change as commitment on the part of management, which was followed through by placing Maori management in a direct reporting position to the Chief Executive. The new structure had the authority to enforce an integrated focus for Maori Health throughout the organisation. Following this was an organisation-wide evaluation of Maori health to identify the barriers to improving the health of Maori. The evaluation identified that the organisation had previously emphasised the employment of Maori health workers in a catch-all role at a non-professional level, allowing the rest of the organisation to abdicate any responsibility to institutionalise Maori health structures and processes. A major challenge was to make a place for Maori health within the infrastructure of the organisation where it could be proactively involved in planning, financial matters and quality control as well as in service delivery.

In 1994, as a result of a proposal from He Kamaka Oranga, the Maori health group, a joint venture was established to comprehensively institutionalise Maori health practice at all levels of service delivery in the organisation. At the time of writing the joint venture had been in place for sixteen months and progress was reported as significant. (Pou 1995)

Young (*Pacific Health Dialogue*) writes of the need for health services in New Zealand not to be simply *accessible* to Pacific people, but to be *acceptable*. She suggests that Pacific people's low utilisation of current health services is, at least in part, because they are not *acceptable*, they are ethnocentric and in particular fail to take account of the role of the family, the use of traditional medicine and the impact of the social distance between patient and provider. (Young 1997)

Another paper identifies the aspects of health services that make them uncomfortable for Pacific people, and says that in order to make such services more acceptable to Pacific people providers need to consider the way services meet the four dimensions of the physical, mental, social and spiritual. (Lurch 1989)

Eckerman and Dowd (*Australian Journal of Advanced Nursing*) write of the need for services to:

- accept 'cultural relativism' which is the knowledge that people's behaviour is culturally determined, and that all cultures are equally valid
- recognise the power inherent in the professional role and address issues of power and dependency between health professionals and patients
- be committed to providing full information and ensuring patients' full understanding even if more time is required to achieve this

- appreciate that attitudes to health, health promotion and treatment are culturally determined and may influence patients' responsiveness to health care advice. (Eckerman and Dowd 1992)

US public health academic Kagawa-Singer agrees that the first essential step towards culturally sensitive practice is the move from 'ethnocentrism' to 'ethnorelativism', and the second equally important step is towards partnership with members of the community. (Kagawa-Singer 1997)

In writing about the appalling health status of the Australian Koori people, Firebrace (*Australian Journal of Primary Health*) makes similar points in this quote:

This will mean a shift in our philosophies. It will mean providers consulting more widely with indigenous people, coming to grips with cultural protocol, establishing trust with a race of people whose traditional well-being was build around a different lifestyle, diet and access to bush medicine. There must be a recognition that the white man's medicine and white doctors are only used as a last resort and usually with some degree of trepidation. (Firebrace 1998 p92)

6.0 Workforce development strategies

6.1 Ethnic and bilingual health workers

Making available health care providers who are from the same ethnic group, or who can speak the same language as a population facing barriers to access of health services is widely seen as a highly effective strategy for improving provision of services to underserved groups.

In one of the few outcome studies retrieved for this review, Lau and Zane (*Journal of Community Psychology*) compared outcomes for Asian American clients using ethnic-specific mental health services with a matched cohort receiving treatment from mainstream services. Better treatment outcomes were found for clients using ethnic-specific services even after controlling for certain demographics, pre-treatment severity, and diagnosis. Although the mean cost of providing the ethnic-specific services was generally higher than for mainstream programmes, and clients tended to make more use of ethnic-specific services. However, this research found that the clients of ethnic-specific services who used the services more achieved better outcomes, but that there was no such relationship between usage and outcomes for mainstream services. (Lau and Zane 2000)

In an evaluation of the dental health project at Ratana Pa (*New Zealand Dental Journal*), Broughton identified one of the factors contributing to the success of the project as that the dentist undertaking the work was Maori.

