MEDICAL INTERPRETER TRAINING AND INTERPRETER READINESS FOR THE
HOSPITAL ENVIRONMENT

A dissertation submitted
to Kent State University in partial
fulfillment of the requirements for the
degree of Doctor of Philosophy

By

Indira Sultanić

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Dissertation written by

Indira Sultanić

B.A., Bluffton University, 2006
M.A., Kent State University, 2008
Ph.D., Kent State University, 2018

Approved by

Richard Washbourne, Chair, Doctoral Dissertation Committee
Judy Wakabayashi, Members, Doctoral Dissertation Committee
Sue Ellen Wright
Jonathan VanGeest
David Kaplan

Accepted by

Keiran Dunne, Chair, Department of Modern and Classical Language Studies
James L. Blank, Dean, College of Arts and Sciences
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## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACT</td>
<td>American College Testing</td>
</tr>
<tr>
<td>ASL</td>
<td>American Sign Language</td>
</tr>
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<td>ATA</td>
<td>American Translators Association</td>
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<tr>
<td>BTG</td>
<td>Bridging the Gap</td>
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<td>CCC</td>
<td>Cross-Cultural Communications</td>
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<tr>
<td>CCHCP</td>
<td>Cross Cultural Health Care Program</td>
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<tr>
<td>CCHI</td>
<td>Certification Commission for Healthcare Interpreters</td>
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<tr>
<td>CCS</td>
<td>Collaborative Classroom Simulation</td>
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<tr>
<td>CDI</td>
<td>Certified Deaf Interpreter</td>
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<tr>
<td>CE</td>
<td>Continuing Education</td>
</tr>
<tr>
<td>CHIA</td>
<td>California Healthcare Interpreting Association</td>
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<tr>
<td>CHI™</td>
<td>Certified Healthcare Interpreter</td>
</tr>
<tr>
<td>CI</td>
<td>Community Interpreter</td>
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<tr>
<td>CMI</td>
<td>Certified Medical Interpreter</td>
</tr>
<tr>
<td>CMT</td>
<td>Certified Medical Technician</td>
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<tr>
<td>HIPAA</td>
<td>Health Insurance Portability and Accountability Act</td>
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<tr>
<td>ICE</td>
<td>Interpreted Communicative Event</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technologies</td>
</tr>
<tr>
<td>IE</td>
<td>Interpreted Event</td>
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<tr>
<td>IMIA</td>
<td>International Medical Interpreters Association</td>
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<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
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ix
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>IVY</td>
<td>Interpreting in Virtual Reality (Project)</td>
</tr>
<tr>
<td>KSABs</td>
<td>Knowledge, Skills, Abilities, and Behaviors</td>
</tr>
<tr>
<td>LEP</td>
<td>Limited English Proficient</td>
</tr>
<tr>
<td>LLD</td>
<td>Language of Limited Diffusion</td>
</tr>
<tr>
<td>LSP</td>
<td>Language Service Provider</td>
</tr>
<tr>
<td>MITIO</td>
<td>Medical Interpreting and Translation Institute Online</td>
</tr>
<tr>
<td>NBCMI</td>
<td>National Board for Certification of Medical Interpreters</td>
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<tr>
<td>NCIHC</td>
<td>National Council on Interpreting in Healthcare</td>
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<tr>
<td>NCQA</td>
<td>National Committee for Quality Assurance</td>
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<tr>
<td>NIC</td>
<td>National Interpreter Certification</td>
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<tr>
<td>OPI</td>
<td>Over the Phone Interpreting</td>
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<tr>
<td>RID</td>
<td>Registry of Interpreters for the Deaf</td>
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<tr>
<td>SBME</td>
<td>Simulation-Based Medical Education</td>
</tr>
<tr>
<td>SIMON</td>
<td>Shared Interpreting Materials Online</td>
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<tr>
<td>VRI</td>
<td>Video Remote Interpreting</td>
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CHAPTER I

INTRODUCTION

Medical interpreter training takes place in both academic and para-academic settings. In some instances, the training weds theory and practice through situational role-play, and in some cases through some form of authentic activity, either in a hospital context, or via different situated learning models. There is a plentitude of published training materials for both medical interpreting and community interpreting, defined by the authors of *The Community Interpreter* international textbook as “interpreting that facilitates access to community services for individuals who do not speak the language of service” (p. 40), and these materials provide a holistic approach to the training of and the making of a professional interpreter. The trainings and the training materials all have one goal, which is to produce trained, qualified, and competent medical interpreters. One of the themes that will be addressed in this study is interpreter training and readiness based on the received training by taking a closer look at the situated nature of medical interpreting as a profession vs. a decontextualized approach to interpreter training.

The existing literature in Interpreting Studies emphasizes the need for more research on interpreting, both qualitative and quantitative, and calls for scholars and professionals to work together to conduct empirical research and promote further professionalization of the interpreting field. Angelelli and Baer (2016) argue that only in the last 50 years has the study of translation
and interpreting moved away from “anecdotal and largely prescriptive writings” toward more descriptive and empirical ones (p.1). This trend has been catching wind, and there have been a number of developments in medical interpreting\(^1\) with respect to medical interpreter training, the use of technology for patient care and communication, national certification, the International Standard for community interpreting (ISO 13611, Interpreting – Guidelines for community interpreting), interpreters’ visibility, curriculum development, research, the professional organizations that are lending more credibility to the interpreting profession, as well as organizations and institutions offering interpreter training and continuing education. Despite these developments, medical interpreters still face a number of challenges before and after they enter the profession.

**Research Problem**

Despite the many training programs available, when a medical interpreter,\(^2\) “a person who renders a message spoken or signed in one language into a second language,” enters the profession, he or she is typically faced with a lack of familiarity with the medical context due to limited or nil exposure to a hospital environment and sufficient authentic learning activities during interpreter training. This in turn affects the new interpreter’s understanding of the hospital organizational structure and best practices, which are partially discussed in interpreter training or are not readily available to interpreters as they are not part of the medical staff, as well as of technology that is used for patient care and communication in those settings.

Lack of exposure to medical contexts, technology used for remote interpreting, and

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\(^1\) This is synonymous with health care interpreting, which, as defined by the National Council on Interpreting in Healthcare, “takes place in healthcare settings of any sort, including doctor’s offices, clinics, hospitals, home health visits, mental health clinics, and public health presentations.”

continuing education, can be attributed to a number of factors. For example, many medical interpreter training organizations often assume that since medical interpreters are not part of the medical staff and do not make medical decisions about patient care, they do not need to be familiar with the processes for patient treatment. Therefore, the training of medical interpreters only occasionally goes beyond interpreter protocol, best practices, and minimal role-play. Lack of exposure to medical contexts during training could also be attributed to patient privacy laws that prohibit interpreters in training from observing and being mentored by professional interpreters, unless they are contracted through an agency or employed by the organization. Also, most interpreter training takes place outside of the medical curriculum proper, and the reality of interpreter encounters, as will be detailed below, is very different from simulated practice offered during training. As a result, patient privacy laws and the mostly external training of medical interpreters, which often limits access to proper and adequate resources, both have an effect on interpreter readiness.

Interpreting encounters in a medical context, both on-site and remote interpreting, provide authenticity that cannot be fully replicated or recreated in academic or para-academic training settings. And while training in a medical setting does not guarantee that the trainees are exposed to every possible scenario, it enhances the interpreters’ experience, exposes them to the technology used for patient communication, and therefore increases their adaptability to other similar situations in the medical environment. The ideas of learning as a situated practice, learning in situ, situated cognition, experiential learning, immersive learning, or legitimate peripheral participation have been developed and studied by a number of scholars. This study examines each briefly and relates them to interpreter training.

Many academic programs and para-academic training programs, such as those offered by
translation and interpreting agencies, in-house and hospital-sponsored, are designed in such a way that they offer an overview of the standards, interpreter best practices, the code of ethics, interpreter roles, and role identity via minimal role-playing, and they also provide an overview of medical terminology, but they provide very few real opportunities for interpreters to gain professional experience in situ or through authentic activities taken directly from an actual interpreting scenario. There are a number of academic programs that offer some in situ training of medical interpreters in the form of an internship, externship, shadowing, practicum, field experience or observing of experienced interpreters as part of the training curriculum. A small number of the university programs in the United States (both certificate and degree programs) that offer in situ training opportunities as part of medical interpreter training will also be discussed.

Para-academic training institutions that do offer these opportunities do not advertise that fact, and they mostly offer shadowing, which usually happens only after the interpreter has completed his or her mandatory 40-hour medical interpreter training through an academic institution or as part of an agency’s mandatory medical interpreter training course, commonly done through Bridging the Gap. The assumption is that interpreters would continue the training on their own, through trial and error, or through continuing education. Contrary to this assumption, and especially in the case of rare languages, interpreters do not have a chance to acquire additional training prior to taking on interpreting jobs, which can range from basic Interpreted Communicative Events (ICEs) (Angelelli, 2004) such as common colds and flus to

3 “An externship is […] a career training program that takes students outside (external) the classroom. […] Externships are offered to college students as a way to learn more about their profession and find out not only what to expect on the job but also what skills they need to develop in order to be successful.” http://www.externships.com/p/what-is-externship.html#.VMfDMWjF8sI

4 This is a 40-hour medical interpreter training program that has been offered by The Cross Cultural Health Care Program for over 20 years. http://xculture.org/medical-interpreter-training/
interpreting for a major surgery. An ICE involves interaction between three parties in a setting that, according to Angelelli (2004, p. 27), “is embedded within an institution which is itself embedded in society,” or as defined by ISO 16611:2014 Interpreting – Guidelines for community interpreting, is a “communicative event where interpreting facilitates communication of at least three participants.” And while in situ training is crucial, other training components seem to be overlooked by training bodies—e.g., technology, and not just its use in remote medical interpreting, but also in everyday patient care.

When a need arises, especially with rare languages, many interpreters still receive ad hoc training through their client or hiring agency, while others may not receive any training at all, which is highly problematic. Many hospitals understand the importance of using trained and qualified interpreters, and some are requiring that interpreters be certified, but there are still hospitals that do not perceive interpreting as a profession. In recent years, medical interpreting has taken a step toward professionalization after the two national medical interpreting certifying bodies—The Certification Commission for Healthcare Interpreters (CCHI) and The National Board for Certification of Medical Interpreters (NBCMI)—launched their separate healthcare interpreter certification programs. This credential not only confirms that the interpreter has the necessary linguistic skills and basic terminological knowledge and is able to apply ethics in challenging situations, it also levels the playing field for the medical interpreter as a licensed professional and an equally important member of the patient care team. The national medical interpreting certifying bodies have further propelled the professionalization of the interpreting field. Although certification aids in providing better-qualified medical interpreters and therefore improved language access, the performance-based test is still available for only a limited number of languages and does not provide a guarantee that the interpreter fully understands the context.
in which he or she will be working.

The certification, however, is not a guarantee that the medical interpreters who do become certified can all perform on the same level with respect to the many medical specialties, but it does show that those interpreters have the required proficiency and were able to apply their theoretical knowledge to various ethical scenarios, and also demonstrate practical skill in both consecutive and simultaneous interpreting modes, as well as sight translation. The certification process is not done in situ, which is a topic for a different study altogether, but this fact emphasizes the importance of situating the learning and therefore portion of the assessment during interpreter training. Both certifying bodies do require that medical interpreters earn yearly continuing education credit through advanced skills training as a way of ensuring continued quality in the medical interpreting profession and also to maintain their status as nationally certified interpreters.

Curriculum development for medical interpreter training could also be contributing to interpreter readiness once interpreters enter the field. While a generic curriculum is acceptable and provides an overview of interpreting standards (best practices, code of ethics, note-taking, interpreting modes) and terminology, the interpreter role “even today…is prescribed without consideration for the actual and current requirements of the workplace” (Angelelli, 2006, p. 176). Even within the same medical subject area, there are a number of subfields that range from the different departments within the hospital context (e.g., ER, oncology, mental health, neurology, burn unit, pediatrics) to external ones that include different subfields in the public health domain and range from migrant health to occupational safety and health, community health, and epidemiology, to name but a few. The lack of exposure to medical environments during interpreter training, as well as the lack of professional internships and shadowing opportunities
both prior to and on the job, result in new interpreters being underprepared for the variety and unpredictability of the numerous medical contexts.

According to Angelelli (2004b, p. 13), interpreting is a situated practice, which is why medical interpreter training needs to be conducted in the medical context. Some may argue that if learning and cognition are fundamentally situated, then all curricula should have a situated learning model, although there are some fields where learning can happen in a virtual environment and does not need to be situated. However, without a situated learning component or authentic learning activities, medical interpreters might not be fully prepared for the professional context, which can result in interpreters taking on roles for which they are not qualified or in their failing to carry out the assignment to the best of their ability due to unfamiliarity with the context, not to mention failing to adhere to the health care quality standard set forth by the National Committee for Quality Assurance (NCQA).  

Some academic training institutions in the U.S., which will be discussed in more detail in the proceeding chapter, seem to provide limited opportunities to interpreters for experiential learning and do not appear to be based on a model that includes training in a hospital setting or any training that allows one to understand the internal hospital organization and the role of technology in patient care. This study does not intend to claim in any way that being an interpreter is like being a surgeon, nor is the aim to advocate that interpreters should learn everything medical students do during their training. It also does not suggest that the training should be based on the requirements of the professional community of practice without any consideration for the theoretical components. Yet, just as one would not trust a doctor who has never seen the inside of an operating room to perform a surgery, neither should medical

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5 NCQA is “a private, 501(c)(3) not-for-profit organization dedicated to improving health care quality.” [http://www.ncqa.org/AboutNCQA.aspx](http://www.ncqa.org/AboutNCQA.aspx)
interpreter training be removed from the medical context in which it takes place if the expectation is that medical interpreters be successful at their job and an integral part of the client-provider discourse and if our goal is to bridge the gap between research and training. Medical interpreter training should be contextualized, for no medical interpreting classroom tasks can fully emulate the real-world experience.

**Research Questions**

This dissertation focuses on medical interpreter training, interpreters’ and interpreting services managers’ perception of readiness based on the training received, the extent of technology training and familiarity with the different technologies used for patient care and communication, and the skills and knowledge still needed after the interpreter enters the professional environment. The study uses a qualitative approach to answer the following research questions:

1) Does current medical interpreter training prepare interpreters for the reality of medical encounters both face-to-face and remotely?

2) Does the medical interpreter training include technology?

3) What skills and knowledge do interpreters working in the medical setting still need?

The first question examines interpreter readiness based on the type of training, amount of specialized medical content included in the training they received, and implications for future medical interpreter training curricula. With the second question the researcher seeks to examine whether the current medical interpreter training includes technology, a crucial component in patient care and communication, as part of the training curricula. The third question focuses on medical interpreter training needs based on interpreters’ and interpreting services managers’
perceptions of the training received as a way of identifying gaps and informing the curricula in a fast-changing, technologized world.

**Significance of the Study**

While qualitative research is on the rise in Interpreting Studies, there is still room for improvement of existing research methods and application of new ones. While ethnographic research in the interpreting field, which started with Angelelli and her book *Medical Interpreting and Cross-cultural Communication* (2004), paved the way (in the United States in particular) for research on this topic using human participants, most qualitative research in interpreting is still limited with regard to the interpreting context and the Interpreted Event\(^6\) (IE) itself. An extensive literature review revealed that while there is research on interpreters’ perception of their roles (Angelelli 2004a; Angelelli 2004b; Leanza 2007), with regard to doctor-patient interaction in both dyadic and triadic settings (Valero-Garcés 2007) and in dialogue interpreting (Wadensjö 1998, Bot 2007), there is no research that directly examines the challenges surrounding the issues of in-context interpreting opportunities during and after interpreter training or interpreter readiness for medical contexts.

As previously stated, mentoring of new interpreters and shadowing of established professionals while the new interpreter is in training are scarce, partly due to hospital rules and regulations, the Health Insurance Portability and Accountability Act (HIPAA) patient privacy laws in the United States, and lack of curricular models that have the experiential component as a

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\(^6\) Roy (2000) states that “Interpreted events, constrained by interaction and participant roles, can be described then in terms of the features used to analyze any communicative event. …most interpreted events are also the common events of a nation or society’s cultural and institutional life.” Since according to Hymes (1974) speech events are “bounded” (as cited in Roy 2000), the difference between an interpreted speech event and any other speech event according to Roy (2000) is that it is bounded “by the presence of an interpreter” (p. 47).
core requirement. However, the lack of these opportunities is primarily due to a lack of financial resources, investment in interpreter training, and return on these investments. Not all languages have the same level of demand, so they lack the same amount of attention to training and experience. While there are some agencies that train medical interpreters and offer shadowing of professional interpreters to newcomers, interpreter training in the healthcare environment still seems to remain an optional practical component and not a core requirement.

No study that examines the adequacy of training and interpreters’ perceived readiness for their professional role (either sign or spoken language interpreters) has been conducted to date, especially one that also looks at the role of technology and its use in patient communication and care. No research has been carried out on the newly developed certification offered by the two certifying bodies and on whether interpreters’ perceived or actual readiness for interpreting in the medical context changes upon successful completion of the certification process. The literature review did not reveal any past or recent studies that focus on the medical context or the healthcare environment or any study of how much content in existing medical interpreter training curriculum focuses on the medical context itself and/or technology that is used by medical interpreters. It is important to provide training in the appropriate context.

While information on existing medical interpreter training curricula is available on both academic and para-academic training web sites, it is limited and does not provide detailed course descriptions. The course descriptions that do exist may not always give an accurate representation of the actual course content. It is our responsibility as researchers to not only identify gaps in the existing curricula and/or to find ways to inform more comprehensive, contextualized curriculum design for medical interpreters, but also to help pave the way for making the medical interpreting profession even more visible and significant in the healthcare
setting, as well as in the organizations that require interpreting services. This includes incorporating technologies into the classroom that extend beyond the linguistic level.

This study can be directly beneficial for the training of healthcare interpreters in several different ways:

- By examining the issue of academic vs. career readiness, as well as workplace expectations and reality, through direct input from interpreters who are working in one of the many medical contexts;
- By bringing the need for authentic learning activity and contextualization of interpreter training to the forefront;
- By obtaining direct input about training and interpreter readiness from interpreters and interpreting services managers and/or directors;
- By gaining insight into the specificity of training as perceived by interpreters and interpreting services managers.

It is important to note that this study only examines the perception of readiness and not actual interpreter readiness, and while there are a number of stakeholders, both those involved in the interpreted events and those who facilitate training (medical staff, patients or clients, interpreting service managers, trainers and training institutions, interpreters), this study focuses only on the interpreters’ and the interpreting services managers’ perception of interpreter readiness for medical contexts. Though the perception of interpreter readiness by medical staff, trainers, and patients is extremely important, it falls outside of the scope of this study, and it would require interpreter assessment training for each stakeholder in order for them to be able to speak to the question of interpreter readiness for the hospital environment.
Framework

Since the phenomenon of interpreter readiness has not been explored in the fashion intended in this study, a structured approach was required in order to obtain data that can be used to show the gaps, but also to substantiate the idea that contextualized and authentic medical interpreter training, which includes technology, is needed. While the present study is not an ethnographic case study, since no interpreter observations were made in the process of data collection, the framework was inspired by Claudia Angelelli’s approach used for her book *Medical Interpreters and Cross-cultural Communication* (2004), since it was the first study that focused on the role of a medical interpreter, and included voices from the interpreting field. The framework, though influenced by Angelelli’s study, primarily draws from a number of learning theories, specifically, situated cognition and learning *in situ*. While this study provides a brief overview of a handful of training programs and in-context medical interpreter training offered by academic and para-academic institutions, the focus of the study is not on the training itself, but rather on the interpreters’ perception of their readiness based on the authenticity of activities used during training, training context and technology, and interpreting services managers’ perception of interpreter readiness.

Overview of the Dissertation

This dissertation comprises six chapters. Chapter I provides a general overview, states the research questions, the problem of the study, and its significance. Chapter II situates the study within the literature of medical interpreting, dialogue interpreting, community interpreting, and cognitive learning theories such as learning *in situ*, contextualized learning, experiential learning,
and immersive learning. It provides an overview of both academic and para-academic training bodies and existing national certifications for medical interpreters, defines medical interpreting, and looks at the role of the medical interpreter. Chapter III describes the methodology, the research design, the instruments used for data collection, data processing, and the participant groups. Chapter IV reports the results of the study, beginning with the data preparation and general observations, and provides specific examples pertaining to the research questions posed in Chapter I. Chapter V discusses the findings from the preceding chapter and addresses the research questions posed at the outset of the study. Chapter VI summarizes the key findings, discusses implications of the study with respect to interpreting pedagogy, and poses additional questions for future research.
CHAPTER II

CONCEPTUAL FRAMEWORK

Over the last few decades, there has been significant research done on professional interpreting (Gile 2000; Pöchhacker 2004; Sawyer 2004), community interpreting (Roberts 1995; Wadensjö et al 2007; Abraham et al 2006; Hale 2007; Leanza 2007; Mikkelson 2013), and medical interpreting (Angelelli 2004, 2008; Metzger 1999). However, medical interpreter training and job readiness have not previously been explored in the fashion intended in this study. In order for the researcher to adequately address and answer the research questions posed in Chapter I, it is important to draw from a wide variety of existing research and learning theories. First, medical interpreting and its significance will be discussed. The role of the professional medical interpreter will be explained and contextualized through an overview of the medical interpreter competences and medical interpreter best practices, of both spoken and signed language. Existing medical interpreter training bodies, both academic and para-academic, will briefly be examined. Furthermore, the researcher will provide an overview of the national certifying bodies as well as the medical interpreter certification process. Next, different medical contexts will briefly be considered along with the different principles of authentic and contextualized learning used in training medical professionals and how those principles could be applied to medical interpreter training in academic contexts. Finally, the literature on relevant learning theories and learning strategies will be explored, starting with situated learning, learning
in situ, experiential learning, immersive learning, legitimate peripheral participation, and contextualized learning.

**Medical Interpreting Defined**

Each context or the setting in which an interpreted event occurs is what determines how that type of interpreting is characterized. For example, as previously mentioned, interpreting that takes place in a medical, healthcare, or hospital setting is categorized as medical or healthcare interpreting. Medical interpreting is synonymous with health care interpreting, which is defined by the National Council on Interpreting in Health Care as interpreting that: “takes place in healthcare settings of any sort, including doctor’s offices, clinics, hospitals, home health visits, mental health clinics, and public health presentations.” Even within the same medical subject area there are a number of subfields that range from the different departments within the hospital context (e.g., ER, oncology, mental health, neurology, burn unit, pediatrics) to external ones that include different subfields in the public health domain and range from migrant health to occupational safety and health, community health, and epidemiology, to name but a few.

Healthcare interpreting is quickly becoming one of the fastest growing specialties within the field of interpreting. The increasing need to facilitate cross-linguistic and cross-cultural patient-provider interactions, as well as the federal mandate⁷ that requires any and all organizations receiving Federal funding to provide language access to non-English-speaking patients, have brought medical interpreting to the forefront of interpreting studies and the interpreting

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⁷ Title VI of the Civil Rights Act of 1964 as well as the Department of Health and Human Services regulations, 45 C.F.R. Section 80.3(b)(2) prohibit discrimination on the basis of national origin and “require recipients of Federal financial assistance from HHS to take reasonable steps to provide meaningful access to Limited English Proficient (LEP) persons.”

profession. According to a definition provided by Kaufert and Putsch (1997, p. 75), “health care interpreting often occurs across major gulfs of culture, class and language, and therefore it is unlike interpretation [sic] in courts, or in business, or international negotiation.”

