THE NEW ZEALAND MEDICAL JOURNAL
Vol 116 No 1169 ISSN 1175 8716

Establishing a Maori case management clinic

Thomas Maniapoto and Barry Gribben

Abstract

Aims The Maori Case Management Clinic Project aims to improve Maori health outcomes by establishing low cost, high quality, culturally appropriate primary care facilities in targeted areas, with a focus on the management of chronic illness. Further, the project aims to evaluate this 'by Maori for Maori' model of community healthcare delivery.

Methods Working in partnership with local Maori health providers, we analysed the available health utilisation and demographic data to choose the three best sites to establish new primary care facilities. We established the facilities with initial start-up funding from Counties Manukau District Health Board. Rigorous evaluation processes have been built into the project.

Results Enrolments at the first of the three clinics exceeded expectations. Client satisfaction as reported by independent evaluators was very high, with cost, cultural acceptability and convenience of location being the three most common reasons given for high satisfaction.

Conclusions The model adopted has been positively received by the targeted population. Further evaluation will reveal whether this resulted in improved health outcomes.

Historically, the New Zealand health system has struggled to deliver health outcomes for Maori. Many health status reports have clearly shown that Maori do not enjoy the same health status as non-Maori. The Maori Operating Group for the Health Funding Authority produced a number of reports outlining the health gain priorities for Maori.[1] The eight key areas were mental health, diabetes, asthma, and immunisations for children, smoking, injury prevention, oral health, and hearing.

One strategy to ensure health services for Maori become more effective is to provide services that are more responsive to the needs and expectations of all Maori,[2] and acknowledge traditional Maori models of health. Implicit in these traditional models of healthcare is the traditional practise of 'Tikanga' (Maori customs), which are acceptable to many Maori consumers of Maori health services. Whilst Maori and non-Maori live side by side, they do not always share the same environments or the same narratives, nor do they subscribe to identical values or aspirations.[3]

These strategies need to be seen against the Treaty of Waitangi, New Zealand's founding document, which establishes a partnership of governance between Maori and the Crown. The Treaty obliges policy makers, planners, and politicians to ensure that Maori are able to participate at all levels of healthcare delivery and to take ownership of Maori health.

It is these fundamental principles that make a 'by Maori for Maori' approach relevant and different to a typical primary/case management service delivery model. The

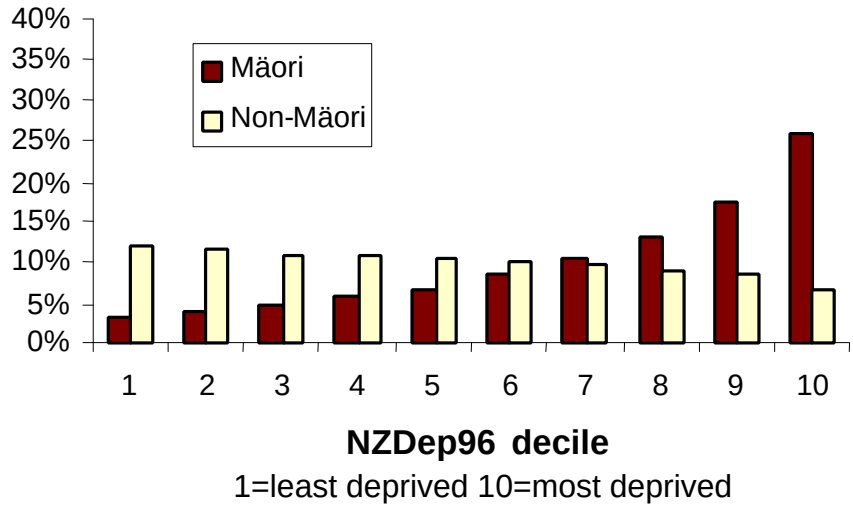
inclusion of Maori in the designing of 'by Maori for Maori' strategies is consistent with the current obligations of the Crown.[4]

The 382 000-strong population in Counties Manukau is unique in both its level of deprivation and its diversity. The Maori population for the Counties Manukau region is 18% (61 000) of the total population, with 65% (39 935) under the age of 25 years and 44% (27 100) under the age of 14 years.[5] The Maori population is expected to grow to 19% (94 000) by the year 2021. Meeting the health needs of this population is a high priority for Counties Manukau District Health Board (CMDHB). This paper describes those needs and the initial results from one of the responses we have implemented – the establishment of the first of three series of primary care facilities to deliver high quality, accessible, culturally acceptable care to Maori living in high-need areas.