The presence of a person with whom they could readily identify, kanohi ki te kanohi (face to face) was an important factor in the initial acceptance by the people for the service. (Broughton 1995 p95)

An Australian study (*Australian Journal of Advanced Nursing*) describes ethnographic research with Aboriginal health professionals, and Aboriginal clients with diabetes. The research found both the health professionals and the clients had limited access to relevant and useful information about the effect of diabetes on Aboriginal clients, families and communities. Amongst the recommendations are that in order to support the stated priority given to Aboriginal health care, tertiary nursing courses must include content on how to deliver services in a way that is acceptable to Aboriginal people. The researchers also found that Aboriginal people do not receive culturally acceptable health care from non-indigenous providers, and concluded that until Aboriginal people are employed as part of the health team limited progress will be made in improving the health of Aboriginal people with diabetes. (King and Wilson 1998)

US research (*Diabetes Care*) was designed to determine the effect of a bicultural community health worker on completion of diabetes education in an inner-city Hispanic population. The research also evaluated the impact of the programme on patient knowledge, self-care behaviours and glycaemia control. The controlled design found both improved rates of programme completion and improved patient knowledge, self-care procedures and glycaemia control amongst those patients in the group managed by the bicultural community health worker. (Corkery et al 1997)

A US study (*Cultural Diversity and Mental Health*) subjected service use data from a county public mental health authority in California to rigorous statistical testing to determine whether patterns of use were significantly different for children and adolescent

clients who were ethnically matched with a therapist. The results suggest that amongst children and adolescents those served by an ethnically matched therapist stayed in outpatient treatment longer and used less of the more intensive day treatment service. (Jerrell 1998)

Australian nursing academic Fuller (*Australian Journal of Public Health*) conducted qualitative research into the role of the ethnic health worker and found a conflict between whether the key role of the ethnic health worker was to facilitate access to services or to provide services. Despite job descriptions which define the role as one of linkage and facilitating access, ethnic health workers often found themselves in a position where clients and co-workers expected them to be responsible for all aspects of health care. Fuller writes:

Ethnic health workers need to be able to refer non-English speaking clients on to mainstream staff, otherwise they will not be able to find the time to move on to health promotion and community development. (Fuller 1995a)

The Men's Co-ordinator of the Australian Office for Aboriginal and Torres Strait Islander Health makes a plea that the need to recruit indigenous men to be health workers must not be overlooked if some of there is to be progress made in addressing some of the health problems of a group with the poorest health outcomes of all in Australian society. (Briscoe 2000)

THE ROLE OF THE ETHNIC OR BILINGUAL HEALTH WORKER

Australian research (*Australian and New Zealand Journal of Psychiatry*) was designed to identify and describe the roles of bilingual professionals in community mental health services in Sydney, and to identify and describe the factors that facilitate or inhibit performance in these roles. Data was collected through in-depth interviews with bilingual professionals in community health services. The research identified four main roles of bilingual health workers as:

- direct clinical service provision
- mental health promotion and community development
- co-work, cultural consultancy and training
- service development.

This research found that existing health service organisational structures did not readily accommodate the variety of roles of the bilingual health worker. The authors write:

The results of this study suggest that simply inserting bilingual professionals into existing models of community mental health work is unlikely to lead to maximal realisation of the benefits that bilingual professionals can provide. Service managers need to develop an awareness of wider organisational adjustments that may be necessary in the pursuit of culturally sensitive services. (Mitchell, Malek and Small 1998)

An example of just such a structural adjustment is given in a descriptive piece from New Zealand's Ministry of Health which outlines a partnership between Western Bay Health and Te Puna Hauora Kaupapa Maori Services to provide what is described as 'the country's only ward-based Maori nursing service'. Te Puna Hauora employs five Maori nurses who are permanently based at Tauranga Hospital to work with Maori patients and

to provide a follow-up service in their homes, working closely with whanau and hapu. As well as the nursing service Te Puna Hauora provides a range of other services including an outpatient clinic and an Maori counselling service. The model is supported by employment contracts developed by the tangata whenua and which reflect and support a Maori style of service delivery. The mana of Te Puna Hauora is also acknowledged through a permanent position it holds on all Western Bay recruitment and selection panels. (Ministry of Health – undated)

A descriptive piece about Christchurch's Pacific Island Community Nurse Project (*Kai Tiaki: Nursing New Zealand*) also draws attention to the different way a Pacific nurse will approach her job, and the need for the service to accept and accommodate that. Working long hours, sleeping in patients' homes when they needed support, and being reluctant to take holidays were all features of a Pacific nurse's approach that that the service had to come to terms with. (O'Conner 1998)