Many interpreter trainers, practitioners, and scholars often refer to interpreting as the oral rendition of a message, as a way of differentiating it from translation, its written counterpart. As Pöchhacker (2016) noted, simply speaking of translation and interpreting as oral or written renderings of a message, as is the case with commonly used definitions and those provided by dictionaries, excludes sign language interpreting altogether. Interpreting falls under the translation studies umbrella, even though interpreting historically predates translation of the written word, for it was used as a means of intercultural and interlinguistic mediation and communication long before translation. Yet the theoretical definitions of translation as provided by many translation studies scholars (Holmes 1972/1988; Baker and Saldanha 2009; and Gambier and van Doorslaer 2014) have all included both the spoken/oral and the written forms of expression. Others have referred to translation as a written or a spoken “process” (Rabin 1958), “transfer of thoughts and ideas” (Brislin 1976a), and a “complex series of acts” (Salevsky 1993) by which a target text is produced.

While conceptually it may seem that translation and interpreting are one and the same, scholars like Pöchhacker (2016) argue that one way to differentiate interpreting from translation is to view interpreting as an activity that is “performed here and now” and by looking at the “immediacy” of the message transfer. His description of interpreting as an “immediate type of translational activity” is derived from Kade’s (1968) definition of interpreting in which “the source-language text is presented only once and thus cannot be viewed or replayed, and the target language text is produced under time pressure, with little chance for correction and
revision” (quoted in Pöchhacker 2016, p. 11). Adapting Kade’s (1968) description, Pöchhacker (2016, p. 11) defines interpreting as a “form of Translation in which a first and final rendition in another language is produced on the basis of a one-time presentation of an utterance in a source language.” While this definition might be accurate, depending on the interpreting context and the overall desired outcome (for example, in a medical or community setting) and if the consecutive interpreting mode is used, the message can in fact be heard more than once. This is especially so if we consider studies (Davidson 2000, 2001; Metzger 1999; Roy 1989, 2000; Wadensjö 1995, 1998) that show how an interpreter can act as a co-participant in an interpreting encounter or as a co-constructor of the dialogue (Angelelli 2004a, 2004b). However, the premise of the one-time utterance holds true for more traditional conference and legal interpreting settings where the simultaneous mode tends to be used primarily.

As stated above, interpreting has historically been used to bridge linguistic and cultural gaps between different groups of people. In the wake of a surge in voluntary and forced migration trends since the 1980s, interpreting has been used as a way to “help immigrants function in the host society” (Pöchhacker 2016). According to a study done by the US Census Bureau in 2011, there were 60.6 million people aged 5 or over who spoke a language other than English at home. Of those, about 22 per cent identified as LEP (Limited English Proficient) or as not speaking any English at all (Ryan 2013). The increasing numbers of LEPs requiring interpreters in order to access community, social, health, and legal services fed the demand for interpreters to ensure language access.

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8 Reported in Language Use in the United States: 2011, American Community Survey Reports.
The Role of the Medical Interpreter

When it comes to theory and practice, it is to be expected that in some instances actual practice may not always fall in line with what in theory might be the correct or proper way to be, work, perform or, in this case, carry out interpreting duties. This is especially true in settings where interpreters are bound by both the interpreter professional code of conduct and the standards and expectations of their work place. The main goal of a professional medical interpreter, and therefore his/her role, is to facilitate complex verbal and non-verbal, cross-linguistic, and cross-cultural communication in any given interpreted event and/or medical encounter. In reaching their goal, they exercise agency and participate in the dialogue while facilitating access to not only the language and the culture (both of the setting in which the event is taking place and the host culture), but also to services the patient might need. However, the interpreter role is much more complex and less well-defined than the literature and training manuals would have us believe. Every interpreted event requires a different degree of active participation in the dialogue. Therefore, the interpreter role extends beyond the visible vs. invisible and involved vs. uninvolved dichotomies (Hale 2007).

There are many metaphors that illustrate the complexity of the interpreter role: interpreters as gatekeepers (Davidson 2001), interpreters as detectives, multi-purpose bridges, miners (Angelelli 2004), to name but a few. According to the Cross Cultural Health Care Program (CCHCP), “The basic purpose of the interpreter is to facilitate understanding in communication between people who are speaking different languages.” (1999). The roles of a medical interpreter in the CCHCP’s Interpreter Handbook are as follows: conduit, clarifier, culture broker, and advocate. The conduit role is considered the “default” role, and interpreters are expected to spend most of their time in an interpreting encounter performing linguistic
transfer without altering the original message by adding, omitting, or changing the register (CCHCP 1999). The clarifier role allows the interpreter, in instances where there is no linguistic equivalence in the target language, to “make word pictures” (CCHCP 1999) and facilitate understanding. Since language and culture are seldom mutually exclusive, the culture broker role gives the medical interpreter permission to provide cultural context to prevent patient-provider misunderstandings. The role of advocate allows interpreters to step outside of the role of conduit and take action on behalf of the patient using their best judgement in determining when to do so. The following inverted pyramid model (Fig. 1), adapted from CCHCP’s pyramid model, provides an overview of which role the interpreter is expected to assume first and foremost in any given interpreted event and how much of their time should be allocated to performing the additional roles.

![Inverted Pyramid Model](image)

*Figure 1: Medical Interpreter Roles, Inverted Pyramid Model.*

The interpreter roles as described above, and as presented in the inverted pyramid model, suggest certain interpreter invisibility where the most desirable role of the interpreter is “the least invasive role” (CCHCP 1999). In this role the interpreter is expected to move between roles in a seamless fashion without disrupting the flow of conversation or diverting the focus from patient-
provider to interpreter-provider or interpreter-patient (CCHCP 1999). While this model delimits the boundaries of a medical interpreter role, it is in part essentialist and suggestive of interpreters as invisible non-participants (not active participants in the conversation) working mainly as conduits (Reddy 1979). This model prescribes the roles of a medical interpreter without taking into account the needs, regulations, and expectations of the medical context (Angelelli 2006) or viewing interpreters as active members of the medical team and act as “co-constructors to the interaction” (Berk-Seligson 1990; Metzger 1999; Roy 1989, 2000; Wadensjö 1992, 1995, 1998), performing more than a simple word-for-word transfer of information, as the conduit role suggests.

In her ethnographic study of medical interpreting and cross-cultural communication Angelelli (2004) provides an outline of how the interpreter role is perceived and how interpreters perceive their role in a public hospital setting. The above schematic representation of the prescribed role of the interpreter is very different from the actual roles interpreters assume in the many medical settings. Angelelli examines the role of a medical interpreter through different lenses: the lens of society, the lens of interaction, and the lens of discourse. According to the author (2004, pp. 33–34), an “interpreting event is socially bound and constrained, as are its participants.” The results of her quantitative research on interpreters’ perception of their role (Angelelli 2003, 2004b), observing interpreters in their roles (Angelelli, 2004a), and interpreter interviews in which they describe their role (Angelelli 2004a) led her to conclude that the role of the interpreter during an interpreted event extends well beyond the simple linguistic transfer as it has habitually been prescribed and defined in terms of language access (Angelelli 2012).

In her book *Interpreting as Interaction* Wadensjö (1998) discovered that depending on how responsibility is divided among interlocutors, the interpreter role, as it has also been argued
by Kaufert and Putsch (1997), goes beyond “simply conveying information” further expanding to the role of cultural broker, negotiator and team worker. The role of a medical interpreter depends on the nature of the interpreted event, the complexity of the encounter, as well as the requirements of the workplace and the other interlocutors’ needs and expectations. The participatory status of an interlocutor, as argued by Van de Mieroop et al. (2012, p. 23), is “constructed and negotiated in the course of an interview.” The interpreter roles can be prescribed, but in an interpreted event, and as Angelelli’s ethnographic study revealed, “interpreters, in the interaction they broker, are visible co-participants who, triggered by the interplay of social factors, exercise their agency.” (2004, p. 140).

Medical Interpreter Competence

Washington State Human Resources define competency as “the measurable or observable knowledge, skills, abilities, and behaviors (KSABs) critical to successful job performance.” The National Standard Guide for Community Interpreting Services divides interpreter competences into four types: 1) Interpreting competence or “the ability to interpret a message from one language to the other in the applicable mode. It includes the ability to assess and comprehend the original message and render it in the target language without omissions, additions or distortions. It also includes the knowledge/awareness of the interpreter’s own role in the interpreting encounter”; 2) Linguistic competence or “the ability to comprehend the source language and apply this knowledge to render the message as accurately as possible in the target language”; 3) Research and technical competence or “the ability to efficiently acquire the additional linguistic and specialized knowledge necessary to interpret in specialized cases.

9 http://www.hr.wa.gov/WorkforceDataAndPlanning/WorkforcePlanning/Competencies/Pages/default.aspx
10 Copyright © 2007-2010 Healthcare Interpretation Network: http://healthcareinterpretationnetwork.ca/
Research competence also requires experience in the use of research tools and the ability to develop suitable strategies for the efficient use of the information sources available”; and 4) Interpersonal skills, which require the interpreter to a) have strong communication skills, b) be polite, respectful and tactful, c) be able to relate well to people, d) have good judgment.”

While the interpreter competences outlined by The National Standard Guide for Community Interpreting Services are more universal across the interpreting field, medical interpreter competences are rather extensive and divided into a number of categories, especially in American Sign Language Interpreting, and these categories have been adapted for spoken language use as well. It is important to note that signed language interpreting has served as a model for not only interpreter training, the standard of practice, but also for the code of ethics, especially in the medical field. Interpreting in Healthcare Settings categorizes the American Sign Language medical interpreter competencies into 13 categories:

1. Health care setting, which includes the knowledge of the type of health care context;
2. Multiculturalism and diversity, which include respect for the diverse backgrounds of each party participating in the encounter;
3. Self-care, which not only includes emotional distress, but also contagious illnesses and patient as well as personal safety;
4. Boundaries where interpreters are aware of their abilities and do not accept assignments that are outside of their abilities;
5. Preparation, which includes being aware of emotions and biases as well as obtaining information about the assignment prior to taking it on;
6. Ethical and professional decision-making, where the interpreter is bound by the code of ethics and makes decisions accordingly;
7. Language and interpreting, which includes both the linguistic ability and the skill to utilize the appropriate interpreting modes (consecutive, simultaneous, sight translation, translation etc.) as well as register;

8. Technology, which encompasses the interpreter’s familiarity with the technology used in medical settings and the types of remote interpreting (video, telephonic, relay services etc.);

9. Research, because it raises the interpreter’s awareness with respect to new policies, medical procedures, terminology etc.;

10. Legislation with respect to HIPAA and other health-related laws;

11. Leadership, since the interpreter may serve as “a liaison between interpreting services and the healthcare system as well as serve as a mentor and a role model”;

12. Communication advocacy in which the interpreter is aware of “the political, sociological and cultural implications of advocacy”;

13. Professional development, which includes continuing education, and keeping up with health care setting practices.

While the above exhaustive list applies not just to American Sign Language but all spoken languages as well, the main focus for this particular study is on the first category, which deals directly with the health care setting and different types of medical contexts. Contextual competence is the competence that is the least emphasized or not considered at all, especially in spoken language interpreter training, regardless of whether the training takes place in an academic or para-academic setting. Interpreters usually acquire contextual competence through performing their duties in actual settings.
Interpreter Readiness

Every medical interpreter needs to be fully prepared to successfully carry out interpreting assignments. Interpreter readiness will be operationally defined here as a state of full preparedness with respect to the specific interpreter competencies: interpreting, linguistic, research and technical, contextual competence, complete understanding and knowledge of interpreter best practices, standards of practice, interpreter ethics as well as the proxemic competence (knowing where to stand, how to move).

Brown et al. (1989, p. 33) maintain that:

Activity, concept, and culture are interdependent. No one can be totally understood without the other two. Learning must involve all three. Teaching methods often try to impart abstracted concepts as fixed, well-defined, independent entities that can be explored in prototypical examples and textbook exercises. But such exemplification cannot provide the important insights into either the culture or the authentic activities of members of that culture that learners need.

American College Testing (ACT)\textsuperscript{11} defines work readiness as follows: “A ‘work ready’ individual possesses the foundational skills needed to be minimally qualified for a specific occupation as determined through a job analysis or occupational profile.” In order for an individual to achieve work readiness according to ACT, he or she must possess both “foundational cognitive skills” and “foundational soft skills”. Foundational skills include both cognitive and noncognitive (soft) skills. According to ACT “Cognitive skills involve the conscious intellectual effort, such as thinking, reasoning, or remembering.” ACT refers to noncognitive or “soft skills” as skills that relate to “motivation, integrity, and interpersonal interaction.”

\textsuperscript{11}American College Testing \url{https://www.act.org/content/act/en.html}
Standards of Practice and Ethics in Medical Interpreting

There are a number of key organizations in the United States that establish and prescribe the norms for the professional practice of medical interpreting (e.g., the International Medical Interpreters Association [IMIA], National Council on Interpreting in Health Care [NCIHC], and the California Healthcare Interpreting Association [CHIA]). All three of these professional associations have been instrumental in writing and formulating the standards and the code of ethics accessible to interpreters, interpreter trainers, healthcare providers, community health workers and patient advocates, and different government and non-government agencies. The IMIA was the first professional association to propose a code of ethics for medical interpreters back in 1987. The IMIA code of ethics\(^{12}\) primarily emphasizes confidentiality, mode of interpreting (simultaneous, consecutive, sight translation), impartiality, conflict of interest, patient advocacy, unobtrusive intervention for cultural or linguistic clarification during an interpreted event, continuing education, and active involvement with professional organizations.

Similarly, the California Standards for Healthcare Interpreters’ ethical principles put forth by CHIA also emphasize confidentiality, impartiality, respect for individuals and their communities, professional conduct, accuracy and completeness, and cultural responsiveness (2002, pp. 10–11). Additionally, CHIA also provides a framework for standardization of interpreting protocols before, during, and after an interpreted event, as a way of guiding the flow of conversation among patients, providers and interpreters (California Standards for Healthcare Interpreting 2002, p. 34). It also addresses the importance of and recognizes the need for interpreter self-care (2002, p. 37).

The norms established by these healthcare interpreting organizations determine

interpreter roles and responsibilities, their rights, their duties, and the limitations of the interpreter role. They also help interpreters uphold a certain professional standard. Nevertheless, although comprehensive, the standards and the ethics do not always lend themselves completely to a professional medical setting. Even though there is a code of ethics and protocols that interpreters should follow, the medical context, the nature or the urgency of a medical assignment, and the expectations of the professional environment and the different stakeholders may require interpreters to adapt, be flexible, and exercise their best judgement during any medical encounter.

**Medical Interpreter Training Bodies**

There are a number of medical interpreter training bodies and organizations. In this study they are categorized as academic and para-academic. For the purpose of this study, the researcher will operationally define academic training programs as those taking place in an institution for higher education such as a university, college or a certificate program, while para-academic includes all training organizations and bodies that are independent from their academic counterparts, such as language agencies, interpreting associations and organizations both state and national. Many academic and para-academic training programs, such as those offered by translation and interpreting agencies, in-house, and hospital-sponsored, are designed in such a way that they offer an overview of the standards, interpreter best practices, code of ethics, interpreter roles, role identity via minimal role-playing, telephonic and video remote interpreting (VRI), and general medical terminology, but they provide very few real opportunities for interpreters to gain professional experience *in situ*. The training, however comprehensive in theory, is largely decontextualized regardless of whether the training takes place within an
academic program or in a para-academic setting. The interpreter trainees who are fortunate to have internships, shadowing, or mentoring opportunities, however limited their exposure to hospital culture, have the advantage of seeing the value of a medical interpreter and that they are an important piece of the healthcare puzzle. It is in those settings where they see how ethics, standards of practice, interpreter roles, and the interpreter modes make for a successful mediation. They see the interpreter as an acrobat skillfully balancing between the host’s and the patient’s cultures, the linguistic and the emotional barriers, as well as between the different stakeholders involved in the interpreted event.

Academic Training Programs

A number of academic programs offer degrees or certificates in interpreting with an emphasis on healthcare. However, this study will only consider those academic programs that offer in situ training of medical interpreters in the form of an internship, externship, shadowing, practicum, field experience or observing of experienced interpreters as part of the training curriculum. Some of the university programs in the United States, both certificate and degree programs, that offer in situ training opportunities as part of medical interpreter training include but are not limited to City College of San Francisco, CA; Bunker Hill Community College in the Greater Boston Area, MA; Boston University, MA; University of Massachusetts Medical School (UMASS), MA; Cape Cod Community College, MA; Berkeley City College, CA; Middlebury Institute of International Studies at Monterey, CA; UCLA Health, CA; Reedley College, CA; The University of Memphis, TN; Madison Area Technical College, WI; and Estrella Mountain Community College, AZ. However, with the exception of a few institutions, there is no exhaustive information about the duration of these training opportunities, how the training is
executed, or the name of the medical institution where it takes place.

Through website analysis and overview of their curriculum requirements and course
descriptions, the following programs have been identified as the ones offering some sort of *in situ* training: City College of San Francisco’s field experience program requirement is a 45-hour interpreting internship, and students can be placed at one of the following sites: Kaiser Permanente -San Francisco, Oakland, Richmond, Santa Rosa; San Francisco General Hospital; Alameda County Medical Center, Highland Hospital; Newcomer Health Program, SFDPH; Saint Francis Memorial Hospital, and Stanford Medical Center. Berkeley City College’s interpreting internship takes place in community-based health care settings over the course of two semesters. Middlebury Institute of International Studies at Monterey offers internships in Stanford Hospitals and Clinics. The University of Memphis offers its interpreter trainees an opportunity to observe and interact for 10 hours with experienced medical interpreters at the St. Jude Children’s Research Hospital and the Methodist University Hospital. UCLA provides what it calls “situational role play” – interpreter shadowing between week 2 and week 10 of the training – but does not list the institution where this training occurs or what this particular opportunity entails. Waubonsee Community College in Illinois lists field experience as an 80-hour on-the-job training, but does not provide information on the institution where it takes place or what the job training entails.

The above list, while not exhaustive, is an indicator of a larger problem of interpreter training where contextual competence is still not a mandatory component or a core course requirement. These programs are, however, a step in the right direction and a sign that training programs are recognizing the importance of internships and on-the-job training for medical interpreters, and they set an example for other training programs.
Para-academic Training Institutions

The most recognized para-academic training program in the United States is *Bridging the Gap* (BTG), a 40-hour medical interpreter training course. This training is generally offered through a BTG-licensed agency in a number of states. The table below shows the states that currently have a licensed agency to offer the training:

<table>
<thead>
<tr>
<th>California</th>
<th>Idaho</th>
<th>Michigan</th>
<th>New York</th>
<th>South Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>Illinois</td>
<td>Minnesota</td>
<td>North Carolina</td>
<td>South Dakota</td>
</tr>
<tr>
<td>Florida</td>
<td>Indiana</td>
<td>Missouri</td>
<td>Ohio</td>
<td>Utah</td>
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<tr>
<td>Georgia</td>
<td>Kentucky</td>
<td>Nebraska</td>
<td>Oregon</td>
<td>Virginia</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Massachusetts</td>
<td>New Mexico</td>
<td>Pennsylvania</td>
<td>Washington</td>
</tr>
</tbody>
</table>

*Figure 2: Bridging the Gap Training by States.*

The BTG course is the basic, minimum required course to get started as a medical interpreter. The training closely follows the curriculum and deals with the following topics: roles of a medical interpreter, code of ethics, modes of interpreting, memory development, sight translation practice, interpreting practice, basic medical terminology (including human anatomy), cultural competence and awareness, professional conduct, self-care, and professional growth. It concludes with a post test. Similarly, ALTA, a language service company based in Atlanta, GA, has also developed and offers a 40-hour medical interpreter training course entitled *Breaking Boundaries in Healthcare*®[^13] that can be completed in person or online and that qualifies a trainee to begin working as a medical interpreter. The curriculum is nearly identical to BTG, with the only difference being that the participants take an oral medical interpreter exam in their

target language that determines their level of linguistic proficiency and ultimately qualifies them to begin working as a medical interpreter. Upon successful completion of the course, the interpreter can then take the national certification exam.

These courses, and other similar ones, offer the interpreter all of the basic tools to get started, including interpreting scenarios. Since the courses are designed to be taught to a multilingual group, however, there is no guarantee that every participant will have a language partner to then practice their interpreting skills and apply the knowledge gained in a supervised environment. Subsequently, many of the trainees will most likely find themselves working for an agency that may or may not require a certain number of shadowing and/or mentoring hours to prepare the interpreter to work in a hospital environment, once again leaving the contextual competence out of the training curriculum.

**Medical Interpreter Certification**

The federal mandates requiring organizations to provide interpreters for Limited English Proficient (LEP) clients brought about a shift in the interpreting field toward a more professional and nationally recognized status of a medical interpreter. However, not all interpreting is done by professional interpreters, especially in healthcare settings, where due to lack of processes in place for providing a trained interpreter, *ad hoc* interpreters are still used. These come in the form of the patient’s relatives, friends or a bilingual staff member, none of whom have been trained to interpret and whose linguistic or interpreting competence have not been evaluated. In order to raise the bar for the medical interpreting profession, two medical interpreting organizations began working on a program for a national certification exam that would give the trained and qualified medical interpreter a professional credential and the necessary skills and
knowledge to exercise their agency. The certification benefits not only the interpreter but also other stakeholders, such as patients, providers, and the healthcare industry. All these individuals and organizations that require complete language access deserve to have it provided by trained, qualified, culturally competent and professionally certified medical interpreters.

Currently, in the United States, there are two national medical interpreting certifying bodies: The Certification Commission for Healthcare Interpreters (CCHI) and The National Board for Certification of Medical Interpreters (NBCMI). Both organizations offer a medical or healthcare interpreter certification credential on a national level. Both organizations have the same prerequisites in order for a candidate to take the certification exam: they have to be 18 years of age, have a high school diploma or GED, 40 hours of medical interpreter training, and fluency in their working languages. Both tests have an oral and a written component. Once the interpreter has passed the written part they then move on to taking the oral exam. Both exams are administered electronically; however, CCHI is administered at designated physical locations, and NBCMI is offered online via ProctorU, as well as on site. The CCHI and NBCMI oral tests are very similar, and assess the following: consecutive interpreting (the most common mode in medical interpreting), simultaneous interpreting, and sight translation. However, CCHI also offers a CoreCHI™ credential to interpreters of languages other than Spanish, Mandarin, and Arabic, for which an oral performance test does not yet exist. It is worth noting that more interpreters have obtained their healthcare interpreter certification credential through CCHI.

The certification is not done in situ or in the medical context(s) in which interpreting events take place, similar to testing in other fields. However, and unlike in other fields, e.g.—medical, the training, in many cases, is also not situated in the community of practice. This, again, emphasizes the importance of developing contextual competence in interpreters since the
training is decontextualized, and points to the challenges of interpreter performance assessment. The oral certification exam assesses the candidates’ interpreting and linguistic competence, and while the written test is designed to assess the interpreter’s decision-making abilities, it does not account for the nuance of an actual encounter. However, both certifying bodies do require that medical interpreters earn yearly continuing education credits through advanced skills training as a way of ensuring continued quality in the medical interpreting profession.

