

# Is it time to talk? Interpreter services use in general practice within Canterbury

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## ABSTRACT

**INTRODUCTION:** Effective communication is fundamental to successful health care service delivery, and has a positive impact on access, quality of care, health outcomes, and patient satisfaction. Although there are a growing number of New Zealanders who do not speak English proficiently, underutilisation of trained interpreter services appears to be common in primary health care settings.

**AIMS:** To describe the pattern of interpreter service need and utilisation by general practice services, and to identify key barriers and enabling factors to the use of trained interpreters.

**METHODS:** A mixed methods study was employed. Census and Partnership Health Canterbury Te Kei o Te Waka (PHC) databases were combined, and quantitative analysis used to derive interpreter service need and utilisation patterns. Transcripts of focus groups and interviews from general practitioners, practice nurses and practice administration staff within the PHC were analysed, using qualitative methods to identify barriers and enablers to interpreter service use.

**RESULTS:** For the years 2008–2010, approximately 10 742 consultations per year involved a non-English-speaking patient, yet in only approximately 74.8 (0.7%) consultations per year were interpreter services utilised. Analysis of focus groups and interviews identified four global themes that represented barriers for interpreter service utilisation; namely, practicalities, expectations, knowledge of service, and systems.

**DISCUSSION:** The current use of interpreter services in PHC general practice appears to be significantly less than the need. In order to maximise health outcomes and reduce risk, strategies must be initiated to counter the barriers currently inhibiting interpreter service use, including adopting best practice policies.

**KEYWORDS:** Communication; communication barriers; general practice; primary health care

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## Introduction

Effective communication is essential to the access and quality of health care services, and is recognised as a health service user's right in New Zealand.<sup>1,2</sup> It has been shown to have a positive impact on patient satisfaction, utilisation, quality of care, and health outcomes.<sup>3,4</sup> However, increasing numbers of New Zealanders are overseas-born, many originating from North-East Asian countries, and with limited English proficiency (LEP).<sup>5</sup> For people with LEP, the use of trained interpreters is fundamental to ensure effective communication and quality of care.<sup>3</sup> Despite this, underutilisation of trained interpreter services

appears to be common in health care services within New Zealand<sup>6</sup> and overseas.<sup>7-8</sup>

Trained interpreter services are available to organisations across New Zealand, including Partnership Health Canterbury Te Kei o Te Waka (PHC)-affiliated general practice services (enrolled population of 369 674 and 94 general practice locations on 30 June 2010). Telephone and face-to-face services are available through Language Line (telephone-based service available since November 2007) and Interpreting Canterbury (telephone and face-to-face service available since February 2011) at no financial cost to clinicians or patients, but uptake appears to be low.

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The aims of this study were twofold: firstly, to describe the pattern of interpreter service need and utilisation by PHC-affiliated general practices; and, secondly, to identify key barriers and enabling factors to the use of trained interpreters. Both quantitative and qualitative methods were employed.

## Methods

This study used mixed methods, combining a quantitative cross-sectional analysis with a qualitative thematic content analysis.

### Quantitative methods

#### *Design*

A quantitative cross-sectional analysis was undertaken combining the PHC 2008–2010 database of enrolled patients (held by PHC); New Zealand 2006 Census population database (held by Statistics New Zealand); and Language Line (availability: 29/11/2007–31/10/2011) and Interpreting New Zealand (availability: 1/02/2011–19/10/2011) billing information databases (both held by PHC).

#### *Target population*

The target population was adults (aged 15 years and older) enrolled in general practices affiliated with PHC (Canterbury, New Zealand) over the 2008–2010 period.