The Queensland Health Indigenous Workforce Management Strategy (*Queensland Government*) was developed to assist Queensland Health enhance its capacity to work with indigenous people and improve their health status. The Strategy includes:

- increased indigenous recruitment, retention and better career development.
- encouragement and support for indigenous students to remain at school, attend university and enter health careers
- increased levels of higher education support for indigenous students. (Queensland Government 1999)

In an opinion piece (*New Zealand Health and Hospital*), Chung, of the Psychology Department at Victoria University described the value of ethnic mental health workers in this way:

The role of bicultural workers is not just as interpreters or translators. They are specialised mental health clinicians who must conceptually move between Western models of disease and treatment and the unique medical and psychiatric worldview of their own culture . . . Bicultural workers not only bridge the gap between language and treatment but they also help to establish a culturally sensitive treatment milieu. (Chung 1989 p13)

Lurch discusses the failure of health services to meet the needs of Pacific peoples in New Zealand in an opinion piece (*New Zealand Health and Hospital*). He calls for a more proactive approach from training providers to attract Pacific young people into careers in the health professions, and to support them once they are there. (Lurch 1989)

Riddick (*Journal of Health Care for the Poor and Underserved*) discusses the role of the bilingual health worker, and notes some cautions about the recruitment of such workers especially where the population to be served is low in number and the choice of health worker may be very restricted. Key to an effective selection says Riddick is to ensure some assessment is made of language skills and of cultural awareness. (Riddick 1998)

THE IMPACT ON MINORITY HEALTH PROFESSIONALS

Two articles from the United States examine the effect of working with minority populations on health care providers from minority groups.

US medics Moy and Bartman reported on research (*JAMA*) which discovered that non-white physicians were more likely to care for minority, medically indigent and sicker

patients than were white physicians. They concluded that caring for less affluent and sicker patients may financially penalise non-white physicians, and that this should be taken into account when developing policy to attract members of minority ethnic groups into the medical profession. (Moy and Bartman 1995)

A US literature review (*Southern Medical Journal*) also found that minority physicians provided a disproportionately greater share of health care to underserved groups. The review described a range of initiatives designed to increase the representation of minorities in health professional training programmes. It was of concern to these authors that judicial and legislative challenges to affirmative action programmes threaten to erode the progress that has been made in to increase opportunities for medical education for minority groups. (Thurmond and Kirch 1998)

6.2 Training

LAY HEALTH WORKERS

Lay health workers are people drawn from ethnic communities who have no health care training but have the trust and respect of their communities and can facilitate access for other health professionals and services.

A comprehensive evaluation (*Department of Health*) undertaken in 1988 of community health workers funded under the Priority Areas Programme used a qualitative methodology to review the origin, establishment and operation of the Community Health Worker project. The chief findings of the evaluation related to the difficulties Maori community health workers had in fulfilling their role effectively within existing health service structures. The recommendations arising from the evaluation addressed cultural assumptions and structural issues that created problems for community health workers in Maori communities. The recommendations of the evaluation included:

- that the assumptions, or supposed truths, of all health development, health promotion, primary and secondary health care be questioned in terms of their consistency with the Treaty of Waitangi, and whether they 'ring true' with community and iwi definitions of health and health needs.
- that requests for community health workers from community or iwi groups be given precedence over community health worker allocation made by health sector bodies
- that health sector bodies (in those days Health Development Units and Area Health Boards) establish partnerships with community groups and iwi in order that community health workers can effectively respond to the needs of the communities
- that health sector bodies make a commitment to the continuation of Maori community health worker positions as a sign of trust and good faith in the developing partnerships between them, iwi and community groups
- that funds allocated for community health workers be identified as Maori resources to be used by Maori health initiatives, and that the funds be increased as part of the Department of Health's commitment to the Treaty of Waitangi
- any future evaluation of innovative programmes involving Maori people be undertaken by research partnerships involving Maori people. (Laing 1988)