While this study focuses on spoken language interpreting, it is important to note that interpreters of American Sign Language are tested through an entirely different entity known as the Registry of Interpreters for the Deaf (RID)\(^14\) and have a different set of certification requirements. Currently the RID offers the National Interpreter Certification (NIC) and the Certified Deaf Interpreter (CDI) credential. According to the RID website, the NIC has been available since 2005 and candidates earn this certification “[…] if they demonstrate professional knowledge and skills that meet or exceed the minimum professional standards necessary to perform in a broad range of interpretation and transliteration assignments.” Candidates are eligible to apply for this certification after meeting the RID education requirements (a college degree with any major) and passing the Knowledge, and Interview and Performance exams.

In order to meet the eligibility requirements for the CDI exam the candidate must submit proof of a 40-hour interpreter training course, know the code of professional conduct and ethics, have taken an introduction to interpreting course, and understand the modules of interpreting, which includes but is not limited to “The Deaf Interpreter at Work, Deaf/Hearing Team Interpreting, Deaf/Deaf Team Interpreting, Interpreting for Deaf Blind consumers, Deaf Interpreting Processes, Deaf Interpreting Theory and Practice, Consecutive Interpreting, Simultaneous Interpreting, Sight/Test Translation, Visual Gestural Communication, and Platform

Interpreting.” The interpreter also has to complete a required 16 hours of suggested elective topics that include “ASL Linguistics, Mentorship Programs, and Interpreting Practicum, Additional training in any of the required content areas above.” Some sign language interpreters also attend para-academic training programs offered through language agencies.

Learning Theories

Many scholars argue that knowing the setting in which one interprets is crucial for a successful encounter. Hale (2013, p. xxv) argues that “In order for interpreters to be able to interpret accurately, they must first understand the context in which they are working […]” Many theorists have argued that learning takes place in a social setting or in a sociocultural environment (Vygotsky 1978; Wertch 1991). The context is key for construction of meaning, and learning is socially and culturally situated (Lave, 1988). The ideas of learning as a situated practice, learning in situ, situated cognition, experiential learning, immersive learning, or legitimate peripheral participation have been developed and studied by a number of scholars. This study will examine each briefly, along with simulation-based learning used in training of medical professionals and how simulation-based learning can be used for training medical interpreters.

Situated Learning

According to Collins (1988, p. 1), situated learning is “a notion of learning knowledge and skills in contexts that reflect the way the knowledge will be useful in real life.” The theory of situated cognition as presented by Brown et al. (1989, p. 41) calls for a change in what the authors call the “traditional focus of education,” since this theory’s main argument is that
learning and activity are not mutually exclusive. Brown et al. (ibid., pp. 32–33) argue that learning and cognition “are fundamentally situated,” and they compare knowledge to tools, stating that “[p]eople who use the tools actively rather than just acquire them, by contrast, build an increasingly rich implicit understanding of the world in which they use the tools and of the tools themselves.” They further state that in order for students to learn to use the tools the way practitioners do, “a student, like an apprentice, must enter that community and its culture” (ibid.). Brown et al. also believe that when people are provided with the opportunity to “observe and practice in situ the behavior of members of a culture” they “[p]ick up the relevant jargon, imitate behavior, and gradually start to act in accordance with its norms” (1989, p. 34). Thus the authors conclude that “[c]lassroom tasks, therefore, can completely fail to provide the contextual features that allow for authentic activity” (ibid). While I agree that classrooms fail to provide the actual context—they are after all a safe learning space that requires cognitive flexibility (Benson and Samarawickerma, 2007)—I do believe that there are ways to authenticate the learning and replicate a professional situation without complete abstraction.

According to Benson and Samarawickerma (2007), “the best way of achieving the construction of meaning that is involved in learning is through contextualised real world tasks which provide for improved understanding and more consistent transfer to new situations,” which would require “situating learning experiences in an authentic context and designing for cognitive flexibility.” (p. 61). Balsam (1985, p.1) argues that “Learning occurs in a cognitive or associate context of what has been learned before and in an environmental context that is defined by the location, time, and specific features of the task at hand.”
Experiential Learning

The notion of experiential learning has been theorized and defined by many scholars: Tumin (1976), Boydell (1997), Chickering (1977), Kolb (1984), Hutton (1989), Saddinton (1992), Cantor (1997), and Malinen (2000). Jarvis (1997) defines experiential learning as a transformation of experience “into knowledge, skill, attitude, emotions, values, beliefs, senses” (as cited in Beard and Wilson 2013, p. 25). Beard and Wilson (2013) describe it as “the sense-making process of active engagement between the inner world of the person and the outer world of the environment” (p. 26). According to Beard and Wilson, learning “might be considered more of a continuum of authenticity,” since “formal and experiential learning processes have varying elements of each other,” where the experiential component is shown as more authentic and the formal learning component as more artificial on their continuum graph (2013, p. 39).

Most recently, in Translation Studies, the new book entitled Towards Authentic Experiential Learning in Translator Education by Kiraly et al., addresses the questions of authenticity, pedagogy, curriculum development, intercultural competence, autonomy, and e-learning as a way of enhancing course design (2016). This particular book does not weigh the advantages and disadvantages of authentic experiential learning, but rather illustrates that translation and interpreting teachers who contributed to this publication “have found authentic experiential work to be an effective platform for learning” (p. 9). In this same volume, Dingfelder Stone argues that “Conventional interpreting classes are, by design, artificial.” (2016, p. 114) and that “conventional classroom instruction, particularly for larger groups, imposes a range of practical restrictions.” (2016, p. 115). She believes that “in order to fully prepare learners for their professional careers, authentic interpretation situations are important for learner motivation and for enhancing learners’ problem-solving skills.” (ibid). Dingfelder Stone argues
that one way to accomplish professional career readiness for conference interpreters is by doing “mock conferences,” which according to her are “currently being organized” in different conference interpreting programs and are “a superb way for learners to experience real-life problems and constraints, but to do so within a protected environment” (ibid). This is one example of authenticating learning in conference interpreter education. This approach would not work as such in medical interpreter training, but it could potentially be adapted for simulation labs normally used for training nursing and medical students.

**Immersive Learning**

Olbrish Pagano (2013) proposes immersive learning design as a way of making learning more lifelike for learners. Her idea is inspired by the use of technology, game design principles, 3D environments, and virtual worlds to provide learning authenticity. She argues that immersive learning is more comprehensive than traditional learning and goes beyond the acquisition of knowledge alone. Using the three learning objectives from Bloom’s taxonomy (cognitive, affective and psychomotor), Olbrish Pagano posits that “Immersive learning provides an opportunity for design to address cognition, emotion and psychomotor skills simultaneously and in context, just as the three domains work together in the real world. This authentic practice makes learners apply what they know, while simultaneously processing how they feel about what they are doing, and building memory of the actions required to perform (2013, p. 22). Pagano’s immersive learning design not only emphasizes the importance of contextualizing learning through authentic activity, but also suggests how the virtual world and gaming design principles (including the idea of avatars) can be adapted to “emulate real performance environments” (2013).
In Europe, the IVY (Interpreting in Virtual Reality) Project piloted virtual environment training and used virtual learning principles to simulate professional interpreting settings using Second Life, which is a freely accessible 3D virtual world developed by Linden Labs. As reported in the 2010 IVY Project Progress Report, the aim was “to develop an avatar-based 3D virtual environment that simulates professional interpreting practice in these settings and to populate this environment with relevant pedagogic content such as appropriate spoken source texts for interpreting practice in several languages.” (p. 3). The focus of the project was on skill acquisition and application of those skills to different interpreting settings.

While virtual environments do offer authenticity, they are not widely used in interpreter training because they require time and resources often not available to interpreter training organizations, which is why alternative Information and Communication Technologies (ICT) have been used. Seeber (2006) describes the SIMON (Shared Interpreting Materials Online) Program, which allows for the organization of interpreting exercises by subject area, and subsequently advancement of knowledge and skill. Tymczynska (2009) describes how the Moodle Learning Management system was used to provide context and authenticity for interpreter trainees at a University in Poland. Hansen and Shlesinger (2007) discuss the use of video-based bilingual dialogues for purposes of interpreter training at the Copenhagen Business School. All of these approaches had their limitations, but provided context for the learner who would not have had access to the professional environment otherwise.

Simulation-based Learning

Immersive learning design as proposed by Olbrish Pagano is already being applied in the training of medical professionals though immersive simulated medical environments.
Simulation-based learning exposes the student to a series of challenging scenarios and provides an authentic learning environment without causing any harm to the patient. While it is important for medical professionals to work with live patients at some point during their training, it is imperative to ensure patient safety and well-being during treatment. One way of doing so is through Simulation-Based Medical Education (SBME). According to Ziv et al. (2003, p. 783) “Recent discussions of medical error and risk reduction strategies have highlighted simulation as an important tool in improving the safe delivery of medical care.” He further states that simulation-based learning gives students an opportunity to learn in safe environments and to discuss the mistakes they make during the simulations, which may even result in a negative outcome for the simulation mannequin, without any “concern of liability, blame, or guilt.” (p. 785). Simulation helps with the development of more than just the basic competences, but it also, provides a safe learning environment and can be used to “assess readiness for clinical environments” (Valler-Jones et al. 2011; Leigh 2008)

Simulation-based learning, like simulation and replication of interpreting events, has its shortcomings, which include the risks associated with worsened or limited professional socialization and communication acquisition (Valler-Jones et al. 2011; Leigh 2008), financial burden with respect to equipment and human resources, as well as consequences for the student in instances where a specific error would lead to a negative outcome in real situations but it might not seem as serious in a simulated setting. Since simulation-based learning has its flaws, another method was proposed and developed to improve the learner experience – The Collaborative Classroom Simulation (CCS) (Berndt et al. 2016). According to Berndt et al:

The Collaborative Classroom Simulation (CCS) experience was developed as a method to overcome common simulation barriers. The CCS experience uses an unfolding simulated case scenario and combines individual student experiences with learning opportunities for the entire class. An unfolding simulation is a patient scenario that
evolves throughout the experience, allowing opportunities for students to evaluate the effectiveness of their interventions and modify them as needed. Although unfolding case studies have been used in simulations before, the CCS is unique because it allows the entire class to participate as a group in a common simulated experience. (p. 401).

As established earlier in this chapter, interpreters are key players in the provider-patient dialogue and are expected to know and understand the medical terminology and to be able to perform in accordance with the rules and regulations of the host culture – i.e., the medical setting. Simulation-based learning and its principles could also be applied to medical interpreter education, especially in academic settings where simulations labs already exist.

Legitimate Peripheral Participation

Lave and Wenger (1991) introduced the idea of Legitimate Peripheral Participation as a way of effectively communicating the idea of “situatedness.” They maintain that “legitimate peripheral participation is not itself an educational form, much less a pedagogical strategy or a teaching technique. It is an analytical viewpoint on learning, a way of understanding learning” (1991, p. 41). According to the authors, “learning involves the whole person; it implies not only a relation to specific activities, but a relation to social communities – it implies becoming a full participant, a member, a kind of person” (1991, p. 53). They argue that peripherality “suggests an opening, a way of gaining access to sources for understanding through growing involvement” (p. 37). With respect to medical interpreter training, the idea of Legitimate Peripheral Participation could be instantiated as interpreter shadowing, where the interpreter is first an observer and then slowly an active participant, as shadowing for medical interpreters implies both the act of shadowing another and being shadowed by, or observed and mentored by, in this case, an experienced interpreter. Then as the trainees gain more experience and become more
comfortable in different medical contexts, they eventually move from the periphery, as novices, into the center of their role as experts.

Despite interpreting being a situated practice, currently, many medical interpreters are learning through experience, without sufficient, if any, guidance and in-process feedback. The sociocultural environment is not considered as a whole. As many interpreting studies scholars argue, for an interpreter to be able to seamlessly navigate the many nuances of each interpreting encounter, the application of the theoretical knowledge and acquisition of practical knowledge in interpreter training has to take place in situ. The current medical interpreter training could benefit from combining a number of learning theories that suggest that learning requires an element of authenticity regardless of whether it takes place in the actual context, or it is contextualized through authentic activities that resemble the realities of the many professional environments. Collins (1988) and Brown et al. (1989) both suggest that learning should be situated in authentic contexts that reflect the reality of the workplace and allow for transfer and application of theoretical knowledge to, what Balsam (1985) calls the “environmental context.” The theory of situated learning could then be viewed as the parent model under which all of the other learning theories mentioned in this study fall. Now, how said learning is situated based on each learning theory, especially as pertains to medical interpreter training, poses its own separate challenges.

The researcher believes that Lave and Wagner’s (1991) idea of Legitimate Peripheral Participation is already being applied in many instances where the novice interpreter is in a mentor-mentee relationship and has the opportunity to slowly begin to participate in the facilitating of communication. They are exposed to it first as observers, and later become active participants with a better understanding of the expectations of the environment. That is not to say that this approach is without its flaws. It is important, in this instance, to ensure that the
interpreter who serves as the mentor is in fact performing their duties in accordance with the professional standards of both medical interpreters and those of the workplace. The mentee interpreter in this case needs to be very observant and sometimes critical of the behaviors of their mentor for the mentor may not always be aware of their own attitudes and shortcomings, or be able to identify them due to having gotten accustomed to performing within a medical care team a certain way, and not always in accordance with what is expected of them. This particular approach could be adopted by more training programs as a way of contextualizing the applied component of interpreter training.

Simulation-based and immersive learning, while ideal in theory as a way to contextualize the learning and situate the trainee in an authentic environment without any harm to the patient, are not easily accessible, and as seen from examples above, require a lot of time and resources. They are cost prohibitive which, again, would leave out any training program, be it academic or para-academic, that does not have funds to support this learning approach. One compromise could be to adapt existing learning management systems for interpreter training, similar to Tymczynska’s (2009) application of Moodle where individual modules are created each with a different learning objective and different scenarios that emulate the many professional settings. However, this, again, may limit it to only academic training institutions since they are the ones that are likely to already have access to a learning management system.

The theory of experiential learning seems to lend itself the best to medical interpreter training. For experiential learning to take place, and for the trainee to reap the benefits of such an approach, it has to be organized in such a way that there are clear learning objectives at each step, and there is meaningful engagement on the part of the learner. Beard and Wilson’s (2013) idea of learning as a “continuum of authenticity” emphasizes that theory and practice are not
mutually exclusive and that, similar to situated cognition, theory always, or rather, should always, inform the practice and vice versa. That is to say, the context is important, and whether the training is done in the community of practice, or in an emulated professional setting, it is still experiential learning for one can observe, albeit not to the full extent, the expectations, behaviors, and values of that environment. Even though the above learning theories cannot be adopted by all training program to contextualize medical interpreter training, the training content could be consistent with interpreter level, and offer a progression of information and knowledge through the use of authentic learning activities in situ or through simulation.
CHAPTER III

METHODOLOGY

As the phenomenon of interpreter readiness has not been explored in the fashion intended in this study, a structured approach was required in order to obtain data that can be used to show the gaps, but also to substantiate the idea that contextualized and authentic medical interpreter training, which includes technology, is needed. This chapter presents the methodology used in this study in order to answer the research questions posed in Chapter I as to whether the current training of medical interpreters prepares them for the reality of medical encounters, both face-to-face and remote, whether the training includes technology, and what skills and knowledge are still needed. This study uses a mixed methods approach with medical interpreters as the main participants, and it supplements the findings with insights offered by managers of interpreting services at a number of hospitals in Ohio. While this study provides a brief overview of a handful of programs and the in-context medical interpreter training offered by academic and para-academic institutions, the focus of the study, as established in previous chapters, is not on the training itself, but rather on interpreters’ perception of their readiness based on the type of training they received, authenticity of activities used during training, training context, and technology.
Research Design

Both interviews and surveys were used as data collection instruments. The study began by focusing only on medical interpreters and interpreting services managers from area hospitals in the state of Ohio. Since the study required human subject participation, the research instrument, recruitment scripts, and consent forms were developed, and an application was submitted to Kent State University Institutional Review Board before the data collection began. A Level II application to use human research participants was submitted to the IRB on December 15, 2015 and approval for protocol #16-002 was received on January 29, 2016. After the approval was received and the interview recruiting began, the call for participants was shared by one of the participating managers of interpreting services via social media in an online interpreting group, which generated interest from interpreters nationwide who wanted to participate in the study.

In an effort to accommodate the newly expressed interest from medical interpreters nationwide and to gather additional data that would provide a greater pool of participants, which would further substantiate the research effort for comparison and triangulation purposes, and to make the additional data collection feasible, I consulted with Dr. Washbourne, my advisor on this study. At his recommendation, a survey instrument was added to the study. A request for amendment or changes to the research project, which included the survey in form of an online questionnaire, a new consent form, and updates to the recruitment materials, was submitted to IRB on February 25, 2016, and modifications to the protocol were approved on March 14, 2016. Continuing Review form for protocol #16-002 was submitted to IRB on January 8, 2017, and approval was received on January 9, 2017, and again on January 21, 2018, and approval received on January 23, 2018. The complete recruitment scripts, research instruments, consent forms, and
approvals are included in the appendices.

**Selection of Participants**

At the beginning of the study, after the researcher conducted an online survey of a number of interpreting services in different hospitals in Ohio, 6 hospitals that have an interpreting services office and a manager of language access were identified. The hospitals were as follows: 2 teaching university hospitals, 2 children’s hospitals, 1 general hospital, 1 research hospital. Hospital names will not be mentioned during data reporting and data analysis to ensure participant privacy, protection of any proprietary information, and protection of the institutions, as the latter are not the subject of the present study. Though the study was not primarily focused on determining whether the type of hospital had an effect on interpreter readiness, the inclusion of different types of hospitals allowed the researcher to conduct an additional comparative study of whether different medical institutions, through interpreting services, contribute to interpreter readiness through training offered before or upon hire. Surveying more than one type of institution also minimizes biased results.

Once the researcher identified and chose the hospitals, the following participants were selected: medical interpreters, full-time or part-time staff, and full-time or part-time contract interpreters, managers or directors of interpreting services from each of the 6 hospitals. Bearing in mind that many hospitals do not contract full-time or part-time in-house interpreters and that many interpreters are contracted through an agency, the researcher initially set out to interview a total of 24 interpreters who work directly for or through an agency for one of the 6 or more hospitals. Subsequently, 6 interpreting services managers were also selected – one from each hospital. As previously stated, at the outset, the study was going to focus only on medical
interpreters in Ohio. Given the above sample size, the results are not going to be used to draw conclusions about the overall state of medical interpreter readiness for the hospital environment, but rather on the participants’ perception of their own readiness. Nevertheless, data collected during this study could provide significant ground for further research on medical interpreter readiness for medical contexts, involving a longitudinal study with a larger pool of participants and hospitals. It could also lead to a study on the specificity of training that examines the academic and para-academic training curricula in further detail beyond the course descriptions currently available on the program websites.

To meet the participation criteria and be able to participate in the study (both the interviews and the survey), the participants had to be professional medical interpreters who were hired within the last 12 months, have 1 or more years of interpreting experience in a hospital setting, and receive some or all of their income from the language industry. These criteria were important to ensure that participants had received some form of interpreter training, since some organizations contract interpreters without any training if their language is one of lesser diffusion\footnote{Also known as Languages of Limited Diffusion (LLD), these are languages spoken by a relatively small group of people (Mikkelson, 1999).} and not in frequent demand. Participants were asked to self-identify as full-time or part-time staff medical interpreters or full-time or part-time freelance/contract medical interpreters. They might still derive all of their income from interpreting, but are not tied to just one provider or organization. These criteria were set so as to draw from a larger pool of participants, especially since the nature of the profession is such that most medical interpreters do not work as full-time staff interpreters for a single health care setting or Language Service Provider (LSP), but on a contract basis. The criterion for participation in this study by the managers of interpreting services only required them to be involved in hiring and/or training of
medical interpreters.

**Description of Participants**

Interpreters

A total of 20 medical interpreters working in Ohio responded to the recruitment e-mail and were interviewed in the process of data collection. The interpreters had different working languages, either signed or spoken, and worked in full-time or part-time staff, or full-time or part-time contract/freelance capacity. Based on the criteria for participation, as specified in the recruitment script, 3 interpreters reported having been hired within the last 12 months, while 17 stated to have at least a year to as many as 23 years of interpreting experience. A total of 70 medical interpreters responded to the online survey, of whom 49 completed it, and 21 started but did not complete it. Similarly, only 3 reported having less than 1 year of interpreting experience, while the rest reported at least one year to over 20 years of medical interpreting experience.

Interpreting Service Managers

After the 6 different area hospitals were identified, recruiting began. The call for participation in the study was sent out via e-mail and additional recruitment calls were made via telephone, after which a total of 7 managers of interpreting services responded to the call to participate. Of those 7, 5 are managers of interpreting services in different area hospitals—2 from children’s hospitals, 2 from university hospitals, and 1 from a general hospital. Of the remaining 2, one is now a former manager of interpreting services at one of the hospitals in Ohio, and 1 was a manager of interpreting services from a local agency that provides interpreter
training and video remote and telephonic interpreting at a number of hospitals nationwide, including one of the participating hospitals in Ohio.

**Instrument Design**

For this study it was important to design an instrument that would best capture data on interpreters’ perception of their readiness based on the type of training they received. Gathering qualitative data through semi-structured interviews has long been used in social sciences and has since made its way into psychology and sociology, as well as Translation Studies and Interpreting Studies. In Interpreting Studies, qualitative research has been conducted to gather data on interpreter experience, interpreter role, and interpreter perception of their role in different contexts—e.g., in healthcare (Angelelli, 2004), legal interpreting (Berk-Seligson 2002), and dialogue interpreting (Wadensjö 1998), to name but a few.

**Interview Design**

The interview questions for this study were designed using semi-structured interview principles as exemplified by Galleta (2013). The questions comprised structured demographic interview questions consistent with the variables specified in the call for participants, as well as questions based on the research questions posed in the study. The demographic questions addressed the following: years of professional interpreting, employment status of the interpreter (part-time, full-time; freelance or contract), and medical interpreter certification. The interview questions that directly relate to the research questions posed in the study were broken down into three sections: 1) Type of medical interpreter training received, length and sufficiency of the
program, usefulness of the course components and why they considered these components to be useful; 2) Technology training: role of technology in patient care and communication, and training and familiarity with remote interpreting technologies, both Video (VRI) and Over the Phone Interpreting (OPI); and 3) Type of training the interpreters felt was still lacking or was needed based on the professional demands upon hire.

Additionally, the interview questions focused on three areas that were important for establishing whether the hiring institution offered any in-context or in-hospital training, shadowing (mentoring, internships), continuing education, and training on hospital standards. These questions were important to determine if the perception of readiness for the hospital environment varied based on these additional opportunities afforded to the interpreters in training before or upon entering the profession. For a complete list of interview questions, please refer to Appendix J.

Questionnaire Design

Similar to the interview questions, the questionnaire was designed to address the research questions posed in this study: interpreter training, role of technology in patient care and communication, shortcomings, and the pertinent demographic questions: years of professional interpreting, employment status of the interpreter (part-time, full-time; freelance or contract), and medical interpreter certification. The questionnaire consists of both qualitative and quantitative questions. The demographic data was collected using quantifiable questions. The survey comprised closed-ended, open-ended, multiple choice, and Likert scale questions. The closed-ended questions were used for demographic data. The open-ended questions were used to give the participants an opportunity to share their views, similarly to those who participated in the
semi-structured interviews. The multiple choice questions address the many aspects of the training that might have been offered, and the Likert scale deals primarily with the interpreter’s perception of the adequacy of training received.

