Healthcare Interpreting from a New Zealand Sign Language Interpreters' Perspective

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Healthcare Interpreting from a New Zealand Sign Language Interpreters' Perspective

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), and no material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Delys Magill

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Ethics approval for the current study was granted by the AUT University Ethics Committee (AUTEC) on the 3rd September 2014 under number 14/248. The relevant document has been included in Appendices.

Abstract

This research examines healthcare interpreting from the perspective of New Zealand Sign Language interpreters. Healthcare interpreting is a growing topic of research globally. However, little focus has been given to the perspective of the interpreters working in healthcare settings. The challenges encountered by interpreters providing communication access to healthcare professionals and deaf clients ranged from interprets and dealing with unfamiliar terminology. To the best of my knowledge, this research is the first of its kind in New Zealand. The aim of this study was to identify challenges encountered by New Zealand Sign Language (NZSL) interpreters working in healthcare settings and examine what coping strategies they employ to deal with challenges.

The research was carried out using a mixed-method approach with a quantitative online survey and qualitative interviews. A total of 28 NZSL interpreters responded to the survey and 8 NZSL interpreters volunteered to be interviewed. The results indicated that the main challenges encountered in healthcare settings included a lack of understanding of the interpreter's role by healthcare professionals, difficulty in dealing with unfamiliar healthcare terminology and in some cases interpreters' belief that the deaf clients did not receive adequate access to full healthcare information. The participants shared the coping strategies they use to deal with the unfamiliar terminology and these strategies were discussed from a perspective of where the onus of decoding the message was placed.

The study suggests that NZSL interpreters working in healthcare situations should be more assertive in terms of their professional relationship building, give thought to moving the onus of providing clear information back to the healthcare professional and ensure that all participants are aware of the role of the interpreter. If consumers of healthcare interpreter services are educated on how to work effectively with interpreters, communication will be more effective and the risk to deaf clients will be reduced.

Chapter 1 Introduction

1.1 Access to healthcare information

Everyone has the right to expect to be treated equitably and competently when they access healthcare. For most people a visit to the local doctor or a short stay in hospital does not mean having to factor an extra person into the equation. In the case of people who speak a first language other than English, there may be the need to rely on an interpreter being available as well.

New Zealand is a multilingual country with two official languages, Te Reo Māori and New Zealand Sign Language (NZSL). English, due to its use by the majority, is also viewed as a de facto official language; however, it does not hold the official status afforded the other two (Human Rights Commission, 2013). NZSL is the main language used by the New Zealand Deaf community in their day-to-day dealings with each other and the wider community. Being able to access information in one's first language is regarded as a human right by the United Nations (2008). The New Zealand Health and Disability Act (1994) also mandates the rights of all consumers to be able to access healthcare information in a form and language they can understand.

For deaf people this may include the provision of a NZSL interpreter in any healthcare situation where a healthcare professional needs to communicate with a deaf person.

1.2 Sign language interpreters in New Zealand

The sign language interpreting profession in New Zealand is relatively small in terms of numbers. The Sign Language Interpreters Association of New Zealand had 82 registered full members as at December 2015 (A. Davidson, treasurer of SLIANZ, personal communication, 7 December 2015). There are large cohorts of interpreters based in the main centres of Christchurch, Wellington, Waikato and Auckland with smaller cohorts or individual interpreters basing themselves in smaller centres throughout the country.

Many of the interpreters are freelance operators who either book their own work directly or contract themselves to one or more of the booking agencies in New Zealand.

The largest booking agency for NZSL interpreters is iSign, a subsidiary of Deaf Aotearoa New Zealand. This is a nationwide service provider which has a number of government funded contracts to provide services for deaf people (Deaf Aotearoa New Zealand, n.d.).

In Auckland, Connect Interpreting Services is a booking agency which provides NZSL interpreters for a range of situations including medical settings (Connect Interpreting Services, n.d.). In Wellington and the Central North Island, Interpreting NZ manages bookings for both spoken language and NZSL interpreters; they also have a permanent office in Christchurch which provides booking services for the Canterbury region. Along with provision of booking services, Interpreting NZ also hosts training services for healthcare professionals and local and government officials on how to work with interpreters (Services: Interpreting NZ, 2017). Other interpreting agencies in New Zealand which provide spoken language interpreters may also provide NZSL interpreters (Magill & De Jong, 2016). It should be noted though that although a range of agencies may provide NZSL interpreters, the pool of interpreters to draw from is relatively small and a single interpreter may accept work from more than one agency.

1.3 The motivation for the study

This study provides a new perspective on what NZSL interpreters think about healthcare interpreting and how they perceive their own behaviour.

Providing communication access for healthcare professionals and deaf patients is an undertaking that can place the interpreter under stress. Unlike many other jobs where interpreters are utilised, miscommunication in a healthcare interpreting situation may result in adverse outcomes for the deaf patient.

Anecdotal evidence would suggest that NZSL interpreters working in healthcare settings 'go the extra mile' to ensure any potential harm is mitigated. This underlying belief that interpreters may behave differently in healthcare settings has formed the basis for this study.

1.4 The aim of the study

The aim of this research is to collect data related to sign language interpreters working in the healthcare arena in New Zealand. While a limited amount of research information is available regarding interpreters working in community settings, there does not appear to be any research solely related to challenges encountered by NZSL interpreters working in New Zealand healthcare settings. Data has been collected by means of an online survey which attracted responses from around one third of NZSL interpreters registered with the Sign Language Interpreters' Association of New Zealand (SLIANZ). Survey responses were analysed and recurrent themes examined in more depth in the course of one-to-one

semi-structured interviews. Analysis and triangulation of survey and interview data brought up interesting findings, including indications of areas where future research and professional development for NZSL interpreters might be focused. Areas where extended training may be needed related to specific healthcare situations, including health professional-patient interactions around informed consent or pre-admission interviews. It is envisaged that stakeholders with an interest in the results of this research would be professional interpreting organisations such as the Sign Language Interpreters' Association of New Zealand (SLIANZ), the New Zealand Society of Translators and Interpreters (NZSTI) along with overseas counterparts, Deaf Aotearoa New Zealand, the major service provider to the Deaf community in New Zealand, and also medical organisations such as District Health Boards who employ a large number of both spoken and sign language interpreters in their everyday dealings with patients.

The questions which have guided this research are:

- What challenges have NZSL interpreters encountered in healthcare settings?
- Do NZSL interpreters consider deaf people to be put at risk in healthcare settings?
- How do NZSL interpreters view their role when working in healthcare settings?
- What coping strategies do NZSL interpreters utilise to deal with unfamiliar healthcare terminology?

1.5 The structure of the thesis

The thesis consists of six chapters. Chapter Two presents the relevant literature and provides the reader with an outline of why this research is necessary. Chapter Three outlines the methodology used to carry out the research and explains why the methods used were deemed the most appropriate.

The online survey results are presented and discussed in Chapter Four, followed by the one-to-one interview results and discussion in Chapter Five. Chapter Six presents the conclusion, including a summary of the findings discussed in the framework of the literature, as well as recommendations for stakeholders and possible future research.

Chapter 2 Literature Review

2.1 Introduction

New Zealand Sign Language (NZSL) interpreters, and indeed all professional interpreters be they signed language or spoken language interpreters, have a responsibility to provide accurate interpreting for all clients in any situation. In healthcare settings, the potential for harm or even life-threatening situations to occur is intensified. This literature review will provide a base for the research into NZSL interpreters' perspectives on healthcare interpreting.

Areas of current research being explored include:

- The New Zealand Deaf community and NZSL
- Sign language interpreter training in New Zealand
- New Zealand statistical information on deafness, life expectancy and sign language use
- Health literacy
- Disparities in healthcare among the Deaf community
- Health information available in New Zealand Sign Language
- Current legislation regarding interpreter provision in New Zealand
- Deaf awareness among healthcare providers
- Use of interpreters in healthcare situations

2.2 The New Zealand Deaf community and NZSL

The New Zealand Deaf community can be viewed as a microcosm of New Zealand society. Padden and Humphries (1988) refer to two different ways in which people who are deaf can describe themselves and they use Deaf and deaf to differentiate. 'Deaf' with an upper case 'D' is used to refer to people who identify as being culturally Deaf. This group of people make up the local Deaf community and use sign language to communicate. The other term 'deaf' with a lower case 'd' is used to refer to people who have a hearing loss but do not identify as members of the Deaf community—this group may also use a signed language to communicate. ¹ Deaf Aotearoa reports the size of the

¹ To avoid reader confusion, for the purposes of this research thesis the term 'Deaf' has only been used in conjunction with specific references to culturally Deaf and the Deaf community only. For all other references the term 'deaf' has been used.

Deaf community in New Zealand to be approximately 9,000 (Deaf Aotearoa, 2017). Unlike other cultural minorities in New Zealand, 'membership' of the Deaf community is not based on ethnicity; rather it is said by Baker and Cokely (1980) to be based on the audiological status (level of hearing loss) of a person, linguistic fluency in the sign language of the community, political support for the Deaf community's goals and social contact within the local Deaf community. The important fifth feature of this particular model is 'attitude'. A person may satisfy the four other components but they still need to have the right attitude towards the cultural minority status of Deaf people to be accepted into the community (Baker & Cokely, 1980). Interpreters and other hearing people are also afforded access into the Deaf community based on Baker and Cokley's (1980) model. It is important to bear in mind however that they will never be able to be considered fully Deaf as they are unable to satisfy all four components due to their audiological status being that of a hearing person.

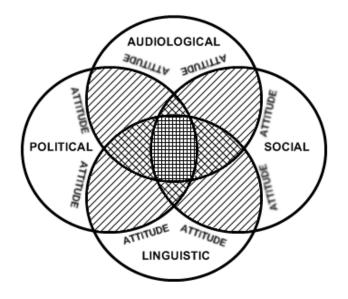


Figure 2.1 Membership of the Deaf community (Baker & Cokely, 1980)

New Zealand Sign Language is the natural, native language of the Deaf community of New Zealand. It shares historical relationships with British Sign Language (BSL) and Australian Sign Language (Auslan) (Schembri, Cormier, Johnston, McKee, McKee & Woll, 2009). Historical evidence leads to the belief that signed languages were being used in the community among deaf and hearing immigrants to New Zealand prior to the first school for the deaf being established in 1880. However, the evolution of NZSL is closely bound to the establishment of the deaf school and the signing which took place in the dormitories (Schembri et al., 2009). Use of signing was banned in the classrooms at the New Zealand school for the deaf with the first principal of the school Gerrit van Asch described as "an ardent oralist who believed in an exclusive focus on the development of speech and lip-reading skills" (Schembri et al., 2009, p. 5)

Signing of any type remained banned in New Zealand deaf schools until 1979 when Total Communication and Signed English was introduced. Signed English is not a language in its own right but rather a manually coded version of English following English syntax and grammatical structure including the addition of suffixes such as 'ed', 'ing' and 's'.

In 1993 NZSL was accepted for use in deaf education, at around the same time a number of other significant developments took place, including the establishment of a permanent NZSL interpreter training programme in 1992 and the documenting of NZSL in a dictionary in 1997 (Dugdale, 2001).

2.3 Sign Language Interpreter training in New Zealand

The sign language interpreting profession in New Zealand is nearing its thirtieth anniversary. In 1985 the first group eight of interpreters were trained by Dan Levitt from the Unites States. This training was the culmination of many years of lobbying and investigation by the New Zealand Deaf Association. Until 1985 the community had relied on welfare workers, family members and friends to interpret for them at any appointments (Dugdale, 2001). At the conclusion of the 14-week training course three newly qualified interpreters gained employment through the New Zealand Association of the Deaf (NZAD); they were situated in Auckland, Wellington and Christchurch.

It was another seven years before the first full-time sign language interpreter education programme commenced in Auckland at the then Auckland Institute of Technology in 1992, later to become Auckland University of Technology (AUT). The Diploma in Sign Language Interpreting (DipSLI) was a two-year full-time qualification offered solely at AUT. To enter the DipSLI programme students were required to have completed at least 140 hours of NZSL tuition. Application requirements included submission of a signed monologue video, a written essay and an interview with a panel consisting of both Deaf and hearing people. This was to remain the cornerstone qualification of the sign language interpreting profession in New Zealand until 2011. In 2011 the DipSLI was replaced with a new three-year undergraduate degree programme known as the Bachelor of Arts (NZSL-English Interpreting) (BA). The first cohort of graduates received their qualifications in November 2013. Entry into the BA programme is different to that of the DipSLI. Students must meet the general BA entry criteria as set out by AUT (Auckland

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University of Technology, 2016) and are now accepted with little or no NZSL knowledge. The first year of the BA is focused on building competency in NZSL and instilling knowledge of Deaf culture. The second and third years of the BA reflect the preceding DipSLI qualification in that interpreting skills, theory and ethics of interpreting and interpreting in specialised settings is taught. Students are also required to undertake practicum placements including observations and practical work experience across a variety of settings.

The specialised interpreting papers available for BA students to study are Advanced Interpretation Health Studies (TRIN704), Advanced Interpretation Health Interpreting (TRIN705), offered by Auckland University of Technology (AUT) (Auckland University of Technology, 2016). Unfortunately, these are also the two areas in which it is most difficult to provide practicum placements for students due to the privacy issues around client confidentiality.

The impact of this limited access to practicum placements in health and/or legal settings is that any knowledge gained in the interpreter training programme may not be able to be put into practice until a student has graduated and commenced work in the community. There are avenues available to all graduated interpreters to undertake continued professional development in their area of work; most of these opportunities are provided by the professional organisations to which interpreters can belong such as the Sign Language Interpreters' Association of New Zealand (SLIANZ) or the New Zealand Society of Translators and Interpreters (NZSTI).

It is important to note that not all sign language interpreters working in New Zealand have trained and/or gained an interpreting qualification in New Zealand. There are a small number who have trained in countries such as Australia and Great Britain who are fluent in either Auslan or BSL when they arrive in New Zealand. These interpreters take time to adapt their language base to NZSL and then gain work as interpreters.

2.4 Professional interpreting organisations in New Zealand

The Sign Language Interpreters' Association of New Zealand (SLIANZ) and the New Zealand Society of Translators and Interpreters (NZSTI) are the two professional organisations in New Zealand which qualified interpreters may join. Both organisations offer annual conferences, regional meetings and collegial support to members. Both organisations also require members to adhere to a Code of Ethics and Code of Conduct

and have complaints procedures in place to protect consumers and the profession as a whole.

While the majority of sign language interpreters in New Zealand belong to SLIANZ and a handful have dual membership of NZSTI, membership of a professional organisation is not compulsory. Nor is there an ongoing renewable registration requirement for sign language interpreters in New Zealand. This means that once an interpreter has qualified, or indeed if someone who is unqualified wishes to work unsupervised in New Zealand, there is no governing body to which consumers can complain, nor is there an overarching body to which the interpreter is answerable. This has the potential to leave consumers at risk.

2.5 New Zealand statistical information

Worldwide the life expectancy at birth is extending by approximately three years over each ten-year period (Global Health Observatory, 2016). In 2016 an average female in New Zealand has a life expectancy of 83 years of age, while for an average male the life expectancy is 79 years of age (Statistics New Zealand, 2016). An ageing population indicates higher demand on healthcare systems in the future. A person born in 1963 is now expected to live until approximately 89.2 years of age for a female and 86.4 years of age for a male (Statistics New Zealand, 2016). This is relevant to this study as it means healthcare consumers who do not have English as their preferred language of medical care (Crezee, 2013) are more likely to have a need for healthcare interpreters in years to come.

The 2013 Census results (see Table 2.1) provide the following information regarding the number of people who identified as using a signed language in New Zealand at the time of the census, which was 5 March 2013. Sign language not further defined is taken to mean people who use New Zealand Sign Language but refer to it simply as 'sign language' rather than using the official title.

Table 2.1: Sign language use in New Zealand (2013)

Sign Language Identified	Number
New Zealand Sign Language	20,235
Signed English	18
American Sign Language	81
Australian Sign Language	24
British Sign Language	63
Sign Language not further defined	582
Total	21,003

* Note: these figures apply to any sign language user not only deaf sign language users.

2006 and 2013 Census information on the number of people in New Zealand who use New Zealand Sign Language (NZSL) can be broken down further into use across age ranges (Table 2.2). In the 1960s, a large group of deaf children were born in New Zealand as a result of the Rubella epidemic. With a life expectancy of mid to late 80s, the need for increased healthcare provision for this group of the population in the future is highly likely. As can be seen in Table 2.2 below, the largest group of NZSL users in 2006 and 2013 falls within the 30–64 years of age range. Unfortunately, statistics showing a further break down of the 30–64 years' age range were unavailable but if we take into account that a person born in the 1960s is now in their 50s, it can be assumed that the number of NZSL users entering the 65 years and over age range will increase in the coming years, as will the demand on healthcare services of all kinds.

New Zealand Sign Language									
Total by Age Group									
Total		Unde yea		15-	29	30-	-64	65 yea ov	
2006	2013	2006	2013	2006	2013	2006	2013	2006	2013
24,087	20,235	3,498	2,835	6,414	4,977	12,027	10,413	2,154	2,013

Table 2.2: NZSL use in New Zealand by age of user 2006 & 2013

Statistics New Zealand (2016)

2.6 Health literacy

Health literacy among cultural minority groups has become a global research focus in recent years (Isham, 2009; Lytton, 2013; World Health Organisation (WHO) 2013; Wolf, 2009). The following editorial statement provides a clear description of the discrepancies

that exist between policy and reality: "Policy documents ask us to become 'informed patients', 'engaged and active citizens' and 'empowered communities' but most of us do not have the necessary skills to drive decisions about our health" (Hartwell, 2012, p. 2).

Health literacy is described as "the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions" (Ratzan & Parker as cited in Ratzan, 2000, p. 210). In 2013 Napier and Kidd undertook research in Australia to gain insight into how Australian Deaf community members who use Auslan to access health services perceive their English literacy and if they believe they are able to access preventive and ongoing healthcare using the systems available to all Australians. Evidence gathered showed that deaf Australians experience barriers in accessing healthcare due to limited English literacy and lack of information available in Auslan (Napier & Kidd, 2013). A study currently being undertaken by researchers at Auckland University of Technology is entitled 'Women with 'disabilities': barriers and enablers to cervical and breast cancer screening' (Payne, Yoshida, Hickey, Pivac, Merrit, McPherson & Garrett, in progress). This study includes Deaf women and results should provide healthcare providers with insights into the barriers faced by women with disabilities.

Isham (2009) suggests that the declining literacy levels in an increasingly diverse population are coming together to cause disparities in access to healthcare. In 1998 Pollard (cited in Pollard & Barnett, 2009) uses the term 'fund-of-information-deficit' (p. 182) to describe how low literacy impacts a person's factual knowledge base. For deaf individuals, especially those who struggle with English literacy, access to information is limited even further as radio, television, movies, spoken conversations and other public announcements are often not accessible.

For many deaf individuals, English language skills are difficult to attain (Kyle & Harris, 2010; Wauters, van Bon & Tellings, 2006). This lack of English literacy puts them at a disadvantage when accessing healthcare information. Literacy levels among deaf children have remained a problem for many years. Power and Leigh (2000) in their historical overview of literacy development for deaf learners' state that several studies from a range of countries including New Zealand showed that deaf secondary school-leavers had the average reading age of a 10-year-old. Deaf people do not have access to the incidental learning that hearing people have. Pollard and Barnett assert that the lack of access to information such as radio, television, overheard conversations and other auditory

information leads to a 'fund-of-information-deficit' (2009, p. 182). Knowledge deficits regarding illnesses, medicines, treatment options and risks along with other healthcare information may contribute to patients leaving appointments with unanswered questions, or signing a form they do not understand (Safeer & Keenan, 2005; Pollard & Barnett, 2009).

Of particular interest, Pollard and Barnett's (2009) research findings suggest that the risks of health consequences for the deaf population associated with low health literacy are prevalent "regardless of educational attainment, and that unique approaches to health literacy disparities in the deaf population may be warranted" as the pattern of word comprehension is different to that of hearing individuals undertaking the Rapid Estimate of Adult Literacy in Medicine (REALM) (2009, p. 183).

Access to health education for deaf individuals is often problematic due to language differences between those providing the information and the deaf people concerned. Prior (2014) asserted that due to social constructionism, the typical formal and informal methods parents use to convey information on sexuality and sex education are blocked due to lack of a shared language.

2.7 Disparities in healthcare among the Deaf community

The disparities of care experienced by deaf and hard-of-hearing individuals and their attitude to healthcare have been the focus of a number of research endeavours in recent years (Orsi, Margellos-Anast, Perlman, Giloth & Whitman, 2007; Ubido, Huntington & Warburton, 2002; Steinberg, Wiggins, Barmada & Sullivan, 2002) The results of that research show many reasons for concern. Overall knowledge by respondents, of medical tests and the purpose of the tests was low; they demonstrated a lack of knowledge about different forms of cancer and the terminology related to cancer (Orsi, Margellos-Anast, Perlman, Giloth & Whitman, 2007); deaf people feel they are treated as if they are stupid (Ubido, Huntington & Warburton, 2002; Iezzoni, O'Day, Killen & Harker, 2004); deaf women are hesitant to ask questions and expressed confusion and fears about issues related to their health (Steinberg, Wiggins, Barmada & Sullivan, 2002); distrust played a major part in deaf women not accessing preventive healthcare such as breast cancer screening education (Sadler, Gunsauls, Huang, Padden, Elion, Galey, Brauer & Ko, 2001). Swabey and Malcolm (2012) provide an example of a deaf colleague not asking the healthcare professional for information on a specific treatment for a serious illness as they realised the interpreter was struggling with the routine questions used in the

appointment. Not only did this mean important questions went unasked, but potentially both the doctor and the interpreter were unaware of the incompetence of the interpreter.

Steinberg, Wiggins, Barmada and Sullivan (2002) reported instances where deaf people had given accounts of procedures being carried out without them having any knowledge or warning of what was about to happen. In the case of a number of deaf women undergoing examinations the following examples were reported:

"One woman's nurse came over and was grabbing her legs and pulling her down to the end of the table, with warning or explanation to my friend."

"The doctor had a mask on so I could not read his lips, but we had this interpreter with us, and (she interpreted when) the doctor said, "Well, the deaf woman should tie her tubes so she doesn't get pregnant again.""

(Steinberg, Wiggins, Barmada & Sullivan, 2002, p.736)

Men also described difficulties while undergoing examinations. The following example is from a deaf man undergoing his first testicular examination:

"I was scared. I didn't know if I was being molested or raped or if this was a sexual advance... A hearing doctor with a hearing person will talk through the entire exam, but when the patient is deaf, they just do it."

(Iezzoni, O'Day, Killeen & Harker, 2004, p. 359)

Further examples of deaf people's uncertainties and reluctance to ask for information include taking medication for an extended amount of time but not knowing its purpose or effects (Iezzoni, O'Day, Killeen & Harker, 2004).

In 2011 a pilot study was carried out by researchers at Auckland University of Technology (AUT)—'Access to New Zealand Sign Language interpreters and quality of life for the deaf: a pilot study' (Henning, Krägeloh, Sameshima, Shepherd, Shepherd & Billington, 2011). The study had three main aims:

- explore the usage and accessibility of sign language interpreters,
- assess the levels of quality of life of deaf adults living in New Zealand,
- and consider the impact that access to and usage of sign language interpreters has on quality of life.

The findings of the study clearly showed that the Deaf community in New Zealand has problems associated with accessing and using NZSL interpreters. There was also considerable evidence, both within New Zealand and overseas, that the Deaf community is at risk of mental illness.

Joanne Witko, a child of deaf parents (CoDA), is based in Wellington. Witko is the psychotherapy professional lead for three District Health Boards (DHB) in the Wellington region, those being the Wairarapa DHB, Hutt Valley DHB and Capital and Coast DHB. Over the past twelve months one-to-one interviews and an online survey have been used to find out about people's experiences when accessing secondary health services within the Wellington region. Researchers have spoken to 52 deaf people and have had 124 responses from DHB staff members. A summary of the preliminary research findings should be available in the near future, with a full report being published within the Wellington DHB in July 2016 (Witko, personal communication, 3 May 2016).

2.8 Signed health information

Pollard and Barnett (2009) note that there is a marked lack of health information available in non-English languages and specifically in American Sign Language (ASL).

This lack of access to health literature also applies to NZSL users and can lead to health disparities. A number of publicly accessible information videos are available on the Seeflow website (http://www.seeflow.co.nz/) and on the HealthEd website (https://www.healthed.govt.nz/). Seeflow is a DeafRadio (https://deafradio.co.nz) sub-project providing high quality translation services to a range of community groups and services as well as individual clients. HealthEd is a website containing information from both the Ministry of Health and the Health Promotion Agency. The number of English language resources available on the website is 283, covering a large range of topics:

- corrections health (information provided for people being held within New Zealand correctional facilities)
- child health
- diabetes
- environmental health
- healthy eating
- hearing
- immunisation and vaccinations
- infectious diseases and viruses
- men's health

- mental health
- mental health foundation
- national screening programmes
- new migrant health
- oral health
- physical activity
- senior health
- sexual health
- being smoke-free
- health topics for teenagers
- women's health.

Speakers of the other official language of New Zealand, Māori, have thirty-five resources available to them in Te Reo. A total of eight video translations are available in NZSL. Topics covered by the NZSL translations include:

- immunisation
- breast screening
- cervical smear tests
- prostate cancer (two videos available)
- ageing well
- body piercing and tattooing
- giving up smoking.

2.9 Requirements for interpreter provision in healthcare settings in New Zealand

NZSL has been recognised as an official language and the preferred language of the New Zealand Deaf community (New Zealand Government, 2006). However, this act of parliament only requires that qualified NZSL-English interpreters be provided in legal settings. There is no requirement under the NZSL Act (New Zealand Government, 2006) that interpreters be provided for deaf people in any other situation such as healthcare settings. However, the Health and Disability Commissioner Act (1994) outlines a code of consumer rights. It is the duty of health providers to take into account the needs, values, and beliefs of different cultural, religious, social, and ethnic groups. These duties have been published in the Code of Health and Disability Services Consumer Rights (1996)

and are designed to protect the rights of all consumers who use health and disability services.