An evaluation of the joint venture between Good Health Wanganui and Ratana Pa to improve the dental health of the people of Ratana Pa, (see Chapter 3 Partnerships), identified the Maori Health Community Worker at Ratana Pa as the most important factor in the success of the project. The author wrote of this person:

She was the person who consulted with her community, made the appointments, was present the whole time to 'awhi' (provide a caring 'embrace') and tautoko the patients. They know her and they trust her. (Broughton 1995 p95)

Two registered nurses from the Bay of Plenty describe an initiative to train community health workers (*NZ Nursing Journal*). In 1989 a project to train lay people as community health workers was initiated under the auspices of Te Whanau a Apanui at Te Kaha in the Eastern Bay of Plenty, and was funded by the government. Unemployed people were selected by their own communities and by course tutors to study primary health care. By 1992 57 students had completed the Bay of Plenty course. Of those, six had gone on to undertake either comprehensive nursing training or pre-nursing programmes at technical institutes, and others had found work providing health or disability care in the community. (*Reisterer and Kane 1992*)

A qualitative study (*British Journal of General Practice*) used random case analyses, video-role plays, surveys of staff, audits of chronic disease management and informal feedback to evaluate the role of 'linkworker' trained in aspects of health promotion and chronic disease management. The authors concluded:

The linkworker's achievements should not be underestimated where recruitment of nurses speaking ethnic languages is difficult. It is easier to train a linkworker to carry out nursing duties than to teach a nurse to speak an Asian language. (Khanchandani and Gillam p993)

Australian Fuller makes the case for existing health services, and the nursing profession in particular to adapt to accommodate the paraprofessional ethnic health worker. He argues that without some structural and attitudinal changes ethnic health workers and their clients are likely to be stereotyped by professionals in a way that works against the provision of services that are flexible and responsive to cultural differences. (Fuller 1995b)

ADDITIONAL TRAINING FOR HEALTH PROFESSIONALS

Another strategy to improve the responsiveness of existing health services to underserved groups is to provide additional training to mainstream health workers.

US research (*Pediatrics*) used a controlled study to evaluate a programme of additional training given to paediatric clinic staff serving low income communities in New York. The training was given to staff in the prevention, screening, diagnosis and treatment of asthma, with particular emphasis on ways to enhance family management of asthma. In each of two years follow-up the intervention clinics showed greater improvement on all measures of access, continuity and quality of care. (Evans et al 1997)

Evaluation of a similar education programme for health professionals in Fresno, California (*Health Education and Behaviour*) found that the programme resulted in 'substantial penetration into the target community', although morbidity and mortality trend data were not available at time of writing to determine programme impact. (Wilson et al 1998)

A seven year evaluation of the Community Access to Child Health (CATCH) programme confirmed that with 'information, support and tailored tools' paediatricians can improve the performance of health and social services for children and families. The paper included no details of methodology. (Guyer 1999)

7.0 Other strategies

7.1 Language support

There is general agreement that speakers of other languages face barriers to accessing health services. In a qualitative study (*Journal of the New Zealand Dietetic Association*) adult Tongans with diabetes mellitus in Auckland were interviewed by Tongan researchers to investigate their understanding of their condition and its management. The research found that language was a major barrier to the nutritional management of diabetes for this group of patients. (Moata'ane et al)

In her paper outlining ways to improve access to health services for speakers of other languages (*Journal of Health Care for the Poor and Underserved*), Riddick describes models and strategies used in health care settings in the US. These include the following conventional strategies for which advantages and/or disadvantages have been briefly outlined:

- bilingual/bicultural health professionals – certainly one of the most effective strategies but such people are hard to find or recruit especially from amongst small populations
- bilingual/bicultural community health workers – a good strategy to improve access
- bilingual employees who function as interpreters in addition to other duties – low cost strategy but employees may not have been evaluated for their language skills, or have any training in general or medical interpreting, ethics or vocabulary.
- professional interpreters – expensive and may lack the specialised knowledge to equip them to work in a medical setting, has potential with the right training
- non-professional interpreters (family and friends) – usually completely without training, cost savings may be offset by lack of effectiveness
- written translation material – assumes a level of literacy that may not exist, of limited use in an emergency situation.