Data Collection

A mixed method approach was used for data collection purposes, as previously stated. It bears repeating that the data collection was two-fold. This study was conducted using semi-structured interviews as the main method of collecting data, but it also used surveys in the form of an online questionnaire. This section describes the process of data collection using both instruments. After IRB approval was obtained, an e-mail invitation to participate in the study was sent to interpreters and managers of interpreting services at the 6 chosen locations. Given the probability that some medical interpreters work for various medical settings through a language agency, an e-mail invitation was also sent to interpreting services at a couple of agencies in Ohio (all three recruitment messages can be found in appendices C, D, E, F, G, H, and I). The interview questions and telephonic and e-mail scripts for recruiting participants were created, participants were contacted, consent for participation was received, and interviews were conducted both face-to-face and over the phone, since some participants preferred to conduct the interview over the phone due to their changing schedules. Data collection using semi-structured interviews began in February, 2016 and concluded in November, 2016. Interviews were recorded on a password-protected mp3 device and then transferred to a password-protected MacBook Pro for transcription, coding, further analysis, and discussion. The data and any identifying information were kept strictly confidential and will be presented under pseudonyms for reporting of the findings.
The data collected with the survey was done online using Qualtrics software. As mentioned above, it included both quantitative and qualitative methods. The link to the survey was sent via-email and also posted to a number of national interpreting organizations’ social media platforms and sent through Cross Cultural Communicators’ newsletter in order to reach as many participants, nationwide, as possible. After opening the survey link, the participants had to consent to the study and could proceed to complete it only after selecting the option – I Agree. Data collection using the online questionnaire began in March, 2016, and the survey remained open until June, 2016.

Data Analysis

Once the interpreter interviews were transcribed and the questionnaire data exported into an Excel file, data analysis began. Given the large quantity of textual data obtained in the interpreter interview process, the decision was made to use NVivo software for coding purposes. The survey data were coded both in Qualtrics and manually, primarily using the evaluation coding method (Saldana, 2013). The NVivo data was coded and organized into nodes. The overarching themes that emerged from the data analysis and the research questions were organized into parent nodes. All other coded material corresponding with the parent node themes was categorized under child nodes. Once the data was coded in NVivo and the themes were identified, the questionnaire data was analyzed using the same codes for consistency purposes. However, additional themes emerged from the survey data. The data acquired from the interpreting services manager interviews was also coded in and analyzed in NVivo using the evaluation coding methods. A detailed account of the analysis process and the themes that emerged in the process will be given in Chapter IV.
CHAPTER IV

RESULTS

As discussed in Chapter III, the process of data collection consisted of medical interpreter interviews, interpreting services manager interviews, and a questionnaire that was distributed to medical interpreters nationwide in the form of a Qualtrics survey. Both sets of interviews were prepared and coded in NVivo, while survey data was coded manually. For consistency purposes, the same codes developed during interpreter interview analysis were applied to the surveys. This chapter presents the results of the qualitative data collected over the course of the study, reflects on interpreters’ professional experience, certification, training received, interpreters’ perception of the training curricula, interpreters’ perceived readiness, and the skills that are still lacking based on the professional demands upon hire. It also reflects on the interpreting services managers’ perception of interpreter readiness and the skills that are still required and/or lacking upon hire. General observations will be made and then further exemplified with participants’ answers to specific questions.
General Observations

Professional Experience

The quantitative aspect of the data for each participant group that shows the participants’ years of professional experience, type of employment (full-time or part-time freelance interpreter, or full-time or part-time staff interpreter), and certification will be examined first, followed by the qualitative data presentation. We will begin by examining the number of years of professional experience of the interview participants. As shown in the figure below, 4 interpreters reported having less than 1 year of experience, 5 reported having 1–5 years of experience, 7 have between 6–10 years of experience, 3 reported having 11–20 years of experience, and 1 reported more than 20 years of professional medical interpreting experience. Two of the interpreters who reported less than 1 year of professional interpreting experience have less than 6 months of active interpreting in medical settings.

Figure 3: Interview Participants – Years of Professional Interpreting Experience
Among the survey participants, of the 65 who responded to the question regarding years of experience, 3 interpreters reported having less than 1 year of professional interpreting experience in the medical field, 21 reported having between 1–5 years, 21 also reported having between 6–10 years of experience, 11 said they have between 11-20 years of experience, while 9 reported having more than 20 years of professional medical interpreting experience.

![Survey Participants – Years of Professional Interpreting Experience](image)

Type of Employment

The participants were also asked to report on the type of employment they held. Out of the 20 medical interpreters who were interviewed, 3 reported working in a part-time freelance capacity, 10 were full-time freelance interpreters, 3 held a part-time staff position within a hospital, and 4 were full-time staff medical interpreters, as shown in Figure 5 below:
Among the survey participants, the results regarding the type of employment held were as follows: 11 reported working in a part-time freelance capacity, 9 said they are full-time freelance interpreters, 6 held part-time staff positions, 33 were employed as full-time staff, and 5 said they have Other type of employment, as shown in Figure 6 below:

Figure 5: Interview Participants – Type of Employment

Figure 6: Survey Participants – Type of Employment
Those 5 survey participants who responded with *Other* reported that they work in the following capacities: manager of training and video interpreting for a few hours per month, Medicaid office interpreter, patient navigator, Certified Medical Spanish Interpreter, hourly staff medical interpreter, both freelance and staff.

Certification

There has been a push for certification as part of a national effort to raise the bar for professionalization of medical interpreters. The national certifying bodies discussed in detail in Chapter II remain an important factor with regard to professional demands upon hire. It bears repeating that the oral, or performance tests, are available in only a handful of languages; however, a written test is available to all. One of the interview and survey questions was whether the medical interpreters were certified, and for those who held medical interpreter certification, the question posed was which of the two certifications they held – CMI or CHITM™. The following charts provide a visual representation of the participants’ responses. We will begin by looking at the answers given by the interview participants.

![Figure 7: Interview Participants – Certification Status](image-url)
Of those interviewed, a total of 8 reported holding a national certification, 11 did not have any form of certification, and one participant reported being in the process of obtaining national certification.

The certification status of the survey participants is shown in Figure 8 below:

![Figure 8: Survey Participants – Certification Status](image)

Among the survey participants, 48 reported having national medical interpreter certification, while 17 stated that they do not hold a national certification credential.

Most of the participants, both survey and interview, hold one of the two national certifications. In terms of the type of certification that each participant held, of those interviewed, 6 (67%) said they have CHI™ certification, 2 (22%) reported having CMI certification, and 1 (11%) reported being in the process of obtaining CMI certification. The survey participants reported the following: 20 (39%) held CHI™ certification, 20 (39%) held CMI certification, and 11(22%) answered Other. Among those who checked Other, the types of certification ranged as follows: Medical certification in Vietnamese, Cantonese and Mandarin; BTG (Bridging the Gap); Administrative Hearing – California; Washington State Department of Social and Human Services (WA State DSHS); Certification Commission for Healthcare Interpreters (CCHI); In-
house MDACC (MD Anderson Cancer Center Certificate Program in Clinical Ethics) and American Translators Association (ATA); Dallas Medical exams for medical interpreters/translators; CMI and CMT (Certified Medical Technician); CoreCHI™. Based on the variety of answers provided by the survey participants, it is important to note the following: as stated in Chapter II, BTG is the 40-hour medical interpreter training recognized on a national level and is not a certification. CCHI and CHI™ are the same certification, and CoreCHI™ is also part of CHI™ certification. Since CHI™ does not currently offer an oral exam for all languages, after passing the written portion of the certification exam interpreters in languages other than Spanish, Arabic, and Mandarin receive the credential CoreCHI™.

The number of survey participants who hold CHI™ certification as compared with those with the CMI credential appears to be evenly distributed. However, if we take into account those who answered Other but also held either the CCHI™ and CoreCHI™, as well as the CMI with the CMT, the total number of those with CHI™ increases to 22, and a total of 21 with the CMI credential.

Managers of Interpreting Services

Managers of interpreting services were also interviewed and asked about their training and certification status. Almost all the participants were also trained as medical interpreters. A total of 7 managers were interviewed, and 6 said they have completed medical interpreter training, while 1 reported not having any interpreter training at all.
Figure 9: Managers of Interpreting Services – Trained vs. Untrained

With regards to medical interpreter certification, a total of 4 (57%) reported having the credential, while 3 (43%) reported not being certified. Of those who stated that they were trained as medical interpreters, 4 held medical interpreter certification, while 2 indicated that they have not obtained this credential. Among those certified, 2 said they have CHI™ certification, while the other 2 held CMI certification.

Interpreter Training

One of the questions posed was what type of training medical interpreters received and how they perceived their readiness based on that training. The training was divided into two groups: academic training, or training received at academic institutions, and para-academic training, which is training received from professional organizations and language service agencies. Of those who participated in the interview, 4 received, or were in the process of receiving, academic training; 17 reported having received para-academic training; and 1 reported not having received any training at all. Of the 17 who reported having para-academic training, 1 participant also confirmed having academic training as well. Three of the 17 interpreters who
stated that they have received para-academic training reported not having received this training prior to beginning their careers as interpreters; only after receiving on-the-job training were they offered the option to complete a training program. Of those 3, two completed the training program, while one opted for continued education mostly through self-study, as seen in the answer below:

To be honest a lot of it was myself. So I had my bachelor(sic) in Chinese from a Chinese University, and then a lot of the other training was like self-study… Yeah it was, uh, I mean, it was a lot of like self-study because even though my degree was in Chinese the medical part of it was, I mean, I kind of figured it out, and a lot of it was through interpreting, through appointments so I’d see like what the appointment was and then I’d learn as I went… I did take Bridging the Gap, which, that’s a 40-hour course, but that was after I’d been an interpreter.

Similarly, among the survey participants the training ranged from para-academic to academic, to in-house or on-the-job training. Analysis of the participants’ responses revealed that most of the training was received in para-academic settings. More specifically, a total of 36 participants reported having completed their training through para-academic institutions, as compared with the 19 who said they graduated from academic programs. A total of 4 participants reported not having received any training at all, while 1 reported having completed in-house or on-the-job training. One interpreter stated that they did not recall the type of training received. As indicated above, the number of those who completed para-academic interpreter training is nearly double the number who graduated from academic training programs. This comes as no surprise, since academic training programs offering medical interpreter training are relatively new in the United States. Figure 10 provides a visualization of the above numbers:
Figure 10: Survey Participants – Types of Trainings

The findings also revealed that of those who completed para-academic training programs, the overwhelming majority reported having graduated from Bridging the Gap (BTG). A total of 15 survey participants listed BTG as their only (initial) training program or in combination with other types of training. The additional 21 responses included the following types of training: through an agency; continuing education; de la Mora Interpreter Training\(^\text{16}\) and self-training; 40-hour training; 50-hour training; community interpreter training; Choice Translating,\(^\text{17}\) Connecting Worlds,\(^\text{18}\) Cross-Cultural Communications\(^\text{19}\) (CCC); Healthcare Interpreting; Glades Initiative\(^\text{20}\) 40-hour training; specialized medical interpreter training through Language Line,\(^\text{21}\) workshops at conferences such as International Medical Interpreters Association (IMIA);

\(^{16}\) Face-to-face and online interpreter training, also offered through interactive modules.  
\(^{17}\) A language agency that offers a 16-hour and a 40-hour interpreter training course.  
\(^{18}\) A 40-hour, face-to-face interpreter training program offered through PALS for Health.  
\(^{19}\) An international agency that provides medical and community interpreter training and course development.  
\(^{20}\) Medical interpreter training based in Florida and recognized by the International Medical Interpreters Association.  
\(^{21}\) Language Service Provider specializing in telephonic and video remote interpreting, translation and localization, as well as medical interpreter training.
Connecting Cultures Inc.\textsuperscript{22} Interpreter Training Program; Culture Smart;\textsuperscript{23} Introduction to the Art of Medical Interpretation;\textsuperscript{24} A Training in Basic Interpreting Skills for Bilingual Workers (40 hours); Interpreting in Mental Health; medical terminology and ethics.

Close examination of the types of other para-academic programs completed by the survey participants reveals a number of responses that suggest that the training could also have been \textit{Bridging the Gap}, if not an equivalent of this course. For example, one participant stated that they received their training “Through an agency,” while 3 others reported having completed some form of a 40-hour training program. There are other 40-hour training programs that are equivalent to the \textit{Bridging the Gap} course, as seen from the examples listed in the additional para-academic programs above, but the lack of specificity with respect to the name could suggest that those participants instead completed BTG, given that this particular course is the most common, nationally recognized, basic 40-hour medical interpreter para-academic training program.

As previously stated, 19 survey participants indicated that they graduated from an academic training program for medical interpreters. The following are the types of training that these participants completed: 60-hours of Coursework on Medical Terminology; Ethics and Physiology; Master’s degree; Traductorado Público;\textsuperscript{25} Certificate Course in Medical Interpreting; Southern California School of Interpretation and City College of San Francisco Interpreting in Healthcare Certificate program; 40-hour University Class; Diploma and a Master’s Degree; Harvard Pilgrim Health Care Foundation;\textsuperscript{26} Certificate of Interpreting & Translation - Health Care Specialization; Literary Translator with a Minor in Interpreting; The Medical Interpreting

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{22} A language service provider that specializes in healthcare interpreting and interpreter training.
\item \textsuperscript{23} A 45-hour medical interpreter training course.
\item \textsuperscript{24} A 60-hour certificate offered through Cross Cultural Communication Systems, Inc.\textsuperscript{TM}.
\item \textsuperscript{25} Undergraduate degree in Translation Studies, better known as Sworn Translation from Argentina and/or Uruguay.
\item \textsuperscript{26} A 60-hour Medical Interpreter Certificate Training Program.
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and Translation Institute Online (MITIO); Spanish Medical Interpreter; Translation-Interpretation Studies Associates of Science Degree in Spanish; Portland Community College Healthcare Interpreter Training Program; medical assistant program and a certified nursing assistant degree; Medical Terminology from Ivy Tech Community College; online training modules through Western Oregon University, which has since been discontinued. Based on the answers seen in the above examples, there is a wide range of academic training programs that span a single, 40-hour university course, Bachelor’s degree in Translation and Interpreting, certificate program, online training modules, diplomas, all the way to Master’s degrees in Translation and/or Interpreting, as well as some that could be qualified as para-academic—i.e., the 60-hour training program offered through the Harvard Pilgrim Healthcare Foundation.

**Training Components and Their Usefulness**

The participants were also asked about the training components, or aspects of the training courses they completed, and their usefulness. Similar to the types of training, there was a wide range of responses. As established in the beginning of this chapter, most of the interview participants have completed the BTG training course. The following figure exemplifies the training components as reported by interview participants:
Most of the training included the following course components: ethics, interpreter roles (conduit, culture broker, clarifier, advocate), interpreting techniques and skill-building, role-play, medical terminology, dos and don’ts, cultural competence, hospital standards of practice, and some strategies on how to manage and/or navigate the encounter in the interpreter role. It is not language-specific nor focused on terminology or the medical context itself. In the words of one participant in particular, Nura: “It just tells you these are the most important fields that you need to go on your own, and figure out how to memorize all the terminology and be comfortable using them.” In the experience of another interpreter, Sofía, the training was as follows:

It was very much the procedural how to perform as an interpreter. It was not terminology focused, it was not language focused because of course there are people in that course from, you know, 10 different languages so it was much it was highly focused on just those steps of performing as an interpreter.

Others relied on prior interpreter training to acquire and further develop their medical interpreter skills. For example, Bill states:

I pretty much depended heavily on the experience I had to become a court certified interpreter. I used those materials. The necessity to develop a code of ethics and adhere to
it, to assure that I was maintaining accuracy, completeness, remaining impartial, but yet, and this is a stretch for me because I was trained as a legal interpreter first, you don’t advocate. I learned how to become an advocate, but still stay within the parameters of a medical interpreter.

Some of the interview participants found the training components to be beneficial, because, as one interpreter posits, “They are readily and easily applicable on a day-to-day job of a professional interpreter.” Many interpreters found terminology to be a useful foundation upon which other interpreting building blocks can be laid, and because without it the interpreter would be lost when faced with healthcare providers who expect them to have that knowledge once they are in a professional setting. Others found that the continuing education course components were helpful, since they provided more subject area-specific training, such as interpreting in a transplant session, in a triage session, or during a trauma session. Some said that since their BTG training came after they had already been working as medical interpreters, the training was not useful, since they were already familiar with those course components from experience. Others, such as Amira, felt as follows about the usefulness of the training:

Actually all of it was beneficial but the most was about how to conduct yourself as an interpreter, to be able to do your job or role as an interpreter through an encounter, what an interpreter should and should not do, and what is ethical, what isn’t, and all of the codes pertaining to that.

Comparable to Amira’s experience, another interpreter felt that the standards of practice, the code of ethics, and role-play were particularly useful because they provided “guidelines of what was expected from an interpreter.”

Similar to the findings from interview participants, survey participants stated that most of the training centered around the code of ethics, professional code of conduct, interpreter roles, modes and techniques of interpreting, and role-play, but it also included sight translation,
observation of a professional interpreter, mentoring, and in some cases, an internship in a medical setting. The training consisted of the following course components:

![Bar chart](image)

**Figure 12: Survey Participants – Course Components**

The participants also reported *Other* training components that mostly included: medical terminology; minimal performance-based training in both consecutive and simultaneous interpreting; some shadowing; continuing education; discussion of difficult concepts; and/or administrative work. One participant reported team translation work, another cited “Internship in a Video Remote Interpreting company,” while two reported professional roles within a medical setting (i.e., Registered Nurse (RN) and a secretary) that were instrumental in preparing them for their jobs as healthcare interpreters.

When asked why they thought those components were useful, many participants cited the following: it helped with problem-solving; provided them with a better understanding of the interpreter role boundaries; helped with the national certification exam; role-play and observation helped prepare trainees for actual interpreting encounters.
Shadowing and In-context Training

This study also examines the decontextualized aspect of medical interpreter training, and therefore it was important to look at whether interpreters received any shadowing, *in situ* or in-context training during their program, prior to taking on their first interpreting job, or not at all. This was addressed by posing the following two questions: “Did the organization/institution where you received your training offer you any shadowing opportunities?” and “Did the organization offer any training at the hospital? In-context training?” Out of the 20 interview participants, 7 reported not having been offered any shadowing, but there were comments in a couple of instances of shadowing being mentioned during their training but that it never materialized. Two of the interpreters said they were given the option of shadowing or told that they would be shadowing an experienced interpreter before taking on jobs, but either this never materialized or, in one case, since it was not a requirement, the interpreter did not take advantage of the opportunity. Eleven interview participants said that they were given the opportunity to shadow, and some also said they have been shadowed by mentors and/or other professional interpreters.

Based on the accounts provided by the interpreters, it seems that the shadowing was done in more than one way, and the amount of time spent shadowing also varied among the participants. One interpreter, Amirah, reports: “I did some shadowing, and I did coaching myself, and it was, uh, a two-way thing.” Others also report that the shadowing was done both ways and that they first shadowed an experienced interpreter and later were shadowed either by those same interpreters, or, once they were the experienced professionals, were shadowed by novice interpreters. Another interpreter claimed that the shadowing “wasn’t something that was offered to everybody in the course, it just happened to work out that I knew that clinic to begin with, and
was offered the opportunity.” James reported that his shadowing comprised a total of 8 hours. He initially spent 4 hours inside the hospital, which he did through an agency, and an additional 4 hours shadowing an interpreter from the same agency after he began working for them. Pablo, who works at a clinic, stated:

They did have some sort of system of you shadowing a more experienced interpreter a number of times, and then when that interpreter felt that you were ready, you would switch, and then you would interpret and they would shadow you and provide feedback.

Mayra’s shadowing experience was slightly different from the ones seen in the examples above. She reports:

That is the standard form of introducing interpreters into our department. Also new interpreters that have joined our team afterwards have shadowed me as well, and, uh, but yes, I definitely shadowed most of my colleagues, and kind of like walked around with my boss for the first few days and just watched her interpret, and then we would kind of like do half-half where she would interpret half the session and then I would take over.

As seen from the examples above, both the way in which shadowing was done and its duration vary significantly from one interpreter to the next.

Among the survey participants, 26 reported having been offered shadowing, while 25 said they had not been afforded the opportunity. Of those surveyed, 51% were offered shadowing, as compared with the 55% of those interviewed. The survey participants who were offered and took part in the shadowing opportunities indicated that the shadowing consisted of the following: discussing how to interpret; observing video and/or telephonic interpreting sessions and seeing how the technology works; shadowing with an experienced interpreter; being exposed to multiple settings and disciplines; shadowing the staff interpreter, then debriefing following the encounter; observing a seasoned interpreter use the proper protocols and use the third person. Some went to only one session, one shadowed for 10 hours over a course of one week. One participant shared their shadowing experience: “Work side by side with a medical
interpreter in international services; learn all the paperwork involved and tasks needed; time
management; team communication.” Another stated: “Having hospital staff observe my
interpretation during rounds and other appointments within the hospital, not clinic settings.”
One writes:

For months I followed a senior Interpreter/translator to each assignment, after my training
it reversed and I was evaluated by my shadow. I was able to learn about radiation, chemo,
surgery settings. Where to seat [sic], how to behave during sessions.

Two other survey participants shared their experience with shadowing, one stating that for a
week at a local hospital “I shadowed the interpreter for the first half and she shadowed me the
second half.” The other trainee’s experience was packed into one day taking place in “different
areas of the hospital” and two full days of shadowing with “special dedication to the ER.”

Technology Training

Technology plays an important role in medical interpreting. In recent years, hospitals
have been adopting technologies that allow patients to speak to providers over a video
conference and successfully utilizing Video Remote technologies for interpreting purposes, such
as Martti, and various remote interpreting options such as Language Line Solutions, for both on-
site and remote interpreting purposes. Video Remote Interpreting (VRI) technology has been
successfully used in Sign Language Interpreting and is an important component of Sign
Language Interpreter training. Many spoken (and signed) language interpreters perform or are
expected to perform both video remote and/or over-the-phone interpreting in their everyday
professional practice. Part of this research also examined the extent to which the interpreters in
training were introduced to technology that is used for patient care and communication and that
which is specifically used for video or phone interpreting.
Of the 20 interview participants, only 4 reported having been introduced to a type of technology used in patient care and communication, while 16 reported not having been introduced to any technology used for these purposes. Among the 4 who were introduced to technology, the answers varied. These interpreters were introduced to technologies such as Voalte (a HIPAA-compliant healthcare communication system), Epic (a patient data management system), nanotechnology, and technology as pertains to one’s safety when in proximity of X-ray or MRI machines.

When it comes to the survey participants’ training on technology used in patient care and communication, 17 reported having received training, while 35 stated that they had not received technology training at all. Of the 17 who were did receive some training, only 4 reported that the training consisted of an overview of patient information systems. The other participants stated the following: 4 indicated that they received an overview of the type of interpreting equipment; 7 were introduced to phone interpreting technology; 12 to video interpreting technology; and 2 reported Other type of technology, of which one mentioned phone conferences without any specifics and one said they provided HIV education in their role as a CNA (Certified Nurse Assistant), without providing details of the type of technology used to perform those duties.