New Zealand is also a signatory to the United Nations Convention on the Rights of People with Disabilities (UNCRPD) which states in Article 21 that parties will take appropriate measures to ensure people with disabilities can exercise the right to access information on an equal basis with others through all forms of communication including by accepting and facilitating the use of sign languages (United Nations, 2008).

The Human Rights Report on the Sign Language Inquiry (Human Rights Commission, 2013) points out that there are no minimum interpreter standards outside court settings, nor is there any system in place to assess or rank competency of sign language interpreters once they have graduated. In direct response to the Human Rights Report, as part of the budget announcements made on 15 May 2014, the then Minister for Disabilities Issues, Tariana Turia, confirmed a new operating budget of \$6 million over four years to establish a body to promote NZSL. The new organisation will provide "stewardship and advice on" NZSL (Turia, 2014). The founding members of the NZSL Board were appointed in May 2015 with a mandate to:

- promote and maintain NZSL use through development, preservation and acquisition of the language
- ensure deaf peoples' and NZSL users' rights are protected through use of appropriate legislation such as the NZSL Act 2006 and the UN Convention on the Rights of People with Disabilities
- and provide advice to the New Zealand government and the community regarding NZSL.

One of the five priorities identified in the NZSL Board Action Plan 2016-2018 (2016) is to develop interpreter standards. The move towards establishing national standards for NZSL interpreters is a positive step towards ensuring deaf people in New Zealand are receiving high quality interpreting services in all areas of community life as needed.

2.10 Healthcare providers' awareness deaf or hard-of-hearing individuals' needs

McEwen and Anton-Culver (as cited in Harmer, 1999) suggest that the physician uses language to establish rapport and trust with the patient, and that good physician-patient communication is fundamental to quality healthcare. They go on to say that of the minority groups in the United States that use English as a second language, "deaf individuals must be at the greatest risk for poor physician-patient communication" (McEwen & Anton-Culver, as cited in Harmer, 1999, p. 73).

Research also shows that sign language users indicate that sharing a language and culture with a physician who is Deaf or hard-of-hearing is associated with positive healthcare experiences, patients are more likely to access preventive services when referred and patients also access healthcare services in an appropriate manner (McKee, Smith, Barnett & Pearson, 2013). This is relevant to my study because to the best of my knowledge there has only been one deaf physician in New Zealand, who was not an NZSL user, who was in general practice in a small town, so as a rule interpreters working in healthcare are always needed in professional-patient interactions.

Roter and Hall (2007) present characteristics which influence communication that occurs during medical visits. They posit that although there is a belief between patients and physicians that all patients are treated equally without regard for personal traits or physical attributes, the assumption of universal neutrality on behalf of physicians may in fact be misplaced. Three mechanisms are cited which aided in the formation of the hypothesis that physician behaviour is in fact related to patient characteristics: 1) unintended association between the care process and patient attributes caused by mutual ignorance of social or cultural norms; 2) physicians may be taking into consideration socio-demographic characteristics of patients and consciously, and appropriately, addressing the varying responses to illness associated with that; 3) and finally, it is possible that physicians are negatively affected by stereotypes, as are other people in society (Roter & Hall, 2007). This theory of being negatively affected by difference is supported by Steinberg, Wiggins, Barmada and Sullivan (2002) who report healthcare providers' unethical behaviours being described by participants as reflecting negative feelings about deafness and, in the setting of their research, questioning the right of the deaf woman to bear children.

Barnett (2002) outlines a number of key points which he believes are important for medical students and residents to be taught as part of their medical training, such as recognising the different communication preferences of deaf people. Another example given in the same article is that physicians are uncomfortable when working with patients with hearing loss. It is believed that this may reflect the lack of education provided to

medical students around how to adjust communication when working with deaf or hardof-hearing patients (Barnett, 2002).

For successful communication with deaf patients, first and foremost, physicians need to understand the psychosocial experiences of deaf people. Understanding deafness from a cultural perspective rather than a medical perspective will help deaf people "tell their stories", and in turn may improve the quality of healthcare (Barnett, 2002, p. 695). This is supported by Filip Verstraete who believes physicians should be educated around the sociocultural perspective of being deaf, thereby broadening the medical view of deafness in a positive manner (Crezee & Verstraete, 2015). In Auckland, New Zealand medical students on ward attachments see consultants working with interpreters. There is also a large professional and communication skills component to the medical curriculum at the University of Auckland Medical School (S. Esteves, co-facilitator personal and professional skills, University of Auckland, personal communication, 23 May 2016).

Most healthcare providers have a limited understanding of the communication needs of deaf and hard-of-hearing individuals. Erroneous assumptions about speech reading, writing notes and the English literacy skills of patients and the belief that if the doctor can understand the patient's verbal comments then the patient must understand the doctor's speech all create a decrease in the quality of care offered and provided to deaf and hard-of-hearing patients (Harmer, 1999).

In situations where writing notes was utilised as a communication method between healthcare provider and patient, patients reported that the handwriting was often illegible or the vocabulary used in the notes was beyond their literacy level (Harmer, 1999). Zazove and Doukas (cited in Harmer, 1999) note that the communication barriers faced by deaf and hard-of-hearing individuals in healthcare settings prevents them from providing informed consent. This along with difficulty in developing and maintaining a confidential relationship when interpreters are used in healthcare settings "may violate the patient's right to autonomy" (Harmer, 1999, p. 102).

It must be acknowledged that deaf clients who use NZSL are a very low incidence population and healthcare professionals deal with a huge range of diversity in patients. While it would be ideal for specific training tailored to working with NZSL interpreters to be provided to healthcare professionals, the time factor involved in doing so may be neither realistic nor viable.

2.11 Models of interpreting

Over the years' researchers have coined different terms for the models of interpreting as the profession has evolved. Witter-Merithew (1999) provides the following explanation of these models:

- The Helper Model: traditionally this has been the term applied to family members or friends who are not qualified professional interpreters but are used in place of professional interpreters. They are not required to follow a code of ethics and may not always behave with integrity when it comes to delivering full information to clients.
- The Conduit Model: a term used to refer to practitioners who act on the premise of all information that comes in is passed on to the client in exactly the same manner in which it is received. How the client reacts to or uses the information is up to them.
- The Bi-lingual/Bi-cultural Model: the meaning of the message is more important than the form it which it is presented. The source language form is dropped once the meaning is gleaned and the resulting interpretation is produced in the target language form.
- The Cultural Mediator Model: similar to the Bi-lingual/Bi-cultural model in terms of language output. However this model also considers the cultural norms of all parties and adjustments to how the interpretation is produced are made to make it more culturally appropriate.
- The Ally Model: the interpreter is an active participant in the interpreting dynamic and is actively working within the situation to achieve the best outcome for all parties in terms of effective communication.

2.12 Role of the interpreter in healthcare situations

The conventional interpreter role has been described as the interpreter having to receive the source message from the first interlocutor, extract the meaning from it, construct an equivalent meaning in the target language and convey that to the second interlocutor without omissions or additions to the message (Pöchhacker, 2004). Interpreters have traditionally been referred to as 'invisible' (Metzger, 1999). The term 'invisible' refers to interpreters not being considered part of the conversation. Angelelli (2004) undertook investigations around the concept of the 'visible' interpreter and how it manifests itself in a medical setting. Considerations around interpreter power are explored and the interpreter is portrayed as being not only visible linguistically but also culturally and socially. Interpreters in any situation enter the interaction with their own set of values, beliefs and views on "power, status, solidarity, gender, age, race, ethnicity, nationality, socio-economic status as well as the cultural norms and societal blueprints" (Angelelli, 2004, p. 9) that are integral parts of the encounter. All of these are used to construct a reality surrounding the interaction in which they are a participant (Llewellyn-Jones & Lee, 2013).

Hale (2007) discusses in depth some of the main issues which surround interpreting provision in medical situations. There is often a misunderstanding of the professional role of the interpreter by the healthcare professional; the healthcare professional "rarely understands the complexity of the task", nor do they understand "the interpreter's needs in producing an accurate rendition" (Hale, 2007, p. 35).

Crezee (2013) points out that although there is a great demand for trained competent interpreters in healthcare settings there is often the temptation for staff on wards to make use of non-professional interpreters. These may be people who just happen to use the same language as the patient; examples given are cleaners, orderlies or even visitors. These situations may arise for a variety of reasons such as the need for haste or even the cost of interpreter provision. However, Crezee (2013) posits that the reason non-professional interpreters are used is often because the staff involved are themselves monolingual and as such do not understand the complexities involved in the interpreting process. More importantly they do not "understand the risks involved in using untrained interpreters in healthcare settings" (Crezee, 2013, p. 11).

Although interpreters are deemed essential, questions are raised by health professionals and patients alike as to the viability and security of having interpreters present. Physicians and patients are often hesitant to include interpreters due to cost factors and availability, confidentiality concerns, lack of knowledge of the protocols around working with interpreters, and they have no way of evaluating the quality of the interpreting (Angelelli & Geist-Martin, 2005; Barnett, 2002; Harmer, 1999; Middleton, Turner, Bitner-Glindzicz, Lewis, Richards, Clarke & Stephens, 2010).

Interestingly, the way in which interpreters are viewed by healthcare professionals differs significantly to the view of patients. Healthcare professionals see interpreters as being there to keep the patient on track, whereas the patients see the interpreters as co-

conversationalists (Angelelli & Geist-Martin, 2005). Although both parties have differing views of the interpreter's role and boundaries, neither view is consistent with the actual role and ethical boundaries of the interpreter.

Major (2013), a discourse analyst, took an interactional sociolinguistic approach to healthcare interpreting practices. Using video recordings of both authentic and semiauthentic healthcare appointments it was possible to identify and micro-analyse clarification requests, and instances of relational work between all participants. Having data of this type allowed comparison of clarification techniques between interpreters and helped to identify some of the interpretsonal challenges faced by interpreters working in healthcare situations. Of particular interest when reading this part of the thesis was the number of clarifications requests (105 in total) and how many were initiated by the interpreter (41), the patient (46) and how few were initiated by the healthcare professional (18). In terms of understanding of role and access to the second language being used in a sign language interpreted interaction these figures appear to indicate that the healthcare professional has little idea of when an interpreter may not be conveying a message accurately.

An interpreter employment survey conducted by the Sign Language Interpreters' Association of New Zealand (SLIANZ) noted that 48% of interpreters work only 0-2 hours in community settings, 33% work between 2-6 hours and only 19% work more than 6 hours in community settings (Gilbert & McKee, 2013). With interpreters spending so little time undertaking work in community settings there is a risk that lack of knowledge in a specific setting may impact the quality of service afforded both deaf and hearing clients. In a healthcare setting any complexities that have an impact may in fact be life-threatening.

In 2009 Llewellyn-Jones and Lee presented the first in a series of papers focusing on the role of the interpreter. They argued at that time that there is no one-size-fits-all approach when it comes to how interpreters behave during interpreted interactions (Llewellyn-Jones & Lee, 2009). The new perspective on interpreter role and behaviour posited by Lee and Llewellyn-Jones revolved around the central view that "the individual decisions made by an interpreter are not made in isolation from one another" (2011, p. 2). They argued that the interactions between participants and any decisions made during those interactions create the interpreter role for that specific interaction. Accordingly, if each interaction is different, the interpreter role must be varied, also meaning it is impossible

to discuss a single definition of the role of the interpreter (Lee & Llewellyn-Jones, 2011). In the third article on re-defining the role of the interpreter discussion focused on interpreters talking of 'stepping out of role' as a means of rationalising behaviours which traditional Codes of Ethics would describe as ethically undesirable. However, Llewellyn-Jones and Lee (2013) asserted that the behaviours are seen as erroneous due to the interpreter role being viewed "as something one has, rather something one does" (2013, p. 58). The SLIANZ Code of Ethics and Conduct (2012) requires interpreters to deal with other parties in an honest and fair manner and to be responsive to their needs. They advise interpreters to "use discretion regarding the situation and the consequences [when deciding] as to whether intervening for clarification is appropriate" (SLIANZ, 2012, p. 12).

2.13 Dealing with healthcare terminology

Meyer (2002) in his analysis of an interpreted medical appointment stated that while it is tempting to say the interpreter's difficulties stem from problems with the terminology used, interpreting is a complex task in which the doctor-patient relationship, language differences in general, along with dialectical differences and cultural differences of all participants need to be taken into account.

While this is true, the interpreter's knowledge of terminology used must play a factor in the deaf client's understanding of a healthcare situation. Sign language interpreters employ a number of coping strategies to deal with terminology or vocabulary during any interpreting assignment. Interpreters use initialisation (signs for an English term which are produced by fingerspelling the first letter and mouthing the English word), and fingerspelling as a linguistic coping strategy, Napier described it as a "conscious decision about language choices to clarify information within the interpretation" (2002, p. 75). Davis (2005) in his discussion on initialisation, and fingerspelling of English words in education explained that although initialised signs are pervasive in education, overgeneralisation of their use is a concern and direct transfer of information in this way with no scaffolding of information to clarify the terminology can lead to misunderstandings around content of the message. In a healthcare situation use of initialised signs and fingerspelled technical terms has the potential to lead to disparities in healthcare for deaf patients as these are manual representations of English lexical items that deaf people may have no knowledge of due to their low literacy levels. Steinberg, Wiggins, Barmada and Sullivan (2002) suggest that some deaf people may indicate they have understood information when in fact they have not. Patients whose health literacy is inadequate often feel too embarrassed to ask physicians to repeat or explain health information. I would suggest it is possible that in situations where an interpreter is unable to produce a clear interpretation, or utilises initialised signs and/or fingerspells technical terms the deaf patient may be hesitant to ask for clarification and as a result may be put at risk.

In some situations, where unfamiliar terminology is being used by deaf clients, the interpreters may be making decisions sub-consciously as asserted by previous studies (Dean & Pollard, 2004; Leeson, 2005). Dean and Pollard (2001 & 2004) are strong proponents of the use of the Demand-Control Schema which allows interpreters to look at any interpreted situation in terms of the demands put upon them and their ability to control those demands. In a situation where a person is "visibly distraught and telling a story of a sensitive nature" (2004, p. 28) it may not be pertinent for the interpreter to interrupt and ask for clarification or repetition, so a paraphrased interpretation may be produced. Often interpreters are unaware of the internal decision-making processes they are using instinctively as they have not openly discussed the decision-making process which occurs in the reality of professional practice (Dean & Pollard, 2004). Leeson (2005) provides a clear explanation of how she views the challenges around dynamic equivalence faced by interpreters when working. "Interpreters have to make decisions" (Leeson, 2005, p. 51), and those decisions are often split-second decisions based on the interpreter's understanding of the language used by the speaker or signer. Depending on how that language is used in that specific situation, interpreters look for approximate equivalence in the other language. Equivalence is often dependent on the interpreting framework being utilised by the interpreter at the time. What may be appropriate in a healthcare situation may not be appropriate in a legal situation, as in the tenor, register and/or illocutionary force of an utterance (Morris, 1999). If both Dean and Pollard's (2004) and Leeson's (2005) explanations are considered together it gives some credence to the respondents' claims that they do not view unfamiliar terminology used by the deaf clients as a challenge.

McKee (2008) invited New Zealand interpreters, both spoken and sign language, to participate in a survey around practitioner perspectives of quality interpreting. The resulting article outlined two perspectives which are relevant to this discussion (McKee, 2008)

The first relates to how interpreters rated what enables quality interpreting. Thirty interpreters responded to the survey and of that number 26 believed that background content and contextual knowledge of the job was important for enabling quality interpreting. The second perspective provides insights into what interpreters believe hinders quality interpreting: 12 respondents indicated unfamiliar content or context; 12 respondents indicated source message factors such as jargon, complex or poor [sentence] structure, pace of speaker or the accent of the speaker; and six indicated insufficient training or experience hindered their ability to provide quality interpreting (McKee, 2008).

Marschark, Sapere, Convertino, Seewagen and Maltzen (2004) describe use of sign language interpreters in daily activities, including accessing medical and mental health services, as essential.

2.14 Interpreter self-care

In New Zealand, various studies have looked at both sign language and spoken interpreting. Recent examples of this are the 'NZSL Interpreter Survey' (Gilbert & McKee, 2013) which provides a snapshot of working conditions for NZSL interpreters.

'Teaching Interpreters About Self-Care' (Crezee, Atkinson, Pask, Au & Wong, 2015) is a study which looked at the stressors affecting interpreters working in New Zealand and the potential for avoiding stress-related injuries through self-recognition of the signs of being negatively impacted by a situation.

Bontempo and Malcolm (2012) describe vicarious trauma as emotions and naturally occurring behaviours which come about from knowing about a traumatic event which has been experienced by others. As interpreters working in healthcare often "manage the transfer of information under difficult circumstances" (Bontempo & Malcolm, 2012, p. 106), prolonged or repeated exposure to stresses of this kind "can lead to a significant accumulation of occupational stress" (Bontempo & Malcolm, 2012, p. 105). Education of interpreters about the risks is imperative to ensure interpreters are aware of the signs of vicarious stress and have strategies to deal with it.

Chapter 3 Methodology

3.1 Introduction

Having presented the relevant literature on the Deaf community, health literacy, sign language interpreting and interpreting in healthcare settings, we will now look at research methodology. This chapter examines the most suitable research methods for this project and explains the individual processes used for both the online survey and the one-to-one interviews.

3.2 Research methodology

Given the nature of interpreting and the relative lack of current research focused on the interpreter perspective, a mixed-methods research design was considered the most appropriate for this research project.

Hale and Napier (2013), Bryman (2012) and Creswell and Miller (2000) explained that use of a mixed-method approach allows the researcher to confirm, explain, illustrate or even enhance the research validity by providing a more comprehensive picture of a defined area of research. Although in theory, this research uses both quantitative and qualitative data collection instruments, the overall purpose of the research was to ascertain whether issues identified by the researcher were recognised by interpreters. The extent to which interpreters experienced these issues was identified by means of a survey, and semi-structured one-to-one interviews with voluntary participants were used to further investigate interpreter perspectives on these issues. This form of research process lends itself to an interpretivist orientation which should prove to be high in both reliability and validity (Hale & Napier, 2013).

3.3 Ethical considerations

As with any research project there is a need to consider all the potential ethical issues. One of the issues that needed to be taken into consideration was the relatively small size of the New Zealand Sign Language (NZSL) interpreting community and the implications this may have in terms of readers possibly being able to identify participants.

Although gender is relevant in terms of power dynamics in interaction along with client alignment, NZSL interpreting in New Zealand is a predominantly female occupation, and with this in mind it was decided that collection of information on gender would be generally irrelevant and, in the event that male interpreters were participants, could lead to participants being identified.

While it would have been useful to know where interpreters are undertaking the most work in healthcare situations, this information may also have meant readers of the research being able to identify individual interpreters and potentially the clients they have worked with.

Participant anonymity was viewed as important because the potential cohort of respondents was relatively small and I wanted as many interpreters as possible to participate in the online survey and the one-to-one interviews. Another contributing factor to participant anonymity is the healthcare setting on which this research focuses. With the Deaf community and interpreting fraternity being closely linked in terms of geographical location it was important to consider the potential for identifying participants and patients.

For these reasons, I decided not to collect data such as gender, or location.

Ethical approval for this research was given by Auckland University of Technology Ethics Committee (AUTEC) on the 3rd September 2014, and the approval reference number is AUTEC 14/248.

3.4 Participants

The cohort of potential participants was limited to qualified NZSL interpreters working in New Zealand. The term 'qualified NZSL interpreters' includes all those who have graduated from the Auckland University of Technology with a Diploma in Sign Language Interpreting or a Bachelor of Arts: NZSL-English Interpreting. Sign language interpreters who have graduated with a sign language interpreting qualification from an overseas educational establishment and who have met the membership requirements of SLIANZ were also included as 'qualified NZSL interpreters'. At the time of sending the survey the number of potential participants was approximately 75, of which 28 (37%) people responded.

New Zealand Sign Language					
Respondent	Age	Interpreting Experience in Years			
01	50+	11–15			
02	40–49	6–10			
03	40–49	6–10			
04	20–29	6–10			
05	30–39	3–5			
06	40–49	15+			
07	20–29	0–2			
08	40–49	6–10			
09	50+	15+			
10	30–39	0–2			
11	30–39	3–5			
12	40–49	15+			
13	30–39	11–15			
14	50+	11–15			
15	30–39	6–10			
16	40–49	15+			
17	20–29	0–2			
18	20–29	3–5			
19	40–49	6–10			
20	40–49	0–2			
21	40–49	6–10			
22	50+	11–15			
23	30–39	11–15			
24	30–39	0–2			
25	50+	15+			
26	50+	11–15			
27	20–29	3–5			
28	40–49	15+			

Table 3.1: Online survey respondent information

Potential participants were approached via a number of different avenues. As the majority of working sign language interpreters in New Zealand are members of SLIANZ, an invitation to participate was issued via the SLIANZ newsletter and the email system used by the SLIANZ Secretary to notify members of new developments and other

opportunities provided to members. This invitation was also distributed to interpreters working for the iSign interpreting booking agency, Connect Interpreting Services and Kelston Deaf Education Centre. iSign and Connect Interpreting Services are the two main booking agencies for NZSL interpreters. Connect Interpreting Services co-ordinates NZSL interpreter bookings mainly within the Auckland and Northland regions of New Zealand and in the past, has been the agency of choice for Deaf Mental Health Services in Auckland. iSign is a nationwide booking agency owned by Deaf Aotearoa Holdings Ltd. The Kelston Deaf Education Centre (KDEC) is one of two Deaf Education Centres in New Zealand; NZSL interpreters are employed to work in classes with deaf children who use NZSL to access the New Zealand Education Curriculum. The Van Asch Deaf Education Centre (VADEC) situated in Christchurch was not employing NZSL interpreters at the time of the research being undertaken, so no contact was made with them. As the sign language interpreting community in New Zealand is relatively small it is likely that all working interpreters were contacted—however there is no way of knowing for sure.

Potential participants were directed to an online survey via a link included in the email or online notification. As part of the online survey, they were required to accept that once they decided to undertake the survey their consent to participate in the online survey part of the research was given, as responses are confidential and withdrawal would not be possible. The invitation also included an outline of the study with relevant contact information of myself, as the researcher, and my supervisors.

3.5 Data collection instruments

These consisted of an online survey, followed by in-depth guided interviews with a small number of NZSL interpreters to further explore data arising from the survey findings.

3.5.1 Online survey

Before conducting the one-to-one interviews with the volunteer participants, I decided to conduct a survey of NZSL interpreters to gain a quantitative description of the NZSL interpreting community.

Data regarding interpreter attitudes towards issues and statistics from the survey would form a good base from which to conduct my one-to-one interviews (Creswell, 2014).

The online survey utilised the Survey Monkey website. Survey Monkey (www.surveymonkey.com) is an online survey tool which allows users to build surveys, distribute the survey in a number of ways using email, websites and/or social media avenues such as Facebook pages or Twitter. The survey can be made available for a specific amount of time and once the survey has been closed the results can be analysed using the Survey Monkey website, or they can be analysed further by exporting them to SPSS, which is a software tool allowing for statistical analysis.

As I wanted to ensure as many NZSL interpreters as possible had access to the survey, the use of Survey Monkey seemed an appropriate choice of software. The selfadministered survey allowed respondents to submit their completed survey anonymously. Respondents' names were not recorded, but the IP addresses of the computers they responded from were. Recording of IP addresses is done automatically by the software as it allows the responses of an individual survey to be looked at. The IP addresses do not enable the researcher to identify individual respondents.

A range of question styles were used when constructing the online survey: rating scale, yes/no questions and multiple choice. Rating scale questions were used to gain responses related to the frequency of occurrences of a variety of interpreting related questions, such as what challenges an interpreter faces when working in healthcare settings and how often those challenges occur.

Questions for the online survey were developed from anecdotal evidence gathered by the researcher along with factors identified in existing research, such as McKee (2008), who found that having access to background information before undertaking an interpreting assignment was a factor in interpreters providing quality service. Rate of utterance for the source text has been identified as a contributing factor to interpreter target text production errors by Gerver (1969) and Cokely (1992).

The online survey was not tested on a cohort of interpreters prior to it being made available to potential participants as it would have impacted the number of potential respondents due to the relatively small size of the NZSL interpreting profession. The online survey was however proofread by both supervisors and given approval by the Auckland University of Technology Ethics Committee (AUTEC) before being released. Although it is believed that all sign language interpreters in New Zealand have reliable access to the internet, paper copies of the survey were available on request. No paper copies of the survey were requested.

Analysis of the online survey was undertaken using Survey Monkey and SPSS.

Shared issues identified from the analysis were the challenges interpreters faced in healthcare settings, the coping strategies interpreters used to deal with challenges they faced, the perceived lack of needs being met and/or the deaf person being placed at risk and the nature of the interpreter's role during healthcare appointments. The criteria for including these issues in the interviews were a high percentage of survey respondents indicating they regularly encountered an issue, or regularly utilised a coping strategy.

Identified issues were then further explored through one-to-one interviews with voluntary participants, and these will be discussed next.

3.5.2 One-to-one interviews

The participants in the one-to-one interviews were selected on a first come, first served basis. Potential participants received an invitation on the information flyer. This invitation was also included as a separate page which Survey Monkey released after participants submitted the online questionnaire. Potential interviewees were invited to contact the researcher by email at <u>dmagill.research@gmail.com</u>. This is an email address set up exclusively for the thesis research project.

After analysing the online survey results and identifying themes which merited further investigation through use of one-to-one semi-structured interviews, the respondents who indicated they would be willing to participate in an interview were contacted. Of the ten responses initially received eight interpreters were interviewed.

Themes identified for further inquiry were:

- the areas of healthcare interpreting interpreters found the most challenging and why
- whether the interpreter had ever felt the deaf person's needs had not been met at a healthcare appointment
- whether interpreters had ever felt the deaf person had been put at risk by their needs not being met

- what strategies interpreters used to ensure clarity of message in healthcare interpreting settings
- how interpreters perceived their role in healthcare settings.