Riddick also outlines some new approaches to overcoming language difference between patient and health professional including:

- remote-simultaneous translation – simple technology involving the use of earphones and microphones connecting to a remote (specialised) translation service. Stanford University research found that this was greatly preferred by patients and professionals to in-person consecutive interpretation
- remote-consecutive interpretation – use of a telephone to a remote interpreter who can interpret each exchange sequentially
- video conferencing – requires the medical setting and the interpreting agency to have parallel equipment. Enhances telephone interpreting services by inclusion of visual cues
- software programmes – a multimedia software programme has been designed to assist with interpretation in the medical setting. Available in a range of languages the programme has been constructed to allow for some interaction with patients, but questions must be closed-ended, limiting its usefulness in medical interviews. (Riddick 1998)

Research examining physician use of and satisfaction with a range of methods of bridging language and cultural barriers between themselves and patients who were speakers of other languages found that in 36% of such consultations the role of interpreter was filled by a family member or friend of the patient, in 27% the physician could speak the patient's language, in 20% of cases interpretation was done by a staff member; trained interpreters were used in 6% of cases and no interpreters were used for the rest. Doctors reported a significantly higher quality of communication with patients in the situation where trained interpreters were used. (Hornberger 1997)

More than 20% of the adult population of Victoria, Australia are immigrants from countries where English is not the main language. A paper by Ziguras et al (*Psychiatric Services*) describes the steps taken by the Victorian Government to respond to the mental health needs of this population. Key amongst these strategies were funding for ethnic mental health consultants in each of the major health care networks, and seed funding for the establishment of ten bilingual case management positions. (Ziguras et al 1999)

7.2 Transport

The focus of this literature review was on ways of improving access to primary health care services for Maori and Pacific people. Somewhat surprisingly, given the attention the matter has had in some countries, little literature on transportation strategies was retrieved for this report. This may reflect a weakness in the search strategy, or there could be other explanations. It may be that transportation strategies, while designed to improve access for underserved populations, are not ethnically specific; alternatively, it could be that transportation strategies target access to the more expensive specialist services, and are less well developed in the primary care sector.

A multi-faceted intervention designed to improve the uptake of breast screening services by minority women in inner city Cardiff found that of the few who accepted the offer of transport assistance, some declined when they discovered that a female driver could not be guaranteed. (Bell et al 1999)

An evaluation of different interventions to increase measles vaccination coverage amongst disadvantaged preschool children compared three strategies referral, transport and vouchers. Both transport and voucher incentive models resulted in increase uptake of vaccination. (Birkhead 1995)

7.3 Electronic strategies

There is a substantial body of literature on telecommunications and telemedicine. However, these areas did not emerge as significant with the search strategy used. Once again it may be that because these initiatives are designed to overcome the disadvantages imposed by distance they were not picked up in a search strategy based on the barriers to access faced by particular ethnic groups.

Research to evaluate the effectiveness of computer generated letters to parents of children overdue for immunisations found that personalised computer generated letters including the recommended immunisation schedule and inviting them to call for an appointment resulted in a higher proportion immunised than for a comparison group which did not receive a letter. (Lieu et al 1997)

The Commonwealth Government of Australia allocated \$250 million over five years beginning in July 1997 to meet a range of telecommunication needs in remote and rural

Australia. A paper reviewing the role of telecommunications technology (*Journal of the American Medical Informatics Association*) in the provision of primary health services in Australia cautions that without adequate infrastructural support such innovations may add little value. There are also significant technical challenges to be overcome in a country where rural telephone services are still far from reliable. (Hovenga et al 1998)

7.4 Multi-faced strategies

A multi-faceted intervention (*Ethnicity and Health*) including translated literature, GP endorsement, transport assistance and language support. The strategy was designed to increase the uptake of breast screening by ethnic minority women. The evaluation methodology was not explicit, but the authors say it showed that neither translated literature nor transport had much impact on rates of uptake. The researchers considered that translated literature had been of little value as many of the women could not read in their own language. Fewer than 8% took up the offer of transport assistance, but of these some withdrew when they found that a woman driver could not be guaranteed. The study found that the GP endorsement letter was of value in encouraging women to attend screening, and that women and their families had respect for the opinion of their GP as expressed in the letter. Many of those attending screening brought the letter with them. Few women had requested language support when offered it through prior written material, however, an ethnic linkworker was in attendance during screening and was available to women whether or not they had requested assistance. The language support provided was utilised and greatly appreciated. (Bell et al 1999)

Wakerman and Field (*Australian Journal of Rural Health*) described initiatives and changes made in remote primary healthcare service delivery in Central Australia. The interventions included:

- introduction of an orientation and Aboriginal cultural awareness programme
- including communities in staff selection
- developing policies and protocols to support culturally sensitive practice
- increasing on the ground support for remote area staff from managers.