With respect to video remote interpreting technology and phone interpreting technology training, most of the interview participants had been introduced to and/or trained on how to use either of the two. A total of 18 interview participants reported having been introduced to remote interpreting technologies, while 2 stated that they not had been trained on nor introduced to it. Eleven interpreters were introduced to and/or trained on video remote interpreting technology, while 7 reported having been exposed to and/or trained on over-the-phone interpreting. Six participants said they have done or have been exposed to both types of remote interpreting
technologies. Three of the 6 participants stated that they were not introduced or trained on remote interpreting per se, but performed it as a job in other interpreting contexts or provided training on remote technology to other stakeholders. Samia speaks of her experience with technology used for remote interpreting purposes: “We have, twice a week, set hours just for video interpreting. Sometimes they can be video sometimes they are audio. We don’t see the patient.”

Another interview participant, Fiona, states:

I did do some phone interpreting for a while, but not as a medical interpreter it was with a insurance interpreting so there was some medical in there because if the patient had been injured, uh, there was some discussion of medical stuff, but mostly it was just an insurance job that I was doing phone interpreting for. But really aside from that, the only other training I would say was working at Children’s. We did some training with how to show other people how to use the Video Remote Interpreting for the iPad when there was not in-person interpreter available. But aside from that, we didn’t really, I haven’t really used a whole lot of technology for interpreting.

Nura, who had a similar experience to Fiona’s in that she also worked as a telephonic and video interpreter without receiving any training on interpreting using either technology, reports:

I did both of them as jobs. But I did the first one, the telephonic one, without training just the knowledge of the first language and the second language, and while I was getting ready for the exam, I was employed full-time to do video interpreting which really helped.

As seen in the examples above, the extent of exposure and the type of training differ among the interview participants.

Among the survey participants, a total of 20 interpreters reported having received training on remote interpreting technology, while 32 said they had not received such training. Out of those who received training on VRI or Over the Phone Interpreting (OPI), 11 participants said that they received video remote interpreter training, 17 said they received telephonic training, and 2 chose Other, as shown below:
Of those who reported having received Other type of training, one participant wrote “face-to-face” without providing further explanation, while the other participant stated that they had done telephonic interpreting without training. No survey participant reported having had training or having been introduced to both types of remote interpreting technology.

Subsequent Training

While this study mainly focuses on the initial training received, the question of subsequent training—such as continuing education, including training of providers that also included or was open to medical interpreters, and training on hospital standards of practice—were also posed. These questions speak directly to the issue of interpreters’ overall readiness and perception of readiness, and therefore the findings will be briefly examined.
Participants were asked about whether the organization offered any continuing or professional education or any course offered to medical staff that also included or was open to interpreters. Out of the 20 interview participants, 16 reported having been offered or having received continuing education through their agency and/or organization, including training that was offered to medical staff and providers. Two interpreters stated that they were not offered any continuing education, while 2 said they were unaware of any continuing education for interpreters or training offered to medical staff that also included or was open to interpreters. Those who were offered or received continuing education stated that the training consisted of the usual refresher courses, such as interpreter ethics; role of the interpreter; general and some specific terminology, such as dentistry; how to do rounds with patients; and a single performance-based training in simultaneous interpreting for a research presentation. The medical training to which interpreters were also invited consisted of the following: overview of patients’ rights and HIPAA; safety in the hospital environment; basic life support; and a talk on new research on asthma. Many of the participants reported that the continuing education courses or those offered to providers and staff were not mandatory, and therefore they could choose if they were of interest in order to attend. Some reported that they only went to courses that offered CE (Continuing Education) Credit which counts toward the renewal of their National Certification Credential.

Among the survey participants, 27 reported that the organization offered continuing or professional education, while 23 said that theirs did not. Much like the answers given by the interview participants, the continuing education offered to the survey participants comprised
similar training components: code of ethics; interpreter role; skill-building; medical terminology; anatomy; body systems; role-play; and cultural competency. A number of participants mentioned webinars and other workshops without providing details about the content of that training. One participant writes:

Linguists, Medical staff, Professors, would give us classes at no cost to us, we were given same books in medicine that medical students received in target languages. To this day I have free access to courses on line.

Others report a wide variety of training offered on a more regular basis. For example, one participant stated that their organization offered:

Variety of topics including advanced development of interpreting skills; interpersonal skills; self-care. Organization has on-going professional development requirements for all interpreters, regardless of tenure, which include a variety of training/professional development types (formal classes, independent study, field shadowing, etc.) and established frequencies for each type.

Another survey participant writes:

Whatever I wanted to attend, they would pay for. There was not internal professional development in medical interpreting. There are many training opportunities at the hospital in management components, ethics, grand rounds, diversity, etc., but nothing specifically geared towards the medical interpreter.

Much like the above example, two other participants reported having had the freedom to attend conferences and training of their choosing and that they were encouraged to do so, and, in the case of one participant, they were financially supported by their organization to do it.

When asked about training that was offered to medical staff and that also included interpreters, 13 survey participants reported having been offered such training, while 36 stated that they had not. Those to whom the training was offered reported that the training consisted of the following components: HIPAA regulations; cultural competency; Joint Commission Preparedness; Infection control, CPR for dual role interpreters, and major disaster preparedness; Medicare/Medicaid fraud prevention; induction, grand rounds as lectures, staff well-being and
safety symposia, intro to new and expensive equipment, e.g., MRI, medical records systems; language access policies; and specialized terminology spanning many medical specialties. As seen above, training varies. One participant writes of their training:

It consists mostly of institution wide policies and procedures as well as compliance with the Joint Commission on Hospital Accreditation. The information usually focuses more on the law and the rules of the institution, not on medical terminology, procedures or information management.

Another participant reports that they were offered training normally offered to medical students, as seen in the example below:

Charting, customer service, classes to become a medical educator for who wanted to change profession. Digital records, CPR, asthma, diabetes, oncology, medical terminology. Courses opened to residents, fellows are open to medical interpreters/translators to attend free of charge.

The course components of the above continuing education training—both those specifically designed for medical interpreters and the ones that were offered to medical personnel but also included the interpreters—run the gamut from general to more specific medical training curricula.

Training on Hospital Standards of Practice

When asked if they received or were offered any training on hospital standards of practice, the interview participants’ responses were as follows: 16 responded with yes, and 3 said they have not received any training on hospital standards at all, while 1 stated that their mentor gave them an overview of what to expect from different types of institutions and taught them the meaning of different signs posted within the hospital. The training of those who said they received such training primarily consisted of an orientation that is offered to all medical staff and some training on HIPAA and the dress code. Two interpreters reported that they first started
working in a different role, as staff, then transitioned into interpreting, so they already had prior knowledge of the hospital standards.

Of the survey participants, 22 reported having received training on hospital standards, while 27 said that they did not. The majority of those who were offered training said that it consisted of the following: hospital practices, values, policies, ethics; new employee orientation; code of ethics, HIPAA; interpreter role as part of the medical team; knowing how the hospital works; explanation of the standards prior to taking any appointments, etc. One participant’s experience with the training was different due to their dual role. They write: “I'm not only the interpreter, I’m also a patient care coordinator, so, my training in the hiring hospital was broad to include both policies & procedures, ethics, compliance, clinical practices and such.” Most participants found that the training they received on hospital policies and standards was broad and geared toward all staff and, as reported by one participant, that “there were no specific instructions for interpreter and/or translator in particular. I made decisions base on common sense and professional judgment but there were no explicit guidelines.” While most of the training seems to cover the hospital standards or practice, one interpreter also had additional training such as “how to handle hard situations” within the context.

Perception of Readiness Based on Training Received

Perception of Interview Participants

Among the interview participants, the answers to the question “Generally speaking, how sufficient do you feel your training was in preparing you for working as a medical interpreter?” were varied. Three of the 20 participants stated that in their opinion the training was sufficient.
One participant realized upon stepping into the setting that they were “very unprepared.”

Another one felt that the initial training was not sufficient at all. The rest of the participants felt that the training was a good starting point, and they used the following metaphors to describe it: “tip of the iceberg” and “a first step down the road.” Based on the participants’ answers shown in the examples below, most felt that the training was a great introduction to the field of medical interpreting, while expressing that they understand this is not a be-all-and-end-all type of training. Fiona states:

I mean I would say that the it was a good starting point. And because there is no course on the planet that you could take that is going to completely prepare you for all of the situations that you can be put in for medical interpreting. A lot of it is just a matter of experience and you have to be put in that position and make your way out, so I would say a lot of it is, you know there is, I don’t think there are a lot of courses that can that would be able to completely compare you [sic] or prepare you for any of it. I would say that the Bridging the Gap course prepared me probably, I don’t know, maybe 50% of what I would need, and then the rest was just a matter of researching on your own and then being in a situation. It was helpful knowing what the interpreting situation was going to be beforehand, so you could, I did a lot of research in the early years whenever I knew I was going to be going into whatever specialty type, I would do a mountain of research before going into the appointment in the hopes of being able to get ahead of what I would need to know.

Another participant, Sofia, reports:

I would say that the training I received before my first interpreting appointment was not, was not sufficient in that I, in that, I had to do it myself. So like with the agency that I work with, again, kind of like with the Bridging the Gap program it was more about how to conduct yourself as an interpreter what are the steps to follow, uh, and I understand that that is a very important part of interpreting, but it did not prepare me for the the actual conversations that I would be dealing with. Uh, so that sort of training was not sufficient in my opinion. I had to take it upon myself as an individual who wanted to do well to go out and find my own resources and study and improve my own, my own skills.

Zuska claims:

I think it was a good start, but really what you learn on a job when you start working you really run into new terminology and new situations almost every time when you interpret for the first year for sure. And also big role plays self-motivation, self-education what do you do after you completed your interpreting session. You have to look up things, you
have to ask other professionals. So, you cannot look at it just like you interpreted 11 to 12, and you go home and forget about it.

Samia, who is a Registered Nurse, speaks of her experience:

As a, uh, being an RN, and the training that I had, like the ethics of the profession, the course, the 40-hour course and the training on the computer on on [sic] the Epic system was enough for me. However; I believe that those who don’t come from a medical background, they lack this information, they lack the part that is medical. Uh, there is a lot, they they [sic] learn, they end up learning it but through encounters rather than being prepared for it. There’s a big, huge number of medical terminology that they don’t know, it’s not only every organ in the body, it’s every procedure, every radiology test, every blood test, uh, plus the familiarity of the hospital. You know, what does code blue mean? What does code red? These kinds of things. If they’re not trained in the medical field, they lack all this information. They end up learning it, but it, I think that training, uh, misses that part. They don’t give enough flight on this part.

Others also felt that the training was somewhat sufficient in preparing them for their role as medical interpreters, but not completely. Pablo reports:

I don’t think it was completely sufficient to feel comfortable in a medical setting. I think that there is a huge amount of vocabulary, uh, and knowledge that you need to have to work comfortably and efficiently. And, I don’t know, elegantly, as a medical interpreter, and that is really hard to obtain from training. And I think that there is a tendency for interpreters to think that going to and attending a training is all that it takes to improve their practice and not to think about what are they doing on a daily or weekly basis to continue learning. Uh, and very few if any of the trainings attended pointed that out.

Mayra’s experience with the interpreter training and her opinion of its usefulness was different from the previous examples. She states:

I think it was sufficient. I think that, uh, complementing that with shadowing my colleagues and my boss for the first several weeks, uh, was kind of like a good, uh, combination. I did for a while before I became a staff interpreter look for kind of like more formal training but could not find any in the Cincinnati area.

As seen from the example above, the perception of interpreters’ readiness based on the received medical interpreter training varies among the interview participants.

Perception of Survey Participants
When asked: “How sufficient do you feel your (initial) training was in preparing you for working as a medical interpreter?”, the survey participants reported as follows: 27 said that it was sufficient, 18 stated that it was somewhat sufficient, 5 found it neither sufficient nor insufficient, 1 participant thought it was somewhat insufficient, while 0 perceived the training as insufficient.

![Bar Chart: Survey Participants – Perception of Training]

*Figure 14: Survey Participants – Perception of Training*

As seen in the example above, most survey participants found the training to be sufficient or somewhat sufficient.

Interpreter Readiness as Perceived by Managers of Interpreting Services

The perceptions of interpreter readiness by managers of interpreting services ranged from those whom they felt were completely prepared, some who were moderately prepared, those who were quite prepared, to those who were providing interpreting services without any qualification or training. For example, when asked “How well prepared for their interpreting assignments are
the trained medical interpreters who work for you?”, one of the managers, Catherine, reported as follows:

The spectrum was very very different. We had some people who were completely unprepared, and you had some people who were moderately prepared, and some who were quite prepared. Although there are standards for training, first of all they are fairly new. I don’t think everyone is aware of them, and I think there’re still a wide variety of levels, types of training, they’re different lengths, and, uh, as you know so well, being an interpreter depends on so many innate characteristics of the person that is an interpreter that perhaps, I don’t know what that somebody has to take to at that point be a good interpreter. One example would be: Is this person diligent enough to follow-up on their continuing education on their own, and their self study? If they don’t have that characteristic alone, the outcome will be completely different.

As seen in the example above, interpreting readiness, as perceived by those who manage interpreting services, is a continuum. The complexity of interpreter roles, combined with personality traits and expectations of the professional, medical environments, all play a part. The perception of readiness by managers of interpreting services can also be subjective, as seen in the following example given by Cristina, who states:

You know, I selfishly would say they are very prepared, but I know there are situations, especially for those languages there are less resources for, uh, you know, I’m sure that they are at a higher level within that language community, but are they the same as say a Spanish interpreter who has a lot of resources? Probably not. In being fair with my answer, I know that there’s some disparity depending on the language and it really has to do with access to language specific training or resources so that would, uh, you know, not allow them to be as prepared I would suppose.

Other managers perceived readiness of their interpreters in terms of what they believe is considered “ready enough” by national standards, as compared with their own perception of medical interpreter readiness based on performance observations. Maggie informs:

Currently, I have what I would consider, what I would honestly consider, one trained interpreter working for me. Uh, everybody else, and I did recently have someone go through a 40-hour training so her I would also consider at this point trained, uh, enough, not fully enough by my own standards, but nationally, by national standards what is termed enough, uh, so I guess I have two people out of the 8 that I have who I consider trained. Everybody else was either grandfathered in, or kind of learned on the job, and really is not, uh, not what I would consider, not what I would like to have them trained
at – level wise. And then there were two people who I actually let go because I didn’t think that they were performing their duties, actually three, but one of them is a bilingual nurse and she’s still working on the floor, but she’s just not working for me anymore.

Another manager, Marcel, offers a deeper insight into their hiring process, which in turn informs the decision on someone’s readiness to work as an interpreter in a hospital environment. Their perception of readiness is based on their own assessment of the interpreter’s abilities, as well as peer assessment, as exemplified in the answer below:

Well, even when we hire staff, I know for a fact there is a learning curve. And, what we do even with those individuals is we give them an opportunity to get better. To assimilate to the environment, to improve their medical terminology. We do hire people utilizing a couple of tools: A written assessment, and specifically a medical interpreting tool. So we use that. I specifically used that as a base line, and also their personality, and other things that we use during a regular hiring process. Uh, obviously if they have experience, I need to know exactly what that experience is and we check the references and all that, but once we have a new hire we basically give them an opportunity to develop within a, uh, three-month period, which is basically the probationary period, and during that time their coworkers provide a report, report on how they think the interpreter is doing. And based on those reports I decide if the interpreter is a good fit, or if we just keep prolonging the introductory period to 6 months. That’s actually the longest, and decide what we do with them. But it’s pretty much identifying the potential individual and then just exploiting it – so to speak.

As seen from the above example, the potential interpreter is expected to have the basic training, and even experience, but there is a probationary period that allows for growth, improvement, and progression of the interpreter’s skills and further acquisition of knowledge through in-hospital practice, peer evaluation, and only then is their readiness assessed by the manager of interpreting services.

Prior interpreting experience in medical settings is one of the factors in determining someone’s readiness to work as a medical interpreter in the hospital environment, according to a manager of a video interpreting company, Peggy. In her opinion, the learning curve for an interpreter to be really ready is one year. She posits:
I think that an interpreter really doesn’t hit their plateau, of like really being fully competent and completely being comfortable with either knowing the information, or knowing where to go to get the information, until they’ve probably been doing it a year. It depends on what their background is. If they came to us, and we’re a video interpreting company, if they came to us with many years of experience already, uh, as a medical interpreter working in a hospital, uh, working in community medical clinics, then that learning curve can be much quicker. But, for someone who maybe has a strong background in being an interpreter but has yet never really worked as a medical interpreter, I think it’s probably a year before they really hit their stride.

Roselyn, on the other hand, believes that an interpreter’s preparedness and readiness for the hospital environment and the interpreted event depends on the frequency of the interpreter’s work. When asked how well prepared the trained interpreters who work for her are, she asserts:

Very well I would say. They are interpreters that have been working in the field for over five years and they are interpreting on daily basis. I believe that they are very well prepared, and if there is an appointment that, uh, probably they’re taking it for the first time, or, uh, genetics or a very different appointment, they prepare for it.

Samantha perceives the interpreters who work for her are very prepared. Much like the previous example, she too believes that if the interpreters are not prepared, it is on them to become prepared, whether it is by looking up terminology or consulting a more seasoned or experienced colleague. She states:

For the most part, I think uhm they’re very prepared, and if they’re not, it is their responsibility to become prepared. So whether that means they need to look up certain words that they think may be part of the procedure, or whether they need to, you know, talk to another interpreter who maybe has, you know, done that pulmonary function test to know exactly, you know, what the expectations are, or since we are one of those academic medical centers that are trying things new, lots of times I will bring new procedures into them for a 15-minute talk at a team meeting, so that they can maybe at least kind of get a concept before they walk into something blindly.

She, like other managers, also brings the training to her team to ensure readiness, as seen in her answer above.
Skills and Knowledge Still Needed Based on the Professional Demands Upon Hire

Perceptions on the Part of Interview Participants

One of the questions posed in this study was “What type of training do you think medical interpreters still need/lack based on your perception of the professional demands upon hire?”. Interview participants identified a number of skills and types of knowledge that they feel were needed, based on their experience with the professional requirements, as shown in Figure 15 below:

![Skills and Knowledge Still Needed Diagram]

**Figure 15: Interview Participants – Skills and Knowledge Still Needed**

The knowledge item that was most frequently identified by interview participants (8 out of 20), as one of the abilities those entering the profession still needed or were lacking based on the
professional demands, was terminology. Four participants identified continuing education and another four identified training in and by the hospital where one would be interpreting as skills that were still needed. Three participants identified self-monitoring, self-awareness, and guidance for self-study as skills and knowledge that were still lacking based on what they observed with respect to professional demands upon hire. Two stated that medical courses were needed to help improve one’s knowledge of medical terminology and understanding of the field and its many conditions and departments. Two identified professionalism as still lacking, and two recognized provider and staff training as lacking. The other items scored lower and were not identified as important in order to meet the professional demands upon hire.

Perceptions on the Part of Survey Participants

The answers regarding what skills and knowledge the interpreters were lacking upon hire, based on professional demands, varied among the survey participants. Eight participants reported that medical terminology and continuing education were the skills most lacking. Six participants reported that knowledge of the code of ethics and professional standards of practice were also lacking, while four reported that more scenario training was needed. Three interpreters stated that self-care, medical courses, and professionalism were among the skills that were still lacking as well. Other significant skills, knowledge, and overall components in terms of training for the hospital environment and interpreter readiness that the survey participants perceived as lacking were the following: university training; role of the interpreter; more interpreting practice; interpersonal skills; cultural competency; as well as specialized training such as interpreting for trauma, in emergency, and psychiatric settings. The skills and knowledge that the participants
felt were still lacking and/or were needed in the professional setting are shown in Figure 19 below:

<table>
<thead>
<tr>
<th>Skills and Knowledge Still Needed</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translation Training</td>
<td>8</td>
</tr>
<tr>
<td>Training on Hospital Policies</td>
<td>7</td>
</tr>
<tr>
<td>Training in and by the Hospital</td>
<td>6</td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>5</td>
</tr>
<tr>
<td>How to Use Technology in General</td>
<td>4</td>
</tr>
<tr>
<td>Team Interpreting</td>
<td>3</td>
</tr>
<tr>
<td>How to Perform and Use VRI and OPI Technology</td>
<td>2</td>
</tr>
<tr>
<td>University Training</td>
<td>1</td>
</tr>
<tr>
<td>Simultaneous Interpreting</td>
<td>1</td>
</tr>
<tr>
<td>Shadowing Other Interpreters</td>
<td>1</td>
</tr>
<tr>
<td>Shadowing Providers</td>
<td>1</td>
</tr>
<tr>
<td>Self-care</td>
<td>1</td>
</tr>
<tr>
<td>Scenario Training</td>
<td>1</td>
</tr>
<tr>
<td>Role of the Interpreter</td>
<td>1</td>
</tr>
<tr>
<td>Note-taking Skills</td>
<td>1</td>
</tr>
<tr>
<td>Professional Memberships</td>
<td>1</td>
</tr>
<tr>
<td>More Practice</td>
<td>1</td>
</tr>
<tr>
<td>Medical Courses</td>
<td>1</td>
</tr>
<tr>
<td>Theory of Medical Interpreting</td>
<td>1</td>
</tr>
<tr>
<td>Managing the Dialogue</td>
<td>1</td>
</tr>
<tr>
<td>Longer Training</td>
<td>1</td>
</tr>
<tr>
<td>Language Classes</td>
<td>1</td>
</tr>
<tr>
<td>Interpreting in Psychiatric, Trauma, and Emergency...</td>
<td>1</td>
</tr>
<tr>
<td>Interpreting as a Profession</td>
<td>1</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>1</td>
</tr>
<tr>
<td>How to Run a Business</td>
<td>1</td>
</tr>
<tr>
<td>How to Work within a Medical Team</td>
<td>1</td>
</tr>
<tr>
<td>Hospital Best Practices</td>
<td>1</td>
</tr>
<tr>
<td>Cultural Competency</td>
<td>1</td>
</tr>
<tr>
<td>Continuing Education</td>
<td>1</td>
</tr>
<tr>
<td>Compassion and Human Understanding</td>
<td>1</td>
</tr>
<tr>
<td>Code of Ethics and Standards of Practice</td>
<td>1</td>
</tr>
<tr>
<td>Professionalism</td>
<td>1</td>
</tr>
</tbody>
</table>

**Figure 16: Survey Participants – Skills and Knowledge Still Needed**

Some of the other skills that were identified, among others, as seen in Figure 16 above, were language classes; shadowing of providers and other, more skilled interpreters; longer training; how to manage the dialogue; how to use and perform interpreting using VRI and OPI technology; and technology in general.
Perceptions on the Part of Managers of Interpreting Services

Perceptions of the skills and knowledge that are still lacking or needed among medical interpreters upon hire varied among the managers’ responses. The managers’ perceptions of the areas in which their interpreters were lacking were based on observations of both full-time and/or part-time freelance interpreters and those who are full-time or part-time staff in their professional environments. The managers observed that the interpreters or their training were deficient in the following areas:

![Figure 17: Managers – Skills and Knowledge Still Needed](image)

As seen in the examples above, managers found that interpreters still needed or were lacking the following skills and knowledge: medical training in the same room with providers, which would allow them to be visible and improve their skills and knowledge as well as communication skills; language-specific training where interpreter competencies can be improved upon and better assessed – such as training offered in academic institutions; medical terminology and spatial
competence; ability to work as part of a team; knowing how to be an independent contractor and protect oneself from being exploited by agencies; managing the interpreted event and dealing with patients and their family members; code of ethics; interpreting with precision and accuracy; and being effective communicators.