The interviews were conducted in person except for one, which was conducted via Skype. All interviews were sound recorded only—no video recordings were made. Seven of the eight interviewees were located within larger metropolitan areas, and the remaining interviewee was in a smaller community.

Due to time constraints data collected from these interviews was transcribed by myself and a transcription service.

3.6 Data analysis

Analysis of the online survey results was undertaken using two analytical tools. The Survey Monkey system produces a set of data which can be read and analysed online without having to manipulate or cross-tabulate statistical data. This tool was adequate for analysing the demographic information collected from participants such as their age range and their years of experience in interpreting. It was also possible to transfer the data and charts produced by Survey Monkey into Excel spreadsheets. Once titles and chart labels had been added the final charts and tables could be inserted into the thesis document.

For data, which required cross-tabulation of statistical data, SPSS was used. SPSS is now the accepted name for what was originally called Statistical Package for the Social Sciences. It has been in existence since the mid-1960s and is regularly updated by the software manufacturer (Bryman, 2012). Auckland University of Technology is currently using SPSS version 22 and the software package is available for use by all Auckland University of Technology students free of charge.

Analysis of the interview transcripts was conducted using NVivo, a qualitative data analysis tool which allows users to upload written material and code sections for text according to themes identified by the researcher.

The primary codes used to identify themes in the interview transcripts were directly related to the issues investigated during the interviews. They were:

- challenges faced by interpreters in healthcare settings (challenges)
- interpreters' view of risks posed to deaf clients in healthcare settings (risks)

- coping strategies used by interpreters in healthcare settings (strategies)
- interpreters' perspective of their role in healthcare settings (role).

After dividing the data into the primary areas of investigation it was then possible to analyse the transcripts in terms of themes. Responses from different participants could then be compared and common themes identified.

One of the common criticisms of using a coding system is that the context of what has been said may be lost due to chunks of text being copied from the original transcript and stored under codes related to each individual theme (Bryman, 2012). In an effort to minimise the risk of loss of context occurring, printed copies of the transcripts were used when writing up the analysis of the interview transcripts to ensure no quotes or themes were being reported out of context.

3.7 Researcher background and potential biases

As the researcher is also an active member of the NZSL interpreting community it was necessary to be cautious of not anticipating participants' responses when preparing the online survey. This was controlled by providing options for participants to choose from for ease of analysis but also by providing a section at the end of each section to allow participants to offer additional relevant information.

When conducting the one-to-one interviews, the researcher was aware of the need to ask open questions which did not lead the interviewees in any way. Gibson and Hua (2016) note that outcomes can be influenced by a number of factors including the phrasing of questions, the tone used in asking questions and the interviewer's body language. An important part of the researcher's role was to constantly monitor the language she used while interviewing and ensuring the researcher did not start to discuss issues with participants rather than gathering information.

The researcher has previously worked as an interpreter trainer and was aware that two interviewees were former students and that this may have affected their disclosure of interpreting practice during interviews.

Chapter 4 Findings and Discussion - Online Survey

4.1 Introduction

Previously we looked at the methodology used to undertake this study. In this chapter the results of the online survey will be presented and discussed.

4.2 Survey responses

The invitation to participate in the online survey was sent to all full members of SLIANZ (approximately 75 people), and generated 28 individual responses. It is difficult to provide an exact number of potential respondents as SLIANZ is growing as an organisation all the time. As at 7 December 2015 the number of ordinary members of SLIANZ had risen to 82 (A. Davidson, treasurer of SLIANZ, personal communication, 7 December 2015). On the 8 September 2014 when the survey was opened the pool of potential respondents was approximately 75, which makes the response rate 37%. In terms of online survey results this is considered to be a good response rate. Manfreda, Bosnjak, Berzelak, Haas and Vehovar (2008) found that when they compared the results of 45 web-based surveys with response rates of other survey modes, on average the webbased surveys yielded response rates 11% lower than surveys presented via mail, email or telephone. Baruch and Holtom (2008), in their analysis of 463 web-based surveys conducted between 2000 and 2005, showed an average response rate from individuals of 52.7% with a standard deviation of 20.4%. Nulty (2008) also noted differences in response yields between web-based and face-to-face survey methods. Nulty's study looked at student evaluation surveys across a number of Australian Universities. There were significant differences, up to 37% in one case, between the face-to-face and webbased surveys, however these significant differences could partly be accounted for by the power differential between faculty members and students when asked for evaluation forms to be filled out in face-to-face situations. Bryman (2012) states that the important point is to recognise and document the potential limitations and the implications of this on the study as a whole. With that in mind the implications of this study having a response rate of 37% is that although the numbers appear low, it is an average to above average response rate for a web-based survey. It also needs to be noted that all respondents were members of the Sign Language Interpreters' Association of New Zealand (SLIANZ), and well over one third of members responded to the survey. Given the response rate of 37%, any conclusions drawn from the results may not be able to be taken as definitivehowever this study does provide strong baseline information to form a starting point for future research projects.

4.2.1 Survey participants' demographics

All respondents were 20 years of age or over (n=28) with 82% (23/28) giving their age as 30 years or over. As previously mentioned the gender of the respondents was not recorded, as with male members of SLIANZ making up around 10% of total membership, identifying gender may have affected the right to anonymity of respondents.

Age Range of Participants				
Total and Percentages by Age Range				
Age Range	Number	Percentage		
20–29	5	17.86		
30–39	7	25.00		
40–49	10	35.71		
50+	6	21.43		
I prefer not to answer	0	0.00		
Total	28	100.00		

Table 4.1: Age range of respondents

It was also important to consider the years of experience that the respondents have.

Years of Interpreting Experience of Respondents					
Total and Percentages by Years of Experience					
Years of Interpreting Experience	Number	Percentage			
0–2	5	17.86			
3–5	4	14.29			
6–10	7	25.00			
11–15	6	21.43			
15+	6	21.43			
Total	28	100.00			

Table 4.2: Respondents experience as interpreters

In terms of years of interpreting experience, Table 4.2 shows that the respondents represented a fairly even spread across the range of options. Five respondents reported

having 0–2 years' experience, four respondents reported having 3–5 years' experience, seven respondents have 6–10 years' experience, six have 11–15 years' experience and six have 15 years or more experience of working as a NZSL interpreter. This shows that 12 out of the 28 respondents (43%) had more than ten years' experience working as a sign language interpreter. However as shown in the next table, Table 4.3, they spent a relatively small number of hours in healthcare settings.

Hours Spent Interpreting in Healthcare Settings Each Week					
Total and Percentages by Hours					
Average number of hours per week	Number	Percentage			
0–2	15	53.57			
3–5	10	35.71			
6–9	2	7.14			
10+	1	3.57			
Total	28	100.00			

Table 4.3: Average hours spent interpreting in healthcare settings

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As is shown Table 4.3, a relatively small number of hours is spent by individual interpreters in healthcare. The majority of respondents worked between 0–5 hours (25 respondents) 15 worked 0–2 hours/week and 10 worked 3–5 hours/week in healthcare situations. Three reported working more than 5 hours per week with only one of those three working more than 10 hours per week in healthcare situations. It should be noted here that Gilbert and McKee (2013) report that 25–30 hours of 'contact' time spent actually interpreting is considered by many to constitute the average full-time work load. This does not include travel time or administration time spent preparing for assignments or undertaking tasks such as invoicing and replying to work requests. If 25 hours per week is taken as the maximum hours worked, results show that 88% (25/28) of respondents spend a maximum of 20% of their time working in healthcare settings. The NZSL Interpreter Employment Survey Report reports that 81% of respondents reported only working 0–6 hours in community settings each week. In the Gilbert and McKee study (2013) community settings included doctors' appointments, functions, meetings etc. Gilbert and McKee (2013) did not offer any further breakdown of categories.

The number of respondents in Table 4.3 who indicated they spend 6 or more hours each week working in healthcare settings is 12% of all respondents. This finding is similar to

Gilbert and McKee (2013) who found that only 19% of respondents to their survey worked 6 or more hours in community settings, which included personal appointments, functions and meetings along with healthcare settings. This does provide some indication that, although the sample size of this research is relatively small, the similarities in statistical information lend validity to the project. Next, we will look at the qualifications of the interpreting respondents.

Table 4.4: Qualifications held by Respondents

Interpreting Qualifications held by Respondents					
Total and Percentages by Qualification					
Name of Qualification	Number	Percentage			
Diploma in Sign Language Interpreting (AIT or AUT)	24	85.71			
Certificate in Advanced Interpreting - Health	1	3.57			
Bachelor of Arts: NZSL-English Interpreting	3	10.71			
Graduate Diploma in Arts: Interpreting	0	0.00			
Post-graduate Diploma in NZSL Interpreting	2	7.14			
Master's Degree in Interpreting	0	0.00			
NAATI Paraprofessional Interpreter (formerly level 2)	1	3.57			
NAATI Professional Interpreter (formerly level 3)	0	0.00			
PhD	0	0.00			
Other (see below)	3	10.71			
Total	28	100.00			

The three respondents specified in Table 4.4 as holding a qualification other than those listed in the questionnaire table provided the names of the following qualifications:

- BSL English Bachelor of Arts and Post-Graduate Diploma (BSL is the acronym for British Sign Language)
- (AUT) Certificate in Advanced Interpreting Legal
- Diploma of Interpreting (Auslan) at TAFE

 (Auslan is the term used for Australian Sign Language and TAFE is the
 institution for Technical and Further Education in Australia.)

4.3 Participants' responses to questions

4.3.1 Challenges encountered by interpreters working in healthcare settings

Participants were asked to indicate what challenges they encountered and to also indicate the frequency with which these happen.

As shown in Figure 4.1 below there were thirteen challenges provided as part of the online questionnaire, along with an 'other' option which respondents could use to add any other challenges not listed.

The frequency options provided were Never, Hardly Ever, Sometimes, Regularly, Often and Not Applicable (N/A). As the terms Regularly and Often were not clearly defined in the questionnaire, these figures have been combined into one category named Regularly when presenting the results of the online questionnaire. The option Not Applicable was not selected by any of the respondents for any of the questions in the online survey and as such has been excluded from the analysis.

All 28 participants in the online questionnaire responded to all thirteen of the challenges listed.

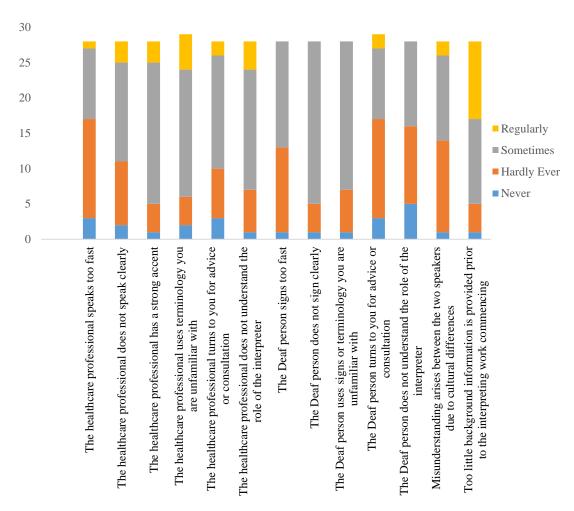


Figure 4.1: Challenges encountered by NZSL Interpreters when interpreting in healthcare settings.

4.3.2 Challenges encountered with healthcare professionals

The following six areas of the challenges encountered by NZSL interpreters when interpreting in healthcare settings relate specifically to working with the healthcare professional.

The healthcare professional speaks too fast:

Participants indicated that the healthcare professional speaking too fast can be challenging for them as interpreters; however only one participant (3%) found this to be a challenge on a regular basis. Ten participants (36%) believed this to be a challenge sometimes, while the remaining 17/28 respondents (61%) did not believe the healthcare professional speaking too fast was a challenge for them when working in a healthcare setting. These figures differ to those reported by Crezee, Jülich and Hayward (2011) in their study of the issues faced by interpreters and professionals working in refugee

settings. Professionals speaking too fast was reported as a commonly faced challenge by 24% of the survey respondents who worked as interpreters in refugee settings. As only one respondent (3%) highlighted this as occurring regularly, the difference may be that NZSL interpreters generally speak English as a first language and spoken language interpreters often speak English as a second or subsequent language.

Early experiments focused on the cognitive ability impacting the length of the time lag used by interpreters included Treisman (1965) and Gerver (1969). These important early works showed that increased rate of production in the source text led to an increase in the decision load between input and output in simultaneous interpretation due to two selections needing to be made. The first selection is comprehending the word or phrase heard and the second selection consists of selecting an appropriate response or selecting the equivalent word or phrase in the target language.

The interpreter's ability to transfer a complex source message being spoken at an increased rate of production is likely to be impaired if the target language does not contain equivalent lexical items for concepts being produced. In the case of signed language interpreters working from a linear spoken language into a visual spatial signed language, the rate of utterance will have an impact on the interpreter's ability to produce a clear message in the target language.

The healthcare professional does not speak clearly:

This particular aspect of unclear speech in healthcare interpreting was viewed as being challenging by the participants. Three of the twenty-eight respondents (11%) found the clarity of the healthcare professionals' speech to be challenging on a regular basis and a further 14/28 (50%) found it to be challenging some of the time. Two of the 28 respondents (7%) never find the health professionals' clarity of speech to be a challenge, with nine others (14%) indicating it is hardly ever a challenge. With 61% of all respondents reporting that they viewed this a challenge, there is clearly a need to focus training on providing coping strategies to deal with this type of issue. In Crezee, Jülich and Hayward (2011) 44% of respondents also indicated they have problems interpreting when professionals mumble or spoke in a low voice. The authors go on to point out that "the guidelines taught in New Zealand and Australia permit interpreters to interrupt and ask speakers to slow down or to moderate delivery" (Crezee, Jülich & Hayward, 2011, p. 260). While this is correct, it would be good to know how many interpreters have the confidence to interrupt and ask for clarification in healthcare situations where time with

the healthcare professional is often limited. Furthermore, the need to be seen to be behaving efficiently and effectively within the healthcare environment is important if interpreters are to be viewed as professionals by the healthcare professionals. Seeking clarification from the healthcare professional has the potential to make the interpreter look as if they are struggling and not able to cope with the situation. As Hale (2007) highlighted, "[p]rofessionals who have had to acquire a university degree in order to practice tend not to treat the interpreter as an equal if the interpreter has not been educated at university level" (Hale, 2007, p. 35). This along with lack of understanding of the role of the interpreter impact on the ability of interpreters to seek clarification from the healthcare professional.

The healthcare professional has a strong accent:

When asked to indicate if working with healthcare professionals who have a strong accent was challenging, 17% of all participants (5/28) responded with Never (1/5) or Hardly ever (4/5). Twenty of the 28 participants, i.e. 71% of all respondents, revealed they found strong accents a challenge sometimes. The remaining 3/28 (10%) respondents said that when interpreting with professionals who had a strong accent, they found it challenging on a regular basis. Anecdotal evidence suggests that the number of overseas-trained medical professionals working in New Zealand appears to be increasing. While exact numbers were not readily available, statistics from Immigration NZ show that 2,326 applications from medical doctors were approved between 2007 and 2011 and the long-term skills shortage list issued by Immigration NZ includes a large number of medical professional jobs (Immigration New Zealand, 2016).

With 81% of respondents indicating that they find healthcare professionals' strong accents challenging, this is clearly an area where more training for interpreters is appropriate.

In a previous study focusing on patient and provider perceptions of healthcare delivery to patients from culturally and linguistically diverse backgrounds, Australian researchers found that the eight Arabic interpreters, who were judged to have a good level of spoken English proficiency, struggled to understand the accents of English-speaking Indian or Chinese doctors (Komaric, Bedford & van Driel, 2012) This type of problem with language understanding affected all levels of treatment and led to communication breaking down between support staff, healthcare providers and patients. If interpreters are also citing difficulties in understanding English spoken by healthcare professionals with

strong accents, the potential to misunderstand the source text is increased. This view is supported by a previous study where comprehension difficulties arise due to deviation in prosodic and phonemic production brought about by different accents, although research into the specific impact of accents on interpreting outcomes has been sporadic. Komaric, Bedford and van Driel (2012) investigated how an interpreter working in the simultaneous mode was affected by predominant phonemic and prosodic features in the speech of non-native English speakers. Of special interest is the statement that no participants who had listened to prosodically deviated versions of a source text reported comprehending over 80% of the source text (Lin, Chang & Kuo, 2013). The same study goes on to note that in addition to pronunciation issues, inappropriate pauses disrupted the study participants' ability to correctly identify grammatical pauses and word stresses. The participants described the source text as monotonous and lacking in pauses, even though none of the participants identified problems with incorrect word stresses, leading researchers to conclude that differences in the components of prosody (intonation, stress and rhythm) do not have an equal impact on speech perception (Lin, Chang & Kuo, 2013).

The healthcare professional uses terminology you are unfamiliar with:

The terminology used in healthcare settings can be challenging for interpreters. Eighteen out of 28 participants (64%) indicated that they found unfamiliar healthcare terminology challenging sometimes, and 15% or 5/28 indicated that this is a challenge they face regularly. With 79% of participants in the online survey indicating that unfamiliar terminology being used by healthcare professionals is a challenge for them, this has the potential for adverse outcomes for both deaf patients and healthcare professionals.

Hale (2007) states that successful healthcare provision relies heavily on successful communication between the healthcare professional and the patient, and language plays a large role in communication. In an interpreted situation where the interpreter does not understand the terminology used by the healthcare professional there is the potential for adverse outcomes for the deaf patient (Komaric, Bedford & van Driel, 2012). Even in a situation where the healthcare professional and patient share a common language background there is the potential for the use of medical terminology to impede successful communication as the patient may not be familiar with the terms, or may not be very 'health literate'. If an interpreter is also present in the interaction, the use of terminology and need for clarification are now doubled (Napier, Major & Ferrara, 2011). If the interpreter does not understand the terminology used by the healthcare professional, they

will need to either ask the healthcare professional for clarification of the term used or they will need to work around the term in some way, one option being to fingerspell the word directly to the patient while having no understanding of the concept. Training interpreters to have a good basic understanding of body systems, commonly-encountered pathology, diagnostic studies and treatment plans (Crezee, 2013) would allow interpreters to paraphrase rather than fingerspelling terminology used by healthcare professionals. The use of fingerspelling and/or initialisation of medical terminology may seem like a viable option to the interpreter but in fact places the onus of clarification on to the deaf patient, who may have little or no understanding of the terminology being used and may not be confident enough to ask for an explanation. Coping strategies of this type are seen as making the interpreter an active participant in the interaction through their reformulation, clarification or editing of the source text (Napier, Major & Ferrara, 2011; Angelelli, 2004; Metzger, 1999). Use of these strategies may still not be of benefit in helping the patient to understand because spelling an unfamiliar word does not explain its meaning.

The healthcare professional turns to you for advice or consultation:

Having the healthcare professional ask the interpreter for advice or consultation can happen for a number of reasons. Generally speaking, it occurs because the healthcare professional does not work with interpreters or deaf people very often, and therefore healthcare professionals may not know how to work with interpreters effectively.

One of the 28 of respondents indicated that this was challenging for them often and another one (4%) revealed it was a challenge on a regular basis. Of the remaining 26 participants, 10% never encountered this, with a further 25% responding that they hardly ever encountered it. The remaining 57% of participants indicated that they encountered this sometimes. With 65% of participants indicating that the healthcare professional consulted with the interpreter or asked them for advice, there is sufficient evidence to show that direct consultation with the interpreter is a challenge that interpreters have found distracted them from their work. As it is likely this occurs because of a lack of understanding of the role of the interpreter, further analysis of this particular topic will be included in the section below.

The healthcare professional does not understand the role of the interpreter:

The majority of participants indicated that the healthcare professional not understanding the role of the interpreter is a challenge they encountered. Seventeen of the 28 respondents or 60% find this challenging sometimes, 15% regularly experience this type of challenge.

The remaining 25% either never find it challenging or hardly ever find it challenging. One respondent provided the following example of how the healthcare professional may misunderstand the role of the interpreter or talk directly to the interpreter:

Healthcare professionals grab or pat interpreter to compensate for reduced eye contact. Or forget that the interpreter is speaking for the deaf client leading to confusion E.g.: Doc[tor] says "no why would I want you to get up on the bed?" I [the interpreter] say "the interpreter is still interpreting for the deaf client" Doc[tor] responds Oh...oh of course. Survey respondent #18

The lack of understanding of role is more probably caused by a lack of education on the role of the interpreter, rather than an intended slight by the healthcare professional.

Question 11 of the online survey asked participants how often they explained their role to the healthcare professionals: 46% of respondents reported explaining their role sometimes, with 29% of respondents explaining their role regularly. The total of 75% of respondents explaining their role seems to indicate that healthcare professionals need to be trained on how to work with interpreters and what the role boundaries are. With this in mind, the education of healthcare professionals on how to work with interpreters and possibly specifically sign language interpreters may be a recommendation to follow up with the appropriate education providers. In the past, organisations such as NZSTI and SLIANZ have worked collaboratively with the judicial system to provide training for judges on interpreters working in court. Perhaps the same undertaking could be trialled at a District Health Board level, or at one of the University Medical Schools. Currently undergraduate medical students at the University of Auckland receive training in working with spoken interpreters prior to beginning their clinical attachments, but working with sign language interpreters is not specifically focused on (S. Esteves, co-facilitator personal and professional skills, University of Auckland, personal communication, 23 May 2016).

It should also be mentioned here that as sign languages are visual spatial languages the healthcare professional only physically hears one voice. With interpreters working in the first person there is always the opportunity for the healthcare professional to not see the deaf patient signing and/or to misunderstand who is responding to a question or direction.

Dickinson and Turner suggested that a legitimate part of an interpreter's professional behaviour is to overtly provide an "appreciation and understanding" (2014, p. 172) of the interpreting process to the primary participants of a communicative interaction.

Explaining the role of the interpreter to any participants in an interpreted encounter is the responsibility of the interpreter, so if there is confusion over the interpreter's role the onus is on the interpreter to make their role clear.

4.3.3 Challenges encountered with deaf clients

Respondents indicated that the issues referred to in questions 7 (g) 'the deaf person signs too fast', 7 (h) 'the deaf person does not sign clearly' and 7 (i) 'the deaf client uses terminology you are unfamiliar with' did not present a challenge to them. On reflection, there are a number of reasons why respondents did not feel challenged by these occurrences.

Firstly, responses by deaf patients during a healthcare appointment are generally in relation to a direct question from the healthcare professional. Having a basis on which to formulate the response allows interpreters to use their closure skills when producing an appropriate response. This technique was developed in the early 1950s and is based on the concept that when confronted with gaps in verbal communication, people used "their lexical and grammatical knowledge to fill in what is missing" (Pöchhacker, 2004, p. 119). An example of using closure skills for interpreting would be when a speaker says 'please return to your seats (interpreter missed this word) after the break, as we have a lot to get through in the afternoon.' As the interpreter has missed the word spoken after seats, he/she uses closure skills to fill in the blank with the word 'quickly'.

Secondly, sign language interpreters are more likely to have a signed language as their second acquired language (L2) rather than their first language (L1). Research has shown that sign language interpreters prefer to work from L1 into the target language L2 and believe themselves to be more proficient when working in that direction. Nicodemus and Emmorey (2015) conducted a study involving both experienced and novice ASL interpreters to test whether the preference was reflected in the actual interpreting performance. Although some children of deaf adults (CoDAs) (Brother, 2016) undertake interpreter training, most interpreters have NZSL as a second language. Research results showed that even though novice interpreters believe they are better at interpreting from L1 to L2, they are in fact more fluent and accurate working from their L2 to their L1 (Nicodemus & Emmorey, 2015). Experienced interpreters involved in the same study showed little or no difference between their L1 to L2 and L2 to L1 renditions. This supports the proposition that "the high cognitive demands of language production" (Nicodemus & Emmorey, 2015, p. 157) are best met working from L2 to L1, or when

interpreting into their native language if interpreters lack experience and lack a greater level of fluency. If in fact an interpreter's receptive skills when processing information in their L2 (in this case NZSL) are stronger than their production skills when providing output in their L2, it goes some way towards explaining why 79% of respondents found terminology challenging when working from their L1 to their L2. It may be more a challenge in making appropriate lexical decisions in the L2 rather than an understanding of the terminology in the L1. Lastly, English medical terminology consists of Latin and Greek roots (Crezee, 2013) and can be difficult to understand even for native speakers of English, whereas medical signs have been organically developed by signers and may be easier to understand. This is an area which could be researched further in the future through appropriate use of interpreting performance analysis and participant interviews.

Lastly, it is possible that interpreters feel more comfortable with clarifying messages with the deaf patient. Hence the pace, terminology used and clarity of signing are not perceived as a challenge as they are utilising skills to eliminate the challenge as it happens. Interpreting students are taught explicit tools to use when interrupting and clarifying during an assignment, and although these skills are designed to be used with both participants in an interpreted situation, given the affinity sign language interpreters often feel for the Deaf community there is the possibility that the interpreter is more comfortable revealing their 'weaknesses' to the deaf patient rather than the hearing healthcare professional. Research has also shown that asking for clarification is a sign of being more professional as it shows that the interpreter is monitoring their own output and therefore displaying that they are behaving ethically and within their level of competency. Major (2014, p. 63) states that clarification is an important tool for any healthcare interpreter, and that practitioners and patients expect interpreters to clarify information regardless of their experience, confidence and/or nativelike bilingual fluency. Clarification is essential in ensuring accuracy and mutual understanding between all participants and "also promoting trust in the interpreter's abilities" Major (2014, p. 63).

The deaf person does not understand the role of the interpreter:

As a small majority of participants (16/28), 57% indicated that they did not believe deaf people who lack understanding of the interpreter's role are a challenge. However, the remaining 12/28 (43%) respondents reported that they sometimes found deaf people who did not understand the role of the interpreter to be a challenge.

While results of the online survey indicate that the deaf person not understanding the role of the interpreter was not viewed as being a major challenge to the interpreter working in healthcare situations, clarification of the potential ramifications of lack of understanding should be noted.