Despite these changes and 'five years of intensive effort', the authors say that sustainable change has been elusive and some problems remain. Staff turnover continues to be a problem and involvement of the community in staff selection has been no guarantee of suitable appointments. The lack of appropriate training available for health workers in remote locations has continued to be an issue, and clinical staff at all levels are faced with responsibilities far beyond those of their urban counterparts. Communication between remote and town-based staff is not easy and electronic communication systems do not always perform as they should. At a structural level there has been some resistance to remote teams having delegated accountability for expenditure, and their physical separation from administrative centres results in difficulties providing adequate and timely support for staff at the front line. A 'them' and 'us' attitude prevails. (Wakerman and Field 1998)

8.0 Key factors in improving access

From its review of almost 100 of the more methodologically robust studies available, the NHS Centre for Reviews and Dissemination (CRD) identified some of the characteristics that affect the success of interventions. The authors introduce the characteristics with a major caveat, that these characteristics are not of themselves sufficient for success, but tend to be found more frequently amongst the programmes that have been shown to be effective. The more successful programmes demonstrate a number of the following features. They:

- are systematic and intensive approaches
- are multifaceted
- use a multidisciplinary approach, collaboration between agencies and/or between lay and professional groups
- involve some face-to-face interaction
- give thought to whether group or individual strategies are more appropriate to achieve their objectives
- consider the setting within which the programme is to be delivered
- have undertaken some prior needs assessment to inform intervention design
- ensure interventions are culturally appropriate
- recognise the importance of the 'agent delivering the intervention' – be it health professional, education professional, outreach worker, ethnic health worker, volunteer or peer educator
- tailor support material for their purpose
- recognise that information alone is often insufficient
- use prompts or personal reminders to encourage people to use services or keep appointments. (NHS 1995 pp 13-21)

The US 'Models That Work' (MTW) campaign is designed to publicise strategies that reduce access to primary health care services for underserved and vulnerable populations. The selection process focuses on identifying innovative community-driven projects with significant quantifiable outcomes. Winning programmes are selected by a panel of experts using five selection criteria: responsiveness to community need; innovation in programme design; collaboration and co-ordination among partners; measurable health-related outcomes at a reasonable cost; and potential for replication. A recent paper describing the MTW campaign focused on the importance of innovative approaches to outreach, and community partnerships as the two most crucial elements in successful programmes to overcome barriers to health services. Of innovative approaches to outreach the authors wrote:

Outreach efforts in most MTW programs strive to keep consumers involved in the policy and program aspects of health care. A common element of these projects is the recognition that consumers and clients are not just objects of policy already implemented, but should be engaged as driving forces behind the design, implementation and evaluation of primary care delivery systems. (Crump et al 221)

The research reviewed for this report confirms the value of the characteristics of successful services identified by the CRD, and the value of strategies that 'reach out' to underserved populations.

Neither the UK or US material cited above addresses the issue of improving access to services for an indigenous population. In relation to access to primary care services for Maori some of the papers reviewed for this research endorse:

- the need for partnerships in the planning and delivery of services
- the value of services delivered on marae, in churches and in locations where Maori feel comfortable
- the benefits of access to Maori health professionals and community health workers health workers.

Similar points are endorsed in relation to Pacific peoples.

An issue raised by this literature review that does not appear to be addressed in the CRD study is the need for structural change in the provision of health services if they are to be more responsive to the needs of Maori and Pacific people, Fitting Maori health workers or programmes for Maori into existing structures, while a positive move, is not of itself sufficient. Developing a culturally responsive service is not working the same way in a different language, but may involve working in a quite different way that takes much greater account of the values, beliefs and practices of the target population.

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