#### *Database and variables definitions*

Information about non-English speakers was gained in the 2006 Census, Question 13.<sup>9</sup> This question asked respondents to tick from a number of options which language(s) they could have a conversation in about everyday things. Respondents were explicitly reminded to tick English if they could have a conversation in English. For the purpose of this analysis, those who were able to speak a language but did not mark English were defined as non-English speaking. Statistics New Zealand provided data on English and non-English speaking variables by ethnicity (classified as European/other, Maori, Pasifika, Asian, African, Middle Eastern), age (classified into 0–4, 5–14,

15–24, 25–44, 45–64, and  $\geq 65$  year groups), and gender for the national population and for the greater Christchurch region. This latter region consisted of Kaikoura, Hurunui, Waimakariri, Selwyn, Ashburton Districts and Christchurch City territorial authorities; designed to cover the geographical region of enrolled PHC patients. People identifying with multiple ethnic groups are represented multiple times in any ethnic-specific breakdown in the Census 2006 figures, whereas PHC currently uses a single priority classification.<sup>10</sup>

#### *Statistical analysis*

Data were imported into the specialist statistical package, SAS version 9.2 (SAS Institute Inc., Cary, NC, USA), and then consistency and range checks were performed. Descriptive statistics were calculated and reported for the demographic variables and then for the enrolled population, consultancy numbers, and non-English-speaking proportion variables by ethnic, age and gender groupings. These statistics were then used to determine the expected number of non-English consultations by taking each ethnic, age, and gender classification combination, and multiplying the average patient numbers  $\times$  average number of consultations/year  $\times$  proportion of non-English speakers (from the 2006 Census greater Christchurch region database), and then summing over all classification combinations. For example, in the 2006 Census there were 26 292 European/other women aged 15–24 years within the greater Christchurch region. Of these, 48 (0.18%) were non-English speakers. Over the study period, there was an average of 55 471 European/other women aged between 15 and 24 years registered with the PHC who made an average of 2.54 consultations/year. Therefore, the expected number of non-English consultancies for this group is  $55\,471 \times 2.54 \times (48 / 26\,292) = 257.26$ . Repeating this calculation over all age, ethnic and gender categorisations, and then summing gives the expected total. Stata version 12.0 (StataCorp, College Station, Texas, USA) was used for all graphs.

### Qualitative methods

An interpretive approach was taken to the qualitative arm of the study which focuses

on the meaning people give to phenomena or experiences.<sup>11</sup> This approach is used frequently in health research, as it aims to gain an understanding rather than an explanation of the world.<sup>11</sup> Purposive sampling was used to recruit general practitioners (GPs), practice nurses and receptionists into the qualitative arm of the study. Practices with high numbers of refugee and migrants enrolled as patients were particularly targeted. Participants were invited to participate in one of two focus groups. Ethics approval was not required for the study as it was deemed low risk.

Focus groups are particularly useful when there is no depth of knowledge about the topic but the researcher wishes to explore what and why people think the way they do.<sup>12</sup> A good focus group has few questions but relies on the interaction within the group to elicit new knowledge or information. Two focus groups were held in December 2011. One focus group was composed of four general practitioners, and the other focus group of two practice nurses and three general practice administration staff. The questions within the semi-structured guide used in the focus groups were informed by the reading of the literature, but were broad enough to allow for the exploration of new information based on the participants' experiences. The questions focused on what the challenges are in dealing with patients with LEP and how best these can be overcome, with a particular emphasis on interpreter service use.

As a follow-up to the focus groups, semi-structured in-depth interviews were conducted with a practice nurse and a GP. These interviews were conducted to explore the complex decision-making health providers engage in when seeing a patient with LEP, and to explore the meanings and interpretations they give to this experience. The interviews allowed for some of the issues brought up in the focus groups to be explored in more depth. However, it should be borne in mind that saturation was not achieved through the use of only two in-depth interviews. Each data collection session was audio recorded and transcribed before being subjected to a thematic content analysis where common themes were searched for within the transcripts.

## WHAT GAP THIS FILLS

**What we already know:** Good communication between provider and client is fundamental to any health care provision service, and is recognised as a health service user's right in New Zealand. However, interpreter services are frequently underutilised in health care provision, with cost cited most frequently as the barrier to use.

**What this study adds:** In a large urban/suburban region over years 2008–2010, we estimate that approximately 10 742 consultations per year involved a non-English-speaking patient, yet in only approximately 74.8 (0.7%) consultations per year were interpreter services utilised. Analysis of focus groups and interviews identified four global themes that represented barriers for interpreter service utilisation; namely, practicalities, expectations, knowledge of service, and systems.