One respondent added a comment indicating that they take steps to ensure the deaf person gains an understanding of the role of the interpreter for future appointments:

Clarification of role boundaries either during or after a job to ensure the client is clear in future. Survey Respondent #7

In any interpreted situation, the professional sign language interpreter is required to perform a complex task which can at times be both mentally and physically draining. When participants are unaware of the interpreter's role there is the possibility that extra strain is being put on the interpreter as they work harder to ensure the deaf client understands what is happening and what is being said. Extra strain of this kind can lead to physical injury in the form of occupational overuse disorders in interpreters (Madden, 2005).

Lack of understanding of the interpreter's role and what the interpreting dynamic entails can mean the deaf client is not receiving the standard of access to information they should be, and in some situations may not be adequately informed when making decisions regarding their healthcare. Stratiy (2005), a Deaf interpreter who works alongside hearing sign language interpreters in the United States, talked about the risks involved when interpreters are expecting the deaf person to understand what is happening in an interpreted situation. Examples given are the use of first person and third person pronouns in the interpreted discourse. When a deaf person is unfamiliar with the interpreter's role, if first person pronouns are used they may believe the interpreter is speaking rather than the healthcare professional.

As has been shown in the above discussion, while interpreters may not view the lack of understanding of the interpreter's role as a challenge, there is always the potential for misunderstanding if the interpreter does not explain their role to a deaf person who they have not interpreted for previously.

The deaf person turns to you for advice or consultation:

Again, most of the participants indicated that having the deaf person ask for advice or turn to them for consultation is something they either never encountered (11%) or hardly

ever encountered (50%). However, two participants (7%) said they regularly encountered this type of challenge, with the remaining 9 respondents (32%) revealing that this is something they encountered only some of the time.

This does not appear to be a challenge which the majority of interpreters working in healthcare settings were facing on a regular basis. A challenge that was faced by many is that caused by cultural differences.

4.3.4 Misunderstanding due to cultural differences

Half of all respondents revealed that this was an issue they encountered sometimes or regularly. Twelve out of the 28 (43%) participants encountered misunderstandings between the two speakers sometimes, and 2 of the 28 (7%) respondents believe misunderstandings challenged their interpreting practice in some way on a regular basis.

Of the remaining half of the participants, 13/28 (47%) indicated that they hardly ever encountered challenges related to culturally based misunderstandings between the two speakers. Only one person responded that this was something they never encountered when interpreting in health settings.

With the respondents being evenly split on whether cultural differences causing misunderstandings between the two speakers was a challenge when working in healthcare interpreting situations, no firm conclusions can be drawn regarding this issue. However, any misunderstandings caused by cultural differences must be noted. Scholars agree on the need for cultural adjustments in our interpreting practice and the responsibility the interpreter has in ensuring cultural adjustments are applied in a respectful manner. Mindess (2006) states that when differences in cultural styles leads to a breakdown in communication all participants become annoyed and the original intentions of the communication are lost. Mindess (2006) suggests that if "we believe every culture is equally deserving of respect, then no culture is 'wrong'" (Mindess, 2006, p. 213). When interpreting is viewed as work between two languages and cultures, interpreters then have a duty to preserve the underlying intent of the speaker's message (Mindess, 2006; Morris, 1999). By preserving the intent, interpreters are making the necessary cultural adjustments to avoid cross-cultural conflict arising (Hale, 2014). Too little background information is provided prior to the interpreting assignment

This is the only section of the question relating to challenges faced in healthcare interpreting settings where a significant number of participants reported encountering this

type of challenge often or on a regular basis. Eleven of the 28 (39%) respondents reported regularly encountering a lack of preparation information. Twelve more participants (43%) sometimes encountered too little background information before an assignment commencing. Only one person (3%) never encountered this type of challenge and four respondents (15%) were hardly ever challenged by too little background information being provided prior to interpreting assignments commencing.

Accessing information regarding a patient prior to an interpreting assignment in healthcare settings will always be a difficult challenge to overcome. Concerns around patient confidentiality play a large part in lack of access to preparation materials and this is understandable. Napier, Major and Ferrara (2011) give a succinct and accurate assertion which encapsulates the lack of access to information before a healthcare interpreting assignment. The fact is that there is no way any interpreter can predict what will occur in every healthcare assignment. The interpreter is also unlikely to be able to predict whether he or she has sufficient background knowledge to accept a healthcare interpreting assignment (Napier, Major & Ferrara, 2011). To counteract this lack of access to information however, interpreters are able to take steps to increase their general knowledge of medical terminology and healthcare procedures. A number of resources are available both online and in hard copy along with educational courses, workshops and conferences which interpreters can attend. One respondent provided a comment which is relevant to this portion of the online survey:

If another interpreter has done the appointments and I come in, the context may be too high for clear understanding. Survey Respondent #6

My understanding of this comment is that it relates to the need for continuity of service for all the clients involved. It is both a logistical matter for booking agencies to consider and a challenge for interpreters who come into interpreting assignments with little or no prior knowledge of preceding appointments. This has the potential to impact the outcomes for both the deaf and hearing clients. Having to explain background information to interpreters not previously involved with the patient means that the time for discussion between the healthcare professional and deaf client is taken up with this briefing. Additionally, a previous New Zealand study showed that health professionals rarely took the time to brief interpreters (Crezee, 2003), except in mental health settings. Where possible healthcare professionals and deaf clients should be able to request a specific interpreter to allow either continuity of service provision or to ensure an interpreter with the required skill level and situational knowledge is booked. In situations where continuity of interpreter provision cannot be achieved perhaps some form of professional information sharing needs to be considered. Respondents also commented on situations where the felt the deaf client's needs had either not been met or where they perceived the deaf client to have been put at risk.

4.4 Deaf client's needs have not been met and/or the deaf client has been put at risk.

One of the areas of healthcare interpreting that was important to explore was whether New Zealand Sign Language interpreters believe deaf peoples' needs are met in interpreted healthcare situations. Anecdotal evidence suggests that NZSL interpreters working in healthcare settings have on occasion raised concerns over the adequacy of service provision to deaf clients. Concerns raised anecdotally during workshops or conference discussions have included occurrences which could be perceived as minor such as deaf patients never receiving a cup of tea off the tea trolley as they never hear the person calling for orders from patients. More serious concerns have been raised on occasion, including an incident where a deaf client with minimal understanding of medical procedures had no access to an interpreter when their partner's terminal cancer and palliative care options were being discussed.

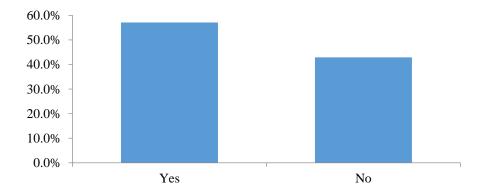


Figure 4.2: I have left a healthcare interpreting situation feeling that the needs of the Deaf client have not been met.

As can be seen in Figure 4.2, 57% of respondents felt the deaf client's needs had not been met in a healthcare interpreting situation. With more than half of the respondents indicating they felt this way there is evidence that it is a serious concern. As shown below, others agree.

In recent years, a number of studies across different countries have looked at the disparities experienced by deaf and hard-of-hearing individuals in the healthcare sector

(Orsi, Margellos-Anast, Perlman, Giloth & Whitman, 2007; Steinberg, Wiggins, Barmada & Sullivan, 2002). The results of that research showed many areas of concern including:

- knowledge deficits around the names and purposes of medical tests (Orsi, Margellos-Anast, Perlman, Giloth & Whitman, 2007);
- a lack of knowledge about different forms of cancer and the terminology related to cancer (Orsi, Margellos-Anast, Perlman, Giloth & Whitman, 2007);
- hesitancy on behalf of deaf people to ask questions about health-related issues (Steinberg, Wiggins, Barmada & Sullivan, 2002);
- distrust of healthcare professionals (Sadler, Gunsauls, Huang, Padden, Elion, Galey, Brauer & Ko, 2001).

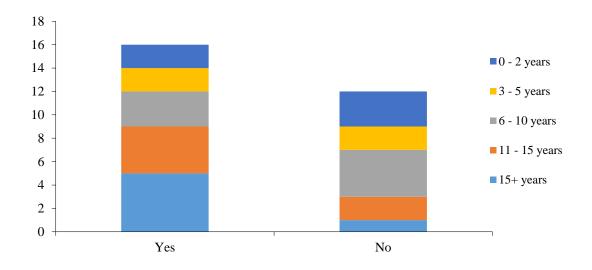


Figure 4.3: Interpreters who have left a healthcare interpreting situation feeling that the needs of the Deaf client have not been met, with years of experience.

A high number of respondents with 15+ years' experience indicated that they had left healthcare assignments feeling that the deaf client's needs had not been met. The fact that a majority of respondents with 11–15 years' experience also felt that on occasion the deaf client's needs had not been met is a clear indication that more research in this area is needed to improve outcomes for deaf clients in healthcare situations.

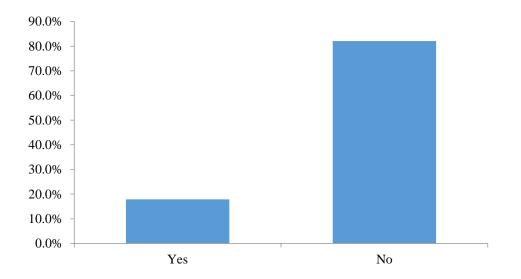


Figure 4.4: I have left a healthcare interpreting assignment feeling that the Deaf client has been put at risk because their needs have not been met.

When asked whether they had ever left a healthcare interpreting assignment feeling that the deaf client had been put at risk because their needs had not been met, only 17.9% of respondents indicated they had felt this way, as can be seen in Figure 4.4. It is not clear why these respondents felt this way; however, there could be a number of factors at play including:

- even though deaf clients may not be provided with the level of access to healthcare to fully meet their needs in some areas such as communication or access to information, the healthcare professional is taking care to ensure any risk is mitigated. An example would be providing abridged information to save time at an appointment
- interpreters may be utilising strategies to ensure clients are not leaving healthcare appointments if there is a possibility of the deaf client being left at risk. Strategies used may include clarifying information with the healthcare professional until the interpreter is satisfied the deaf client has enough information to not be at risk.

The above reasons are speculative; further research would need to be undertaken to ascertain actual reasons for interpreters feeling the deaf client had been put at risk.

Cross-tabulation of years of experience and perceptions as to whether the deaf client had been put at risk showed that 82% (23/28) of all respondents irrespective of the number of years of experience had not left a healthcare interpreting assignment feeling the deaf client had been put at risk.

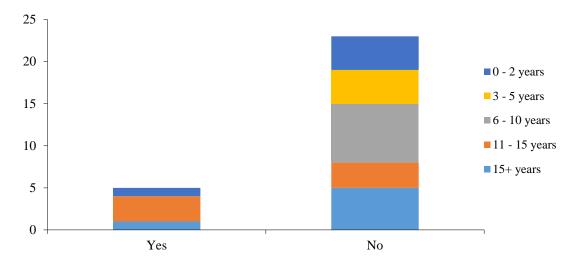


Figure 4.5: Interpreters who have left a healthcare interpreting assignment feeling that the Deaf client has been put at risk because their needs have not been met, with years of experience.

Again, as the survey did not ask, there is no clear explanation for this. However, it may be that interpreters with more experience may have been the ones attending assignments where there was a higher likelihood of risk to the deaf patient. Although there may be several reasons why respondents did not feel that the deaf client had been placed at risk by their needs not being met, it is difficult to reconcile 57% of respondents feeling the deaf patient's needs had not been met against the 18% who believed the deaf person had in fact been put at risk.

One factor that may have influenced respondents' awareness of deaf clients' needs not having been met may involve their own experiences as healthcare consumers. When interpreters themselves have been consumers of healthcare, such experiences may have caused them to reflect on possible differences between experiences as a hearing or a deaf healthcare consumer. Such reflections may in turn have made them more aware of different situations where the deaf clients' needs were not met. Although having insights into the deaf client's experience is valuable and provides the interpreter with perspectives on which to base their professional practice, such an increased awareness may also carry a certain amount of risk for the interpreter such as vicarious trauma.

Interpreters are privy to information and witness behaviours that have the potential to cause vicarious trauma in the interpreter and this is becoming an area of research internationally (Lai, Heydon & Mulayim, 2015; Crezee, Atkinson, Pask, Au & Wong, 2014; Bontempo & Malcolm, 2012; Harvey, 2003 & 2015). Harvey (2003) wrote on the perils of empathy and how interpreters need to shield themselves from caring too much. In this article, Harvey explained that when deaf people become resigned to that cultural insensitivity, disrespect and prolonged stress and trauma that are ongoing occurrences in their lives, this can have an adverse effect on the interpreter who becomes oversensitive to the perceived denigration of the deaf person. Splevins, Cohen, Joseph, Murray and Bowley (2010) interviewed eight interpreters working in therapy settings with asylum seekers and refugees. Although these participants were spoken language interpreters, the feelings of vicarious trauma were the same as those described by Harvey (2003). Participants reported feeling confusion around professional and personal boundaries. The study found that participants' emotions, both negative and positive, tended to be in tune with the clients, with participants describing a change in their own world-view as a result of experiencing vicarious trauma (Splevins, Cohen, Joseph, Murray & Bowley, 2010). More recent studies focusing specifically on sign language interpreters provide an insight into the reasons vicarious trauma may occur in sign language interpreters. These include the need to deliver negative and potentially life-threatening information to consumers in what are often emotionally charged situations (Bontempo & Malcolm, 2012). By and large interpreters are responsible for managing vicarious trauma themselves and Bontempo and Malcolm (2012) outline some of the steps interpreters take to prevent or lessen the effects of trauma. These included inactive coping strategies such as isolating oneself, apathy, aggression or taking on more work, often too much, to avoid processing negative feelings. Other coping mechanisms mentioned by Bontempo and Malcolm (2012) were more active and included seeking peer and social support, mentoring, spiritual care and counselling.

One survey respondent provided the following list of challenges he/she faced. The challenges mentioned could also contribute to vicarious trauma, especially if they are commonly experienced by other interpreters as well. Anecdotal evidence would suggest that these issues are in fact prevalent within the healthcare interpreting environment: therefore, it seems likely that sign language interpreters may have encountered at least some of these on a regular basis:

- medical misadventure (interpreter privy to prejudicial info);
- *hearing family members responding on behalf of deaf patient medical professionals not taking charge of this;*

- *family obstructing deaf voice (sometimes intentionally);*
- gaps in knowledge of deaf clients eg procedures/terminology, blood transfusions, purpose of placenta, medication names and purpose;
- unconscious patient means no communication; patient unable to use arms means difficult communication.

Survey Respondent #22

There are a number of avenues available for the healthcare sector to increase the quality of access for deaf clients and reduce the potential for vicarious trauma effects for interpreters.

These include use of qualified professional deaf interpreters who would work alongside qualified hearing interpreters to relay important healthcare information to deaf clients who may be experiencing difficulties accessing the information from a hearing interpreter. Deaf interpreters are described by Boudreault as possessing "the linguistic and cognitive adaptability to generate and transmit messages that satisfy a wide variety of deaf consumers with a range of communication abilities" (2005, p. 352). Deaf interpreters are able to break down information signed by a hearing sign language interpreter into a more visual form of sign language due to sign language being their first language, in the same way as speakers who have English as a first language are able to break information in their first language down into a simplified version. Napier, McKee and Goswell (2006) further explain that a deaf relay interpreter is employed to work alongside hearing interpreters in situations where ordinary interpreted communication would be difficult, such as mental health appointments, or where the deaf client has "minimal or limited language skills or uses idiosyncratic signs the hearing interpreter may not be able to understand" (Napier, McKee & Goswell, 2006, p. 144). All of these situations may occur in healthcare settings.

Another option for increasing the quality of access for deaf clients is provision of patient navigators. The role of patient navigators is described by Crezee (2014) as reducing barriers related to patient care. Barriers to patient care might include:

- cultural and linguistic differences
- financial issues
- time issues
- transportation issues
- health literacy

• literacy and numeracy

(Crezee, 2014, p. 8)

While this concept is relatively new to New Zealand, research conducted overseas indicates that patient navigation is helping to improve patient access to preventive care programmes and follow-up appointment attendance (Wells, et al., 2008). Navigators may not be able to resolve any or all of the issues experienced by deaf patients but they are able to liaise directly with healthcare professionals and make them aware of the impact such issues or 'barriers' may have on patients' access to adequate healthcare. Patient navigators work with patients over a longer period of time (not just during an interpreter-mediated interaction with a healthcare professional) and strive to empower patients to gain deeper understanding and 'speak up' for themselves. Provision of patient navigators could reduce the extra stresses resulting from interpreters trying to keep deaf clients safe, because interpreters would know that deaf clients are receiving ongoing support from the navigators.

The next section will look at the need for interpreters to explain their role to both clients and professionals.

4.5 As a professional interpreter how often do you explain your role?

It is also important that both deaf clients and healthcare professionals understand the interpreter's role and role boundaries. This will make it possible for all parties to work with interpreters and achieve positive communication outcomes for all participants. Two questions in the online survey asked respondents how often they explained their role to the healthcare professional and the deaf client.

4.5.1 How often do you explain your role to the healthcare professional prior to an assignment commencing?

All 28 respondents elected to answer this question, with 75% indicating they either regularly (28.6%) or sometimes (46.4%) explained the role of the interpreter to the healthcare professional before an assignment commences. Of the remaining respondents, nearly one quarter hardly ever explained the role of the interpreter to the healthcare professional prior to an assignment commencing.

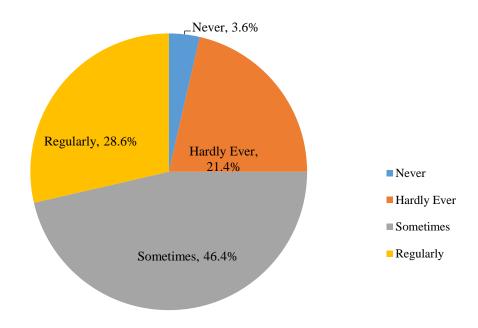


Figure 4.6: As a professional interpreter how often do you explain your role to healthcare professionals prior to an assignment commencing?

Napier, McKee and Goswell (2006) explain the importance of establishing the interpreter role when arriving at an appointment. Introducing themselves to the contact person immediately upon arrival allows the interpreter the opportunity to explain their role and their needs. In the case of healthcare interpreting in a hospital or clinic environment, however, an interpreter may find they are explaining the interpreter role and needs to a receptionist or administrator rather than to the healthcare professional who will be treating the deaf client. Napier, Major and Ferrara (2011) identified several types of challenges experienced by interpreters. One of those challenges was the issue of the interpreters in healthcare settings and how to deal with healthcare professionals. One of their interviewees stated that the healthcare professional often expects the interpreter to know the medical history of the deaf client. This indicates the healthcare professional has an assumption the interpreter is somehow related or aligned with the deaf client (Napier, Major & Ferrara, 2011). In order to combat this type of confusion it is necessary to give the healthcare professional some sort of quick introduction to the role of the interpreter where possible. This may need to be negotiated with the deaf client as to how it will be handled. Regardless of how the introduction is handled it needs to be noted that both the deaf client and the healthcare professional must have a clear understanding of the interpreter role.

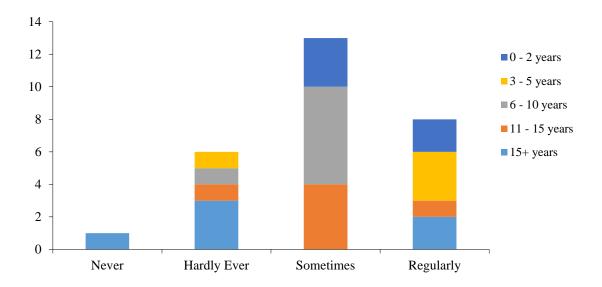
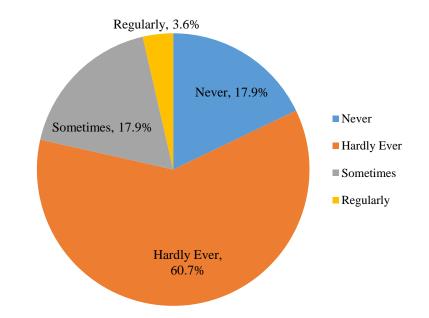


Figure 4.7: Frequency of having to explain the interpreter role to healthcare professionals prior to an assignment commencing, with years of experience.

Cross-tabulating years of interpreting experience and how often the respondent explained their role to the healthcare professional revealed that interpreters with 15+ years' experience tended to hardly ever (n=3) or never (n=1) explain the role of the interpreter to the healthcare professional before commencing an assignment. Conversely, the respondents with 0–2 years' experience reported that they regularly (n=2) or sometimes (n=3) explain their role to the healthcare professional before the assignment commences. Further investigation into the reasons behind these responses would be needed before any firm conclusions could be drawn. However, it may be that new graduates, those with 0–2 years' experience, are eager to demonstrate their professional attitude to clients and this is one way of portraying themselves in a professional manner. Conversely interpreters with many years' experience may not feel the need to explain their role as they have worked in the same healthcare environment previously and believe the healthcare professionals have the background knowledge regarding the interpreter role.



4.5.2 How often do you explain your role to a deaf client prior to an assignment commencing?

Figure 4.8: As a professional interpreter how often do you explain your role to a deaf client prior to an assignment commencing?

In what can only be described as a complete contrast to the way respondents replied to the previous question, 78.6% of respondents hardly ever (60.7%) or never (17.9%) explain the role of the interpreter to the deaf client prior to an assignment commencing.

In an attempt to identify which of the groups of interpreters were not explaining their role and to find an explanation, a cross-tabulation of years of experience and explanation of role was carried out. As can be seen in Figure 4.8 the only interpreters regularly explaining their role to the deaf client were those with 15 or more years' experience as professional interpreters. In the case of the respondents with 0–2 years' experience, this may be explained by their lack of confidence. However, these results may highlight an area of training which could be provided in professional development workshops or as part of the interpreter training curriculum. Further research could also be undertaken to ascertain why interpreters may be hesitant to explain their role to the deaf client and if it is only a healthcare settings issue or if the reticence to explain their role is spread across a variety of settings. The next section will look at coping strategies used by interpreters to manage interpreter-mediated interactions.

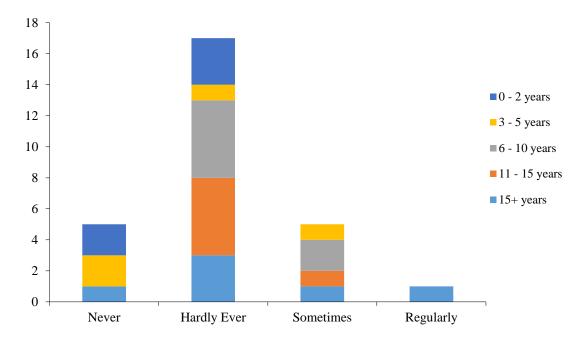


Figure 4.9: Frequency of having to explain the interpreter role to a deaf client prior to an assignment commencing, with years of experience.

4.6 Coping strategies used by interpreters working in healthcare situations

Interpreting, as opposed to translation, takes place when a source language utterance is rendered into another language in a live situation. Pöchhacker (2004) further defined it as a "first and final rendition" of the target language "on the basis of a one-time presentation" in the source language (p. 11). Napier, McKee and Goswell (2006) also refer to the source utterance and target utterance being in the "presence of people who need to communicate immediately" (p. 13). While the following strategies have been classified as 'coping strategies' for the purposes of this research, the first two strategies (asking the healthcare professional to draw a picture or use a model to explain, and asking the healthcare profession to use simpler language) could have been labelled 'interaction management' strategies, a term posited by Llewellyn-Jones and Lee (2009, 2013). Interaction management encompasses behaviours the interpreter employs "to actively manage how the interaction is proceeding" (Lee & Llewellyn-Jones, 2011, p. 4). Interaction management includes managing turn-taking, seeking clarification and/or "requesting specific actions of one or more participants" (Lee & Llewellyn-Jones, 2011, p. 5). The latter might include requesting the healthcare professional to draw a picture, use a model or use simpler language to explain a concept.

The final two coping strategies, use of fingerspelling and use of initialisation have both been identified in previous research (Napier, 2002; Davis, 2005) as strategies

interpreters employ when they are "attempting to avoid any vagueness or ambiguity within an interpretation" (Napier, 2002, p. 75). However, use of fingerspelling and/or initialisation and mouthing of a medical term during an interpreted healthcare assignment can be viewed as source language interference and may interfere with the linguistic structure of the message, resulting in confusion or misunderstanding on the part of the deaf client. To provide a very basic example from an English-language perspective, this would happen if a patient was at an appointment and the healthcare professional used the term 'audiology' but the interpreter could not pronounce it and proceeded to spell the word A-U-D-I-O-L-O-G-Y as a way of giving the patient the word. The meaning of the unknown word is no clearer. The English word has been presented but the patient has been placed in the position of having to try and decipher both the unknown English word and the meaning. Napier, Major and Ferrara (2011) state that in an interpreted healthcare situation the need to clarify information is the same for the interpreter as it would be if they were themselves the patient and did not understand the information the healthcare professional was providing.

The following section will look at respondents reported use of specific coping strategies.

4.6.1 Use of the coping strategies listed in the online survey

While there were 28 respondents to the online survey, there are 29 responses recorded for this question. It is assumed that one of the respondents replied to this question twice.

Although respondents indicated they were utilising a range of strategies to cope when interpreting in healthcare situations, I was slightly concerned to find that many still reported the use of fingerspelling along with use of initialisation and mouthing of unfamiliar terminology as strategies they employed. As explained in the previous section, it would be far better to ask the healthcare professional to produce the information in a simpler spoken manner or in a more visual way, such as using a medical model. This would allow a more appropriate interpretation to be produced, rather than providing a word fingerspelled in the patient's other language: English. Figure 4.10 shows that there appeared to be no one clear strategy being utilised by interpreters to cope with unfamiliar healthcare terminology. Therefore, this may be an area in which further training could be made available to qualified interpreters working in healthcare situations.