Maori in Counties Manukau

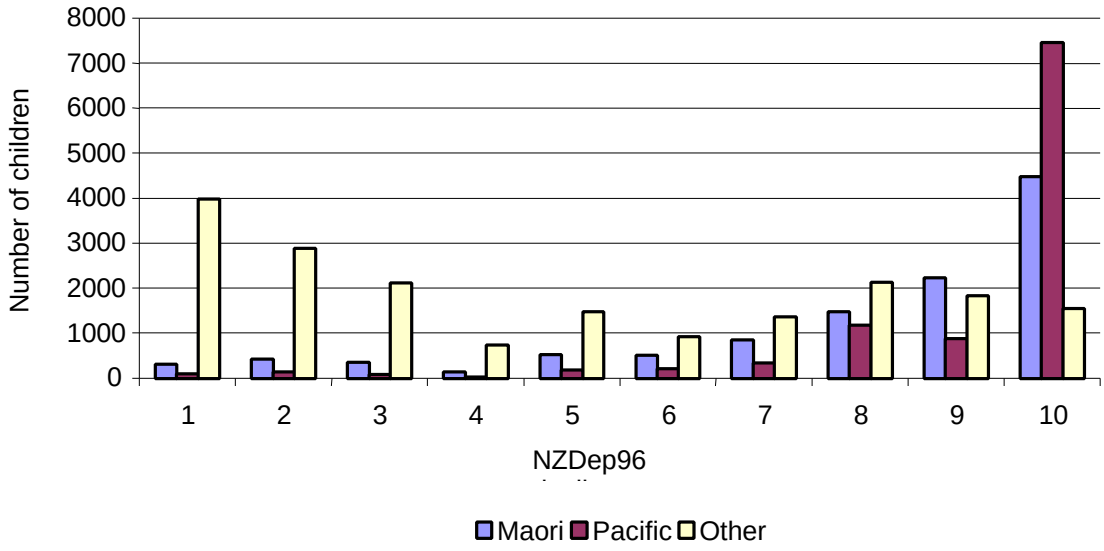
Compared with the population as a whole, Maori in CMDHB experience high levels of deprivation, reduced life expectancy, more potentially avoidable admissions and higher Did Not Attend (DNA) rates. Access to primary care services is likely to be affected by similar factors to those reported for Maori generally. Our approach to improving Maori health status started with an analysis of these factors.

Figure 1. Distribution of Maori and non-Maori populations by deprivation decile, 1996



Deprivation Figure 1 shows 43% of the total non-Maori population live in a NZDep96 decile rating of 8, 9 and 10, compared with 72% (43 999) of the total Maori population. Large proportions of children live in areas of high deprivation, with Maori and Pacific children over-represented in the most deprived areas (Figure 2). The areas in Counties Manukau that have a decile weighting of 8, 9 or 10 are: Otara, Mangere/Papatoetoe, Manukau/Manurewa, Takanini/Papakura and South Rural.

Figure 2. Distribution of Counties Manukau children (0–5 years) by NZDep96 decile



Life expectancy Life expectancy for Maori is considerably lower than for all other populations in Counties Manukau.[6] While overall life expectancy for Counties Manukau exceeds that for New Zealand, both Maori and Pacific people are lower than others and their counterparts elsewhere in the country (Table 1). The leading causes of youth and adult mortality in Maori are respiratory and cardiovascular diseases, intentional and unintentional injury, nutritional and lifestyle factors.