## Results

### Population characteristics

In 2010, the average registered population size of PHC totalled 366 075 individuals. Table 1 includes demographics of this PHC population, together with 2006 Census figures from the greater Canterbury region and New Zealand. The age and gender profiles are similar across all groups, and the ethnic and deprivation index profiles<sup>13</sup> are similar between PHC and greater Canterbury region groups—but different from national figures, a known demographic finding.

### Establishing interpreter service utilisation

Over the calendar years 2008–2010, the PHC recorded 2 669 586 consults for an average enrolled population of 349 498 people. Figure 1 depicts the average number of consultations per year over this period for enrolled patients by ethnicity, age, and gender classifications. Clear ethnic, age, and gender differences emerged. In particular, males generally had fewer consultations than females; consultation rates were markedly less for Asian people, and for Pasifika and Middle Eastern women, compared to other ethnicities; and there was a strong age-dependent skewed U-shaped relationship in rates.

The percentage of non-English-speaking people in the greater Christchurch region from the 2006 Census by ethnicity, age, and gender

Table 1. Demographic data from the 2006 Census for New Zealand (N=4 028 247) and the greater Christchurch region (N=466 407), together with the 2010 PHC figures (N=366 075)

	New Zealand (2006 Census)		Greater Christchurch (2006 Census)		PHC (2010)	
	n	(%)	n	(%)	n	(%)
<b>Age (years)</b>						
0–4	275 079	(6.8)	29 403	(6.3)	25 027	(6.8)
5–14	592 500	(14.7)	62 289	(13.4)	47 258	(12.9)
15–24	571 176	(14.2)	66 507	(14.3)	46 807	(12.8)
25–44	1 134 255	(28.2)	131 667	(28.2)	97 888	(26.7)
45–64	959 337	(23.8)	113 853	(24.4)	96 581	(26.4)
≥ 65	495 606	(12.3)	62 688	(13.4)	52 514	(14.3)
<b>Gender</b>						
Female	2 062 626	(51.2)	238 956	(51.2)	192 022	(52.5)
Male	1 965 621	(48.8)	227 451	(48.8)	174 053	(47.5)
<b>Ethnicity*</b>						
European/other	3 080 361	(71.3)	414 414	(84.5)	308 916	(84.4)
Maori	565 326	(13.1)	33 417	(6.8)	23 574	(6.4)
Pasifika	287 658	(6.7)	11 037	(2.3)	8 964	(2.4)
Asian	358 008	(8.3)	28 617	(5.8)	22 170	(6.1)
African	10 647	(0.2)	1 209	(0.2)	1 267	(0.3)
Middle Eastern	17 514	(0.4)	1 458	(0.3)	1 184	(0.3)
<b>Deprivation index<sup>††</sup></b>						
1–2	825 597	(20.5)	124 677	(26.7)	96 731	(28.7)
3–4	810 849	(20.2)	104 499	(22.4)	74 587	(22.2)
5–6	797 046	(19.8)	99 225	(21.3)	70 125	(20.8)
7–8	791 388	(19.7)	79 989	(17.2)	52 679	(15.6)
9–10	798 162	(19.8)	58 002	(12.4)	42 553	(12.6)

PHC Partnership Health Canterbury Te Kei o Te Waka

\* Census figures give the total responses over all ethnic categories so individuals identifying with multiple ethnic groups will be counted more than once

† The Deprivation Index used here is the NZDep2006. The NZDep2006 is a scale from 1 to 10 that divides New Zealand meshblocks into tenths with a value of 10 indicating that the meshblock is in the most deprived 10% of areas in New Zealand and, conversely, a value of 1 indicates that it is in the least deprived 10% of New Zealand.<sup>13</sup>