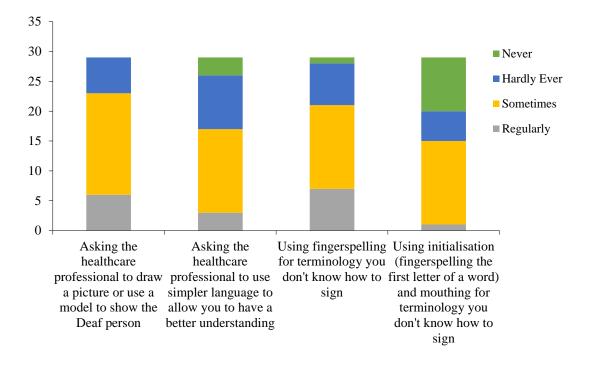


Figure 4.10: Coping strategies used in healthcare interpreting situations.

Given that this research focuses solely on the interpreter's perspective of healthcare interpreting, there is scope for extending the research further through discourse analysis of interpreted healthcare encounters. This was done by Major (2013), where authentic and semi-authentic interpreted healthcare appointments were analysed to identify how interpreters managed the discourse in general practice settings. Another avenue which could be explored would include carrying out research from a deaf person's perspective on which methods of language transfer are more effective for them when accessing healthcare information through the use of sign language interpreters. This would add more depth of understanding to how information is or can be more clearly delivered with the deaf healthcare consumer in mind.

Each of the coping strategies will be discussed separately with a further breakdown looking at whether years of interpreting experience influenced the coping strategy utilised among the survey respondents.

Asking the healthcare professional to draw a picture or use a model to show the deaf person:

As can be seen in Figure 4.11 below there is no clear evidence of years of interpreting experience having a direct bearing on the interpreter asking the healthcare professional to draw a picture or use a model when dealing with unfamiliar healthcare terminology.

Six of the respondents (20%) indicated that they use this strategy on a regular basis to cope with unfamiliar healthcare terminology. Of those, one respondent had 0–2 years' interpreting experience, one had 3–5 years' experience, one had 6–10 years' experience and the remaining three respondents had 11–15 years' experience interpreting in healthcare situations.

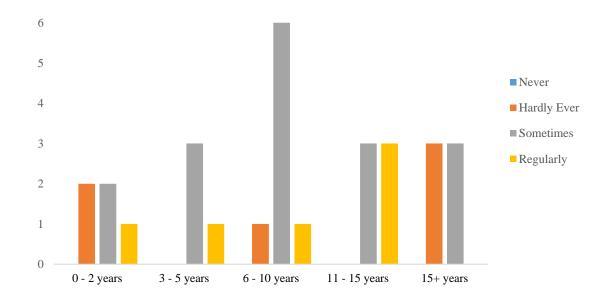
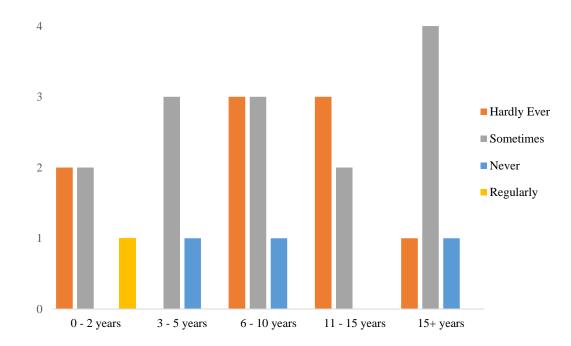


Figure 4.11: Use of models or drawings as a coping strategy in healthcare interpreting, with years of experience.

I always ask the healthcare professional to show their name ID to patient; quick scan of posters and charts on the wall - and make use of them and models and x-rays/scans etc. (on computer) - I will initiate that if Dr doesn't; if I need to clarify or break something down I'll voice and sign at the same time - so the Dr and P[atient]t have the opportunity to correct me; I'll make sure the prof knows exactly which responses are to which questions - get them to ask one at a time, or say "And what was the second part of that question?" etc. etc.; get full instructions FIRST - before lying p[atien]t face down/going alone into scan...; ask what colour pills are...and position myself where I can glance at list of medication names on file.

The fact that all the other categories of years of interpreting experience reported that they sometimes 60% (17/29) or hardly ever 20% (6/29) used this strategy may indicate there are other reasons interpreters are not asking healthcare professionals to provide a more visual explanation for the deaf person. Perceived power differentials between healthcare professionals and interpreters may be one explanation. Hale (2007) makes the point that professionals who have had to acquire a university degree to be able to practice tend to look at interpreting as an unskilled task, thus reinforcing subordinate stereotypes. Being placed in this situation may mean interpreters will be hesitant to ask

for clarification as they do not want to add to this stereotype by appearing incapable of understanding healthcare terminology.



Asking the healthcare professional to use simpler language to allow you to have a better understanding:

Figure 4.12: Asking the healthcare professional to use simpler language to allow interpreters to have a better understanding, with years of experience.

Again, this appears to be a strategy which interpreters who responded to the online survey appeared not to be regularly taking advantage of. Only one respondent (4%) with 0–2 years interpreting experience indicated they used this strategy on a regular basis. Three of the respondents (10%) across a range of years of experience indicated they never asked the healthcare professional to use simpler language to clarify unfamiliar healthcare terminology and the remaining 86% (25/29) of respondents indicated either hardly ever 38% (11/29) or only sometimes 48% (14/29) asked for this. One respondent provided a more detailed explanation of strategies used:

Asking the healthcare professional to detail his/her explanation in a linear way with breaks in between so I can add detail to make the deaf person understand better. Asking the healthcare professional to explain what has/is happening with this patient so I can understand the professional/deaf person's discussion more clearly, and do a better job of interpreting it. Survey Respondent #5

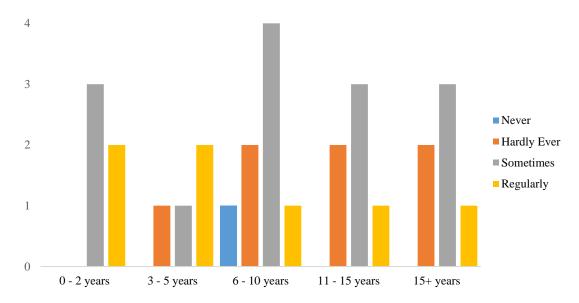
Both of the above strategies for clarifying unfamiliar terminology place the onus of ensuring clarity on the healthcare professional. If interpreters are not utilising these types of options on a regular basis, then how are they dealing with it? Or more importantly, why are they not placing the onus of providing clear information on the healthcare professional? Some comments from respondents indicate that a range of strategies involving the healthcare professional were being used:

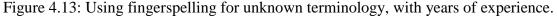
Ask healthcare professional to explain to me before I meet the deaf person, including maybe draw a picture for me; ask deaf person if they have a sign; watch carefully how deaf person describes their condition and symptoms and what signs they use for certain terminology. Survey Respondent #25

In theory, this would be an ideal strategy as long as both the deaf person and the healthcare professional are involved. With the Deaf community's history of oppression (Baker-Shenk, 1986) and the opportunities for deaf people to be excluded from conversations prevalent, it is important to ensure the deaf person's right to confidentiality and information is not breached. Hale (2007) touches on this point by saying that talking about a patient to others, either in their presence or not, creates a subordinate role for the patient. This subordinate role would be further compounded if the discussion was undertaken between an interpreter and a healthcare professional in the presence of the deaf person (without it being interpreted) due to the deaf person not being able to hear what is being discussed.

Using fingerspelling for terminology you don't know how to sign:

As can be seen in Figure 4.13 the number of respondents who reported regularly using fingerspelling as a coping strategy to cope with unfamiliar healthcare terminology was 24% (7/29). Years of interpreting experience had no bearing on whether a respondent regularly used fingerspelling or not. A further 48% (14/29) of respondents indicated they sometimes use it, with the remaining 8/29 respondents reporting they used it hardly ever 24% (7/29) or never 4% (1/29) fingerspelled unfamiliar terminology. Again, these responses were evenly spread across the full range of years of experience categories giving no indication that years of experience had any impact on whether this strategy was used or not.





A small number of respondents included examples of how they used fingerspelling in interpreted healthcare situations and it is worth including them here to give some clarity around the reasons why interpreters made the decision to use fingerspelling in their interpretation:

I would always ask the doctor to explain the meaning of terminology I didn't know so I could then sign that explanation, and include fingerspelling etc. for reference. Survey Respondent #8

fingerspelling with sign (a few times) to introduce new concepts likely to recur. Survey Respondent #18

Even though respondents provided what they apparently perceived to be an acceptable rationale, the use of fingerspelling to cope with unfamiliar healthcare terminology can be considered an omission or a change of information which has the potential to distort the target message (Napier, Major & Ferrara, 2011; Bolden, 2000). With this in mind, regular use of fingerspelling in healthcare situations should be avoided and alternative coping strategies employed. One alternative mentioned by a respondent was:

Getting the healthcare professional to write a complicated drug name/procedure/illness etc. so the deaf person can visualise the word. Survey Respondent #4

Asking the healthcare professional to write the terminology down for the deaf person can have two potential benefits. Firstly, the deaf person now has a written copy of the word which they can take away with them. This could be used for accessing further information online if they choose or simply be filed in their own records for future healthcare appointments. Secondly, by asking the healthcare professional to write the terminology down, they have been alerted to the fact that the terminology is unknown and the healthcare professional has the option to clarify it for both the interpreter and the deaf client. The onus has been moved back onto the healthcare professional to ensure the patient understands any information provided. Figure 4.14 provides information about respondents' use of initialising and mouthing unfamiliar terminology.

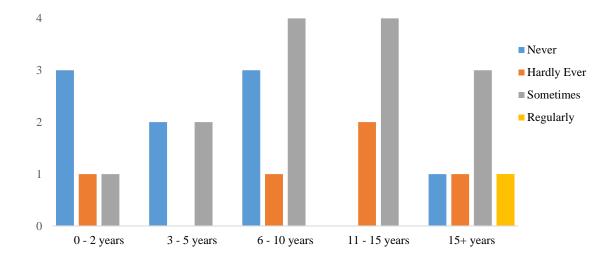


Figure 4.14: Use of initialisation and mouthing of unknown terminology, with years of experience.

Only one respondent reported using the above strategy on a regular basis. Of all the coping strategies suggested as part of the online survey this is the one which most respondents indicated they never or hardly ever use. To give an approximate equivalent example in English for those not familiar with sign languages, it would be like having someone just mouth a word without making any sound. There would be no indication of context other than the preceding and subsequent English words in a sentence.

Use of fingerspelling and use of initialisation and mouthing of unknown healthcare terminology places the onus of understanding on the deaf person. As previously mentioned both of these strategies are viewed by researchers (Napier, Major & Ferrara, 2011; Bolden, 2000) as omissions or errors which have the capacity to distort the message. As has been demonstrated through other suggested coping strategies, there are alternative ways to deal with unknown healthcare terminology. The final two comments listed below are also potentially helpful options mentioned by respondents:

Sometimes ask the healthcare professional for colours of medication, because this is often how deaf people know which ones are being referred to. Survey Respondent #1

Having a more visual option, such as the colour of medication, could be useful for the interpreter and the deaf person alike. Being able to refer to the blue pill or the red and yellow capsules would be clearer than fingerspelling or initialising the technical name for a medication.

I have also asked the deaf person if they know the word and what sign they use. Survey Respondent #10

In a healthcare situation where the deaf person has an ongoing condition or a regular regime of medication or treatment, they are likely to have developed a sign or abbreviated form of a word to use to refer to their condition or treatment plan. If the opportunity is available to ask the deaf person for their preferred way of dealing with this, it should be utilised. Continuity of interpreters in ongoing treatment situations is also helpful, as signs referring to unfamiliar terminology are often developed on the job between deaf clients and interpreters.

4.7 Summary of chapter

The findings of the online survey showed that sign language interpreters in New Zealand have taken the time to consider their own practice and the potential impact of both their own and the healthcare professionals' actions on health outcomes for deaf patients.

Interpreters indicated a range of different challenges they have encountered, including:

- healthcare professionals speaking too fast, using unfamiliar terminology or not understanding the role of the interpreter
- deaf clients not understanding the role of the interpreter.

Strategies interpreters indicated using to cope in healthcare interpreting situations included:

- asking the healthcare professional to draw or use a model to explain unfamiliar terminology
- fingerspelling or initialising and mouthing unfamiliar terminology.

These outcomes provided enough information to form the foundation questions for the one-to-one interviews.

The findings of the one-to-one interviews will be presented and discussed in the next chapter.

Chapter 5 Findings and Discussion - Interviews

5.1 One-to-one interviews

The previous chapter presented the analysis of the online survey. Five themes were identified when analysis of the one-to-one interviews was carried out. These themes were:

- The challenges interpreters face when working in healthcare situations
- The interpreter's perspective on whether the needs of the deaf client were met and any risks to the deaf client
- The role of the interpreter when working in healthcare situations
- Coping strategies used by interpreters when working in healthcare situations
- Recommendations for healthcare professionals, interpreter educators and interpreting booking agencies on how to improve healthcare access for deaf patients in the future.

Each of these themes is presented in separate sections in this chapter which provides the background information and information gleaned from the one-to-one interviews. Following the presentation of the interview data, a triangulation of interview data, online survey data and previous literature is provided.

5.2 Background information of interviewees

A total of eight one-to-one semi-structured interviews were carried out over a period of three months. While seven of the eight were carried out face-to-face, one interview was conducted via Skype as it was not possible to organise a time to meet face-to-face.

The interviewees offered perspectives from a range of experience levels: Two had 0-2 years' interpreting experience, while the remaining six interviewees had more than 11 years' interpreting experience. A third of these six had 11-15 years' interpreting experience (n=2) and the remaining two thirds (n=4) had 15+ years' interpreting experience. Table 5.1 below shows how much experience the interviewees had. As with the online survey, information regarding gender and geographic location of the interviewees was not recorded to preserve the anonymity of the interviewees.

Interviewee	Years' Experience
Interviewee 01	15+
Interviewee 02	15+
Interviewee 03	15+
Interviewee 04	11–15
Interviewee 05	0–2
Interviewee 06	15+
Interviewee 07	0–2
Interviewee 08	11–15

Table 5.1: Years of experience of interviewees

When questioned about how many hours per week were spent interpreting in healthcare situations, the interviewees responded in different ways. Four out of the eight answered in terms of percentage of total hours worked and the other four answered in terms of actual hours spent each week.

Gilbert and McKee (2013) report the average number of hours worked by NZSL interpreters each week was 20 or less. With this in mind, the four responses given in hours were converted to an approximate percentage to allow for better comparison of the statistical information. 20 hours was taken as the average to work out the percentages of hours spent interpreting in healthcare situations. Table 5.2 shows the average time (%) interviewees reported working in healthcare settings.

Percentage of Working Hours Spent in Interpreting in Healthcare Settings Each Week	Number of Interviewees
0–10%	4
11-20%	1
21-30%	1
31–40%	1
41-50%	-
51-60%	1
Total	8

Table 5.2: Percentage of working hours spent interpreting in healthcare settings

Of the eight people interviewed, four spent an average of between 0–10% of their working hours each week interpreting in healthcare situations. This was the largest group, and this result corresponds with results in the article by Gilbert and McKee (2013); almost half of their respondents said they spent 0–2 hours per week in community interpreting settings which included events, medical appointments, functions and meetings. The community settings category was not broken down into more specific settings so it is not possible to say how much time Gilbert and McKee's (2013) respondents spent interpreting in healthcare situations.

The other four interviewees in this study were spread across four other categories, as can be seen in Table 5.2. Only one interviewee reported spending more than 50% of their working hours interpreting in healthcare settings. In contrast, Gilbert and McKee (2013) reported that only 19% of respondents to their survey worked more than 6 hours per week in community settings. Given that seven interviewees of this study indicated they spent less than 50% of their time interpreting in healthcare situations, it would appear that healthcare interpreting in New Zealand does not yet provide enough regular work to allow an interpreter to specialise in health-related interpreting work. Another factor influencing the number of hours spent interpreting in healthcare settings may be the number of hours NZSL interpreters generally spend working in educational settings. Gilbert and McKee (2013) stated that 43% of respondents spent 10–20 hours per week interpreting in tertiary settings. Regular hours and guaranteed income for the university semesters are deciding factors for interpreters wanting to work in educational settings (Gilbert & McKee, 2013).

5.3 Challenges faced by interpreters

5.3.1 Situational factors

One of the main themes was the dynamics of interpreting in healthcare situations. There appears to be a lack of understanding among healthcare professionals of the importance of interpreters for patients who do not speak the same language as the healthcare professional. When discussing the healthcare professionals' interactions with deaf patients, one interpreter gave the following comment:

It's the dynamics I find quite hard because I think often the medical profession aren't particularly good with people really, their rapport isn't the greatest. Interviewee #2

One interviewee reported arriving for appointments only to be told by the receptionist that the deaf person had already gone in despite the interpreter arriving 15 minutes early

for the job. Sometimes this is used as an opportunity to educate the healthcare professional that even though they can understand the deaf person, the deaf person may not understand them, and as one person commented:

some deaf people don't have the confidence to ask questions without an interpreter. Interviewee #3

However, this situation is not limited to signed language interpreters, as noted:

In actual fact, it was interesting because I went to a workshop last year when they were kind of reviewing interpreters ... and just about all other [spoken language] interpreters said the same thing. Interviewee #3

Two interviewees commented specifically on interpreting in eye health appointments:

We do a lot of work in the eye clinic, that's sometimes quite difficult. More for practical reasons of being in the right place at the right time, knowing how to describe certain tests. Interviewee #1

When asked if they thought the eye clinic staff had an understanding about how difficult it was for a deaf person to have an eye exam, especially one which involved having drops put in the eyes to test eye pressure, the interviewees expanded on their answers:

You need to know what to say at certain times...when the doctor says 'I'll just put these eye drops in' before you've even interpreted that you need to say 'Will these make his eyes blurry?' 'Yes, they will' 'OK well just to let you know it's going to affect his vision is there anything else you need to explain before this happens?' So, you need to be aware of the dynamics of what happens in that setting. Interviewee #1

Another one [challenge] is a cataract exam with the drops in for the pressure. Interviewee #2

[The doctor didn't want her to move] but he also wanted to know if she was in pain. So, we had to get a few things organised...with hearing people they can make a noise and you know straight away...she didn't understand what he wanted her to do, so then we got this whole squeezing my hand but the more she squeezed the more she was moving her body and he didn't want her to move at all. So, in the end we worked on a thing where she just held it [hand] for longer. Interviewee #2

Interviewee #3 was called into the emergency department at 0600 hours and on arrival the interpreter found out that the deaf patient had been there since 0200 hours, but as the doctors would not be available until 0600–0700, their policy states that they cannot have

an interpreter booked until then. At times the issue is one of the patient's safety, as noted by one interpreter:

So, that they are not having an interpreter sitting in the waiting room for all those hours they [the patient] are not being attended to. Except the thing that concerns me a little bit is that if an emergency happens with that deaf person during that waiting time then it's not safe for them. Interviewee #3

Being unable to communicate with healthcare professionals for such long periods of time may put deaf patients at risk. Even if a patient is initially assessed as being low risk, there is always the possibility that symptoms may worsen. Without the ability to explain symptoms or procedures quickly and accurately, the deaf patient is put at risk. Right #5 of the Code of Health and Disability Services Consumers' Rights Regulation (Health & Disability Commissioner, 1996) states that every consumer of healthcare services has the right to access effective communication in a language that allows the consumer to understand the information fully. This includes the right to have a competent interpreter present for consultations. The second part of Right #5 goes on to say "Every consumer has the right to an environment that enables both consumer and provider to communicate openly, honestly and effectively" (Health & Disability Commissioner, 1996). Not having an interpreter available during an emergency department assessment period contravenes this part of the Code of Disability Rights, and hospitals need to ensure policies regarding interpreter provision comply with the Health and Disability Commissioner Act 1994. All of this does however need to be balanced against budgetary and logistical constraints experienced by hospitals and other emergency care facilities. In many, if not most, cases it would be impractical to have an interpreter sitting unutilised for long periods of time in case they are needed.

Other comments included healthcare professionals becoming impatient because of the perceived difficulties of working with interpreters:

The dynamics of the relationship I think sometimes is quite hard because you can see them getting that attitude thing like 1. Oh my God this is interpreted it's going to take longer, 2. Man they don't understand. I'm plodding with them and yelling and it's just going to be very difficult. Interviewee #2

Safeer and Keenan (2005) along with Pollard and Barnett (2009) discussed knowledge deficits regarding illnesses, medicines and treatment options experienced by deaf patients. Knowledge deficits of this kind occur because of missing out on incidental learning through interaction with family, colleagues or just from overhearing discussions around

us. This lack of general health knowledge can lead to deaf patients asking questions which healthcare professionals view as inappropriate. In one situation where a deaf patient asked a specialist about an existing condition which was outside of the specialist's area of expertise, the response was directed at the interpreter rather than the deaf patient:

The medical professional comes out with things like 'is she a complete idiot?' Interviewee #3

Having to deal with comments such as the one quoted above places the interpreter under unnecessary stress. Ethically interpreters are bound to interpret all utterances made by either party during an interpreting assignment. However, if a direct interpretation of utterances such as this are made the interpreter runs the risk of disrupting the appointment and making any future interactions between the specialist and the deaf patient uncomfortable at the least. In this particular instance, the interpreter made a judgement call:

It was a deaf person who was really, really nervous about being there in the first place and was very sensitive so that was a really unhelpful [thing to say]. So, what I took him to mean was that 'I'm a specialist and that has nothing to do with my area.' So, that's what I said. Interviewee #3

Sometimes even though interpreters know they are fully booked for the day, they will get calls from agencies desperate to cover an extra job at very short notice. When this happens the hospital schedule and a breakdown in communication can become a hurdle. In the following situation, an interpreter was asked to attend an appointment at the last minute. However, due to the doctor not being told the interpreter needed to rush to another appointment, the situation became stressful for both the interpreter and the healthcare professional:

So I really do have to go actually I can't wait half an hour for the doctor to come and the doctor came in unhappy [saying] 'nobody told me that you couldn't wait' ... so it [the appointment] started off on an unfortunate footing, so [the doctor] was like 'right just give it to me, answer my questions' Well [the deaf patient] didn't answer any of her questions but did want to tell his story and so [the doctor] was getting worse and worse and at this point [the deaf patient] was like 'I need this pillow put behind me. I need this pillow put behind me.' It would be the simplest thing in the world [for the interpreter] just to put the pillow behind him but I had the feeling if I did that I was going to alienate [the doctor] even more. Interviewee #3

Having discussed some of the situational factors that interpreters find challenging in healthcare settings, content-related factors will be explained next.

5.3.2 Content-related factors

When interpreters work in any situation, there is always the potential for the discourse content to prove a challenge. New Zealand Sign Language (NZSL), as with other signed languages worldwide, is not based on a spoken language. Therefore, it is not always possible to produce a single sign to express in NZSL an utterance made in English. An example which is commonly used is the hypernym *weapon* in English. There is not generic sign in NZSL for *weapon*; instead it would be more common to use hyponyms such as *knife* or *gun*. The term *gun* of course then raises its own issues with which type of gun: a pistol or a shotgun. Making lexical choices of this type are challenges interpreters often face, as the example below shows:

The whole thing 'are you allergic to something?' that's one of the one's I really hate because you can say 'do you get a rash; do you get this?' Interviewee #2

Although there is a generic sign for *allergic* (Figure 5.1), this may not necessarily be pertinent to how an allergic reaction manifests itself in an individual—for example a rash, vomiting or anaphylaxis. If a deaf person has the situational experience to understand the generic sign *allergic* to mean a range of possible symptoms it may be appropriate to make that lexical choice. However, with use of generic signs such as *allergic* there is the risk of misunderstanding between the interpreter and the deaf client with the potential for harm if an allergy is not recorded correctly.



itch

allergic, allergy, itchy, scratch, scratchy

NZSL Dictionary Online (2016)

Figure 5.1: NZSL generic sign for *allergic*

The next two quotes must be considered in light of the number of refugees and immigrants now living in New Zealand. Signed languages are not universal. Just as spoken languages evolve according to the specific needs of a country's community, so too do signed languages. Although some signs may be iconic and easily understood across Deaf communities worldwide, deaf people settling in New Zealand from overseas may not use or understand NZSL, just as hearing people settling in New Zealand may not speak or understand English spoken with a New Zealand accent or including New Zealand vocabulary:

Yeah, the deaf person doesn't sign, [uses] older signs or overseas signs. Interviewee #3

I think for me the most challenging thing is with the clients that are disfluent for whatever reason whether it's somebody with minimal language skills, somebody from overseas, somebody with a cognitive impairment.

Interviewee #4

Other challenges for sign language interpreters to sign to the patient are related to the seriousness of the situation, as described below:

The most challenging is probably having to tell somebody that they're going to die. Interviewee #6

Challenges also involve knowing the appropriate register of language to use to voice for the deaf patient:

Putting it out in the type of language that the doctor gets. Not putting it out in big long words that the doctor will think I studied with him or anything but putting it out in a way because I know sometimes when I've been working with some [deaf] people the way they describe their symptoms is very visual and can appear to people who don't know sign language to be a little crude. So, trying to work that in a way so it does sound at a level of what a hearing person would put out. That's probably the most challenging part. So, finding that balance. Interviewee #7

As with other languages, New Zealand Sign Language has one lexical item which may have more than one way of being expressed in English. An example working from English to NZSL would be the word *run*. In English, we *run meetings, run races, run someone into town in the car* and we can *have the runs*, but in NZSL these would all be signed differently as they are conceptually different. An example working from NZSL to English where one sign can be voiced in different ways depending on the context would be *urinate*. This is conceptually different between male and female (Figure 5.2), but depending on how the verb is articulated it may be voiced as *mimi* (the Māori word for urinate), *piss, urinate, wee* or any of the other common terms used to describe going to the toilet to pass water. Being able to make those lexical choices quickly and accurately is important for an interpreter and is an example of one of the challenges that NZSL interpreters face in healthcare settings.



urinate (male)

Urinate

NZSL Online Dictionary (2016)

Figure 5.2: NZSL signs for urinate

The next section discusses the problems related to the lack of awareness of the interpreter's role.

