Maori callers to a telephone triage service

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ABSTRACT

Aims

To record Maori use of a pilot telephone-based triage and health advice service in New Zealand.

Methods

All calls to Healthline over two years were analysed with respect to Maori and non-Maori ethnicity.

Results

When compared with their representation in the pilot populations, Maori usage was slightly higher than that of non-Maori; Maori callers were more likely than non-Maori to seek triage of a symptom. In all other respects analysed, calls from Maori were similar to those from non-Maori.

Conclusions

Healthline is being used for health advice by Maori, and appears to be as accessible as it is for non-Maori.

(NZFP 2003; 30:261–263)

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Healthline, a nurse-run telephone triage service, has now been operating for over two years in four pilot areas in New Zealand: Gisborne and east coast North Island, Northland, Westland, and Canterbury.[1]

Callers telephone a free 0800 number 24 hours a day seven days a week for symptom triage, general health information, or the identification of health care providers in their region. Decision software in the form of binary chain logic algorithms supports the nurses to triage symptomatic callers. The algorithms set the level and timing of the intervention. They help nurses triage patients to appropriate care, while at the same time providing comprehensive automated call documentation and reporting for analysis, risk management and quality improvement. The algorithms have been shown to triage callers from emergency departments to general practitioners and self-care, more often than protocols, guidelines or nurse judgement alone, and to do so safely.

The New Zealand Ministry of Health's primary objective in establishing the service was to increase timely and appropriate access to health advice and services by population groups which currently had poor access or utilisation. Maori were identified as one of those populations.

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Maori are over-represented in the most socioeconomically deprived areas (more than half of all Maori live in areas represented by the three most deprived deciles) – what Reid and others called a 'disparity gap'.[2] As they pointed out, within disparities there is always an 'outcome gap' – that is, even allowing for deprivation, the health outcomes of Maori are different from those of non-Maori.

No study of access to telephone triage by indigenous people has been published. The equivalent British system, NHS Direct, is underused by ethnic minorities, people aged over 65 and disadvantaged groups in comparison with the general population, despite the acknowledgement these groups had *'as much need as others and perhaps an even greater one'*.[3]

Davis found rates of general practitioner contact for Maori were slightly lower than those for non-Maori patients, so there is a limited correspondence between ethnic patterns of general practitioner usage and health need (as measured by mortality levels and rates of public hospital discharge). He concluded, *'The near equivalence in ethnic rates of general practitioner contact revealed in this study contrasts strikingly both with the level of hospitalisation for Maori, which is nearly double that of non-Maori, and with the difference in mortality rates (30% higher for Maori). Attention devoted to improving access to general practitioner services among Maori may be necessary if important areas of ill health and hospital resource use are to be addressed effectively'*.[4]

A whole issue of Pacific Health Dialog was devoted to telemedicine in the Pacific yet no mention was made of telephone triage services.[5] Aboriginals made good use of a mental health line in Australia.[6]

Crengle challenged those who provide health care to Maori to begin to collect information about how effective current Maori health strategies are, and how effectively such services are caring for Maori clients.[6] This paper provides some of that information for Healthline in its first two years of operation.

Methods

From the outset Healthline utilised the services of a Maori Advisor. Communication with Maori initially included consultation with Treaty partners, local Maori health providers and local iwi. This was followed by targeted information and regular interviews by the Maori Advisor and Site Director on community/iwi radio and for Maori publications. National Maori media such as Te Karere, Mana News and Mana Tangata and Whenua were utilised whenever relevant. Particularly in Northland, local 'ambassadors' (often health professionals or community leaders) were enlisted to advise about Healthline and leave material with people they met in the course of their community visits.

Data collected by Healthline's call documentation software are normally analysed for risk management and continuous quality improvement purposes, but have also been used to provide quarterly reports to the Ministry of Health. The Ministry required the collection of data on the ethnicity of callers, and these data have been collated for this report.

A 'caller' for these purposes is the patient concerned, whether or not the patient is the person actually telephoning Healthline.

Ethnicity was determined by the question, *'Which ethnic group do you identify with?'*

Callers with current symptoms were triaged, whether or not they were seeking health information in addition to symptom management advice; asymptomatic callers were simply seeking information on a health topic.