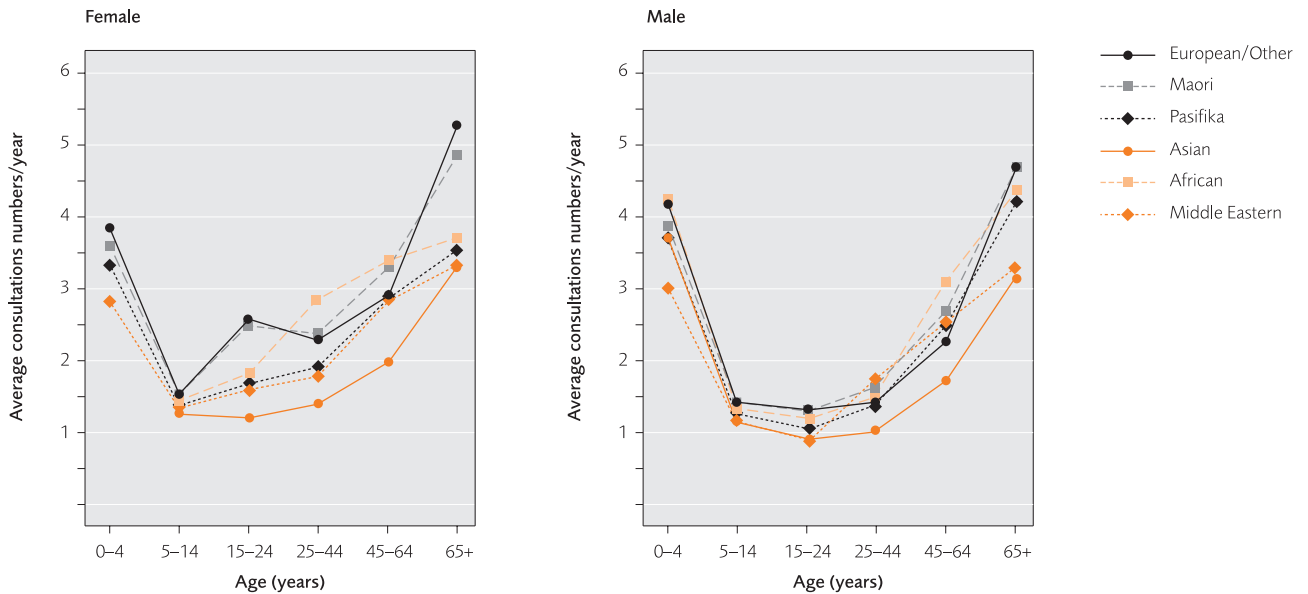
‡ 4902 values missing from the New Zealand figures, 15 values missing from the greater Christchurch figures, and 29 400 values missing from the PHC figures.

categorisations appears in Figure 2. Due to the small numbers, New Zealand Census figures were used for the African percentages except the male, 65-and-older year group, where no reliable estimate could be ascertained. Again, clear ethnic, age, and gender differences exist, with Asian people having the highest proportion of non-English speakers, followed by African, Pasifika and Middle Eastern peoples; a higher

non-English-speaking proportion was seen in females compared to males; and there was again a strong age-dependent skewed U-shaped relationship for Asian, African, Pasifika and Middle Eastern peoples.

Given the similarity of the PHC and greater Canterbury region profiles seen in Table 1, application of the 2006 Census non-English-speaking

Figure 1. Average number of consultations per year (over the period 2008-2010) for patients enrolled in Partnership Health Canterbury Te Kei o Te Waka by ethnicity, age group, and gender