The following example, as reported by Catherine, provides a more detailed view into the need for interpreters to be present in the same room as providers and to be visible to providers as an integral part of the care team. She states:

I think the big piece that is needed is to put the interpreters in the room with everyone else. I think that visually, linguistically, however you think of that, if all of a sudden you have these nurses and physicians and someone is raising their hands and this person is hearing from the point of view of the interpreter, you know, I’m going to work with you later, we’re going to be in front of this patient together, let’s think now. I think that’s going to be very positive for our profession and it’s absolutely lacking right now.

Another manager, Cristina, expressed not only concern for certification not offering an oral component for all languages, but also the lack of language-specific training and the need for educational and healthcare institutions to work together to improve the training process. She states:

I just really hope that there is a day when educational institutions really take over. You know, and really form programs that are two years, that are four-year programs, and then could partner with hospitals and other, you know, healthcare institutions that could really help prepare the next generation of interpreters, uh, as well as, I think as health systems we also need to be creative with the skills that we already have in our hospitals, and create maybe dual roles within our health systems. That’s something we’re also working on, because language concordance is the optimal.

While offering and instituting longer training programs beyond the basic 40-hour training would be beneficial, as identified by many of the managers, Maggie proposes the following:

I really think that nationally, we could push nationally for the 40-hour program being the minimum, and then figuring out how to institute larger programs at least a year-long program, and then having the correct reward for that kind of program. You know having institutions that actually have staff interpreters. Like mine is the only one in the area that
I know of. Unless in my search I somehow completely missed everything [laughs]. But you know, my program is the only program in the area that hires staff people who are, and they’re still just as needed? You know there just, there isn’t, you always have to cobble stuff together as an interpreter and then do maybe you do some translating, maybe you do, maybe you work for different agencies, maybe you do telephonic stuff, you know, to make up for the other hours that you need, but it’s not currently a great job to be in and that sucks because a lot of interpreters are getting older and the ones that are grandfathered in are ones that would be really good can’t work in the field because there isn’t enough work.

Working as part of a team and being an effective communicator are some of the other areas in which the interpreters are lacking. Marcel identified that interpreters were also deficient in their customer service skills, which he believes “Interpreting managers don’t really think about, but I think it’s extremely important that they work well with others.” Samantha also believes that interpreters need to be good team players and effective communicators. She uses the following metaphor to describe the role of the interpreter and the importance of effective communication:

All we are is the quarterback in the room. We’re tossing the provider’s words to the patient, taking the patient’s words tossing them back to the provider, and then we’re regrouping, you know, adjusting the register and education level so that there is clarity and understanding. But again, if your provider is not keen, it doesn’t matter how great the interpreter is because boundaries and ethics hold us true to our profession, and we need to be careful.

As in the case of training and readiness, managers’ perception of the skills and knowledge that medical interpreters were still lacking or needing based on professional requirements differ from one manager to the next.
CHAPTER V

DISCUSSION

The data presented in the previous chapter point to the various aspects of medical interpreter training in a general way and establish that training on technology and its use in medical contexts for patient care and communication is not sufficient. It offers insight into the current state of medical interpreter training, training components, certification, readiness, interpreter perception of the received training, perception of the interpreting services managers, and the skills and competencies that are still needed or lacking once the interpreters enter the professional context. Findings from the data analysis will be discussed in the present chapter, with the main focus being on answering the research questions posed in this study:

1) Does the current medical interpreter training prepare interpreters for the reality of medical encounters both face-to-face and remotely?

2) Does the medical interpreter training include technology?

3) What skills and knowledge do interpreters working in the medical setting still need?

General observations about professional experience, type of employment, certification, training and its components, perception of readiness, technology, and skills needed, will be made, followed by a more detailed discussion about each one of the research questions.
Professional Experience, Type of Employment and Certification

General Observations

With respect to professional interpreting experience, 60 percent of the interview participants reported having between 1 and 10 years of experience, as compared with the 64 percent of those surveyed. While years of experience were not the focus of this study, they might help explain the training and perception of readiness among each participant group. With regards to the type of employment, the following observation can be made: of the 20 interview participants, 10 reported working in a full-time freelance capacity, while 9 of the 64 survey participants reported working in a full-time freelance capacity. A total of 33 out of the 64 survey participants who answered this question said they are employed on a full-time staff basis, while only 4 interview participants held full-time employment status.

Since the interviews were conducted with participants from Ohio while the survey was done on a national level, the interview sample was significantly smaller. However, on a national level, more than half reported holding full-time staff interpreting positions within hospital structures. This leads to the conclusion that with respect to current medical interpreter employment on a national level and based on the data of the interview and survey participants, the employment types vary. This comes as no surprise, since contract-based work is very common in the interpreting profession and many hospitals work through agencies on an as-needed basis, selecting interpreters from a pool of available medical interpreting professionals. However, generalized statements regarding current or future medical interpreter employment cannot be made based on the data collected in this study, without also conducting a study and a needs assessment with different healthcare organizations that hire interpreters for language
access purposes. While this would shed additional light on the issue of type of employment and employability of those trained for the profession, it is a subject for another study.

The status of certification was addressed and yielded interesting results. With regards to certification benefits for interpreters, CCHI argues that: “A valid and independent professional certification must first be recognized and preferred by healthcare providers requesting interpreting services.” Despite this general principle and the benefit of certification, the need for certification is often left to the discretion of those requesting interpretation services and depends on whether they are concerned with the qualifications and quality of those providing the service. Thus they may allow the continued use of trained and/or ad hoc interpreters instead of certified interpreters.

However, there are other ways of looking at and discussing the certification results. First, the fact that a national certification performance test does not exist in all languages must be considered. Second, those who interpret in languages of lesser diffusion might not receive any or sufficient return on their investment, since the need for their language combination can be very sporadic. Third, a point that more closely aligns with the abovementioned one, healthcare providers and/or medical organizations might not require their interpreters to hold either of the two national certifications – either the performance-based test or the written test in the case of languages that currently do not have the oral test—and therefore interpreters might be less likely to obtain the credential.

Only 8 out of 20 of those interviewed held the national certification. Six held the CHI™ credential, while 2 held CMI and 1 was in the process of obtaining the CMI credential. There was no further discussion with the remaining 11 participants as to whether they would become certified, nor did they address this issue. Among the survey participants, 22 held the CHI™
credential, 21 were CMI-certified, and the remaining participants either were not certified or held other certifications. Although the question here was specific to the national certification, some survey participants held other types of certification credentials that more closely aligned with their state requirements (e.g., Washington State Department of Social and Human Services), certificates in translation and interpreting, or a certificate at different medical centers that are not specifically interpreting-related, such as a CMI (Certified Medical Technician) Certification, as noted in Chapter IV.

We can infer from the foregoing that while certification is beneficial and more professionals, providers, and patients are beginning to recognize the importance of credentials, the lack of certification among the remaining participants suggests that some interpreters might speak languages for which an oral exam still does not exist, the organization for which they work does not require the credential, or they have not taken the written or both tests due to low demand in their language combination, and therefore the exam would offer no return on their investment.

Among the managers of interpreting services, 4 of the 6 who were trained as medical interpreters reported having one of the two national credentials. This statistic is significant for professionalization reasons and for raising the bar for quality in interpreting on an institutional level. Although the sample is rather small and specific to managers of interpreting services in Ohio, this statistic points to the importance of having a manager who is also a trained and/or certified medical interpreter so as to help educate providers and interpreters on the importance of competent interpreters vs. those who, albeit trained, might be less competent. In addition, having interpreting services managers who are themselves certified medical interpreters might reduce
the tendency toward utilizing less qualified and/or *ad hoc* interpreters, therefore elevating the status of nationally certified medical interpreters.

**Interpreter Training**

Interpreter training was examined from two different angles: para-academic and academic. As stated in Chapter II and as further exemplified in the results chapter, the vast majority of the interview and survey participants completed their medical interpreter training through one of the nationally recognized para-academic training programs. One of the expected findings was that most participants will have completed a para-academic training program, specifically Bridging the Gap, or a comparable para-academic course. The results showed that 17 out of 20 interview participants, the majority, graduated from BTG, with one citing academic training as well, and 15 out of 36 survey participants who graduated from a para-academic program named BTG as their (initial) training course. As noted in the results chapter, of the 21 participants who reported having completed *Other* para-academic training programs, some failed to provide the name of the program, which leads to the conclusion that an even higher number could have completed the BTG course.

A total of 3 interview participants reported having received academic training or being in the process of receiving it. The three interpreters who had completed or were in the process of completing an academic training course were enrolled in a semester-long, Master’s-level medical interpreting course. Among the above 3 participants, there is consistency in the duration and components of the academic training, as we will discuss further. The same cannot be said for the survey participants. The answers seen in Chapter IV regarding the academic training programs from which the survey participants graduated range from a single, 40-hour university course, a
bachelor’s degree in Translation and Interpreting, a certificate program, online training modules, and diplomas, all the way to a master’s degree in Translation and/or Interpreting. As pointed out before, some of the programs might also qualify as para-academic training programs, as is the case with the reported 60-hour training program that one participant completed through the Harvard Pilgrim Healthcare Foundation. Unlike that of the interview participants, the survey participants’ training curriculum varied, pointing to the inconsistency of training programs. This could have an effect on and potentially contribute to interpreter preparedness for the interpreted communicative events and their contexts, as well as having future pedagogical implications.

Training Components and Perception of Their Usefulness

It was stated in Chapter I that, following the training textbook for BTG, both standard para-academic and academic training curricula consist of the general training components and usually include the following: overview of interpreting standards and best practices, code of ethics, note-taking, interpreting modes, non-language-specific medical terminology, role-play, and the interpreter role. Much like the interpreter role, which according to Angelelli (2006, p. 176) “is prescribed without consideration for the actual and current requirements of the workplace,” the same could be said about the training components, which traditionally have also been prescribed without considering the realities and the demands of the workplace. The training components as reported by the interview participants and illustrated in Figure 11 do not deviate much from the expected. As exemplified by Nura’s and other participants’ answers, these components provide the foundation for the interpreter to then be able to enter the profession and prepare for many interpreting encounters on their own. The interview participants had a positive
response to their interpreter training and acknowledged that it was sufficient as a starting point, but also recognized that it was not meant to fully prepare them for all scenarios.

As exemplified in Figure 12, the survey participants’ answers very closely align with the course components reported by the interview group. The difference was that the survey participants also listed the following course components that were not mentioned in the interviews: sight translation, observation of a professional interpreter, mentoring, and in some cases, an internship in a medical setting. These course components could suggest that some participants were also referring to additional training and not solely focusing on their initial medical interpreter training. Other participants listed medical terminology as another course component, but there was no indication as to whether any of the terminology training was language-specific.

With respect to the usefulness of the above-mentioned components, both participant groups found the training components to be beneficial, especially the medical terminology. It is no surprise that medical terminology was one of the training components the interview participants felt was very beneficial, especially given the fact that most interpreters need to acquire the subject matter knowledge to be able to perform within the many different areas of specialization. They use medical terminology on a daily basis as a main element of interpreter subject matter competence. The applicability and transferability of the training components to the day-to-day duties of a professional medical interpreter, such as the role, modes of interpreting, and role-play, as well as the code of ethics and professional conduct, were cited as beneficial by both groups of participants. As exemplified in the data presentation chapter III, some of the survey participants who were dual-role interpreters also reported in-context training in the form of shadowing or internship, as well as other professional roles that ranged from
secretarial work to that of a registered nurse. The above *in situ* opportunities during training, which goes hand in hand with the aforementioned applicable training components, were found by the participants to be the most useful for knowing their role boundaries, preparing them for the national certification exams, and for problem-solving and critical thinking in actual interpreting encounters. The findings suggest that those who were exposed to the medical interpreting context during their training were able to better understand the usefulness of the training components, which directly aligns with Benson and Samarawickrema’s (2007) idea that in order for one to construct meaning, the learning needs to be done through contextualized tasks. As seen in the participants’ answers, this training also allowed for both the transfer and the application of knowledge to authentic situations.

Shadowing and In-context Training

As established in Chapter II, there is no research that examines the challenges surrounding the issue of in-context interpreting opportunities during and after interpreter training, or interpreter readiness for medical contexts. The in-context training section of this dissertation will be discussed using the conceptual framework, more specifically, the situated learning theories. Scholars, such as Angelelli (2004b), have established that interpreting is a situated practice, which is why medical interpreter training needs to be conducted in the medical context. I have also argued that medical interpreter training, or a practical portion of the training, should be contextualized, for no classroom task can fully authenticate the hospital setting or allow for immediate transfer and adaptability of the skills learned to a real-life event. As discussed in the previous section, only a number of participants reported that their training included some in-context training. To further elaborate on this particular, potential, and actual
component of the training, the question of whether the organization/institution where the
interpreters received their training offered them any shadowing or in-context, in-hospital
opportunities was asked. Answers from each group of participants, interview and survey, will be
discussed in turn.

Of those interviewed, 11 out of 20 said they have been given in-context opportunities that
materialized in the form of shadowing. The shadowing was a two-way process where the
participant shadowed an experienced interpreter, and then after completing some shadowing
sessions, they would be observed by that experienced interpreter. While 51% of those
interviewed reported having had in-context shadowing experience, the manner in which it was
conducted and the number of hours that each participant reported were inconsistent and very
much depended on how the hiring organization structured their training *in situ*. The institution
might also have protections in place, which under HIPAA make on-site training prohibitive for
reasons of privacy. One participant also stated that the only reason they were offered the
opportunity was that they had prior knowledge of this training existing at the clinic where they
were working and the clinic extended them the shadowing opportunity. Another stated that there
was “some sort of shadowing,” again following an experienced interpreter around and then
stepping into the interpreter role “when that interpreter felt that you were ready,” later providing
them with postmortem comments. Only one interpreter, Mayra, reported that the shadowing at
her institution was “the standard form of introducing interpreters” into their department. Again,
similar to the others who also cited shadowing, Mayra’s shadowing was a two-way process.
Unlike the other participant, she also reported that she has since been shadowed by novices and
been observed by peers for quality control purposes. While this type of in-context training was
offered to these 11 participants, it is unclear as to the basis on which the interpreter skills assessment was done.

Nine interview participants were not offered the opportunity to shadow or train in-context, and when it was mentioned during training as a possibility, that portion of the training was an optional, suggested step in preparing them for professional encounters in a hospital setting. This approach leaves it up to the trainees to determine what skills and competences they need or to identify what is beneficial to them, as opposed to using research and conducting readiness assessment to inform existing training and making the situated learning a mandatory component to ensure uniformity in terms of training components, and therefore consistency in the readiness of each candidate. The existence of respondents who reported that the shadowing or in-hospital training and observing of an experienced interpreter were not required and who therefore did not take advantage of the opportunity points to a larger problem of learner autonomy. However, learner autonomy is not a problem in itself, but rather a goal, and not every non-expert interpreting student knows what they don’t know, so learner autonomy has to be scaffolded.

Out of the 51 survey participants who responded to this question, 26 said they have been offered and took advantage of shadowing and/or in-context, in-hospital training. While some of the shadowing was a two-way, experienced vs. novice observation process, the survey participants’ situated learning extended beyond the observer/observed role. Many participants provided more specific answers, as seen in Chapter IV. For instance, one interpreter discussed “how to interpret” with their mentor, others observed someone doing telephonic and video interpreting, while still others experienced being shadowed in different settings, which required different skills and levels of difficulty (for example, Emergency Department and grand rounds).
As with the interview participants, the duration of in-context, in-hospital training and/or shadowing reported by the survey participants varied. Some said that it lasted a couple of hours, while others mentioned 10 hours; some spent an entire day training in the hospital setting, while one participant spent months observing then being assessed by their “shadow,” during which time they were exposed to a number of departments and specialties to which others were not privy. Since the length of the in-context training could affect each participant’s initial work readiness, it exposes the fact that in-context training is not a standard training component, with rather extreme differences in training duration.

Brown et al. (1989) have argued that classroom tasks lack the features of the context, so a classroom setting cannot provide the authentic activity of a real setting. While some participants who were trained or offered training in the context in the many forms listed above experienced what Brown is suggesting that classrooms cannot offer, others’ experience was more along the lines of Lave and Wenger’s (1991) idea of Legitimate Peripheral Participation, of learning the behaviors and mannerisms of experienced interpreters by shadowing and/or observing them. The learning is still contextualized, yet as Lave and Wenger (1991) suggest, it does not represent a learning strategy or a pedagogy. Angelelli (2004, p. 32) has argued that the interpreting event and those taking part in it are “socially bound and constrained,” which means that in-context training, whatever form it may take, is a necessary component. Yet only around half of the participants from each group reported having been offered or having completed such training.

Technology Training

The question relating to technology training was twofold. First, the participants were asked if they were introduced to technology used for patient care and communication, and
second, if they were introduced to or received any training on remote interpreting technology, video remote, or over-the-phone (OPI) interpreting. Technology has changed how we communicate in any industry, but especially in the medical field. As stated in the previous chapter, many providers and hospitals offer e-portals such as “my chart” to share certain medical information with and provide updates to their patients. Medical records and charts are becoming digitalized, and some hospitals may even require or grant access to interpreters to view and/or enter information in patients’ charts, depending on the interpreter’s role and employment status. This level of access is usually reserved for dual-role interpreters, as exemplified in Chapter IV.

The focus of this technology training question was primarily on the training involving remote interpreting technology, but it is important to discuss the findings of the first part of the question, because technology literacy for medical interpreters involves being familiar with more than just the different mediums used for language access purposes.

The findings revealed that in both groups of participants there was insufficient training on technology used for patient care and communication. Four out of 20 interview participants reported having been introduced to a type of technology used in hospital settings. Only two stated that the training had to do with technology used for communication (Voalte and Epic), while the other two cited nanotechnologies\(^\text{27}\) and diagnostics technology. All 4 responses are significant for different reasons. The two who had access to Voalte and Epic worked for the hospital. The participant who had training on the Epic system was also a nurse, hence the familiarity with this particular technology. The Voalte system was accessible to anyone on the care team, so in this unique instance the interpreter was also considered part of the care team and

\(^{27}\) According to a definition provided by [www.nano.gov](http://www.nano.gov), it is “the study and application of extremely small things and can be used across all the other science fields, such as chemistry, biology, physics, materials science, and engineering.”
given access in order to receive information about patients and appointments via a secure platform. The remaining 16 participants were not offered any training on technology used for patient care and communication.

The survey participants’ responses suggest that the participants may have understood the question as pertaining to technology used for remote interpreting. This is evidenced by the answers of 13 out of the 17 participants who reported having been exposed to and offered this type of technology training. Only 4 provided answers that had to do with training and/or introduction to patient information systems, but they did not specify what types of system. As described in Chapter IV, the rest of the survey participants stated that the training consisted of various training on remote interpreting equipment, both video and telephonic.

The findings regarding training on remote interpreting technology among interview participants revealed that the majority, 18 out of 20, had been introduced to, trained on, or done telephonic or video remote interpreting as jobs. Their answers are shown in the preceding chapter. While the majority were exposed to the technology or received training on these technologies, the duration of training and exposure to remote interpreting technologies was inconsistent among the participants. This can be explained in one of two ways: 1) that those who were exposed were exposed only because they worked in a hospital setting where they had to learn how to use the technology to perform remote interpreting when needed or to train other providers who might need to call for an interpreter to relieve them; or 2) they were not actually exposed to the technology during training, but learned it because they started their interpreting careers as remote interpreters, either telephonic or video, as previously exemplified by Fiona’s, Nura’s, and Samia’s answers. Despite the fact that 18 interview participants reported being
exposed to the remote technology, no additional details that could help shed light on what the training actually consisted of were revealed, therefore not allowing for further explanations.

Out of the 52 survey participants, only 20 said they have received training on remote interpreting, while 32 did not. No participant reported having been trained on both types of remote interpreting. The majority (17) had received telephonic training, while 11 were trained on VRI technology. Although 20 said they have received remote interpreting technology training, 2 participants’ answers suggest otherwise. One answer states that the respondent had done face-to-face interpreting, which could mean that the remote interpreting was by video or that they only did in-person interpreting. The other answer, similar to the 3 interview participants, stated that this interpreter had done telephonic interpreting without training. Again, the lack of training on remote interpreting technology or training on only one type could be related to the type of training received. Para-academic or academic trainings might have offered only an overview of remote interpreting and the techniques. Alternatively, the lack of training could be explained by the immediate interpreting needs; availability of talent; the language combinations for in-person interpreting; type of employment; resources of each organization employing and/or contracting interpreters for language access purposes; and the available equipment.

Subsequent Trainings

Continuing Education

To further examine the issue of readiness, the researcher posed two questions that focused on continuing education offered by the hiring organization/institution specifically for
interpreters or medical professionals that also included the interpreters, and training on hospital standards of practice, which would provide additional insight into the situatedness of medical interpreter training in and for the hospital environment. Most of the interview participants received or were offered continuing education. The significant finding here is that, based on the responses, the continuing education courses that the interpreters took appear to have not been structured in a way to advance the interpreter’s skills, but rather served as a refresher based on the type of content offered. Only three interpreters stated that it expanded their knowledge base by offering some performance-based training in simultaneous interpreting and dental terminology. This finding is important to assist in identifying where continuing education is lacking in medical interpreting training. Additionally, this question revealed that even when offered training with medical staff, however beneficial it might be, the interview participants did not attend the training unless there was value attached to it in the form of continuing education credit for continuing credentialing purposes. This, again, is an issue of learner autonomy and whether interpreters are best able to identify the needs and where their skills might be lacking. They might not be able to identify their own weaknesses, or simply lack sufficient motivation to undertake trainings unless it helps with gaining continuing education credit.

Twenty-seven survey participants reported that they were offered and completed continuing education sessions, of which the majority comprised the same components as the ones described by the interviewees. Some did participate in webinars and workshops without providing specifics. Unlike the interview participants, a handful of survey participants, as seen in the examples in the preceding chapter, did also undergo more advanced training. One cited having been offered courses that resembled those of medical students, including having access to materials and medical textbooks in their second language. One interpreter stated that their
institution would cover the cost of any training they wished to attend. Institutions usually offer employees these types of training opportunities, which suggests that those working as staff interpreters might, in fact, have more access and greater opportunities for advancement of their skills and practice, as compared with those who are contracted through agencies. Thirteen participants stated that they were offered and attended training provided to medical personnel that was also open to them, while 36 said they were not offered this opportunity. As seen in the examples in chapter IV, the training varied from one interpreter to the next, with training types ranging from procedural, standards of practice, to safety and patient privacy-related training.