Table 1. Life expectancy by ethnicity

	Life expectancy (years)	
Ethnicity	**Counties Manukau**	**New Zealand**
Maori	**69.03**	**70.36**
Pacific	71.26	72.26
Others	79.82	78.78
Total	77.77	77.71

Potentially avoidable hospitalisations Maori and Pacific peoples in Counties Manukau have a higher proportion of avoidable hospitalisations than non-Maori. In fact, it has been estimated that 38% of all Maori hospitalisations were potentially avoidable.[6] The rates of potentially avoidable hospitalisations were highest in the age group of 1–14 years, and accounted for 50% of all Maori 1–14 year old admissions (Table 2).

Table 2. Potentially avoidable admissions by ethnicity in Counties Manukau (CM)

	0–14	15–44	45–64	65+	Total
Maori	**1652**	**956**	**726**	**307**	**3641**
Pacific	2229	937	811	542	4519
Other	2096	1893	2528	4358	10 875
Total CM	**5977**	**3786**	**4065**	**5207**	**19 035**
	As % of all discharges				
Maori	**50**	**25**	**39**	**44**	**38**
Pacific	54	23	42	47	40
Other	38	20	32	38	32
Total CM	**46**	**22**	**35**	**39**	**34**
Rest of NZ	**42**	**18**	**30**	**35**	**30**

DNA (Did Not Attend) rates Counties Manukau currently has a Maori DNA rate of 24% (1245 out of total 5179 outpatient clinic appointments).[7] Gender has no bearing on missed appointments, but Maori under the age of 14 years were more likely to miss an outpatient clinic appointment.

Access to healthcare There has been a paucity of information on Maori health service utilisation other than from the secondary sector. Information collected in the 1996/97 New Zealand Health Survey (NZHS) provided some insight into people's patterns of health service use during a 12-month survey period. Results suggested that access to health services might be affected by cost. During the survey period, 66% of Maori accessed a health service compared with 76% for non-Maori. Forty nine per cent of Maori surveyed said that cost was the main reason for not seeing a GP; 22% said that "they did not want to make a fuss"; 17.1 % could not get an appointment when they wanted it; 17.3% reported lack of time; and 13.1% cited lack of transport.[8]

Methods

Our response was to undertake a project to establish three medical facilities in Manurewa/Clendon, Papakura and Mangere (Table 3). The facilities are operated by three Maori health providers and seek to provide high quality, culturally and clinically competent services to Maori clientele living in the targeted areas. We analysed the available demographic and health services utilisation data to determine the most appropriate sites for these facilities (Tables 3 and 4).

Table 3. Deprived Maori population for targeted areas

Area	NZDEP96	Maori population	% of Maori population	% of other population
Mangere	Deciled 8,9 and 10	15 477	77	15
Clendon	Deciled 8,9 and 10	12 846	63	16
Papakura	Deciled 8,9 and 10	5712	62	15
Total		34 005		

Table 4. Potential avoidable hospitalisations for Maori

	PAH	FAs	Angina	Respiratory phenomena	Cellulitis	STD	Asthma	COPD	CHF
Mangere	242	162	43	28	31	16	19	26	16
Manukau	253	215	44	28	27	21	26	11	21
Manurewa	268	222	64	31	26	29	27	25	29

PAH=potential avoidable hospitalisations; FAs=frequent attenders; COPD=chronic obstructive pulmonary disease; CHF=congestive heart failure

The Maori health providers worked closely with Middlemore Hospital by linking people who used the hospital services into their Maori primary healthcare services. Those people who were identified as at risk from chronic diseases were properly case managed and motivated to stay as well as possible. The project commenced on 1 February 2001 and will cease on 1 February 2003.

Approach Each facility was required to demonstrate traditional models of healthcare that incorporated Tikanga (Maori customs) consistent with Maori health paradigms. They employed a range of staff, a general practitioner, practice nurse, community health worker, and a receptionist, with a background and experience that reflected the needs of the target population. Each facility continued to provide a number of existing contracted services (for example, Disease State Management Nurses, and Alcohol and Drug services) in addition to general practice services. The new facilities were required to provide affordable care, with zero or low patient fees.