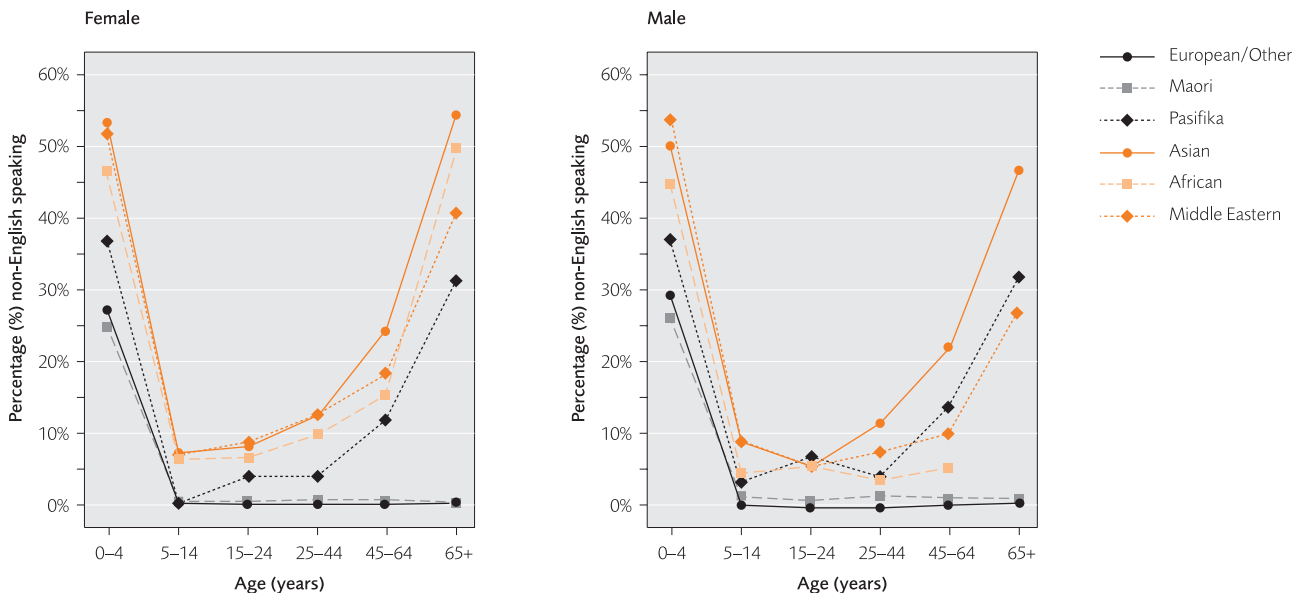


proportions to the PHC population appears reasonable. Combining the information contained in Figures 1 and 2 with the ethnicity, age, and gender characteristics for PHC summarised in Table 1, yielded an expected number of 10 742 instances per year where non-English-speaking patients aged 15 years and older would consult a PHC general practitioner. This equates to ap-

proximately 1.5% of all consultations for patients aged 15 years and older.

Data were available from Language Line between 29/11/2007 and 31/10/2011, and 131 service events were recorded, at a rate of 33.4/year. For Interpreting New Zealand, data were available between 1/02/2011 and 19/10/2011, and 33 ser-

Figure 2. Percentage of non-English speaking people in the greater Christchurch region from the 2006 Census by ethnicity, age group, and gender



vice events were recorded, at a rate of 41.4/year. Thus total utilisation of PHC-funded interpreter services observed within the PHC enrolled population equalled  $33.4 + 41.4/\text{year} = 74.8/\text{year}$ , some 0.7% of the expected number.

### Identifying key barriers and enablers to interpreter service use

There were several global themes identified within the qualitative arm of the study that represented the barriers to the use of interpreter services. These themes are discussed below with excerpts from the transcripts presented to illustrate the analysis.

#### *Practicalities within a busy general practice*

Issues such as additional time requirement, cost and amenities were raised by the participants as barriers to the use of interpreter services. All participants emphasised that time was an issue and that if they went over time and this was unscheduled, it caused delays for other patients. They indicated that the longer time taken in an appointment when an interpreter was used was disruptive to the practice.

The other thing is timing of course you've then got, if you've got a third party involved in the consultation it's much harder to be flexible with timing for other patients so you've got somebody else sitting there waiting and so there's pressure upon you to, to try to keep really hard to time which may mean some other patient's consultation gets chopped. (GP)

In addition, participants explained that setting up an appointment for a patient with LEP to have an interpreter requires a greater deal of organisation than for the average patient, and ideally should be done in advance.

The patient arrives... perhaps there isn't the time to set it up, again it would have to be planned. (Administrator)

Perceptions of the financial costs both to the practice and the taxpayer also present a practical problem and may inhibit the use of interpreter services. One participant spoke of interpreters being an inefficient use of resources.

There's still a cost. It's not free, um, in fact it's more expensive overall if it goes through the DHB [district health board] than if it goes through the individual practice, not to the practice directly, but to the taxpayer as a whole and I think as, I am acutely aware of the need in general practice to use resources as sparingly as possible um, and for the most appropriate cases at the most appropriate time. (GP)

Other participants indicated that they did not realise that there would be no direct cost to the practice in using interpreters.

There is no charge to the practice and there is no invoicing or paperwork or anything that the practice needs to do. (Interviewer)

I mean, we are all probably quite high users and we haven't, I haven't I didn't pick that up till... (GP)

I didn't either. (GP)

Many ways of 'getting by' without professional interpreters were identified. Some participants felt that they could cope sufficiently well using their own communication techniques or family or staff as interpreters. Some participants talked about managing communication with alternative techniques such as mime, use of online translators, use of their own foreign language skills or non-verbal techniques.