5.3.3 Lack of awareness about interpreting and interpreter role

A small number of interviewees touched on challenges related to the healthcare professional not knowing how to work with interpreters or having little or no awareness of the needs of the deaf person or the interpreter:

Doctors don't get a lot of training on that whole 'how to use an interpreter' and such do they? Not really, maybe a bit more now. But many, many years ago, when I used to go and try and give doctors some training about working with deaf I found them always quite hard to deal with that, it seemed like it was a bit too easy and they wouldn't pay much attention to that. Interviewee #2

Deaf clients might also not understand the role of the interpreter. In the quote below, the interviewee talked about attending appointments with different deaf clients. One deaf client had a good knowledge of how to work with an interpreter and the role of the interpreter:

I also had a deaf client and who will go in and go 'this is my interpreter and she will sign'... Interviewee #5

However, in other situations the deaf person would prefer to rely on the interpreter to tell their story. They give the interpreter the information ahead of time and then ask the interpreter to do the talking:

...and then I have the clients who go 'oh you just tell him'; you know [the information]. Interviewee #5

This is not part of the role of the interpreter and has the potential to place both the interpreter and the deaf patient at risk. The expectation of the interpreter to do the talking on behalf of the deaf client raises two issues. Firstly, there is a lack of understanding of the role of the interpreter by the deaf client. Secondly, there may be something in the way interpreters are greeting and building rapport with deaf clients in waiting rooms that is providing a misunderstanding of the role. It is important for interpreters to greet and converse with their deaf clients to gain an understanding of their language use, get a little background information and make sure the deaf client is comfortable with the interpreter's signing style, but there is a fine line between getting a little background information and conducting the patient's history-taking discussion in the waiting room. There is always the potential for misunderstandings to occur and as professional interpreters working in healthcare situations it is important to maintain clear and consistent professional boundaries at all times. This may mean instructing a deaf client not to give the interpreter their full medical history before the appointment commences but to wait until the doctor is present. Having a strategy in place to deal with that should be part of a healthcare interpreters' repertoire.

5.3.4 Analysis of the challenges faced by interpreters in healthcare situations

These were the major challenges highlighted by the eight interviewees in the semistructured interviews. Although there was no single area of interpreted healthcare situations which stood out as a challenge for the interviewees, it is believed training workshops for healthcare professionals around the role of the interpreter would be of benefit to both healthcare professionals and deaf clients.

One interviewee spoke of the benefit of having completed the two healthcare interpreting papers, Advanced Interpretation Health Studies (TRIN704, Auckland University of Technology, 2016) and Advanced Interpretation Health Interpreting (TRIN705, Auckland University of Technology, 2016), offered by Auckland University of Technology (AUT). While these papers are offered as part of the BA NZSL-English Interpreting, they are not compulsory as students may choose between the healthcare interpreting papers or the legal interpreting papers. Students may choose to complete both the legal and health papers but this does require completing an extra paper in the final semester of study. An option exists for NZSL interpreters who hold the Diploma in Sign Language Interpreting (DipSLI) to return to AUT and complete one year of full-time study (or two years' part time) and on successful completion they would graduate with

the BA NZSL-English Interpreting. Again, the healthcare interpreting papers are offered along with the legal interpreting papers for students to choose from as part of their one year of study. Although the upskilling to the BA NZSL-English Interpreting is open to all DipSLI graduates, the reality is that only interpreters based in the Auckland region, or those able to relocate to Auckland, can take advantage of this option as the qualification is not offered elsewhere.

Perhaps alternative study options such as online papers over a semester or intensive courses provided over 1 or 2 weeks could be made available to a cohort of off-campus NZSL interpreting students to be able to complete the healthcare interpreting papers as part of a Diploma or Certificate programme of study. Spoken language interpreting students have taken advantage of the availability of online study options. However, to date only two NZSL interpreting students have opted for online enrolment.

Content-related factors were identified by interviewees as being a challenge to them. A variety of strategies are employed to deal with the use of unfamiliar terminology and will be discussed further on in the research. Content-related factors raised by the interviewees were not only about unfamiliar terminology related to healthcare. Matching the manner and tenor of the healthcare professional and deaf client were also challenges the interviewees spoke about. Comprehending the source message is of course vital in producing an accurate interpretation but being able to deliver the target message in the appropriate manner and tenor is also an important part of the interpreting process. With NZSL being a visual spatial language, the underlying message is often clear but it does not include the characteristics of the deaf person, their educational background, or their professional history. The aspects of everyday life which shape people and how they speak are represented by the lexical content of what they say and by the manner in which they produce it.

In the case of legal interpreting, qualified NZSL interpreters must have at least two years' work experience and be a member of SLIANZ before being allowed to accept work in legal settings (New Zealand Government, 2006). No such requirement exists for interpreters working in the healthcare sector and this is possibly something which should be considered. The NZSL Interpreting Standards Project commenced in August 2016. The NZSL Interpreting Standards report has been commissioned to look at stakeholder perspectives regarding performance standards for NZSL interpreters. The report will be

presented to the Office of Disability Issues in January 2017, after consultation with consumers and interpreters.

The deaf patients who interpreters meet in interpreted healthcare situations may not always understand the role of the interpreter. Although they are sign language users, not all deaf people socialise within the Deaf community. This may be because they live in geographically remote areas, or do not have easy access to other signers, or because of personal preference choose not to socialise with other deaf people. The Deaf community is a collective community which shares stories and knowledge to enhance the overall communal knowledge. Deaf people who do not socialise within the Deaf community may not have access to the communal fund of knowledge, so they may not have worked with an interpreter before or had the opportunity to discuss what the role of the interpreter is. Educating this group of deaf clients may be more difficult, as identifying and contacting them may be an issue. This should not discourage interpreting agencies and organisations from running educational workshops in local District Health Board areas to inform both deaf and hearing clients about the best ways to work with interpreters in healthcare situations and how to overcome any problems they may encounter.

As previously mentioned, McKee (2008) noted that both spoken language and signed language interpreters believe the factors that most hinder their ability to provide quality interpreting are:

- unfamiliar content or context
- source message factors such as jargon, complex or poor [sentence] structure
- pace or accent of the speaker
- and insufficient training or experience.

The University of Auckland Medical School provides some training to medical students as part of the professional communication skills component of the training programme. In addition, medical students doing ward attachments get some practical experience working with interpreters during consultations (S. Esteves, co-facilitator personal and professional skills, University of Auckland, personal communication, 23 May 2016). As one interviewee noted however, previous attempts to provide specific training to healthcare staff have been met with disinterest due to the preconceived idea that because it was not something they had to deal with every day it was not something they needed to pay much attention to.

5.4 Risks to deaf people

In the online survey over 50% of the respondents indicated they had left an interpreted healthcare assignment feeling the deaf person's needs had not been met. A smaller number also indicated they believed the deaf person may have been put at risk during an interpreted healthcare assignment. It was important to follow this up in the one-to-one interviews to ascertain why deaf peoples' needs were not being met in healthcare situations.

During the interviews, participants were asked if they had ever left an interpreted assignment in a healthcare situation feeling that the deaf person has not had their needs met. Seven out of the eight interviewees recounted instances of assignments where they had come away feeling the deaf person's needs had not been met. A few of those responses are shown below.

Some interviewees felt in some situations that perhaps the healthcare professional found it too difficult to go into detail with the deaf client:

Yeah, I do think so and it goes back to the same thing. A little bit to do with attitude, you know. They just aren't giving them the detail because it's too hard to get when they took their pill last or whatever, let alone, and that's already in their head and they think oh god it's going to be even harder to explain the next bit so we'll just really make it minimal and then you think, gosh have they really given all the risks involved or the side effects, all those things. They just seem to skim across that sometimes. Interviewee #2

Others felt the deaf person's needs had not been met because of low literacy levels or minimal language skills on the part of the deaf person. Crezee (2014) noted that interpreters are good for people with good levels of (health) literacy, but that people with minimal language skills and poor levels of (health) literacy may need a patient navigator, (a person employed by the healthcare provider to work with patients for an extended period of time with the aim of empowering patients to gain a deeper understanding and 'speak up' for the themselves), over a longer period of time, to ensure they slowly build up understanding:

I did have one deaf client who was a really severe diabetic and he had really minimal language skills and understanding the blood sugar levels, the diet that was required, how to recognise the signs of hyper-hypoglycemia, knowing what to do ... I often left his interviews feeling really worried about him.

80

Interviewee #4

I had one deaf person who was on a blood thinning medication ... and it wasn't working because [they] weren't taking the meds right so [we went] back to the doctor's several times but finally in conjunction with the doctor and the chemist [working together] ... so the deaf person would have their blood test, results were faxed though to the doctor, doctor to the chemist to say what the pills were, chemist to deaf person to say, 'ok today you'll be taking a brown pill and half a pink' because again colour, colour they know. It's not like 'you'll going to take 5 mg and 10 mg. you're going to take a brown one and a pink one' and that's how we solved that dilemma because that person was really not cognisant of how to take their medication properly. Interviewee #6

In regards to the above comment by Interviewee #6, it is unusual for interpreters to attend pharmacies with clients. A study carried out in the northern and western areas of Auckland showed that the use of trained spoken language interpreters among northern and western Auckland pharmacies was infrequent, although the pharmacies reported having frequent contact with clients with limited English proficiency (Chang, Tsang & Thornley, 2011). Although this article is focused on use of spoken language, interpreters' anecdotal evidence would suggest that signed language interpreters are not often used in pharmacist-patient interactions either. The funding provided to Deaf Aotearoa New Zealand by the Ministry of Health may be allocated to cover interpreted pharmacy visits (L. Keating, CEO Deaf Aotearoa NZ, personal communication, 12 September 2016), but statistical evidence of the frequency of this occurring was not available at the time of writing. A number of international research articles have highlighted the effect low literacy can have on the effectiveness of prescribed medications and the increased risk of hospitalisation due to misunderstanding of instructions given with medication (Raynor, 2009; King, McCaffery, & Bouldin, 2011). Nicodemus, Swabey and Moreland (2014) noted the importance of medication instructions being adhered to if healthcare outcomes for deaf patients are to improve. Common terms used to describe dosage levels on medication are easily misinterpreted by people with English as a first language and often prove even more difficult for speakers of other languages. Australian studies (Emmerton, Mampallil, Kairuz, McKauge & Bush, 2010; Kairuz, Bellamy, Lord, Ostini & Emmerton, 2013) which looked at the impact health literacy had on the ability of consumers to understand medication instructions showed the need for pharmacy staff to:

- become more engaged with consumers when explaining medications
- use simpler language when explaining dosages and precautions to consumers
- use larger fonts, lists, headers and white space on medication labels

• discuss all relevant information with consumers and determine their comprehension of the information.

One interviewee phrased their response in a way which could be construed as the deaf person not understanding the terminology or as the deaf person not understanding the sign language interpretation being produced. Either of these could mean a deaf person's needs were not being met, and this response demonstrates the importance of interpreters being observant of how deaf clients are reacting to the message being produced. It is important that if the terminology is unfamiliar to the interpreter and they are unsure whether their interpretation is sufficiently clear, then interpreters have a duty of care to take particular notice of facial expressions of the deaf person and ensure the message is being delivered in an appropriate manner. In healthcare situations interpreters also need to speak up and clarify with the health professional if there are concerns that the message is not being delivered clearly. As can be seen from the comment below, making the decision to clarify information with the healthcare professional places the onus on them to ensure the patient is receiving adequate treatment and information:

There've been a couple of jobs, I've explained to the doctor I don't think this is getting across or I know you can see them nodding but I don't think they're actually understanding what's been put across. I've done that a couple of times and the doctors, it's sort of in their hands. Interviewee #7

Only one interviewee did not think deaf peoples' access to adequate healthcare was any worse than it is for hearing people:

No I don't think so no. I don't see any instances where the level of service they get is inadequate or less than you'd expect for anybody else. Who knows, it's actually quite difficult to measure because if you think if I was that doctor I might ask for more detail but they might be like that with everybody.

Interviewee #1

When questioned further about whether they had ever left an interpreted healthcare situation feeling that the deaf person had been put at risk, the range of responses was more varied.

Three interviewees revealed that, although they sometimes felt the deaf person's needs were not being met, they did not feel that had ever left an appointment where the deaf person was put at risk. Two interviewees gave answers which showed that they would not allow a deaf person to leave an appointment if they felt they were left in an unsafe situation:

I don't remember leaving a situation where I thought it was dangerous and obviously if it was I wouldn't leave. Interviewee #1

No I don't think so but then ...I'm an older interpreter who's been around for a while so I'll often particularly with medication ...the doctor might not have said 'take this at night or during the day' so I put that question in, you know make that question part of the conversation. So, if it's something like medication then I definitely add stuff to make sure that's right. Interviewee #2

The above comments give rise to the question of where the interpreter stands ethically in terms of their role if they are potentially deciding to stay or leave an assignment based on a patient's perceived well-being and safety, or consciously utilising their position as the interpreter to elicit information from one or both interlocutors to ensure information is shared in a culturally appropriate manner. This raises the issue of whether 'duty of care' (Crezee, 2013) extends to situations such as the ones referred to above, and not just to life-and-death situations. This ties in with work done by Llewellyn-Jones and Lee (2009 & 2013) and Lee and Llewellyn-Jones (2011) regarding interpreter conduct during interpreter-mediated interactions.

Hoza (2016) asserted that humans have an aversion to harming others—that our automatic response is to do or cause the least possible harm. This explains why interpreters would elect to stay and ensure a deaf person is not being placed at risk and why interpreters utilise their position to manipulate the healthcare professional/patient conversation to ensure information regarding prescription directions is clearly stated.

The remaining three interviewees provided examples of where they felt the system had put deaf patients at risk. Some of these examples involved interpreters feeling that the healthcare system was failing deaf patients:

It was my best friend, so it had a big impact on me. She was in hospital and she could not get the hospital to call for an interpreter. So, in the end the nurse agreed to call me to come but had to use her [the friend's] cell phone to call me to come and then they refused to pay my account...you know it was always fight, fight. That hospital would rarely provide an interpreter. And in the end, she [my friend] died and then her husband had exactly the same problems and he died. So, that was really extreme. It can't get more extreme than that can you. But it was just where the hospital was absolutely no good. Interviewee #3 The New Zealand Code of Health and Disability Services Consumers' Rights (1994) established the rights of consumers of health and disability services and the obligations and duties of healthcare and disability service providers. The Code was reviewed in 1999, 2004, 2009 and 2014, with one change being made to Right #7 (10) in 2004.

Under Right 5 of the Code, healthcare professionals are required to convey information to patients in a form, language and manner that allows the patient to understand the treatment or advice. Healthcare professionals must do their best to help the patient understand any information provided to them, which includes arranging a competent interpreter when necessary. However, healthcare professionals have no way of assessing the competency of interpreters and must trust that booking agencies are sending interpreters equipped with the necessary skills to work in healthcare situations. The onus must also be on agencies to do their best to provide continuity for ongoing appointments. This is important as the interpreter builds up background knowledge over time through attending all the appointments and this allows the deaf patient and healthcare professional to communicate more effectively.

From the same interviewee, here is an example of another interpreter being placed in a distressing situation. Here a deaf patient's continued complaints of pain went unheeded by a healthcare professional:

I said I can't come but I will get another interpreter to go. So, another interpreter went and it was very distressing for that other interpreter, I didn't realise what I was sending them into...and he [the deaf patient] was in heaps and heaps of pain and the doctor apparently was saying 'no, he's not, he doesn't have any pain.' And the interpreter said 'yes, he says he has very bad pain'. And they did just absolutely nothing, so in less than 24 hours he was gone. Interviewee #3

In both the previous examples the patients have passed away. It must be noted here that no evidence collected as part of this research indicated that the lack of access to interpreter support, the interaction between the healthcare professional and the interpreter, or negligence on the part of the healthcare provider played a part in the passing of the patients.

Other interviewees provided similar accounts of situations in which they felt patients had been put at risk:

There was one situation where it was quite high risk, so I told them I wasn't very comfortable and I didn't think this was working and what they had recorded from the previous thing with them, the previous appointment and what I was

getting from this person was completely different...but I just had to keep interpreting and in that situation it was a minimal language user with a support worker with them and the support worker had no idea about the previous appointments...and I definitely felt that...because the first one was so high in risk...I feel like it wasn't resolved and now it's feeding into future things, I'm not totally comfortable with it. Interviewee #7

Informed consents are a legal document which medical professionals, patients and interpreters, when present, must sign before a medical procedure commences (Simon, Zyzanski, Durand, Jimenez & Kodish, 2006). The aim of an informed consent is to provide a patient with all the relevant information regarding a medical procedure to allow the patient to make informed choices to allow the procedure to be undertaken, to choose an alternative treatment or to opt for treatment not to be undertaken at all:

I can recall on occasion having consent forms signed for surgery. [The deaf person being told] 'Just sign it'. They don't understand it what it says, they need to know what they are signing. They need to know you are not going to remove their left leg, that you are actually going to remove the cancer that's on their back. 'Oh, they just sign it, It's all good.' Yeah informed consent is [a] huge [issue]. Interviewee #8

One last observation was recorded regarding the fact that lack of continuity—in terms of interpreters working with particular patients—has the potential to put patients at risk:

There's no continuity. Even if it's the same agency that is with them, but if there are different agencies then it's even worse. And I think in some regards it puts the deaf patient in some degree of risk because we are not providing the best service that we can...You know if we are looking at making it the best possible service to the deaf person then to be able to debrief with each other and fill each other in before a job is huge I think. Interviewee #3

It is evident from both the online survey and the one-to-one interviews that NZSL interpreters have concerns over the treatment their deaf clients receive. Of particular concern is the apparent lack of empathy shown by healthcare professionals when dealing with deaf clients. If indeed healthcare professionals do view the need to explain essential information regarding medicines and health procedures as difficult and time-consuming, then perhaps they need to be aware such attitudes are in fact putting deaf clients at risk. Steinberg, Barnett, Meador, Wiggins and Zazove (2006) reported that the deaf participants in their study felt that some healthcare workers disliked working with deaf people. Participants also felt that their own feelings of mistrust were fuelled by poor communication, lack of information and fear. Deaf patients' access to accurate medication information could be improved by interpreters becoming more aware of the

linguistic features used by highly experienced interpreters and deaf healthcare professionals (Nicodemus, Swabey & Moreland, 2014). However, this is not going to help deaf patients with low levels of health literacy and low language skills. Deaf people who are native users of signed languages have the ability to produce clear, concise explanations of concepts which qualified interpreters and interpreter trainees could benefit from in terms of their own interpretation skills. The use of such signs by interpreters would benefit deaf health consumers with lower-level language skills and lower levels of health literacy.

Pivac (2009) states that "while training and qualification is vital for interpreting professionals, ongoing learning, professional development and monitoring of that progress is also essential if interpreting standards are to raise and consolidate" (p. 161). She goes on to add that having a general understanding of how the Deaf community and deaf people are contextualising their world will allow interpreters to more accurately transfer meaning between deaf and hearing clients (Pivac, 2009).

In summary, it is clear from both the online survey and the one-to-one interviews that NZSL interpreters believe that deaf patients' needs are not always met when they attend healthcare appointments. Although the onus for successful outcomes of interpreted healthcare appointments is not solely on the healthcare professionals, this study provides enough evidence to suggest that the healthcare professional does sometimes put deaf patients at risk. In situations where a deaf patient is adamant something is occurring, such as ongoing pain, or where a deaf patient is asking for an interpreter and this is denied, their rights under the Health and Disability Act 1994 are being breached and changes should be implemented by District Health Boards to stop these incidents occurring. Before any change can occur, such instances need to be reported and the problem remains as to who can or should report this. Questions to consider include: Does the interpreter have a duty of care which overrides the tenets of confidentiality and impartiality? Or is the deaf person or their family solely responsible for reporting such breaches?

Interpreters working in healthcare situations also have a professional responsibility to continually upskill and develop their language capabilities to ensure they are performing at the highest standard possible. Liaising with Deaf community members to have professional conversations around healthcare concepts and the various ways they can be expressed clearly in NZSL would be a helpful exercise to undertake and is something that could be explored by interpreter groups in the different regions of New Zealand.

5.5 The role of the interpreter in healthcare settings

In this part of the interview participants were asked how they perceive their role in healthcare settings.

5.5.1 Models of interpreting

When the interviewees were asked which model of interpreting, as outlined by Witter-Merithew (1999) in Chapter 2, they felt best described their role in healthcare interpreting the responses reflected the flexible nature of healthcare situations:

It is sort of a cultural mediation in terms of the culture of medical practice and deaf people. Interviewee #1

I've got a bit of an issue with those models. Cross-cultural's fine because as I said before you have the culture of the hospital and the culture of the client that you're trying to marry up. In terms of the ally, I think you can be an ally to both parties. Not necessarily one over the other. Interviewee #1

Ally, cultural mediator really. Rather than conduit straight. I don't think I could do that. Well not always, though there are places where you do that aren't there? But people are in pain or are scared or are getting a prognosis that's not great and a conduit can't do it. Interviewee #2

Probably allies, but then I also want to be allies to the medical professional because I want to get them on my side. Interviewee #3

[Ally]...so I suppose strictly speaking it's stepping out of role [to make sure the healthcare professional understands the needs of the deaf person]. I guess that's the difference between an ally and a cultural mediator. Interviewee #4

With the medical stuff, more often than not I come into more of the helper model a little and then the rest of the time it's the cultural mediator.

Interviewee #5

Interviewee #5 then went on to explain why they view themselves as a helper and the reason was linked to the fact that they believe the staff view the interpreter as a helper and due to uncertainty about the interpreting of facial expressions to get clarification:

It's not necessarily anything I do, it's just the way the medical people look at it. They are used to someone coming along and helping, so yeah, I think more often than not I end up as helper. I try to keep it neutral but yeah....

Sometimes I feel like I'm putting words in the deaf client's mouth. So, they will look confused and so I'll say to the doctor 'sorry can you explain that a bit more.'

Interviewee #5

Reading facial expressions and interpreting their meaning for the other participants in a healthcare assignment highlighted a dilemma interpreters can encounter in any situation. Dean and Pollard (2012) point out that facial expressions that are identified by the interpreter as not having grammatical significance but possibly being significant from an affective perspective should be passed on to the healthcare professional. The example given by Interviewee #5 of the deaf patient looking confused can be looked at from the perspective that it is the deaf person's responsibility to ask for clarification. The following quote from Interviewee #1 gives a good perspective on the process interpreters work through when making the decision to interpret a facial expression or seek clarification on behalf of the deaf patient:

So, I take on an implicit agreement to be a little more involved in healthcare because of the consequences of what's there. So, if I thought there was a misunderstanding, too right I would stop and go back and check what was said again. And has that ever resulted in a problem for me? I've been doing it for 20 years this year, there have been one or two times when a client [indicated that this isn't what they expect or want from an interpreter and I have to accept that I've overstepped the line in that case]. Interviewee #1

The remaining three responses also continue the theme of flexibility within healthcare settings:

My approach is humanitarian. Those other models, they come into play I guess depending on who my client is. So if I've got an old lady at an appointment who can't put her pantyhose back on, I'll help her...I'm not a conduit, I'm definitely not a conduit model. Interviewee #6

With healthcare for me I think I use a lot of them but for me it's not healthcare that makes me change my role, it's the deaf person in healthcare but it's really helpful gauging the language, the person first, then the situation.

Interviewee #7

I probably flit in and out of different models. In healthcare definitely more of an advocate within the interpreting role but not stepping outside. When I say advocating I would if I can see the client's not understanding anything I would say 'Oh could you rephrase that because they are not quite getting that.' Culturally mediating as well all the time. Interviewee #8

5.5.2 Explanation of role to healthcare professional

The second part of the discussion on the role of the interpreter looked at how often interpreters explain our role to the healthcare professional and/or the deaf person. Only five out of the eight interviewees were asked this question directly. The other three interviewees were not asked this question as the semi-structured nature of the interviews took discussion in a different direction and the subject of role explanation was not revisited. The omissions were not picked up until analysis of the interview transcripts was undertaken. Of those, four out of the five responded that they explained their role to the healthcare professionals:

The first interactions are obviously key to how much I need to explain. In hospitals, there seems to be a much better understanding in wards. A&E can be a bit fuzzy...GP clinics aren't that great. Anything to do with the community's still a bit old fashioned. The hospital seems pretty good...because they're getting more and more interpreters in their services. Interviewee #1

Not very often. [If] I've heard people say 'Oh I have never used an interpreter before'. Then I am more likely to but generally I just assume that they are pretty good. Interviewee #3

At times a little bit. If I have never worked with somebody before I may do. I usually ask them if they have worked with a sign language interpreter before and if they say no, then I will still do the little spiel. Interviewee #4

Interviewee #5 works as a freelance interpreter in a smaller community where they have not had access to a full-time qualified interpreter before. A local Deaf advocate has been working to raise awareness of how to work with the interpreter by running workshops at organisations such as Work and Income New Zealand. However, at the time of interviewing for this research a workshop had not been run at the local hospital. The response given by Interviewee #5 should be read bearing this in mind:

I feel like I'm doing less education now but I think that's more because I just go with the flow. I guess that every time I go 'Have you worked with an interpreter before?' [they answer] 'Oh yes on language line' That's a little bit different. Interviewee #5

5.5.3 Explanation of role to deaf person

When asked if they explained their role to the deaf person, only two of the five interviewees answered that they did so:

Sometimes I might do if I've just arrived...I often use that chance [while the healthcare staff are getting organised] to go in and say hi and ask have you

worked with an interpreter before, so yeah I do it quite a bit...because if it's a client you haven't worked with before you'd want to get some sort of background or signing measurement anyway so a good question is to ask 'Have you worked with an interpreter before? Tell me about that.' Two birds with one stone really. Interviewee #1

I will go in, especially if it's someone I don't know. I'll go in and explain a bit about me and what I'll be doing. And I ask should I wait with [them] until the doctor comes or would [they] like me to wait outside. Interviewee #2

The other three interviewees who answered this question responded that they did not explain their role to the deaf person:

Ah no, very rarely actually, that's a really good point though. Interviewee #3

No probably not...I can't think of a recent time when I would explain working with a deaf person. I think there have been one or two times that it has come up...but they would be quite specific and possibly more if there is family around too. Interviewee #4

No I haven't had to really.