Models of Rangatiratanga (self determination) Empowerment and self determination may be as critical to the achievement of health outcomes for Maori as are improved health information, health infrastructure, service provision, and access.[9]

The Alaskan Native Tribal Health Consortium (ANTHC) and the South Central Foundation (SCF), achieved native ownership of the Alaskan Native Medical Centre (ANMC) in 1999. All outpatient primary care at ANMC is now successfully operated by the SCF.[10] This was made possible in a number of ways, but most clearly through the land settlement between the ANTHC and the US Government under the Indian Self Determination and Education Assistance Act passed by Congress in 1974.

Consistent with this experience and the principles of the Treaty of Waitangi, the facilities are operated by local Maori.

Results

The data used were from the Raukura Hauora O Tainui (RHOT) clinic in Clendon, which opened on 1 February 2001. There were some delays in establishing the second and third facilities. The second facility opened on 30 July 2001 (Papakura), and the third clinic opened on 8 October 2001 (Mangere).

The formal project period commenced on 1 February 2001 and data collection for this evaluation was completed by 30 November 2001. It was a relatively short period in which to observe improved outcomes. Nonetheless, the measure of process, which could be reasonably linked to expected outcomes, was an important part of this evaluation.

Patient enrolment The RHOT Clendon Clinic experienced very rapid growth in the initial stages, which began to level off towards the end of the evaluation period. At that time, there were over 3450 patients registered at the Clinic (after 10 months of operation), who represented around 50% of the total Maori (6742) population for the targeted area. A similar trend appeared for consultation rates, with total consult of 7343 for the 10-month period, peaking at 1908 consultations in November.

Such rapid growth pattern was very unusual for a 'new' practice and probably reflected a number of factors, such as cost, cultural acceptability, needs in the community, institutional support (Tainui), and location of the Clinic in a busy mall with other established practices nearby.

Reaching the target population By November 2001, 70% of patients registered were Maori and 12% were of Pacific descent. Only 18% of enrolments were of non-Maori and non-Pacific descent. Our qualitative research confirms that the reason for this is a large degree of cultural acceptance by Maori of a service that meets their diverse needs.

Seventy four percent of patients were Community Service Card holders. Of the total enrolments, 74% live in a decile 8, 9 or 10. Eighty four per cent live no further than 3 kilometers from the location of the facility. The location of the facility was critical for Maori, given that the TPK report showed that transport to healthcare was one of the main barriers to Maori being able to access it.[8]

Seven per cent (245) of the enrolled population were identified with a chronic illness. Of these, asthma and diabetes accounted for 64%. Hypertension and coronary heart disease amounted to 30%. More importantly, 43% of such patients had more than one chronic illness (Table 5).

Table 5. Chronic illness in patients registered at the Clendon Clinic

	People	**%**
Heart failure	10	4
COPD	10	4
IHD/heart disease	12	5
Hypertension	57	23
Diabetes	70	29
Asthma	85	35
Total	**245**	

COPD=chronic obstructive pulmonary disease; IHD=ischaemic heart disease

As the growth in patient numbers at the Raukura Hauora O Tainui Clendon clinic exceeded the initial projections, the CMDHB commissioned an independent Research Group to conduct a series of brief interviews with patients of the service to explore the reasons for such rapid growth.

Fifty patients were interviewed in the Clinic waiting room at various times over two weeks. The interview consisted of three questions:

- Are you a regular or new to RHOT?
- Did you have a GP before coming here?

- Why did you decide to come to RHOT?

The main reasons for people accessing this facility were affordability, cultural acceptability and close proximity to patients' residence. Some typical quotes from patients were:

> "I'm of Tainui descent, I should come here and it's cheaper."
>
> "My Mum told me to bring her Moko here because it is culturally appropriate."