Certainly when I'm speaking with someone, especially about something like diabetes with the family, I mean, I slow right down, and I'm also watching body language, and I can sense when I'm losing them and so I change the way the words... I use my hands, I might ... we can use pictures you know it's not just all about verbal communication... I just, always sort of managed it really. (Nurse)

#### *Cultural perceptions*

Patients with LEP may have cultural values and beliefs that act as barriers to using interpreter services. Some of the participants in this study perceived that some of their patients would take offence at being offered an interpreter. As a result, they did not explicitly offer the service.

They are actually quite offended because they think that ... you underestimate their ability of talking in English. (Nurse)

The participants indicated that many times, patients with LEP brought family members with them to their appointments and these family members insisted on translating for the patient. Some of the participants felt that family members often tried to control how the consultation was run and that this situation was therefore not ideal. They indicated that in such situations an interpreter would be preferable.

... 'cause the family often says: we will come and help. So sometimes, the family isn't actually the help you need. (Administrator)

People that share a common language do not necessarily have similarities in terms of ethnicity or in their religion. The participants spoke of how one interpreter from a particular ethnic group may be acceptable to some patients but not others, which made for additional difficulties. Privacy was also seen as a barrier to interpreter service use as there were concerns about patient confidentiality. Some ethnic groups are relatively small and 'tightly-knit' which makes the use of an interpreter from that community problematic.

There's probably from the other side a degree of reticence to use the interpreters as far as those that have limited English as well. All to do with you know, family information, information getting out into the wider community, confidentiality or feelings of confidentiality if you talk to interpreters, ... and yeah a lot of people don't want that person, or that person, or that person to know any of their business and you know, there's often a 'loss of face' especially if they're talking about mental health which is a difficult thing and they really want to keep it confidential. (GP)

Staff culture, including role responsibilities, may inhibit interpreter service access. A participating receptionist explained how she didn't feel that she had the authority to call in an interpreter for a patient when she thought it necessary.

Yes I do think if we're talking barriers to it [use of interpreter services] I think we really have to look

at the GPs and you know I take instruction. So if they're prepared to instruct me to set it up—and I know how to do it now, it's really simple—but it comes down to if the GPs themselves are willing to use the service. (Nurse)

### *Knowledge*

Many of the participants were unaware of all the options that were available for patients with LEP. Participants indicated that health care providers may also not access interpreter services simply because they do not think to use them.

And I must admit that I've got a fairly 'woolly' understanding of all the different agencies that exist in Christchurch to provide health 'cause it's constantly changing. (GP)

Some participants felt that many patients with LEP were unaware of their rights as patients and, because of this lack of awareness, they hypothesised that patients also were unaware that they could expect or ask for interpreter services within their consultations.

A lot of these people have arrived in the country they know almost nothing about. They're finding their way through the entire services, you know, how the education, social welfare system works. They're completely at sea. (GP)

### *Systems*

According to participants, a lack of policy and information management poses a barrier to service access. Individual practices are inhibited by not having systematic recording of English proficiency, a lack of training policy regarding the use of interpreter services, and by not having technical set-ups or facilities conducive to interpreter service use. The GPs, practice nurses and receptionists all indicated a need for further training regarding interpreter service use.

Maybe more education to the health professionals—let them be aware to use that [interpreter services] and maybe the importance of using it. (Nurse)

Much of the information regarding patients with LEP is available only, or mostly, in English. This

is clearly a problem as the people who need to access it will have difficulties understanding information in a language they are not proficient in. The participants saw this as a problem and that information should be printed in a variety of languages.

I think it's important to have this [information about interpreter services] more out and in different languages ... If it's in English, how can you look at it? (Nurse)

Health professionals commented on the difficulty of managing incoming information, including that on interpreter services, due to the sheer quantity of information. They identified a need for a better system to manage this information.