Interviewee #5

Explanation of the role of the interpreter to both the healthcare professional and the deaf person is important. It establishes the interpreter as a professional working within the communicative event. Healthcare professionals may not work with deaf patients often enough to be aware of the need to work with an interpreter. The deaf person may also not use interpreters on a regular basis and as such may not have a full understanding of how the interpreting process works. In such cases interpreters need to be assertive enough to introduce themselves quickly and establish their role and needs to ensure their professional needs are met and that they can interpret to the highest standard possible (Erlenkamp, Amundsen, Berge, Grande, Mjøen & Raanes, 2011; Napier, McKee & Goswell, 2006).

5.6 Coping strategies

The final theme to be explored during the one-to-one interviews concerned the coping strategies interpreters employed to deal with unfamiliar terminology. The two main strategies used by interpreters given in the online survey results were:

- Fingerspelling
- Asking the healthcare professional to use a model or a drawing to explain a concept.

These two themes formed the basis for questions in the one-to-one interviews to gain more insight into how unfamiliar healthcare terminology was dealt with.

5.6.1 Fingerspelling

As previously mentioned fingerspelling is the presentation of a word letter by letter using the manual alphabet of a given sign language. In New Zealand, the two-handed manual alphabet is used. Presenting unfamiliar healthcare terminology in this way places the onus of understanding on the deaf patient. Interviewee #1 pointed out the problem with this:

With deaf people where there is generally an understanding that doctors are authority figures, [so] fewer questions [are asked] because it's not their place or they should have actually understood it [when the doctor was speaking]. Interviewee #1

When questioned about coping strategies, the interviewees made the following comments on fingerspelling:

In a perfect world you wouldn't need to fingerspell the word, you could just use the sign for it, but there aren't always signs for procedures and all the information they're going to be given is in English. So, it's counter-productive to think I'm only going to interpret into NZSL and I'll only describe the procedure, I won't name it because then the client might not be able to put two and two together when they come to see it [in written English]. Interviewee #1

I normally do fingerspell it and ask if they know what that means. If they go no, then I'll clarify it. So, asking the deaf person first and if they say no then asking to clarify it. Interviewee #2

From the above comments, it appears that although two interviewees reported using fingerspelling, it was not used in isolation or as the only means of conveying a concept. As Davis (2005) pointed out, the conscious transference of the source language form may be used to make the message clearer in an educational setting. Napier (2002) also mentioned use of fingerspelling as a linguistic feature of interpretations undertaken in a university setting. While both articles highlight the appropriate use of fingerspelling in lexically dense texts, it can be argued that overuse of fingerspelling in isolation in healthcare settings could have an adverse effect on patient understanding. Giving deaf patients the necessary terminology via fingerspelling is appropriate but should be done in conjunction with a thorough explanation of the concept by other means.

If it's a big long word but we all know it's the yellow pill we're talking about I'll just keep speaking yellow pill rather than try to remember what the name is because it just becomes annoying [for the other participants]. I've asked if the

yellow pill name can be drawn [written] down and then I'll sign yellow pill and point to it and sign that's the name. Interviewee #7

5.6.2 Use of models and drawings by the healthcare professional

A number of the interviewees reported using this strategy to make sure the deaf person was given a clear representation of the information:

Where I'm able to help with pictures for the patient, that can be really helpful too and sometimes the deaf patients have got their own book. So, they sort that out and they have the picture there and everything so we can talk via those pictures. Interviewee #3

I have asked a couple of times for them to draw something and they go Oh that's such a good idea and doctors are actually really good at doing that.

Interviewee #5

I love it when doctors have models and I often ask do they have a model that we can actually show them [the deaf patient]. Some are really good, they'll draw the picture. Interviewee #6

I recall kidney transplants, the initial stages – the doctor had a power point and showed the power point which is all well and good but two dimensional. So, I requested him to bring out the model of the kidney which I knew he had because I had seen it and explain the arteries etc. to the client visually.

Interviewee #8

In a review of literature conducted by Sudore and Schillinger (2009), it was found that when pictures were used in conjunction with written and spoken information a higher understanding of materials was noted when compared with verbal communication alone. This was especially apparent for patients with limited health literacy. Having a tangible object to refer to such as a three-dimensional model or a two-dimensional drawing or poster makes effective communication easier for all concerned.

5.6.3 Other coping strategies

One interviewee reported practicing how to sign medical concepts they came across.

Researching conditions, I google. Google is my friend, especially ones [conditions] I haven't come across before. Practicing signing those conditions as well. Interviewee #4 The comment below shows that some interpreters also employed face-saving techniques to mitigate perceived health literacy deficits in deaf patients.

The dumb old interpreter, you know, saying I don't know what it means. And I do play the carer a bit, even when sometimes I do sort of know it but it's a word you know like palpitations or something that's really hard [for the deaf person] to understand I'll go, Oh, interpreter clarification, can you just explain what that means, and I actually do know what it means but it's a little ploy because I don't want them [the deaf person] to look stupid. I'd much rather I look stupid. Interviewee #2

The above comment raises the issue of the line between providing a translation of information and explaining medical terminology to the patient. This concerns the implications of interpreters knowing medical terms and being able to accurately produce them in NZSL, versus having a basic understanding of medical terms and asking the healthcare professional to explain in more detail what a medical term means.

Healthcare is an area where clarity of information is most crucial. In situations where patients are being given clinical results, having procedures explained or receiving prescription medicines, it is essential that interpreters take as much care as needed to ensure the information is presented in the most accessible format possible.

I will ask the doctor if I'm not quite sure if they [the deaf person] are understanding some things. It should be up to the doctor to be the one to break it down even more. Interviewee #5

Being assertive enough to request healthcare professionals take extra steps to explain concepts clearly for effective interpretation is an integral part of the professional conduct of the interpreter.

5.7 Summary of chapter

This chapter looked at the outcomes of the one-to-one interviews and found that:

- interpreters have observed a variety of behaviours in healthcare professionals
- interpreters employed a range of coping strategies to ensure deaf clients are getting the best possible access to healthcare information
- by and large interviewees' comments supported the results of the online survey.

The major theme that presented itself during the one-to-one interviews was the degree to which interpreters take upon themselves the responsibility of ensuring clarity of information for deaf clients. Although most interviewees viewed themselves as undertaking their assignments using the ally model, their reported behaviours when dealing with healthcare situations indicated that in fact they adjust or create the interpreter role in response to the specific interaction (Lee & Llewellyn-Jones, 2011).

Healthcare professionals are most likely to have been presented with the more traditional conduit model of interpreting. Prompting healthcare professionals to use drawings or models to explain concepts, asking for medication names or medical terms to be written down for deaf patients and asking for information to be broken down into more manageable language indicate that NZSL interpreters are working outside of the traditional conduit model. Interpreter affinity with the Deaf community may play a large part in this occurring.

Given the responses from the interviewees, it appears that New Zealand Sign Language interpreters are exhibiting behaviours consistent with those identified in current research undertaken in other countries around the world.

The idea that interpreters place themselves into a situation and expect interlocutors to pretend they are not part of the communication dynamic has long since been dispelled (Metzger, 1999; Angelelli, 2004). More recently, Llewellyn-Jones and Lee (2013) have asserted that by following prescriptive interpreting models, interpreters may be inhibiting or affecting the interaction. The authors go so far as to say that interpreters bring a third interlocutor into the dynamic who does not follow the norms of conversation. To be able to make assertions on how interpreters should be working, it is first important to observe how two people, who share a language, converse in specific settings (Llewellyn-Jones & Lee, 2013)

To gain a more accurate view of how NZSL interpreters are working in healthcare settings it would be useful to revisit this aspect of the research from a discourse analysis perspective. Major (2013, 2014) looked at how interpreters manage turn-taking, clarification and presentation of self during authentic and semi-authentic healthcare interactions. Analysis showed that interpreters were able to identify, while actively managing the discourse, when it was appropriate for the interpreter to allow the deaf and hearing clients to interact directly. Analysis of this type regarding use of the various strategies outlined above would lend credence to the authenticity of this research.

Chapter 6 Conclusion

6.1 Introduction

In the previous two chapters, the findings of both the online survey and the one-to-one semi-structured interviews were discussed. This chapter summarises the research project and brings together those findings, within the framework of the literature. Recommendations for stakeholders along with potential future research topics are also outlined and discussed.

6.2 Review of the methodological approach

A mixed-methods approach proved to be the most appropriate methodology to use for this research, and this included the use of an online survey followed by one-to-one interviews to further explore some of the main themes arising from survey findings. The online survey provided respondents with the opportunity to reflect on their interpreting practice in healthcare settings and quantified a number of recurrent issues which were further explored in the one-to-one semi-structured interviews.

Eight one-to-one interviews were conducted in a range of locations, with one being conducted online using Skype as a telecommunication tool. The information gleaned from the interviews provided a depth of knowledge about how interpreters conducted themselves and coped with specific challenges in healthcare settings.

It is not known whether the measures taken affected the final response rates to both survey and interviews; however, the results allowed the original aims of the research to be achieved. These along with an overview of the findings will now be presented.

6.3 Review of the research aims and an overview of the findings

When the research was first planned four questions were proposed:

- What challenges have NZSL interpreters encountered in healthcare settings?
- Do NZSL interpreters consider deaf people to be put at risk in healthcare settings?
- How do NZSL interpreters view their role when working in healthcare settings?
- What coping strategies do NZSL interpreters utilise to deal with unfamiliar healthcare terminology?

After analysis of the online survey results and one-to-one interviews had taken place, the following conclusions were drawn.

6.3.1 Challenges encountered by interpreters in healthcare settings.

Results of the research, including both the online survey and the one-to-one interviews, show that in some cases dealing with healthcare professionals was a challenge. Often due to time constraints, participants felt that healthcare professionals did not provide full and clear information to the deaf client. They indicated that at times the healthcare professional spoke too quickly or not clearly both in terms of pronunciation and explaining things, making interpreting difficult.

Dealing with unfamiliar healthcare terminology proved to be challenging for participants, with many saying a number of factors were involved with this. Lack of continuity for ongoing medical appointments was one theme related to terminology that came to the fore in both the online survey and the one-to-one interviews. When interpreters were brought into an ongoing medical treatment situation, they were aware that valuable time was being spent bringing them up to date on the patient's history and the terminology being used in both English and NZSL. The importance of appropriate lexical choices with regards to terminology was also highlighted. The use of English terms such as *allergic*, which has no equivalent single term in NZSL, raised particular concerns, as the potential negative health outcomes of misrepresenting this to the deaf patient placed extra demands on the interpreter. These outcomes supported those of McKee (2008) who identified the pace of the speaker, their accent and the use of unfamiliar terminology as three of the greatest hindrances faced by both spoken language and signed language interpreters

General lack of awareness of the needs of the interpreter was raised by participants in a variety of ways. Neither deaf clients nor healthcare professionals were always aware of the role of the interpreter. Healthcare professionals, in particular, viewed interpreters as an intrusion which meant a normal appointment was made more difficult. These main themes identified in the study raised concerns about whether deaf people were getting adequate access to healthcare and whether they were being placed at risk.

6.3.2 Risk to deaf people in healthcare settings

More than 50% of 28 online survey respondents disclosed they had left a healthcare assignment feeling the deaf person's needs had not been met, with a small percentage saying they felt the deaf person had been put at risk. These results were concerning and

became a main focus for the one-to-one interviews. Concerns raised about adequate healthcare showed that many of the occurrences involved explanation of medication or medical procedures.

Instances where these types of issues arose were also the situations in which interpreters reported exercising more agency in mediating information or interaction to minimise risk to the deaf clients. Examples of how the interpreters mitigated the risk included asking for clarification on behalf of the deaf person and actively working with the healthcare professionals (doctor and pharmacist) to provide a workable solution for the deaf client. The aim of causing the least amount of harm to a deaf person was a deciding factor for how interpreters behaved in healthcare settings.

6.3.3 The interpreter role when working in healthcare settings

While these outcomes appeared to be outside of the role of the interpreter, most reported being more flexible in terms of their role when working in healthcare than they might be working in different settings. The SLIANZ Code of Conduct contains a paragraph in subclause 5.1 pertaining to impartiality. This relates to it not being appropriate for interpreters to offer advice or opinions during interpreting assignments. An exception to the clause states that it is acceptable "when the immediate wellbeing of a participant would be at risk by failing to offer advice or information" (2012, p. 13). While this clause was not written with healthcare interpreting specifically in mind, it could be argued that minimising immediate risk to a deaf patient would be covered by this clause.

Interviewees reported adhering to a variety of the roles as outlined by Witter-Merithew (1999): In the interviews, the range of roles interpreters adhered to was explored, as was the question of whether they did in fact explain their role to health professionals and deaf clients.

Unsurprisingly, a range of answers was provided when interviewees were asked which of interpreting models that Witter-Merithew (1999) had summarised best suited their role in healthcare settings—most took the view of themselves acting as an ally or cultural mediator. These roles involve the interpreter being more actively involved to ensure all participants are working effectively towards a common communication goal. None of the interviewees reported following the conduit role, in which an attitude of non-involvement is strictly maintained. However, one interviewee did feel they reverted to being a helper in some healthcare situations as they felt this is what the healthcare professional was

expecting. There is a real danger that inexperienced interpreters could fall into the habit of 'helping' in the belief they are being flexible in their role and this is something recent graduates, mentors and interpreter trainers should be aware of and actively discuss as part of ongoing professional development.

When it came to explaining the interpreter role to healthcare professionals, both online survey respondents and interviewees indicated that they did explain their role before commencing an assignment. Some indicated they did this regularly, but most reported explaining their role on occasion, often if they had not worked with the healthcare professional before or if they overheard someone saying it was the first time they had worked with an interpreter. In terms of explaining their role to the deaf person, the responses were very different. Participants of both the online survey and the interviews reported hardly ever or never explaining the role of the interpreter to the deaf person. Anecdotally, the assumption that deaf people know how to work with an interpreter is an issue that has been raised in the past by interpreters and Deaf community members. The best way to alleviate misunderstandings would be for the interpreter, upon meeting a deaf client for the first time, to ask if they have worked with an interpreter before. Again, this is an area of training which could be addressed in the form of ongoing professional development and training.

When faced with issues such as unfamiliar terminology interpreters were required to find ways to cope. The final question posed as part of the research was to find out what coping strategies interpreters employed in healthcare settings.

6.3.4 Coping strategies used in healthcare settings

The online survey presented four strategies for dealing with unfamiliar terminology. The first two options, asking the healthcare professional to use simpler language and/or to use a drawing or two- or three-dimensional model to explain the message to the deaf person, imply that the healthcare professional is made aware that the terminology is difficult for the interpreter to produce in NZSL and puts the onus on the healthcare professional to make the information more accessible. The third and fourth options, use of fingerspelling and/or the use of initialisation and mouthing of unfamiliar terminology, means that the healthcare professional will be unaware that the interpreter is unable to produce a workable solution to deal with the unfamiliar terminology. The deaf person is left with the responsibility of deciphering the fingerspelled word, or trying to lip read and use their

closure skills to identify the initialised and mouthed vocabulary. The responsibility for clarification is thus shifted to the deaf person.

Respondents to the online survey reported having used fingerspelling and asking the healthcare provider to draw a picture or use a three-dimensional model most often, with use of initialisation and mouthing also being used.

When the same question was put to interviewees, they also reported asking the healthcare professional to draw a picture or use a three-dimensional model and/or utilised fingerspelling. The difference between the online survey results and the interviews, however, was that participants were able to expand on their answers. Fingerspelling was often used in conjunction with explanations of conditions to ensure deaf people had the appropriate English term for their own knowledge. Providing a well-rounded interpretation that included presentation of concepts in NZSL and English was cited as the aim by some of the interviewees.

6.4 Previous studies and relevance to current study

The study provided data from a New Zealand Sign Language interpreters' perspective not previously available, and in that regard this study has added to a growing body of knowledge about both signed language interpreting and healthcare interpreting in New Zealand.

6.5 Strengths and limitations of the study

The limitations of this study were that the cohort of potential participants was relatively small at 75. Given that the aim was to gain a NZSL interpreters' perspective on healthcare interpreting there was no way of extending the potential pool of participants. However, if a more general perspective on interpreters working in healthcare was wanted, it would have been possible to invite spoken language interpreters to participate also. The issues faced by spoken language interpreters may have added depth to the research, but the probability of Deaf community members gaining the most benefit from the research outcomes would have been reduced.

The strength of the research lies in its practical perspective of how NZSL interpreters felt while working in healthcare situations. Providing reliable research information interpreting to the Deaf community and their respective organisations such as Deaf Aotearoa New Zealand along with District Health Boards and other stakeholders was the driving force behind undertaking this study.

The recommendations which follow suggest that interpreters in healthcare work should be made aware of the perspectives given by the practicing sign language interpreters who participated, in order to ensure the best possible outcomes for patients and healthcare professionals alike and stakeholders.

6.6 Recommendations

As with any research the results have elicited recommendations for stakeholders and for future research possibilities.

6.6.1 Recommendations for stakeholders

District Health Boards and medical schools should provide training for healthcare professionals on how to work with sign language interpreters. Although training is given on how to work with spoken language interpreters, the dynamics of working with sign language interpreters are different and this gap in training needs to be acknowledged and remedied.

Interpreters need to convey to healthcare professionals that the interpreter is not an advocate for the patient but in some cases the deaf patient will need both. Interviewee #1 mentioned that 10% of all deaf people seen in hospital by this interviewee really needed an advocate as much as they needed an interpreter.

Booking agencies should, where possible, aim for continuity of interpreter provision for ongoing medical appointments and/or treatments. Having the same interpreter for ongoing appointments helps to foster trust between the healthcare professional, the deaf person and the interpreter.

Interpreters themselves should ensure that all parties are aware of the role of the interpreter. Explaining our role is part of the professional relationship interpreters have with clients and more care should be taken to ensure interpreters are providing all the relevant information before commencing an assignment.

Clarity of information is paramount and interpreters have a duty of care to ensure they are presenting the target language message in the most appropriate form. If this requires

clarification or requests for use of drawings or models on the part of the healthcare professional, then they should be asked for.

Continuing professional development for NZSL interpreters working in healthcare situations could include workshops at which Deaf community members work with interpreters to provide constructive feedback on recorded interpretations. Professional conversations regarding clarity of articulation, lexical choices and coping strategies for unfamiliar terminology have the potential to improve access to clear information for deaf patients in the future.

Deaf people are the best people to ask about signing concepts clearly. Developing, filming and sharing resources which show deaf people explaining medical terminology is a project which should be considered. Stories of Deaf community members' healthcare experiences are currently being collected as part of a research project at AUT. How they will be used is unknown at the time of writing this.

6.6.2 Recommendations for future research

Having developed a base of information, future research projects could extend what has already been learned. The study presented here outlined strategies NZSL interpreters stated they had used in healthcare situations. This has raised an area for future research which would involve looking at how interpreters cope with unfamiliar healthcare terminology in a live interpreting situation.

It would be beneficial to all people in healthcare situations if interpreters could specialise in healthcare interpreting. Unfortunately, New Zealand is too small in terms of population to allow that to happen.

A narrow focus on one specific area such as interpreting informed consents prior to medical procedures is another area which is of particular interest to me. This is an area of healthcare which carries an enormous amount of responsibility for all concerned, yet it appears to be under-researched at this time.

References

- Angelelli, C. (2004). *Medical interpreting and cross-cultural communication*. Cambridge, United Kingdom: Cambridge University Press.
- Angelelli, C., & Geist-Martin, P. (2005). Enhancing culturally competent health communication: Constructing understanding between providers and cultually diverse patients. In E. B. Ray (Ed.), *Health communication in practice: A case study approach* (pp. 271-283). Mahwah, NJ: Lawrence Erlbaum Associates.
- Auckland University of Technology. (2016). *Academic Calendar*. Retrieved from Auckland University of Technology: http://www.aut.ac.nz/_media/intranet/pdfs/services-and-operations/academicquality-office/academic-calendar-2016/Bachelors-Degrees_Academic-Calendar-2016-June-updated.pdf
- Baker, C., & Cokely, D. (1980). American Sign Language: A teacher's resource text on grammar and culture. Silver Spring, MD: TJ Publishers.
- Baker-Shenk, C. (1986). Characteristics of oppressed and oppressor peoples: Their effect on the interpreting context. Retrieved October 03 2016, from National Consortium of Interpreter Education Centres: http://www.interpretereducation.org/wpcontent/uploads/2014/04/Characteristics-of-the-Oppressed.pdf
- Barnett, S. (2002). Communication with Deaf and hard-of-hearing people: A guide for medical education. *Academic Medicine*, 77(7), 694-700.
- Baruch, Y., & Holtom, B. (2008). Survey response rate levels and trends in organisational research. *Human relations*, 61(8), 1139-1160. doi:10.1177/0018726708094863
- Bolden, G. (2000). Toward understanding practices of medical interpreting: Interpreters' involvement in history taking. *Discourse Studies*, 2(4), 387-419.
- Bontempo, K., & Malcolm, K. (2012). An ounce of prevention is worth a pound of cure: Educating interpreters about the risk of vicarious trauma in healthcare settings. In L. Swabey, & K. Malcolm (Eds.), *In our hands: Educating healthcare interpreters* (pp. 105-130). Washington, D.C.: Gallaudet University Press.
- Boudreault, P. (2005). Deaf interpreters. In T. Janzen (Ed.), *Topics in signed language interpreting* (pp. 323-356). Amsterdam, The Netherlands: John Benjamins Publishing.
- Brother, M. (2016, October 03). *Children of Deaf Adults*. Retrieved from codainternational.org: https://www.coda-international.org/milliebrother
- Bryman, A. (2012). *Social research methods* (4th ed.). New York, NY: Oxford University Press.
- Chang, E., Tsang, B., & Thornley, S. (2011). Language barriers in the community pharmacy: A study of northern and western Auckland. *Journal of Primary Health Care*, *3*(2), 102-106.
- Cokely, D. (1992). The effects of lag time on interpreter errors. In Cokely, D. (Ed.), *Sign language interpreters and interpreting*. Burtonsville, MD: Linstok Press.

- Connect Interpreting Services. (n.d.). Retrieved October 04, 2016, from http://www.connectinterpreting.co.nz/
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). California, USA: Sage.
- Creswell, J., & Miller, D. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, *39*(3), 124-130.
- Crezee, I. (2003). Health interpreting in New Zealand: The cultural divide. In L. Brunette, G. Bastin, I. Hemlin and H. Clarke (Eds.) The Critical Link 3, 249– 259. Amsterdam, The Netherlands and Philadelphia, PA: John Benjamins.
- Crezee, I. H. (2013). *Introduction to healthcare for interpreters and translators*. Amsterdam, The Netherlands: John Benjamins Publishing.
- Crezee, I. (2014). *Patient navigators at Seattle children's hospital: What can learn for New Zealand?* Auckland, New Zealand: Auckland University of Technology.
- Crezee, I., Atkinson, D. P., Pask, R., Au, P., & Wong, S. (2015). Teaching interpreters about self-care. *International Journal of Interpreter Education*, 7(1), 74-83.
- Crezee, I., & Verstraete, F. (2015). Interview: Interpreter consumer and Deaf advocate Filip Verstraete. *International Journal of Interpreter Education*, 7(2), 68-72.
- Crezee, I., Jülich, S., & Hayward, M. (2011). Issues for interpreters and professionals working in refugee settings. *Journal of Applied Linguistics and Professional Practice*, 8(3), 253 - 274.
- Davis, J. (2005). Code choices and consequences: Implications for educational interpreting. In M. Marschark, R. Peterson, & E. Winston (Eds.), *Sign language interpreting and interpreter education* (pp. 112-141). New York, NY: Oxford University Press.
- Deaf Aotearoa New Zealand. (n.d.). *What we do*. Retrieved October 04, 2016, from deaf.org.nz: http://deaf.org.nz/about-us/what-we-do
- Deaf Aotearoa New Zealand. (n.d.). *Deaf Community*. Retrieved January 10, 2017, from deaf.org.nz: http://deaf.org.nz/about-us/deaf-community
- Dean, R., & Pollard, R. (2001). Application of demand-control theory to sign language interpreting: Implications for stress and interpreter training. *Journal of Deaf Studies and Deaf Education*, 6, 1-14. doi: doi:10.1093/deafed/6.1.1
- Dean, R., & Pollard, R. (2004). A practice-profession model of ethical reasoning. *Views: A Monthly Publication of the Registry of Interpreters for the Deaf, 21*(9), pp. 1, 28-29. Retrieved July 11, 2016
- Dean, R., & Pollard, R. (2012). Beyond "interesting": Using demand control schema to structure experiential learning. In Swabey, L. & Malcolm, K. (Eds.), *In our hands: Educating healthcare interpreters* (pp.77-103). Washington, DC: Gallaudet University Press.
- Dickinson, J., & Turner, G. (2014). Forging alliances: The role of the sign language interpreter in workplace discourse. In R. Ricoy, I. Perez, & C. Wilson (Eds.), *Interpreting and translating in public service settings: Policy, practice, pedagogy* (pp. 171 - 183). London, England & New York, NY: Routledge.