Training on Hospital Standards of Practice

The answers and the training on hospital standards of practice varied among participants. Of those interviewed, 16 received training in and about the hospital and its requirements and the way it operates. Again, this could be a reflection of the type of training and employment the participants held. One interview participant was at an advantage because of the nature of their role, first as hospital staff, then as an interpreter. This finding points to the issue of barriers to entry for many medical interpreters, especially those who work through an agency or independently and might not have access to information regarding hospital standards and the institutional structure. The answers offered by the 22 survey participants who stated that they did receive training on hospital standards of practice, and the fact that 33 survey participants were full-time staff interpreters, suggest that this training was part of employee orientation and also that it is representative of the new dual-role interpreting trends where the interpreter first enters the context as medical staff.
Perception of Readiness Based on Training Received

Perception on the Part of Interpreter Participants

The findings revealed that the interview participants’ perception of their own readiness, based on the (initial) training received, varied. One of the drawbacks of this study is the subjectivity of participants with regard to their own perception of their readiness. This is why managers of interpreting services were also interviewed so that comparisons could be drawn between the interpreters’ more subjective perceptions and the more objective observations made by the managers of interpreting services, who can base their assessment on interpreters’ performance. While some participants may possess a higher degree of self-awareness and be able to self-assess in a less subjective way, others might feel that inquiring about their readiness based on training may be a reflection of their skills and/or abilities, rather than preparedness based on the training completed. Others might recognize, as exemplified in the previous chapter, that the training was simply a starting point and assume that the rest of the competencies will be acquired through professional interpreting practice.

Only 3 out of 20 interview participants felt that the training was sufficient. Fifteen felt that it was a good starting point, which for the purposes of this discussion we will classify as somewhat sufficient; one stated that it was not sufficient at all; and one person did not receive any training at all, so they felt completely unprepared for interpreting events. As shown in the participants’ answers, particularly Fioan’s, Sofia’s, Zuska’s, and Samia’s, the findings point to a deeper understanding of the purpose of the training and these participants’ ability to self-assess in the context of their role against their training background. They perceive training as getting them to the starting point of their professional race. Other answers point, again, to the
inconsistencies in the types of in-context opportunities that some trainees had initially or at the onset of their careers. These findings, coupled with the subjectivity of participant’s perception of their readiness, explain why others would feel the training was sufficient. They knew from their first day that there was another step in the training before their ‘training wheels could come off,’ with this training in some cases including peer observation or mentor observation and an assessment of their abilities by those same co-workers. Based on the survey participants’ perception of training, shown in Figure 14, it can be concluded that most survey participants felt sufficiently or somewhat sufficiently prepared for the many medical interpreting contexts. Five felt neither prepared nor unprepared, while 1 participant felt insufficiently prepared. No participant felt completely unprepared for their work as a healthcare interpreter.

Perception on the Part of Interpreting Services Managers

Similar to the answers reported by the two interpreter participant groups, managers’ answers point to inconsistency of readiness among professional medical interpreters, including among those who are trained and those who are, in some cases, certified. Unlike the interpreter participants, the managers of interpreting services offer an assessment of readiness based on their observation of the interpreters who work for them. None of the answers provide a completely objective assessment of interpreters’ readiness, but they do provide additional insights that will be further addressed in the pedagogical implications section in Chapter VI. The profile of each interpreter is multifaceted, as are the skills and abilities that determine their readiness for a professional medical interpreting environment. The findings from the managers’ position on interpreter readiness, as exemplified in the preceding chapter, represent a continuum.
For example, Catherine’s overall opinion of her interpreters’ readiness was that it ranged from completely, to moderately, to quite prepared. According to her assessment, no interpreter who worked under her was unprepared, or perhaps she was reluctant to admit that she employed under-qualified interpreters. Catherine’s perception of the training and thus of interpreters’ readiness, as stated in her answer, is representative of the overall finding of this study, which is that the levels, types, and lengths of training vary. She also provided additional insight with respect to what makes a good interpreter. She argues that interpreters partly are born and partly are made and that training is one factor, but it also depends on “so many innate characteristics of the person that is an interpreter” and whether that person will be “diligent enough” to advance their skills through self-study and continuing education. This raises another issue, which is “what makes someone a good interpreter”, and it also addresses the desirability of making continuing education mandatory so that all interpreters can continue improving their skills and knowledge to remain current and be equally as competent as their peers. This is partially addressed already by CCHI and NBCMI as part of the certification renewal process, since those who have the CHI™ credential are required to submit proof of continuing education credits, of which 2 credit hours need to be performance-based.28

Maggie’s perception of her interpreters’ readiness was that those working for her were “ready enough” based on national standards. She stated that out of 8 staff interpreters, she considered only 2 to be trained, and the rest were “grandfathered” into their positions. She also stated that due to the inability of some interpreters to pass even simple terminology tests that she had administered, she had to let them go even though these individuals thought they were prepared and had been doing the job for many years. Maggie’s answer points to the differences

28 “Training aimed to improve the healthcare interpreter's skills in the three interpreting modes - consecutive, simultaneous and sight translation.”
among three types of interpreters: trained interpreters, *ad hoc* interpreters who were then grandfathered into the role, and dual-role interpreters. Cristina offered a more subjective perception of readiness with regards to her interpreters, stating that the only ones that she considers potentially less prepared would be those in languages of lesser diffusion due to insufficient resources for language-specific training and continuing education. While this is true to a certain extent, based on her statement that she trusts that her other interpreters prepare for more difficult or new assignments on their own, the same argument can be applied here to interpreters in languages of lesser diffusion. The issue here is no longer that of under-preparedness but rather of learner autonomy and self-motivation to study and prepare for new assignments on their own. Samantha also believes that her interpreters are very prepared, and she holds them responsible for preparing terminology and words they might not know. She trusts that they will do what it takes to be ready for their assignments. Roselyn, by contrast, attributes readiness to the frequency of assignments. She believes that those who work more often in the context and are exposed to more interpreting assignments are better prepared, and that if they are not, she (like many other managers) trusts that the interpreters prepare for new specialties with which they might not be familiar.

Two managers offered somewhat similar answers in that they both stated that there is a learning curve. They differ, however, in that Marcel believes that the learning curve is 3–6 months, while Peggy believes it to be 1 year for interpreters to be “fully competent and completely comfortable with either knowing the information, or knowing where to get the information.” Marcel reported that even though interpreters might be trained, there is still an assimilation period to get used to the environment and to “improve their medical terminology.” Marcel initiates new hires through a 3-month trial period, even in the case of those who had
verifiable, prior medical interpreting experience. This hiring practice reported by Marcel is a way to allow interpreters time to develop their skills and gives Marcel and his team time to identify whether the interpreter is improving. Sometimes he extends the probationary period to 6 months if the person merits it.

Peggy believes that readiness depends on whether the person being hired has had a medical or community interpreting background, which shortens the learning curve, but if they have strong linguistic competence and interpreting skills (but no such background) she thinks that “it’s probably a year before they really hit their stride.”

The managers’ perception of readiness points to the issue discussed at the outset of this study, which is that training is largely decontextualized. The findings from this study show that these managers suggest that in situ training or training in the medical context should be at least 3 months in duration, but there could be a system for those with experience, who might have a shorter learning curve.

**Skills and Knowledge Still Needed Based on the Professional Demands Upon Hire**

Perception on the Part of Interpreter Participants

When asked about what skills and knowledge interpreters were still lacking or needed based on the professional demands upon hire, the participants reported a number of different areas, shown in both Figure 15 and Figure 16 in the preceding chapter. While there are many areas that were identified, there were 5 major areas that both groups of interpreter participants found as lacking based on the demands of the professional context. These areas are: medical terminology; medical classes; training in and by the hospital; code of ethics; self-monitoring and
self-study. Others that were also ranked as needed and/or missing had more to do with the training itself, such as role-play and scenario training, professionalism, shadowing of experienced interpreters, and continuing education. While these categories are no surprise, especially considering that most interpreters are not trained medical professionals, we see a surprising difference in participants’ overall perception of readiness based on the training received.

The above categories were listed in the training components, as shown in Figure 11 and Figure 12, yet both interview and survey participants reported that these were the areas in which they felt interpreters were lacking or did not have sufficient knowledge. These findings can be used to inform future training and reevaluate course components, especially with regard to the five areas identified above. All of these factors point to what some managers had already stated: 1) medical interpreter training needs to include language-specific and specialized terminological training; 2) a portion of the training needs to take place inside a hospital setting in the form of an internship and it needs to include more and consistent shadowing and mentoring; and 3) interpreters need to be placed in the same room as providers so that both can have a better understanding of how to work with the other. Unexpectedly, only 1 participant from both interpreter groups said that more training was needed on how to perform interpreting through VRI and OPI technologies.

Perception on the Part of Interpreting Services Managers

While managers’ answers regarding the skills and knowledge still needed based on the demands of the professional context differed, a closer examination of participants’ answers suggests that interpreter participants were lacking in terminological knowledge. As exemplified
in chapter IV, the managers also pointed out the need for effective communication skills, which fall under soft skills with regard to career readiness, and the need for training to be longer. Their perception of the skills and knowledge did not focus solely on the interpreters, but also included the need to place the interpreters in the same room with providers so as to increase their visibility and give them access to the context that currently excludes them. As previously argued, learning can also be authenticated through use of avatars and through simulation in virtual learning environments. Other areas that were identified were more training, specifically dual-role interpreter training, and academic training, in the hope of even better equipping trainees for their work environments and new roles.

Experience was also mentioned, which is indicative of in-hospital training in the form of mentoring, shadowing, or internships as not existing or not being sufficient, or that these components need to be mandatory to ensure that every patient and provider has access to equally qualified and certified medical interpreters. The lack of experience and subject matter expertise could be remedied by making shadowing, mentoring, and internships a mandatory course component, which currently is not the case for all interpreters in training. Overall professionalism and an understanding of what is expected of one to work as a freelance interpreter were also mentioned as needing improvement. The findings with respect to managers’ perception of the skills and knowledge that were lacking based on the demands of the professional context are consistent with their perception of medical interpreter readiness based on the training received. There is a range in opinions with regards to the skills that need improvement—primarily, the categories of terminology, more training, and communication. There is also a range in perception of interpreters’ readiness, which in most cases is attributed to the inconsistency in the duration and the training components offered.
CHAPTER VI

CONCLUSION

Findings from this study revealed that both interpreter participant groups, interview and survey, felt sufficiently or somewhat sufficiently prepared for their interpreting assignments after completing their initial medical interpreter trainings regardless of type – academic or para-academic. The participant answers suggest that the majority had an understanding that the training was the foundation upon which additional training needed to be built. The study also revealed that the participants found their medical interpreter training components to be beneficial. The majority cited terminology as the most beneficial training component. Additionally, participants reported that situational role-play and in-hospital training, which was mostly done through shadowing of an experienced interpreter, were also valuable, because it provided the trainees with contextual authenticity that allowed them to apply interpreting theory in practice. It also gave them an opportunity to better understand the interpreter role boundaries and the professional code of conduct within the medical context. The fact that shadowing was offered to only approximately 50% of the interview participants, specifically to 9 out of 20 interview participants, and to 26 out of 51 survey participants, highlights the decontextualized aspect of medical interpreting training programs.

Moreover, the study revealed that there are significant differences in the duration of the shadowing, internship, externship, or in-hospital training components among those participants
who said they have completed them. Managers of interpreting services found that there were varying degrees of readiness among their interpreters regardless of training and/or certification. Their observation and perception of interpreter readiness could be best described as being on a scale that ranges from completely, to moderately, to quite prepared. Additionally, the managers of interpreting services considered the many factors that affect one’s interpreting readiness for the hospital environment, including one’s innate abilities, implying that learner autonomy is important inasmuch as interpreters need to know where to look for information if and when they feel unprepared for an assignment. Two managers felt that regardless of how much training and experience one had, there was still a learning curve when interpreters entered the professional environment. Some utilized and proposed the learning-while-doing model, with help from an experienced interpreter as a mentor who could “show them the ropes” during the assimilation process.

One of the managers, Marcel, also suggested that the best way to address readiness and to introduce new interpreters into the context would be by categorizing appointments by difficulty and applying both self- and peer-evaluation methods at each level, so as to then be able to “graduate them” to the next, more advanced interpreted communicative events. At his institution, they are already successfully using a 5-tier model as a way of categorizing the level of difficulty of each medical appointment. However, while this approach might work when well executed and the interpreter is trained in a number of medical specialties and sub-specialties, there are still variables that could affect the level of difficulty, such as the technology used, equipment, specialized terminology, and the emotional aspect that accompanies assignments such as those in mental health settings, oncology, or hospice settings. Even though the terminology might not be difficult, other factors might affect the performance if the interpreter had not been exposed to
such a setting before and is not emotionally ready.

The data analysis showed that even though participants felt prepared for their face-to-face interpreting assignments, the training on technology was insufficient. Only a handful of participants, both survey and interview, reported having been introduced to some technology used for patient care and communication. Those participants who were offered training on remote interpreting technologies used for VRI and/or OPI were exposed to it either because they began their professional interpreting careers as remote interpreters or because the organization where they work uses remote interpreting for languages of lesser demand and for overflow in commonly commissioned languages. The duration and ways in which they were exposed to, and the extent to which they were trained on, these technologies varied from one participant to the next. That is to say, the lack of training on remote interpreting technology could be related to the type of training received, language combinations available for in-person interpreting, type of employment, resources of each organization employing and/or contracting interpreters, and the available equipment. All the above factors need to be considered, but that is a topic that requires further exploration and falls outside the scope of this study.

With regards to the subsequent interpreter training that included continuing education and the hospital standards of practice, the findings showed a continuum. The respondents’ answers illustrated that continuing education does not always offer a progression with respect to skills and knowledge. Findings revealed that some coursework consisted of refresher courses and only some were oriented toward performance and advanced skill-building. Other answers, again, point to learner autonomy as something that needs to be developed from the outset of interpreter training, because if and when it was not required the interpreters did not seek out or pursue continuing education opportunities. The findings regarding training on hospital standards of
practice revealed that there might be barriers to entry for any interpreter who is not employed in a part-time or a full-time staff capacity. This particular finding is not a novel idea. Only those who said they are staff interpreters or also have a different, dual role within the organization were required to attend employee orientation during which one is informed of institutional best practices. While this is not a critique, it identifies a potential gap in the training curricula that could be bridged with structured authentic learning activities or in-context training.

The main focus of this dissertation was interpreter training and the perception of readiness for the hospital environment based on the training received and the professional demands upon hire. As previously stated, interpreters perceived their readiness as sufficient, and they identified specific training components (e.g., terminology) as the most beneficial. With regard to the skills and knowledge interpreters felt they still needed and/or were lacking upon hire, they also identified terminology as an area that was lacking the most, along with the code of ethics, training in the hospital context, and self-monitoring and self-study. This particular revelation should come as no surprise, given the many specialties within the medical field; however, it can also be attributed to the type of training and the training components, and interpreters not knowing what they don’t know until they are in a situation where they are expected to perform. Managers’ perception of the skills and knowledge needed, or their observation of where interpreters were lacking, also focused on interpreters’ limited medical terminology knowledge. Additionally, the study found that the managers also perceived professional experience and interpreters’ soft skills, which enable them to be effective communicators, as lacking.
Implications

The findings from this study provide a rationale for including and/or improving the following course components in current and future medical interpreter training programs:

1) More language-specific terminology and more advanced and specialized training in different specialties and subspecialties; 2) Performance-based training in consecutive, simultaneous, and sight translation; 3) More contextualized training – situated learning in the form of shadowing and mentoring in different areas of the hospital or through other authentic learning activities; 4) Training on remote interpreting and technology used for remote interpreting, especially as employment status differs from one interpreter to the next and not all are given the same in-hospital training opportunities, especially those who are part-time or full-time freelance interpreters. Each of the above components and their implications for the pedagogy will be considered in turn.

Both interpreter participants and managers identified terminology as one of the areas in which they were lacking upon entering the professional environment. There are continuing education workshops dedicated to different specialties and subspecialties and terminology pertaining to each. However, the initial training could offer more language-specific training so that interpreters entering the professional context are prepared. The 5-tier model used by Marcel could be adapted for terminology training as well, providing a sense of progression to the trainee. It has been established that learner autonomy is something that does not come naturally to all and that many interpreters need to be trained to be autonomous learners, especially since, as seen from the managers’ answers, it is the responsibility of the interpreters to learn the material and prepare for new appointments. This is problematic, because if the interpreter is not a staff interpreter, they might not have access to the same information about the case as someone who is
an employee, therefore this approach of trusting that all interpreters will take it upon themselves to study all the terminology and potential ailments may be counterproductive. Instead, offering more frequent, easily accessible, specialized trainings that include both terminology and interpreting performance would even the playing field.

The need for performance-based training can be addressed in the same vein as the need for situated training. Interpreters’ performance could be improved by situating the training, either in a hospital setting, or by contextualizing it through the use of virtual environments, and therefore making in-context training accessible, and a structured, mandatory course component so that every interpreter can observe, learn, and apply their skills in an authentic setting.

Telehealth or Telemedicine is already being adopted by both in-patient and outpatient medical centers thanks to Information Technology offered by HIMSS29 and HIMSS Analytics.30 More and more healthcare providers are offering virtual visits to their patients. For example, the Cleveland Clinic brings providers to their patients through the Cleveland Clinic Express Care® Online. This virtual environment could potentially be adapted for interpreter training, which would serve a dual purpose: 1) situate the trainee in the healthcare context; and 2) introduce the interpreter to the technology used for virtual care.

It has been established that there are many factors that prohibit situating interpreter training in hospital settings, which explains why some participants reported having completed in-hospital training and others did not. However, some academic programs might already be positioned to place their trainees in medical contexts through partnerships with different teaching hospitals, including their own University Medical Centers. The same goes for agencies that offer para-academic training but also provide language access to hospitals in their area. It might be

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29 Healthcare Information and Management Systems Society.
30 A global healthcare advisor that offers IT solutions for virtual care.
possible to make in-hospital training a mandatory training component of any training program and to standardize its duration. Although the duration could be standardized, the content might vary based on the type of hospital or medical center. That said, and even though the interpreters might not be exposed to the same types of situations, the skills and knowledge acquired in each could still be transferred and applied to similar settings elsewhere.

Another way in which training could be situated is through authentic learning environments and activities, such as the immersive learning principles proposed by Olbrish Pagano (2013). As discussed in Chapter II, there have been projects and documented cases where interpreter training was situated in a virtual 3D environment, such as the IVY project in Europe (Ritsos et al., 2012), including other examples of training done through the course management system Moodle (Tymczyńska, 2009). These settings contextualize the learning through authentic dialogues that one would normally encounter in an actual interpreted event between a patient and a provider. They would offer problem-solving exercises that range from specific terminology to cultural brokering. Allowing trainees to go at their own pace and to have time to look up difficult or unknown terms would also serve as scaffolding for autonomous learning. When a novice interpreter is in a position where they do not know or have to look up a term in an actual interpreted event, it can increase anxiety. That fear of appearing incompetent can lead to the novice interpreter omitting the term, saying it in English, or providing a description that may or may not be correct. In virtual settings, no harm would be done to the patient, and the trainee would have the opportunity to problem-solve in an authentic dialogue, apply the code of ethics, and as a result would know how to mediate a similar situation in an actual interpreting encounter.

While it is no secret that there are barriers to entry into real settings and that 3D environments pose additional challenges that require planning, obtaining content for and then
creating virtual scenarios for various medical encounters, programming, and also training students and trainers on how to use the virtual environment to apply their knowledge, virtual environments could offer an alternative way for learners to problem-solve and advance their interpreting skills. The findings also revealed that the length of shadowing and in-hospital training differed from one participant to the next, a disparity that could potentially be solved by adopting virtual reality or other technologies as a situated learning model in medical interpreter training, where the interpreter progresses from basic to advanced over the course of the training, without organizational constraints. Virtual environments might also offer a better situated learning solution for speakers of Languages of Limited Diffusion and Lesser Demand, since the trainees would not have to rely on appointments, which can often be very sporadic with these languages. It is important to note that 3D principles for situating interpreter training in virtual environments might not be equally suited for both types of training, academic and para-academic. Virtual environments might be better suited for academic training programs due to their greater resources and greater access to technology.

Another way that interpreter training could be situated is through the use of simulation-based learning and its principles. More specifically, through nursing simulation labs in academic settings where such setups already exist, especially those using standard or simulated patients that present like a real patient, which provides realism. According to the Northern Alberta Institute of Technology, the standard patient allows students to practice the following skills: clinical, interview, history-taking, physical examination techniques, management of ethical and moral dilemmas, crisis management, conflict resolution, and communication skills. This particular approach provides a realistic learning environment for a medical professional without any risk to the patient (Ziv et al, 2003), and it could also serve as a way to put interpreters in the
same room as providers and give them a chance to contextualize the skills and terminology they already know and to acquire additional knowledge of the treatment process. This approach, however, does have other potential limitations with respect to availability, resources and funds for start-up, as well as for running a simulation lab for medical interpreter training purposes.

The respondents stated that technology training was insufficient despite all the new technological advances. Nevertheless, bearing in mind that technology is used in patient care and communication, medical interpreter trainers and training programs should consider technology and its use as a fundamental component of any training. Remote interpreting has been used for decades in many interpreting settings and is used for both common languages and those of limited diffusion. Despite the many benefits for the hospital, such as immediate access to an interpreter, “cost and effort…are not negligible” (Moser-Mercier, 2010, p. 75). Moser-Mercier (ibid.) argues that as technology and interpreting equipment becomes more affordable and those providing support become better at troubleshooting problems, those requiring interpreting services are becoming more open to using it. However, Kelly (2008) has argued that use of telephonic interpreting depends on the type of medical center, large and urban or small and rural, and the training of interpreters depends greatly on the size of the organization, available resources, and the need for telephonic interpreters (p. 52). Kelly also states that “some hospitals have networks of shared interpreters who may provide interpreting services over the phone” (ibid.), which makes investing in training and the technology used for remote interpreting worthwhile.

While technology training needs to be placed higher in interpreter training curricula, the researcher believes that it will continue to depend on the need, resources, and medium through which interpreting is delivered. Hospitals that offer remote interpreting services and expect all
staff interpreters to be trained will provide additional training. Those centers that require it only occasionally might not put the same emphasis on training their staff. It is also important to note that technology training, especially on remote interpreting practices, should also extend to medical providers, and a case could be made for putting providers and interpreters in the same room during technology training. Similarly, interpreters could also be brought into hospital briefings and even policy meetings with providers and staff. This would not only increase interpreter visibility as members of the care team, but also inform decisions regarding language access policies and hospital standards for language professionals, including the mediums through which language services are provided – remote vs. face to face. It could also lead to further discussions on language assessment of “bilingual” providers and how to work with medical interpreters.

**Limitations of the Study**

The findings from this study cannot be used for generalizations regarding training and readiness of all interpreters. However, conclusions can be drawn from the answers given by the two groups of respondents regarding their perception of readiness based on the training received. The findings strongly suggest that the current training does not prepare all interpreters equally; that in-hospital training and/or shadowing is not a mandatory component and offered to all trainees; that training on technology is inadequate; and that interpreters entering the professional environment are lacking in terminology and subject area knowledge, along with the necessary soft skills.

One limitation of this study, as noted above, is the sample size of participating interpreters and managers of interpreting services. It would be beneficial to conduct another
study with managers of interpreting services nationwide, who could provide additional observations of interpreter readiness for the medical context upon hire, so as to better inform training curricula, both academic and para-academic. Additionally, obtaining information regarding interpreter readiness from different stakeholders, such as medical providers, patients, and interpreter trainers, would also help paint a more complete picture with respect to medical interpreter training and interpreter readiness. This, however, would require additional training of providers and patients on what constitutes readiness in order for them to be able to provide their own assessment.