Every six months the DHB [district health board] send through another set of Language Line cards. They probably go straight to recycling... that's the trouble. (GP)

## Discussion

This study is the first to attempt to quantify the extent of interpreter service underutilisation within a primary health care organisation in New Zealand. Based on reliable Census non-English-speaking data, consistent demographic profiles between the PHC and Census figures, and the accurate consultancy numbers contained within the PHC database, we would expect around 10 742 instances per year where non-English-speaking adults aged 15 years and older would consult a PHC GP. However, only 74.8 (0.7%) consultations per year involved interpreter services. These figures represent a potentially massive underutilisation of services and, consequently, inferior care and outcomes for those affected. While the expected consultation numbers were based on some gross assumptions, ignoring important nuances in health care service delivery in New Zealand (for instance, effective non-English consultations and services), it does provide an insight into the extent of this largely hidden problem. These findings are consistent with New Zealand and international studies reported elsewhere.<sup>14-18</sup> Most recently, Gray and colleagues examined clinicians' pattern of use of interpreters in hospital services in the Wellington region.<sup>14</sup> They found

that there was a high level of awareness of both the clinical risk of not using interpreters for people with LEP and the relevant policy. Yet, there were low levels of trained interpreter utilisation. Instead, family members were often engaged to interpret in consultations, a practice fraught with ethical and moral difficulties.

Previous studies have identified many of the barriers to interpreter service use identified by our qualitative study.<sup>7,16,19,20</sup> Kale and colleagues identified interpreter service and health care provider competencies as a potential barrier to service utilisation, as well as general access issues.<sup>7</sup> Bonacruz Kazzi et al.<sup>19</sup> found that the main barrier to service use was the poor identification of need for an interpreter, and Fatahi et al.<sup>20</sup> identified timing, practicalities and interpersonal issues as the main barriers to interpreter service use. Using in-depth interviews from 20 internal medicine resident physicians from two urban teaching hospitals, Diamond and colleagues identified four main barriers to interpreter service use: providers just 'getting by', time constraints, inconveniences, and normalisation of the problem.<sup>16</sup>

One barrier identified in our study, 'knowledge', has received scant attention in the literature. This was one of the primary reasons given for interpreter service underutilisation, and was due to many providers being unaware of what systems exist and how they function. This may reflect, in part, the relatively recent establishment of interpreter services within the greater Christchurch region. Interestingly, while there is a significant literature on this topic, issues surrounding use of telephone interpreters as compared to face-to-face interpreters were not raised.<sup>21-23</sup>

While having salient strengths such as the mixed method approach, this study also has some important limitations. The quantitative estimates ignored patients seeing GPs who both speak the same non-English language, patients attending general practices who employ in-house interpreters, or those consultations that do not require proficient language skills for an effective consultation. These factors are likely to partially off-set the seemingly vast difference between the identified need and supply of interpreter services. For the qualitative component, due to practical limita-



tions we were unable to run a greater number of focus groups and interviews. Ideally, we would have liked to interview more health providers. Therefore, we cannot confirm that data saturation was achieved in this study and recognise that there may be other barriers to interpreter service use that we have not identified. Regardless, it is likely that a significant underutilisation of interpreter services exists and that some of the key identified barriers are malleable to change.

To redress this underutilisation, a regular comprehensive training and education programme for health providers is recommended to overcome the knowledge and perception barriers. Especially useful would be a programme that assisted providers through their first access of the service, thereby overcoming any initial set-up difficulties.

Another recommendation is the need for systems and policy development to guide the use of interpreter services. Gray and colleagues have developed a toolkit to assist the use of interpreters in general practice.<sup>24</sup> Through a series of flow charts, clinicians are guided on how to make decisions about when and what type of interpreter is needed for a person with LEP. They also outline policies and processes that will support patients with LEP. For instance, they suggest that coding for LEP is a basic requirement for patient records.

The current underutilisation of interpreter services in Canterbury signifies that we are ignoring best practice and failing many LEP patients. In our quest to reduce inequities and improve health outcomes, concerted efforts are needed to diminish the identified barriers for effective communication and encourage appropriate and efficient use of interpreter services. These efforts will have capacity and resource implications. In order to redress the underutilisation of interpreter services, we recommend that priority is given to education programmes on the use of interpreter services within general practice.

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#### COMPETING INTERESTS

None declared.