- Dugdale, P. (2001). *Talking hands, listening eyes: The history of the Deaf Association of New Zealand*. Auckland, New Zealand: Deaf Association of New Zealand.
- Emmerton, L., Mampallil, L., Kairuz, T., McKauge, L., & Bush, R. A. (2010). Exploring health literacy competencies in community pharmacy. *Health Expectations*, 15, 12-22.
- Erlenkamp, S., Amundsen, G., Berge, S., Grande, T., Mjøen, O., & Raanes, E. (2011).
 Becoming the ears, eyes, voice and hands of someone else. In L. Leeson, S.
 Wurm, & M. Vermeerbergen (Eds.), *Signed language interpreting: preparation, practice and performance* (pp. 12-36). Manchester, England: St Jerome Publishing.
- Gerver, D. (1969). The effects of source language presentation rate on the performance of simultaneous conference interpreters. In F. Pochhacker, & M. Shleshinger (Eds.) (2002), *The interpreting studies reader* (pp. 52-67). New York, N Y: Routledge.
- Gibson, B., & Hua, Z. (2016). Interviews. In Z. Hua, *Research methods in intercultural communication: A practical guide* (pp. 181-195). Chichester, UK: Wiley.Press.
- Gilbert, J., & McKee, R. (2013). NZSL Interpreter Employment Survey Report. unpublished report. Retrieved from: http://www.slianz.org.nz/uploads/official%20docs%20and%20forms/SLIANZ% 20NZSL%20Interp reter%20Employment%20Survey%20Report%202013.pdf Wellington: Sign Language Interpreters Association of New Zealand Inc.
- Global Health Observatory. (2016). Retrieved May 16, 2016, from World Health Organisation: http://www.who.int/gho/mortality_burden_disease/life_tables/situation_trends_t ext/en/
- Hale, S. (2007). *Community Interpreting*. Basingstoke, Hampshire: Palgrave MacMillan.
- Hale, S. (2014). Interpreting culture: Dealing with cross-cultural issues in court interpreting. *Perspectives*, 22(3), 321-331. doi:10.1080/0907676X.2013.827226
- Hale, S., & Napier, J. (2013). *Research methods in interpreting: A practical resource*. [Kindle DX version]. Retrieved from Amazon.com
- Harmer, L. (1999). Health care delivery and deaf people: Practice, problems and recommendations for change. *Journal of Deaf Studies and Deaf Education*, 4(2), 73-110.
- Hartwell, H. (2012, January). Health literacy. Perspectives in public health, 132(1), 2.
- Harvey, M. (2003). Sheilding yourself from the perils of empathy: The case of sign language interpreters. *Journal of Deaf Studies and Deaf Education*, 8(2), 207-213.
- Harvey, M. (2015). Reaping the benefits of vicarious trauma. *International Journal of Interpreter Education*, 7(2), 5-20.
- Health and Disability Commissioner. (1996).*Code of health and disability services: Consumer rights.* Retrieved August 19, 2016, from: http://www.hdc.org.nz/media/24833/leaflet%20code%20of%20rights.pdf

- Henning, M., Krägeloh, C., Sameshima, S., Shepherd, D., Shepherd, G., & Billington, R. (2011). Access to New Zealand Sign Language interpreters and quality of life for the deaf: a pilot study. Disability & Rehabilitation, 33(25/26), 2559-2566.
- Hoza, J. (2016). *Interpreting in the Zone*. Washington, D.C.: Gallaudet University Press. Retrieved from http://www.ebrary.com.
- Human Rights Commission. (2013). A New Era in the Right to Sign: Report of the New Zealand Sign Language Inquiry. Wellington, New Zealand: Human Rights Commission.
- Iezzoni, L., O'Day, B., Killeen, M., & Harker, H. (2004). Communicating about health care: Observations from persons who are deaf or hard of hearing. *Annals of Internal Medicine*, *140*(5), 356-362.
- Immigration New Zealand. (2016, October 26). *Skill Shortage List Checker*. Retrieved from Immigration New Zealand: http://skillshortages.immigration.govt.nz/
- Isham, G. (2009). Opportunity at the intersection of quality improvement, disparities reduction and health literacy. In I. o. Medicine, *Toward health equity and patient centeredness: integrating health literacy, disparities reduction and qulity improvement: Workshop summary* (pp. 5-16). Washington, DC: The National Acadamies Press.
- Kairuz, T., Bellamy, K., Lord, E., Ostini, R., & Emmerton, L. (2013). Health literacy among consumers in community pharmacy: perceptions of pharmacy staff. *Health Expectations*, 18, 1041-1051.
- King, S., McCaffery, D., & Bouldin, A. (2011). Health literacy in the pharmacy setting: defining pharmacotherapy literacy. *Pharmacy Practice (Internet)*, 9(4), 213-220.
- Komaric, N., Bedford, S., & van Driel, M. (2012). Two sides of the coin: patient and provider perceptions of healthcare delivery to patients from culturally and linguistically diverse backgrounds. *BMC Health Services Research*, 12. doi:10.1186/1472-6963-12-322
- Kyle, F., & Harris, M. (2010). Longitudinal patterns of emerging literacy in beginning deaf and hearing readers. *Journal of Deaf Studies and Deaf Education*, 289-303. doi:10.1093/deafed/enq069
- Lai, M., Heydon, G., & Mulayim, S. (2015). Vicarious trauma among interpreters. *International Journal of Interpreter Education*, 7(1), 3-22.
- Lee, R., & Llewellyn-Jones, P. (2011). Re-visiting role: Arguing for a multidimensional analysis of interpreter behaviour. *paper presented at the Supporting Deaf People online conference, January 2011.*
- Leeson, L. (2005). Making the effort in simultaneous interpreting: Some consideratons for signed language interpreters. In T. Janzen (Ed.), *Topics in signed language interpreting* (pp. 51-68). Amsterdam, The Netherlands & Philadelphia, USA: John Benjamins.
- Lin, I., Chang, F., & Kuo, F. (2013). The impact of non-native accented English on rendition accuracy in simultaneous interpreting. *International Journal for Translation and Interpreting Research*, 5(2), 30-42. doi:ti.105202.2013.a03

- Llewellyn-Jones, P., & Lee, R. (2009). The 'role' of the community/public service interpreter. paper presented at the *Supporting Deaf People online conference January 2009*.
- Llewellyn-Jones, P., & Lee, R. (2013). Getting to the core of role: Defining interpreters' role-space. *International Journal of Interpreter Education*, 5(2), 54-72.
- Lytton, M. (2013). Health literacy: An opinionated perspective. *American Journal of Preventive Medicine*, e35-e40. doi:10.1016/j.amepre.2013.10.006
- Madden, M. (2005). The prevalence of occupational overuse syndrome in sign language interpreters in Australia What a pain! In M. Metzger, & E. Fleetwood (Eds.), *Attitudes, innuendo and regulators: Challenges for interpretation* (pp. 3-70). Washington, DC.: Gallaudet University Press.
- Magill, D., & de Jong, K. (2016). Interview with Kim de Jong, Interpreting and Translation Service Manager. *International Journal of Interpreter Education*, 8(1), 57-66.
- Major, G. (2013). Healthcare interpreting as relational practice (Doctoral thesis, Macquarie University, Sydney, Australia).
- Major, G. (2014). "Sorry, could you explain that?": Clarification requests in interpreted healthcare interaction. In B. Nicodemus, & M. Metzger (Eds.), *Investigations in healthcare interpreting* (pp. 32-69). Washington, DC.: Gallaudet University Press.
- Manfreda, K., Bosnjak, M., Berzelak, J., Haas, I., & Vehovar, V. (2008). Web surveys versus other survey modes: A meta-analysis comparing response rates. *International Journal of Market Reserach*, 50(1), 79-104.
- Marschark, M., Sapere, P., Convertino, C., Seewagen, R., & Maltzen, H. (2004). Comprehension of Sign Language interpreting: Deciphering a complex task situation. *Sign Language Studies*, 4(4), 345-368. doi:10.1353/sls.2004.0018
- McKee, D., (Ed.). (n.d.). NZSL Online. *NZSL Online Dictionary*. Retrieved October 2016, from NZSL Online Dictionary: http://nzsl.vuw.ac.nz/
- McKee, M., Smith, S., Barnett, S., & Pearson, T. (2013). What are the benefits of training deaf and hard-of-hearing doctors. *Academic Medicine*, 88(2), 158-161. doi:10.1097/ACM.0b013e31827c0aef
- McKee, R. (2008). 'Quality' in interpreting: A survey of practitioner perspectives. *The Sign Language Translator and Interpreter*, 2(1), 1-14.
- Metzger, M. (1999). *Sign language interpreting: Deconstructing the myth of neutrality*. Washington, D.C.: Gallaudet University Press.
- Meyer, B. (2002). Medical Interpreting: Some salient features. In G. G. Viezzi (Ed.), Interpreting in the 21st Century: Challenges and opportunities (pp. 159-169).
- Middleton, A., Turner, G., Bitner-Glindzicz, M., Lewis, P., Richards, M., Clarke, A., & Stephens, D. (2010). Preferences for communication in clinic from deaf people: A cross-sectional study. *Journal of Evaluation in Clinical Practice*, 16, 811-817. doi:10.1111/j.1365-2753.2009.01207.x
- Mindess, A. (2006). *Reading between the signs: Intercultural communication for sign language interpreters* (2nd ed.). Boston, MA: Intercultural Press.

- Morris, R. (1999). The gum syndrome: predicaments in court. *Forensic linguistics*, 6(1), 6-29.
- Napier, J. (2002). *Sign language interpreting: Linguistic coping strategies*. Gloucestershire, England: Douglas McLean.
- Napier, J., McKee, R., & Goswell, D. (2006). *Sign language interpreting: Theory and practice in Australia & New Zealand*. Sydney: The Federation Press.
- Napier, J., & Kidd, M. R. (2013). English literacy as a barrier to health care information for deaf people who use Auslan. *Australian family physician*, 42(12), 896.
- Napier, J., Major, G., & Ferrara, L. (2011). Medical signbank: A cure-all for the aches and pains of medical signed language interpreting? In L. Leeson, S. Wurm, & M. Vermeerbergen (Eds.), *Signed language interpreting: Preparation, practice and performance* (pp. 110-137). Manchester, England: St. Jerome Publishing.
- New Zealand Government. (2006). *New Zealand Sign Language Act*. Retrieved April 13, 2014, from New Zealand Legislation Website: http://www.legislation.govt.nz/act/public/2006/0018/latest/whole.html
- New Zealand Government. (1994). *Health and Disability Commissioner Act 1994*. Retrieved October 07, 2016, from New Zealand Legislation Website: http://www.legislation.govt.nz/act/public/1994/0088/latest/DLM333584.html
- New Zealand Sign Language Board. (2016). *New Zealand Sign Language board action plan 2016-2018*. Wellington: Office of Disability Issues. Retrieved from http://www.odi.govt.nz/documents/what-we-do/nzsl/nzsl-action-plan/nzsl-boardaction-plan-2016-2018.pdf
- Nicodemus, B., & Emmorey, K. (2015). Directionality in ASL-English interpreting: Accuracy and articulation quality in L1 and L2. *Interpreting*, *17*(2), 145-166. doi:10.1075/intp.17.2.01nic
- Nicodemus, B., Swabey, L., & Moreland, C. (2014). Conveying medication prescriptions in American Sign Language: Use of emphasis in translations by interpreters and deaf physicians. *International Journal for Translation and Interpreting Research*, 6(1), 1-22. doi: ti.106201.2014.a01
- Nulty, D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education*, *33*(3), 301-314. doi:10.1080/02602930701293231
- Orsi, J., Margellos-Anast, H., Perlman, T., Giloth, B., & Whitman, S. (2007). Cancer screening knowledge, attitudes and behaviours among culturally Deaf adults: implications for informed decision making. *Cancer Detection and Prevention*, 31(6), 474-479. doi:10.1016/j.cdp.2007.10.008
- Padden, C., & Humphries, T. (1988). Deaf in America: Voices from a culture. Boston, MA: Harvard University Press.
- Payne, D., Yoshida, K., Hickey, H., Pivac, L., Merrit, S., McPherson, K., & Garrett, N. (Paper in progress). Women with disabilities' barriers and enablers to cervical and breast cancer screening.
- Pivac, L. (2009). Sign language interpreting in New Zealand from the perspective of a Deaf professional. In *Interpreting in New Zealand: The pathway forward* (D.

Hanks, Trans., pp. 161-164). Wellington, New Zealand: The Office of Ethnic Affairs: Te Tari Matawaka.

- Pöchhacker, F. (2004). Introducing interpreting studies. London, England: Routledge.
- Pollard, R., & Barnett, S. (2009). Health-related vocabulary knowledge among Deaf adults. *Rehabilitation Psychology*, 54(2), 182-185. doi:10.1037/a0015771
- Power, D., & Leigh, G. R. (2000). Principles and practices of literacy development for deaf learners: A historical overview. *Journal of Deaf Studies and Deaf Education*, 5(1), 3-8.
- Prior, A. (2014). Deaf is best: Exploring the sexuality experiences and knowledge of Deaf women in New Zealand. (Masters thesis, Victoria University of Wellington, Wellington, New Zealand). Retrieved January 11, 2017, from http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/4837/thesis.pdf? sequence=1
- Ratzan, S. (2000). Health literacy: Communication for the public good. *Health Promotion International*, *16*(2), 207-214.
- Raynor, D. K. (2009). Addressing medication literacy: a pharmacy practice priority. *The International Journal of Pharmacy Practice*, *17*, 257-259.
- Roter, D., & Hall, J. (2007). *Doctors talking with patients/patients talking with doctors: Improving communication in medical visits.* Westport, CT: Auburn House.
- Safeer, R., & Keenan, J. (2005). Health literacy: The gap between physicians and patients. *American Family Physician*, 72(3), 463-468.
- Sadler, G., Gunsauls, D., Huang, J., Padden, C., Elion, L., Galey, T., . . . Ko, C. (2001). Bringing breast cancer education to Deaf women. *Journal of Cancer Education*, 16(4), 225-228.
- Schembri, A., Cormier, K., Johnston, T., McKee, D., McKee, R., & Woll, B. (2009). British, Austalian, and New Zealand sign languages: Origins, transmission, variation and change. In: Brentari, D, (Ed.) Sign Languages. (pp. 476-498). Cambridge, England: Cambridge University Press. Retrieved from www.academia.edu/download/31010729/BrentariVolumeChapterFinal.pdf
- Services: Interpreting NZ. (2017). Retrieved January 01, 2017, from Interpreting New Zealand: http://www.interpret.org.nz/services/
- Simon, C. M., Zyzanski, S. J., Durand, E., Jimenez, X., & Kodish, E. D. (2006). Interpreter accuracy and informed consent among Spanish-speaking families with cancer. *Journal of Health Communication*, 11(5), 509-522.
- SLIANZ. (2012). *SLIANZ Code of Ethics and Conduct*. Retrieved from SLIANZ: http://www.slianz.org.nz/resources/code-of-conduct
- Splevins, K., Cohen, K., Joseph, S., Murray, C., & Bowley, J. (2010). Vicarious posttraumatic growth among interpreters. *Qualitative Health Research*, 20(12), 1705-1716. doi:10.1177/1049732310377457
- Statistics New Zealand. (2015, March 06). 2013 Census Totals by topic. Retrieved from Statistics New Zealand:Tatauranga Aotearoa: http://www.stats.govt.nz/Census/2013-census/data-tables/total-by-topic.aspx

- Statistics New Zealand. (2016, October 07). *How long will I live*. Retrieved from http://www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Health/life-expectancy.aspx#info5
- Stratiy, A. (2005). Best practices in interpreting: A Deaf community perspective. In T. Janzen (Ed.), *Topics in signed language interpreting* (pp. 231-250). Amsterdam, The Netherlands & Philadelphia, USA: John Benjamins.
- Steinberg, A., Barnett, S., Meador, H., Wiggins, E., & Zazove, P. (2006). Health care system accessibility: Experiences and perceptions of Deaf people. *Journal of General Internal Medicine*, 21(3), 260-266.
- Steinberg, A., Wiggins, E., Barmada, C., & Sullivan, V. (2002). Deaf women: experiences and perceptions of healthcare system access. *Journal of Women's Health*, 11(8), 729-741.
- Swabey, L. A., & Malcolm, K. (2012). *In Our Hands*. Washington, D.C.: Gallaudet University Press.
- Sudore, R., & Schillinger, D. (2009). Interventions to improve care for patients with limited health literacy. *Journal of Clinical Outcomes Management*, *16*(1), 20-29.
- Treisman, A. (1965). The effects of redundancy and familiarity on translating and repeating back a foreign and a native language. *British Journal of Psychology*, *56*(4), 368-379.
- Turia, T. (2014). Budget supports range of disability issues. Wellington, New Zealand. Retrieved from http://www.behive.govt.nz/release/budget-support-rangedisability-services#.U3QiggDwD0w.facebook
- Ubido, J., Huntington, J., & Warburton, D. (2002). Inequalities in access to healthcare faced by women who are deaf. *Health and Social Care in the Community*, *10*(4), 247-253.
- United Nations. (2008). *Indigenous languages*. Retrieved from United Nations: http://www.un.org/en/events/indigenousday/2008/pdfs/Factsheet_languages_FI NAL.pdf
- United Nations. (2008). UN Convention of the Rights of People with Disabilities. Retrieved from http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf
- Wauters, L., van Bon, W., & Tellings, A. (2006). Reading comprehension of Dutch deaf children. *Reading and Writing*, 19, 49-76. doi:10.1007/s11145-004-5894-0
- Wells, K. J., Battaglia, T., Dudley, D., Garcia, R., Greene, A., Calhoun, E., Mandelblatt, J., Paskett, E., Raich, P. & the Patient Navigation Research Program. (2008).
 Patient navigation: State of the art or is it science? *Cancer*, *113*, 1999-2010. doi:10.1002/cncr.23815
- Witter-Merithew, A. (1999). From Benevolent caretaker to ally: The evolving role of sign language in the United States of America. Retrieved July 19, 2016, from National Consortium of Interpreter Education Centers: http://www.test.interpretereducation.org/wp-content/uploads/2014/04/From-Benevolent-Caretaker.pdf

- Wolf, M. (2009). Building the foundation for integrating health literacy, disparities reduction and quality improvement in health and health care. In Institute of Medicine, Integrating health literacy, disparities reduction and quality imporvement: Workshop summary (pp. 17-39). Washington, D.C.: The National Academies Press.
- World Health Organisation. (2013). Health literacy: The solid facts. Retrieved April 12, 2014, from

http://www.euro.who.int/__data/assets/pdf_file/0008/190655/e96854.pdf

Appendix A: Ethics Approval



3 September 2014

Lynn Grant Faculty of Culture and Society

Dear Lynn

Re Ethics Application: 14/248 Healthcare interpreting: A New Zealand sign language interpreters' perspective.

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 3 September 2017.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through <u>http://www.aut.ac.nz/researchethics</u>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 3 September 2017;
- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/researchethics. This report is to be submitted either when the approval expires on 3 September 2017 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

Al Courson

Kate O'Connor **Executive Secretary** Auckland University of Technology Ethics Committee Cc:

Delys Magill delys.magill@aut.ac.nz

Auckland University of Technology Ethics Committee WA505F Level 5 WA Building City Campus Private Bag 92006 Auckland 1142 Ph: +64-9-921-9999 ext 8316 email ethics@aut.ac.nz





My name is Delys Magill and I am currently completing a Master of Arts in Applied Language Studies at Auckland University of Technology. The focus of this thesis research will be NZSL interpreters working in healthcare settings.

This study aims to increase the understanding of the challenges faced by NZSL interpreters working in healthcare settings in New Zealand and the linguistic coping strategies they employ during healthcare interpreting assignments.

It also aims to identify what ongoing professional development interpreters working in healthcare settings are undertaking.

It is believed that this research will be of benefit to the sign language profession both in New Zealand and overseas. Interpreters will have a greater understanding of the challenges and issues faced by their colleagues when interpreting in healthcare settings. The Deaf community and healthcare providers will have a hetter understanding of the challenges faced by interpreters working in healthcare settings.

There are two parts to this research: a confidential online questionnaire and 1-1 interviews to be conducted with voluntary participants.

If you wish to volunteer as an interviewee you should contact Delys Magill directly by email at dmagill.research@gmail.com. This email address has been set up specifically and solely for the purposes of this research.

Protection of your privacy is paramount and all information collected will remain confidential at all times.

There is no financial cost involved in participating in this research, however you will be asked to spend a short amount of time (approximately 15 minutes) filling out the online questionnaire. If you agree to participate in a 1-1 interview in early 2015, this will take approximately 45 minutes of your time as well as a further 15 minutes to check the interview transcript which will be sent to you.

Please Note: By completing this questionnaire, you are consenting to participate in the first part of this research.

The findings of this research will be available at https://plus.google.com/u/1/116667831118918619192/about/p/pub.

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Ineke Crezee, icrezee@aut.ac.nz, 921 9999 ext 6825 or Dr Lynn Grant, lgrant@aut.ac.nz 921 9999 ext 6826.

Concerns regarding the conduct of the research should be sent to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz , 921 9999 ext 6038.

Approved by the Auckland University of Technology Ethics Committee on 3 September 2014, AUTEC Reference number 14/248

- 1. My age range is:
 - a. 20-29
 - b. 30-39
 - c. 40-49
 - d. 50+
- 2. I have been a New Zealand Sign Language interpreter for:
 - a. 0-2 years
 - b. 3-5 years
 - c. 6-10 years
 - d. 11-15 years
 - e. 15+ years
- 3. On average I would interpret in a healthcare setting:
 - a. 0-2 hours/week
 - b. 3-5 hours/week
 - c. 6-9 hours/week
 - d. 10+ hours/week
- 4. What kind of interpreter training or interpreting study have you completed or are you now engaged in? (please click on any that apply)
 - a. Diploma in Sign Language Interpreting (AIT or AUT)
 - b. Certificate in Advanced Interpreting Health
 - c. Bachelor of Arts: NZSL-English Interpreting
 - d. Graduate Diploma in Arts (Interpreting)
 - e. Post-graduate Diploma in NZSL Interpreting
 - f. Master's Degree in Interpreting
 - g. NAATI (please specify which level)
 - h. PhD
 - i. Other (please specify)

		Never	Hardly Ever	Sometimes	Regularly	Often	N/A
GP (General P appointment							
Audiology ap	pointments						
Mental Healt	h						
Eye clinic app	ointments						
Counselling							
Hospital – on department	call emergency						
Hospital – pre	admission						
Hospital – pre consent)	e-surgery (informed						
Hospital – po ward)	st-surgery (recovery						
Hospital – wa	rd rounds						
Ante-natal an (including chi	d maternity care ld birth)						
Specialist app specify type o	ointments (please of specialist)						
Other (please possible to er answers here	nter multiple						

Which areas of healthcare do you interpret in? (please click on any that apply and indicate the frequency)

	Never	Hardly Ever	Sometimes	Regularly	Often	N/A
The healthcare professional speaks too fast						
The healthcare professional does not speak clearly						
The healthcare professional has a strong accent						
The healthcare professional use terminology you are unfamiliar with						
The healthcare professional turns to you for advice or consultation						
The Deaf person signs too fast						
The Deaf person does not sign clearly						19035
The Deaf person uses signs or terminology you are unfamiliar with						
The Deaf person turns to you for advice or consultation						
Misunderstanding arises between the two speakers due to cultural differences						
Too little background information is provided prior to the interpreting work commencing						
Other (please specify) It is possible to enter multiple answers here			184 Contraction			

6. What challenges have you ever encountered in healthcare interpreting? (please click on any that apply and indicate the frequency)

- 7. Which mode of interpreting would you use most often in healthcare interpreting situations?
 - a. Simultaneous
 - b. Consecutive
 - c. Both (please specify where you would use which mode)
- What kind of coping strategies do you use in healthcare interpreting situations? (please click on any that apply and indicate frequency)

	Never	Hardly Ever	Sometimes	Regularly	Often	N/A
Asking the healthcare professional to draw a picture or use a model to show the Deaf person						
Asking the healthcare professional to use simpler language to allow you to have a better understanding						
Using fingerspelling for terminology you don't know how to sign						
Using initialisation (fingerspelling the first letter of a word) and mouthing for terminology you don't know how to sign						
Other (please specify)						

	Never	Hardly Ever	Sometimes	Regularly	Often	N/A
Watching medically based television programmes e.g. Shortland St, ER, House						
Reading reports on medical research in the newspaper either online or in print						
Using internet resources such as search engines, question boards, forums and websites						
Attending seminars and conferences for interpreter professionals						
Communicating with other Interpreter professionals (email, phone call, in person)						
Attending ongoing language mentoring sessions with a Deaf person						
Videoing and self-analysing contrived healthcare interpreting appointments						
Videoing and asking a mentor to analyse and provide feedback on contrived healthcare interpreting appointments						
Other (please specify)						

9. What types on ongoing professional development do you do to improve your healthcare interpreting skills? (please click on any that apply and indicate frequency) 10. Have you ever left a healthcare interpreting assignment feeling that the needs of the Deaf client have not been met?

Yes No

11. Have you ever left a healthcare interpreting assignment feeling that the Deaf client has been put at risk because their needs have not been met?

Yes No

12. As a professional interpreter how often do you explain your role to healthcare professionals prior to an assignment commencing?

Never	Hardly Ever	Sometimes	Regularly	Ofter
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13. As a professional interpreter how often do you explain your role to a Deaf client before an assignment commencing?

Never	Hardly Ever	Sometimes	Regularly	Often
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Project title: Healthcare interpreting: A New Zealand Sign Language interpreters' perspective

Project Supervisor: Dr Ineke Crezee and Dr Lynn Grant

Researcher: Delys Magill

- O I have read and understood the information provided about this research project in the Information Sheet dated 28 July 2014.
- O I have had an opportunity to ask questions and to have them answered.
- O I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- O I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- O If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- O I agree to take part in this research.
- O I wish to receive a copy of the report from the research (please tick one): YesO NoO

Participant's	signature:
Participant's	name:
Participant's Contact Details (if appropriate):	
Date:	
Approved by the Auckland University of Technology Ethics Committee on 3 rd Septer	mber 2014,

AUTEC Reference number 14/248

Semi-Structured Interview Guide Questions



Please note that these questions are indicative only.

- On average how much of your interpreting time per week is spent attending healthcare interpreting assignments?
- 2. What types of healthcare interpreting assignments do you find the most challenging?
- 3. Why?
- 4. 57% indicated that they leave appointments feeling that Deaf people have not had their needs met and 17% indicated they felt that Deaf people have been put at risk. Is this something that you agree with as being possible or that you have experienced yourself?
- 5. Can you give me an example of a time when you were working in a healthcare interpreting assignment and you left feeling the Deaf client's needs had not been met?
- 6. What did you do about it?
- 7. As interpreters we work across a number of 'models' depending on the situation in which we find ourselves. E.g helper, conduit, cross-cultural mediator, ally. Which model do you think you use most often in healthcare situations and why?
- 8. In terms of clarity for both the Deaf person and the Healthcare professional, what coping strategies do you find are most successful in healthcare situations?
- 9. When was the last time you undertook professional development which focused on healthcare interpreting?
- 10. What was that PD activity?