Figure 1. Per cent of all callers in different age groups

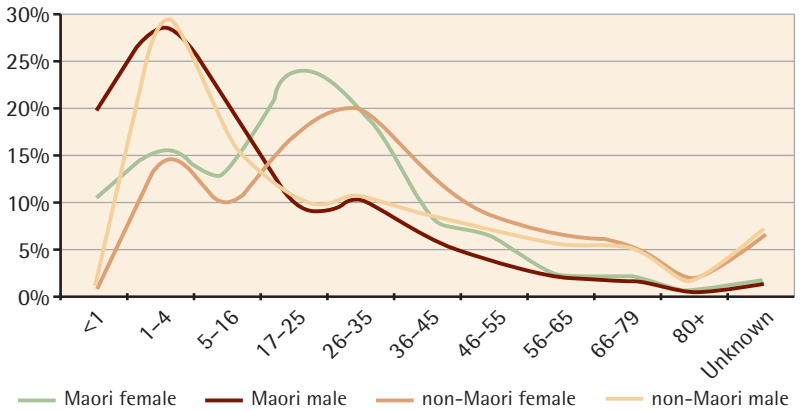
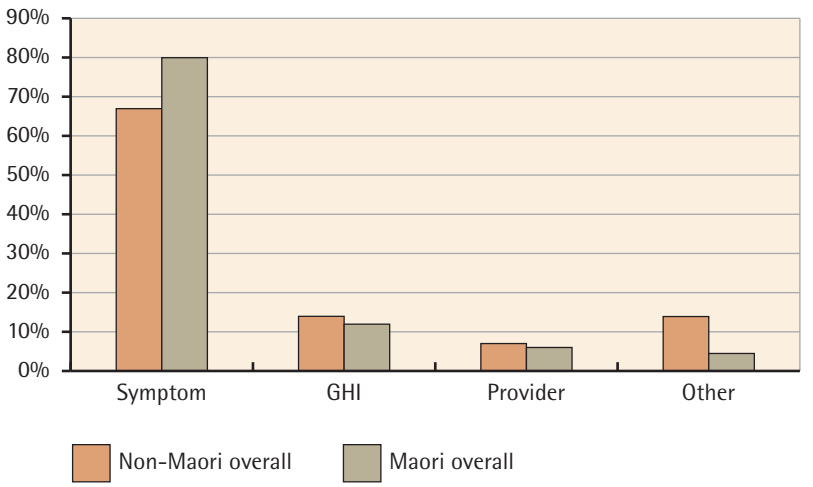


Figure 2. Per cent of callers seeking triage, general health information (GHI) and the identification of providers



Results

Healthline received 79 254 calls from 7 May 2000–30 April 2002. Monthly call volume ranged from 1853 to 5065 (the fluctuation reflected the impact of promotion and seasonal demand). The average weekly call volume was 759, or a little over 100 calls a day. The population in the pilot areas was 627 500 (1996 Census, the data that applied at the start of the programme). In that population 91 617 (14.6%) were Maori.

Eighty-three per cent of callers gave their ethnicity (those who did not were mostly asymptomatic callers seeking information), and of these 15.1% identified as Maori. There were no important differences in the age of callers (Figure 1). Of Maori callers, 79% were seeking symptom triage, as compared with 66% for non-Maori (Figure 2).

The intentions stated by symptomatic callers when they were asked what they would have done if they had not been able to call for advice showed no difference between Maori and non-Maori. The outcomes of triage of symptomatic calls were also similar.

Maori and non-Maori callers heard about Healthline via similar

Table 1. How callers heard about Healthline (symptomatic and non-symptomatic callers)

	Maori calls		non-Maori calls	
Medium	**n=**	**%**	**n=**	**%**
Repeat caller	3,915	42.3%	24,777	37.5%
Fridge magnet	2,888	31.2%	20,384	30.9%
Word of mouth	669	7.2%	3,881	5.9%
Television advertisement	319	3.4%	2,453	3.7%
GP clinic	300	3.3%	1,828	2.8%
Emergency department	251	2.7%	2314	3.5%
Other	242	2.6%	5,357	8.1%
Brochure via mail	176	1.9%	1,912	2.9%
Phonebook	142	1.5%	835	1.3%
Radio advertisement	131	1.4%	662	1.0%
Newspaper advertisment	49	0.5%	322	0.5%
News show	44	0.5%	209	0.3%
Radio show	39	0.4%	234	0.4%
Family Planning Clinic	37	0.4%	460	0.7%
Newspaper article	31	0.3%	160	0.2%
Poster	8	0.1%	86	0.1%
School launch	8	0.1%	72	0.1%
PlunketLine	5	0.1%	32	0.0%
Whangarei ED	2	0.0%	13	0.0%
	9,256		65,991	

media (Table 1). While there are some statistically significant differences, these are hardly of clinical importance.

Discussion

The figures must be regarded as approximate, since 17% of callers did not give their ethnicity: most of these callers were in the 'other' category (wrong numbers etc.), or were about emergencies when it seemed inappropriate to ask for ethnicity.

In 15.1% of calls the caller identified as Maori: 14.6% of the pilot population identify as Maori. These figures are not strictly comparable because callers may call more than once, but since the proportion of repeat callers is similar between Maori and non-Maori, they do indicate that Maori are calling Healthline roughly in proportion to their representation in the population.

Maori callers sought triage of symptoms (as opposed to seeking general health information) more often than non-Maori. In every other way measured, their calls were similar to those of non-Maori.

Key Points

- Maori are over-represented in the most socioeconomically deprived areas..within disparities there is always an 'outcome gap' – that is, even allowing for deprivation, the health outcomes of Maori are different from those of non-Maori.
- Maori are calling Healthline roughly in proportion to their representation in the population.
- Maori callers sought triage of symptoms more often than non-Maori. In every other way measured their calls were similar to those of non-Maori.
- If utilisation of health services were to reflect true health need, we speculate Healthline might expect to receive even more calls from Maori.

A key limiting factor in use of telephone health advice is access to a telephone; data for the country are available, but cannot readily be analysed for the pilot regions. Currently access to Healthline is limited to calls from telephones whose number begins with certain regional prefixes: cellphone calls are thus excluded, and this may be significant for Maori.

Healthline appears to be an acceptable source of primary health information for Maori, especially those seeking advice on current symptoms. On the other hand if utilisation of health services were to reflect true health need, we speculate Healthline might expect to receive even more calls from Maori.

References

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