This study, as seen in Chapter II, provides a summary of a few academic training programs and discusses the most common para-academic training. However, without complete access to the curricula of institutions that offer initial and subsequent medical interpreter training, proposals for curricular changes and pedagogical implications can rely only on the findings of this study, which, as established at the beginning of this section, cannot be used to make generalizations about the state of training and readiness of all medical interpreters.

Additionally, given the time constraint of this study, a longitudinal study could not be done. However, such a study could prove beneficial and provide a more complete picture of interpreter competence “evolution” from initial training as novices to expert status. Also, the findings from this study highlight only certain aspects of interpreter training and perceived readiness. Additional resources, new research instruments with the same participants, and observation of all the participating interpreters during their interpreting assignments would give the researcher an opportunity to triangulate the data, which was not possible with the present study.

Another limitation to this study is the fact that participation was voluntary and
participants were not remunerated in any way for their time. This could have affected the number of responses received, along with the unpredictable nature of interpreting assignments, which could explain why some participants, after agreeing to participate, had to withdraw from the study or leave the survey incomplete.

**Future directions**

Interpreter readiness in a medical setting could also be attributed to the presence or absence of in-house interpreting service directors and/or managers who have both the managerial and interpreter training skills (i.e., who have completed medical interpreter training and/or a training of trainers course). This would enable them to provide adequate training that includes both interpreter industry standards of practice as well as hospital best practices, along with necessary training to properly use remote interpreting equipment and to understand the constraints. The presence of trained interpreting service directors and/or managers could be what separates interpreters who are ready for their work environment from those who are not. Based on the answers provided by some of the managers of interpreting services, medical institutions that do have in-house interpreting service managers often provide the hospital best practices training to staff interpreters, but rarely to contractors, who tend to outnumber those who are employed as full-time staff interpreters. A future study focusing on how the presence of managers who are also trained and certified medical interpreters affects medical interpreter readiness would provide additional insight into the question of readiness.

A study of providers’/clients’ and patients’ perception of interpreters’ readiness for the work environment would also provide an additional assessment that could then be compared with those from managers of interpreting services and medical interpreters. The main role of
interpreters in any setting is communication, therefore input regarding interpreters’ readiness for different interpreted communicative events should include input from all stakeholders. Moreover, interpreter feedback culture could be examined, looking at instructor/trainer feedback, as compared with peer feedback and interpreter self-evaluation, and its effect on interpreter overall readiness for the environment. This could be done by looking at feedback given during training, contrasted with the feedback given during actual interpreting assignments. Lastly, as a follow-up to the present study, it would also be beneficial to conduct a study to see if the general perceived self-efficacy and self-reported competence of the participants correlates with their interpreting performance.

It has been argued that learning is not a passive transfer of knowledge from teacher to students, but rather “a process of becoming a member of a sustained community of practice” (Lave, 1991, p. 65) through increased participation. Students are active participants in the communities of practice where they learn through activities and social interaction. This process, as argued by Lave and Wagner, “involves the whole person” (1991, p. 53). Learning and practice are not mutually exclusive, and students actively participate in the construction of their knowledge. The present study was born out of the idea of interpreting as a situated practice, and hence it focused on the decontextualized aspect of current medical training and its effect on interpreters’ overall readiness. It does not offer definitive solutions for bridging the gaps between interpreter training and the settings in which interpreting takes place. Instead, it addresses the situated nature of the interpreting profession and the need for training in situ and offers possible ways for positioning the learner in the medical context through a number of proposed authentic learning activities.
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APPENDIX A

Informed Consent to Participate in a Research Study

Study Title: Medical Interpreter Training and Interpreter Readiness for the Hospital Environment

Principal Investigator: Dr. Richard Kelly Washbourne
Co-Investigator: Indira Sultanic

You are being invited to participate in a research study. This consent form will provide you with information on the research project, what you will need to do, and the associated risks and benefits of the research. Your participation is voluntary. Please read this form carefully. It is important that you ask questions and fully understand the research in order to make an informed decision. You will receive a copy of this document to take with you.

Purpose:

The purpose of this study is to examine the medical interpreter training in the United States and whether the training interpreters receive is sufficient to prepare them for the realities of the healthcare contexts in which they work. The focus of the study is interpreters’ perception of whether the curricular content of the medical interpreter training is sufficient to prepare them for their work environment, especially given the continuing growth of technology in the field, and whether new interpreters feel prepared for actual interpreted events that span from in-person to remote (telephonic and video) interpreting. The study uses semi-structured interviews with both in-house and contract-based medical interpreters, as well as with managers of interpreting services.

Procedures

This study will be conducted using semi-structured interviews as the main method of collecting data. The participants will be asked to answer a series of questions pertaining to medical interpreter training, certification, internship and shadowing opportunities, specialization, competencies, and readiness to work in a hospital environment. The interview questions (both those for the interpreters and those for the interpreting service managers and/or directors) are enclosed. The interview will take between 30-45 minutes.

Audio Recording

The semi-structured interviews will be recorded, transcribed, and analyzed. Interviews will be recorded on a USB-enabled mp3 voice recorder designated for this project. A password protected PC will be used to transfer the recorded interviews and for transcription of data. The recordings will be used only by the principal and co-researcher and will not be used for any purpose outside the scope of this research. Only transcripts of the recordings will be used in the analysis and only aggregate results and random quotes will be used in the
research presentation materials. Participants will not be identified in any way in the presentation of the research materials or results. A separate form for the use of audio recordings by the co-investigator is provided to you.

Benefits

As a participant, this research may not benefit you directly. However, your participation in this study is valuable and will help us to better understand the medical interpreting profession and the ways we can improve on medical interpreter training and help bridge the gap between the language industry and academia. Your participation will also contribute to the advancement of knowledge and research in Interpreting Studies, and Medical Interpreter Training.

Risks and Discomforts

There are no anticipated risks beyond those encountered in everyday life. No personal or sensitive questions are included in the semi-structured interview. All questions pertain to medical interpreter training and overall readiness.

Privacy and Confidentiality

Your study related information will be kept confidential within the limits of the law. Any identifying information will be kept in a secure location and only the researchers will have access to the data. The semi-structured interviews will be recorded on a USB-enabled mp3 voice recorder designated for this project then transferred onto a password-protected computer for transcription purposes. Each participant will be given a pseudonym and all data will be reported under the corresponding pseudonyms. Any data collected during the study, along with consent forms will be kept in a secure, password protected location and only accessible to and by the researcher. Research participants will not be identified in any publication or presentation of research results; only aggregate data will be used.

Compensation

Participants in this study will not be financially compensated. Other benefits of the study are discussed under benefits.
Voluntary Participation

Taking part in this research study is entirely up to you. You may choose not to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. You will be informed of any new, relevant information that may affect your health, welfare, or willingness to continue your study participation.

Contact Information

If you have any questions or concerns about this research, you may contact the Principal Investigator Dr. Richard Kelly Washbourne at 330-672-2150 or the Co-Investigator Indira Sultanic at 330-672-2150. This project has been approved by the Kent State University Institutional Review Board. If you have any questions about your rights as a research participant or complaints about the research, you may call the IRB at 330.672.2704.

Consent Statement and Signature

I have read this consent form and have had the opportunity to have my questions answered to my satisfaction. I voluntarily agree to participate in this study. I understand that a copy of this consent will be provided to me for future reference.

Participant Signature

Date

Consent to Re-Contact for Future Studies

From time-to-time, the Pediatric Health and Stress Lab may have additional research studies that you and/or your adolescent may qualify for. Do we have your consent to re-contact you either by telephone or formal letter about such studies and to discuss whether you and/or your adolescent may be interested in participating in any additional studies? Your decision to be re-contacted will have no bearing on the current study or your relationship with either Kent State University.

☐ Yes, I give my permission to be re-contacted

☐ No, I do not want to be re-contacted

Medical Interpreter Training and Interpreter Readiness for the Hospital Environment
Medical Interpreter Training and Interpreter Readiness for the Hospital Environment

You are being invited to participate in an online survey on Medical Interpreter Training and Interpreter Readiness for the Hospital Environment. This study is lead by Principal Investigator Dr. Richard Kelly Washbourne, and Co-Investigator PhD Candidate Indira Sultanic. Before taking part in this study, please read the consent form below and click on the "I Agree" button at the bottom of the page if you understand the statements and freely consent to participate in the study.

Consent Form

The purpose of this study is to examine the medical interpreter training in the United States and whether the training interpreters receive is sufficient to prepare them for the realities of the healthcare contexts in which they work. You will be asked to answer a series of questions pertaining to medical interpreter training, certification, internship and shadowing opportunities, specialization, competencies, and readiness to work in a hospital environment. Your participation in this survey is voluntary. You may refuse to take part in the research and discontinue your participation in the survey at any time without penalty. This survey will take between 15-20 minutes to complete.

There are no anticipated risks beyond those encountered in everyday life. No personal or sensitive questions are included in the survey. All questions pertain to medical interpreter training and overall readiness.

Your answers will be sent to Qualtrics where data will be stored in a password protected electronic format. Qualtrics does not collect identifying information, such as your name or e-mail address. Therefore, your responses will remain anonymous and no one will know that you took part in this study. You will not be identified in any publication or presentation of research results; only aggregate data will be used.

If you have any questions or concerns about this research, you may contact the Principal Investigator Dr. Richard Kelly Washbourne at 330-672-2150 or the Co-Investigator Indira Sultanic at 330-672-2150. This project has been approved by the Kent State University Institutional Review Board. If you have any questions about your rights as a research participant or complaints about the research, you may call the IRB at 330.672.2704.

Clicking on the “I Agree” button indicates that you have read this consent form, you voluntarily agree to participate in this study, and that you are 18 years of age or older. You may print this consent form for your records.

☐ I Agree
☐ I Disagree
E-mail Script for Interpreters to Participate in Interview

Hello,

My name is Indira Sultanić and I am a doctoral candidate at Kent State University. I am conducting a study that will help me collect data for my dissertation, which focuses on medical interpreter training and interpreter readiness for the hospital environment. This study is being conducted by Dr. Kelly Washbourne, principal investigator, and co-investigator, Ph.D. candidate Indira Sultanić, and it has been approved by the Kent State University Institutional Review Board.

I am seeking for this study the participation of professional medical interpreters who were hired within the last 12 months and those who have 5 or more years of interpreting experience in the hospital setting, and who receive some or all of their income from the language industry. The study consists of semi-structured interviews that can take approximately 30-45 minutes to complete.

If you are a medical interpreter who was hired within the last 12 months by a hospital or language service provider or have 5 or more years of interpreting experience in the medical setting, and receive some or all of your income from the language industry, I would greatly appreciate 30-45 minutes of your time to complete the interview. Please respond to this e-mail with your availability and/or willingness to participate.

Thank you very much in advance.

Warm regards,

Indira Sultanić
E-mail Script for Managers of Interpreting Services to Participate in Interview

Hello,

My name is Indira Sultanić and I am a doctoral candidate at Kent State University. I am conducting a study that will help me collect data for my dissertation, which focuses on medical interpreter training and interpreter readiness for the hospital environment. This study is being conducted by Dr. Kelly Washbourne, principal investigator, and co-investigator, Ph.D. candidate Indira Sultanić, and it has been approved by the Kent State University Institutional Review Board.

I am looking for interpreting services managers who are involved in hiring and/or training of medical interpreters to participate in this study. The study consists of semi-structured interviews that can take approximately 30-45 minutes to complete.

If you are a medical interpreting services manager in a hospital I would greatly appreciate 30-45 minutes of your time to complete the interview. Please respond to this e-mail with your availability and/or willingness to participate.

Thank you very much in advance.

Warm regards,

Indira Sultanić
Hello,

My name is Indira Sultanić and I am a doctoral candidate at Kent State University. I am conducting a study that will help me collect data for my dissertation, which focuses on medical interpreter training and interpreter readiness for the hospital environment. This study is being conducted by Dr. Kelly Washbourne, principal investigator, and co-investigator, Ph.D. candidate Indira Sultanić, and it has been approved by the Kent State University Institutional Review Board.

I am seeking for this study the participation of professional medical interpreters who were hired within the last 12 months and those who have 5 or more years of interpreting experience in the hospital setting, and who receive some or all of their income from the language industry. The study consists of semi-structured interviews that can take approximately 30-45 minutes to complete.

If you know of medical interpreters who meet the criteria specified above, I would greatly appreciate your help with contacting them in order to complete this study. Please respond to this e-mail and let me know if you are able to share the contact information of the interpreters who are eligible to participate in this study, or if you would rather share this message and my contact information with them.

Thank you very much in advance.

Warm regards,
Indira Sultanić
Hello,

My name is Indira Sultanić and I am a doctoral candidate at Kent State University. I am conducting a study that will help me collect data for my dissertation, which focuses on medical interpreter training and interpreter readiness for the hospital environment. This study is being conducted by Dr. Kelly Washbourne, principal investigator, and co-investigator, Ph.D. candidate Indira Sultanić, and it has been approved by the Kent State University Institutional Review Board.

I am seeking for this study the participation of professional medical interpreters who were hired within the last 12 months, those who have 5 or more years of interpreting experience in the hospital setting, and who receive some or all of their income from the language industry. The study consists of a survey. The survey questions are about your training as a medical interpreter and should take approximately 15 minutes to complete.

If you are a medical interpreter who was hired within the last 12 months by a hospital or language service provider or have 5 or more years of interpreting experience in the medical setting, I would greatly appreciate 15 minutes of your time to complete the survey. Please click on the following link (to be provided when survey is finalized) (or cut and paste it into your browser) to complete the survey.

Thank you very much in advance.

Warm regards,

Indira Sultanić
APPENDIX G

Telephone Script for Interpreters

Hello,

My name is Indira Sultanić and I am a doctoral candidate at Kent State University. I am conducting a study that will help me collect data for my dissertation, which focuses on medical interpreter training and interpreter readiness for the hospital environment. This study is being conducted by Dr. Kelly Washbourne, principal investigator, and co-investigator, Ph.D. candidate Indira Sultanić, and it has been approved by the Kent State University Institutional Review Board.

I am looking for professional medical interpreters who were hired within the last 12 months and those who have 5 or more years of interpreting experience in the hospital setting, and who receive some or all of their income from the language industry to participate in this study. The study consists of semi-structured interviews that can take approximately 30-45 minutes to complete.

I would greatly appreciate 30-45 minutes of your time to complete the interview. Would you be available and/or willing to participate in this research study?

Thank you very much.

Warm regards,
Indira Sultanić
Hello,

My name is Indira Sultanić and I am a doctoral candidate at Kent State University. I am conducting a study that will help me collect data for my dissertation, which focuses on medical interpreter training and interpreter readiness for the hospital environment. This study is being conducted by Dr. Kelly Washbourne, principal investigator, and co-investigator, Ph.D. candidate Indira Sultanić, and it has been approved by the Kent State University Institutional Review Board.

I am looking for interpreting services managers who are involved in hiring and/or training of medical interpreters to participate in this study. The study consists of semi-structured interviews that can take approximately 30-45 minutes to complete.

I would greatly appreciate 30-45 minutes of your time to complete the interview. Would you be available and/or willing to participate in this research study?

Thank you very much.

Warm regards,
Indira Sultanić
Hello,

My name is Indira Sultanić and I am a doctoral candidate at Kent State University. I am conducting a study that will help me collect data for my dissertation, which focuses on medical interpreter training and interpreter readiness for the hospital environment. This study is being conducted by Dr. Kelly Washbourne, principal investigator, and co-investigator, Ph.D. candidate Indira Sultanić, and it has been approved by the Kent State University Institutional Review Board.

I am looking for professional medical interpreters who were hired within the last 12 months and those who have 5 or more years of interpreting experience in the hospital setting, and who receive some or all of their income from the language industry to participate in this study. The study consists of semi-structured interviews that can take approximately 30-45 minutes to complete.

I would greatly appreciate your help with contacting the interpreters, who meet the criteria specified above, in order to complete this study. Would you be able and/or willing to share the contact information of the interpreters to participate in this research study, or share mine with them?

Thank you very much in advance.

Warm regards,
Indira Sultanić
APPENDIX J

Interpreter Interview Questions

1) Can you please tell me how long you have worked as a medical interpreter?

2) Are you a full-time staff interpreter or a freelance/contract medical interpreter?

3) Are you a certified medical interpreter? If so, which certification do you have?

4) Where did you receive your medical interpreter training?

5) Can you please describe the program from which you have graduated? Or the training you completed? (Prompt: What did the training consist of?)

6) How long did the program last?

7) What aspects of your course(s) do you feel were most useful in preparing you for your career as a medical interpreter? Why do you think they were useful?

8) Did you receive any training on the role of technology in patient care and communication and how it fits into your role?

9) Were you introduced to remote interpreting and technology used for remote interpreting?

   (Prompt: Is so, what type of training? Telephonic, video etc.?)

10) Generally speaking, how sufficient do you feel your training was in preparing you for working as a medical interpreter? Please explain.

11) Did the organization/institution where you received your training offer any shadowing opportunities? Please explain.

12) Was the shadowing offered during training, post-training or prior to taking on your first interpreting assignment?

13) Did the organization offer any training at the hospital? In-context training?

14) Did the organization offer any continuing education? Or any course offered to medical
staff that also included the interpreters?

15) Were you offered or did you receive any training on hospital standards of practice from the hiring institution or the interpreting services manager?

(Prompt: Was this upon hire or prior to your first appointment as an interpreter? Please explain).

16) Generally speaking, what skills and/or competencies have you developed or improved by completing a portion of your training in a medical setting? Please explain.

17) What do you consider to be the advantages of training that includes an experiential (on-site, in-hospital, or in-context) component?

18) What type of training do you think medical interpreters still need/lack based on your perception of the professional demands upon hire?
APPENDIX K

Interpreting Services Manager Interview Questions

1) How long have you worked as a manager/director of interpreting services?

2) Are you a trained medical interpreter? Where did you receive your training?

3) Are you a certified medical interpreter? If so, which certification do you have?

4) In your role, do you train incoming medical interpreters on hospital best practices? Please explain.

5) Generally speaking, how sufficient do you feel interpreter best practices are or the interpreter standards of practice for new medical interpreters in your work environment? Please explain.

6) Do you offer any shadowing opportunities, or any in-context training for staff and contract interpreters?

7) Do you offer any shadowing opportunities or any in-context training to new interpreters as part of the new medical interpreter orientation to the hospital work environment or interpreting context? Please explain.

8) How well prepared for their interpreting assignments are the trained medical interpreters who work for you? Please explain.

9) What aspect or aspects of medical interpreter training do you feel is beneficial to overall interpreter readiness?

10) What aspect or aspects of medical interpreter training and curriculum do you feel is missing, if any, for interpreters’ overall readiness?

11) Generally speaking, do you feel that medical interpreter training is lacking an experiential learning component? If so, what should this consist of? Please explain.
12) Do you feel that interpreters need in-context training? If so, what should it consist of?

13) Is there sufficient information in the training curriculum about hospitals and how they operate? Please explain.

14) Is there sufficient or any training that involves technology used in patient care and communication offered to interpreters? Please explain.

15) What skills do you feel medical interpreters still need upon hire?
Qualtrics Survey Questions for Medical Interpreters

19) How long you have worked as a medical interpreter?
   a. 0 – 12 months
   b. 1 – 5 years
   c. 5 – 10 years
   d. 10 – 15 years
   e. 15 – 20 years
   f. 20 – 30 years

20) In what capacity do you work?
   a. Full-time staff medical interpreter
   b. Full-time freelance medical interpreter
   c. Part-time freelance medical interpreter
   d. Other: Please explain

21) Are you a certified medical interpreter?
   a. Yes
   b. No

If answer is No go to: Question 5
If yes:

22) Which certification do you have?
   a. CMI
   b. CHI
c. Other: Please explain

23) Where did you receive your medical interpreter training?
   a. Professional organization
   b. Academic program

24) Which program did you complete?
   a. Please provide name(s) or type(s) of professional program(s)
   b. Please provide name(s) or type(s) of academic program(s)

25) What did the training consist of? (Check all that apply or provide answer if not listed below)
   a. Code of ethics
   b. Professional code of conduct
   c. Medical interpreter roles
   d. Modes of interpreting
   e. Role-play
   f. Sight translation
   g. Hospital best practices
   h. Observation of professional interpreter on the job
   i. Internship in a medical setting
   j. Technology simulation
   k. Over the Phone Interpreting (OPI)
   l. Partnership with medical training program lab simulations
   m. Mock conference
   n. Other – Please provide answer if not listed
26) How long was the training program you completed?
   a) Please provide answer

27) Which of the following course components were most useful in preparing you for your career as a medical interpreter? (Rank in order of usefulness)
   a. Code of ethics
   b. Professional code of conduct
   c. Medical interpreter roles
   d. Modes of interpreting
   e. Role-play
   f. Sight translation
   g. Hospital best practices
   h. Observation of professional interpreter on the job
   i. Mentoring by professional interpreter
   j. Internship in a medical setting
   k. Technology simulation
   l. Over the Phone Interpreting (OPI)
   m. Partnership with medical training program lab simulations
   n. Mock conference
   o. Other – Please provide answer if not listed

28) Why do you think they were useful?
   a. Please explain

29) Did you receive any conceptual training on the role of technology in patient care and communication?
a. Yes
b. No

If yes go to:

30) What type of training? (Check all that apply)
   a. Overview of patient information systems
   b. Interpreting equipment
   c. Phone interpreting technology
   d. Video interpreting technology
   e. Other – Please explain

If no go to straight to (if yes also go to 13 next):

31) Were you given any hands-on training to use remote interpreting technology?
   a. Yes
   b. No

If yes go to:

32) What type of technology? (Check all that apply)
   a. Telephonic
   b. Video
   c. Other – Please explain

If no go to 15.

33) How sufficient do you feel your training was in preparing you for working as a medical interpreter?
   a. Very sufficient
   b. Sufficient
c. Somewhat sufficient
d. Insufficient

34) Did the organization/institution where you received your primary training offer any shadowing opportunities?
   a. Yes
   b. No

If yes, please proceed to #17.

35) What did the shadowing consist of?
   a. Please explain.

36) Was the shadowing offered: (Check all that apply)
   a. during training
   b. post-training
   c. Prior to taking on your first interpreting assignment
   d. Other – Please explain

If no go to 19.

37) Did the organization offer any training at the hospital?
   a. Please explain

38) Did the organization offer any continuing or professional education?
   a. Yes
   b. No

If yes:

39) What did the training consist of?
   a. Please explain
If no go to 22

40) Did the organization you work for offer to include interpreters in any medical training designed for staff?
   a. Yes
   b. No

If yes:

41) What did the training consist of?
   a. Please explain

If no go to 24.

42) Did you receive any training on hospital standards of practice from the hiring organization?
   a. Yes
   b. No

If yes go to 25

If no go to 27

43) Was this training:
   a. upon hire
   b. prior to your first appointment as an interpreter
   c. Other - Please explain.

44) What did the training consist of?
   a. Please explain

45) What competencies have you developed or improved by completing a portion of your training in a medical setting?
a. Linguistic
b. Interpreting competence
c. Contextual competence
d. Other - Please explain.

46) What do you consider to be the advantages of training in a hospital setting?

a. Please explain

47) What type of training do you think medical interpreters still need based on your perception of the professional demands upon hire?

a. Please explain

Thank you for participating in this study. Your time is greatly appreciated.