The report concluded that "patients gave the overall impression that the Clinic was trying hard to meet their needs. Cheap fees, being able to see the whanau as a whole, generous consultation time, and using fully subsidised medications, all added up to a perception that the Clinic was making an extra effort for the clients. The receptionist made all the clients feel comfortable and confident that their information was secure and confidential. The nurse was seen as lovely and given as much respect in the Clinic as the doctor. The practice manager was able to financially assist clients through the WINZ offices and network with the other support services in the Clendon mall. The overall feeling was of a very patient focused service."

Cost The average cost per visit was $44.79, compared with an average of $29.25 for other primary care clinics. The extra $15.54 was allocated for case management purposes. Historically, the CMDHB spent on average $250.00 per patient with chronic illness per year. Those patients with chronic illness attending the Clendon Clinic (7%, 245) would cost the CMDHB around $61 250. With active case management in the coming years, some of this expenditure may be avoided.

However, the type of product being delivered is considerably different to that provided by other primary care services and is difficult to cost. The added value that 'by Maori for Maori' strategies offer is the provision of culturally appropriate models of healthcare delivery. This can be summarised in the following points:

> Tikanga Mo Nga Iwi Me Nga Hapu – appropriate engagement of Maori
> Tino Rangatiratanga – Maori control over healthcare
> Taha Whanau – involving the whanau (family) in healthcare
> Taha Tinana – maintaining physical wellbeing
> Taha Wairua – maintaining spiritual wellbeing
> Taha Hinengaro – maintaining emotional and mental wellbeing

There are no benchmarks as to how much such a service should cost. However, the effect of providing health services in this way is something that we will continue to measure.

Conclusions

The results to date from the Maori Case Management Clinic are very encouraging. The very rapid growth of the Clinic in its initial stages, and the fact that most clients are Maori, suggests high acceptability by the target group. The clients of the service report very high levels of satisfaction with service in a quite comprehensive sense. Although fee levels are important, the overall patient focus of the service is also a major driver of patient satisfaction. The challenge is now to duplicate this success in the next two clinics.

Author information: Thomas Maniapoto, General Manager, Maori Health, Counties Manukau District Health Board; Barry Gribben, Senior Research Fellow, Department of General Practice and Primary Health Care, University of Auckland, Auckland

Correspondence: Dr Barry Gribben, Department of General Practice and Primary Health Care, University of Auckland, Private Bag 92019, Auckland. Fax: (09) 373 7006; email: barry.gribben@cbg.co.nz

References:

1. Health Funding Authority. Eight health gain priority areas for Maori health 1999/2000. Summary Report. Auckland: Health Funding Authority; 2000.
2. Ministry of Health. He Taura Tieke: measuring effective health services for Maori. Wellington: Ministry of Health; 1995.
3. Durie M. Mauri Ora: the dynamics of Maori health. Melbourne: Oxford University Press; 2001.
4. Ministry of Health. He Korowai Oranga: Maori health strategy discussion document. Wellington: Ministry of Health; 2001. p. 1–2.
5. Statistics New Zealand. Census data 1996. Available online. URL: http://www.stats.govt.nz/
6. Jackson G, Palmer C, Lindsay A, Peace J. Counties Manukau Health Profile. Manukau: Counties Manukau District Health Board; 2001. Available online. URL: http://www.cmdhb.org.nz/News_Publications/Publicationsframe.htm
7. Coffin, Emery, Zweir. Report on reasons for Maori non-attendance of outpatient clinic appointments. Counties Manukau District Health Board; 2000 (unpublished data).
8. Te Puni Kòkiri. Tikanga Oranga Hauora – Health trends: Whakapakari No 4. Wellington: Te Puni Kòkiri; 2000. Available online. URL: http://www.tpk.govt.nz/maori/education/tohtrend.pdf
9. Hill PS, Shannon C. Empowering indigenous health workers through management training. Physician Exec 1993;19:22–5.
10. Ross J. Negotiating native ownership. Anchorage, Alaska: Alaskan Native Medical Centre; 1999.