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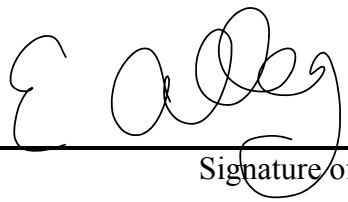

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ABSTRACT

Exploring Deaf Physicians' and Physician Trainees' Experiences with Designated Interpreters

The term "designated interpreter," introduced by Hauser, Finch, and Hauser (2008), continues to be an emerging concept in the field of signed language interpretation. Whereas this role has been discussed by deaf professional and designated interpreter teams, or by interpreters themselves, there is a lack of perspective on this role exclusively from those deaf professionals who work with interpreters. Using a demographic survey and an ethnographic interview, deaf physicians and physician trainees were asked about their experiences with interpreters for this pilot study, and to conceptualize what a designated interpreter is and does. Results of this study suggest that a unified understanding of a designated interpreter's work remains to be established, and that the arrangement is not a model that is desired by all deaf and hard-of-hearing physicians or physician trainees who work with interpreters. This study was exploratory and focused solely on deaf physicians or physician trainees. Additional studies are needed to better qualify the concept of a designated interpreter, as well as to better understand the experiences, preferences, and expectations of other deaf medical professionals, such as nurses, physician assistants, pharmacists, *et cetera*.

Keywords: deaf physician, designated interpreter, interpreter role,

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INTRODUCTION

Since the publication of "Deaf interpreters and designated interpreters: A new paradigm" (Hauser, Finch, Hauser, 2008), there has been a small but increasing level of attention given the work of a designated interpreter (DI). The still-emerging identity of the designated interpreter was originally conceived as a reference to a long-standing and well-developed relationship between a deaf professional (DP) and their preferred interpreter. (Cook, 2004; Hauser, Finch, and Hauser, 2008). Currently, the role seems to be conceptualized as a job title or position, based on an interpreter's unique employment opportunity. In the field of signed language interpreting, the information surrounding designated interpreters amounts to a few essays written by interpreters who work closely with deaf professionals. A concise, standard definition of "designated interpreting" or a "designated interpreter" remains to be adopted, though several descriptions have peppered the literature over the past 15 years.

Hauser, Finch, and Hauser (2008) introduced the term "designated interpreter," building on the work of Cook (2004), who borrows heavily from the history of spoken language interpreters functioning as diplomatic interpreters, a concept based upon the idea where "[d]iplomats, politicians, and other high-status individuals have long made use of exclusive personal interpreters (Cook, 2004, p. 59). Cook's (2004) work was focused on whether or not the work of a "diplomatic" interpreter was ethical vis-à-vis the Registry of Interpreters for the Deaf's Code of Ethics (Code of Professional Conduct, 2005). Hauser, Finch, and Hauser's (2008) volume, a collection of monographs by deaf professional-designated interpreter (DP-DI) teams, is among the first to begin to elucidate the concept of a DI. Much of what can be considered a definition of the DI is the focus of

the opening chapter, written by the editors. They described the characteristics that make an interpreter a *designated* interpreter: skills, qualifications, and interpersonal "soft" skills.

Though described primarily through the lens of ethical behavior, Cook (2004) characterizes the role of the *diplomatic* interpreter in much the same way as Hauser, Finch, and Hauser (2008) conceptualize the role of the *designated* interpreter. One main characteristic is that the diplomatic interpreter cannot be a "neutral conduit" (Hauser, Finch, and Hauser, p. 4) or an "impartial practitioner" (Cook, p. 61). The authors seem to agree that neither neutrality nor impartiality is among the DI's role.

Per Hauser, Finch, and Hauser (2008), "designated interpreting … represents the marriage between the field of interpreting and the deaf professional's discipline or work environment" (p. 4). They continue on to say that an important factor is the "mutual trust between the deaf professional and the designated interpreter, as well as ... intense interest in and commitment to" the field of the deaf professional (p. 4). I wonder, do deaf medical professionals who use interpreting services see this type of personal and professional commitment from the interpreters with whom they work? How, if at all, does the relationship aspect declare itself?

Hauser, Finch, and Hauser (2008) describe many characteristics of a DI, from the interpreter sharing the deaf professional's goals (p. 5) to environmental understanding, where the interpreter understands the social hierarchy and network of all participants in the Deaf professional's workplace (p. 5). Moreland and Agan ("Educating Interpreters as Medical Specialists with Deaf Health Professionals" in Swabey and Nicodemus, 2012) address their thoughts on the education of DIs who work with deaf medical professionals,

and Swabey, Moreland, Agan, and Olsen (2016) address task-based responsibilities of DIs in the medical setting. To date, there has been no inquiry as to the perceptions of deaf professionals about the DP-DI relationship.

Grooms considered designated interpreters in his thesis, "Interpreter Competencies in Science, Technology, Engineering, and Mathematics as Identified by Deaf Professionals" (2015). Using parameters identified by Hauser, Finch, and Hauser (2008), designated interpreters are those who provide interpreting services regularly or semi-regularly to specific clients. "Regularly" and "semi-regularly" are not further clarified. Would a standing assignment the first Thursday of each month be considered "regular"? Grooms' discussion of DIs is based on scheduling considerations (the on-going, regular provision of services), with an eye specifically on Deaf professionals' views of DIs' qualifications, whether academic, professional, or credentialed. There is minimal, if any attention, given to considerations of interpersonal relationships between the Deaf professional and the interpreter.

Hauser, Finch, and Hauser (2008) liken the relationship between a Deaf professional and his or her designated interpreter to describing a marriage; Cook (2004) repeatedly emphasizes the issue of trust. Swabey, Moreland, Agan, and Olsen (2016) focus on the tasks of designated interpreters. Only Cook (2004) attempts to unpack and delineate interpersonal considerations. Even then, interpreters, not deaf professionals, provide most commentary. Additionally, Hauser, Finch, and Hauser (2008) speak generally about the work of DIs, as does Cook (2004). Grooms (2015) is the only author to look at a specific area of practice--STEM fields. What, exactly, is the most important consideration in the DP-DI arrangement from the Deaf professional's perspective? How,

then, do Deaf professionals--in particular, Deaf *medical* professionals-- characterize the relationship between the deaf professional and a designated interpreter? Is the relationship even a primary consideration for the deaf professional?

The information pertaining to issues of interpersonal relationships in the interpreting profession is scant. Detailed descriptions of the desired relationship parameters from the Deaf professionals' perspective are almost non-existent. In order to begin to consider this, further review of the literature regarding issues of trust and intimacy in professional relationships must be explored and extrapolated to DP-DI relationships. It is unclear whether interpersonal relations are secondary to considerations of qualification (e.g., skills, professional fund of knowledge, certification, and training), or that qualifications are secondary to interpersonal relations.

LITERATURE REVIEW

Definition of Terms

As a beginning, it is important to first define the terms contained herein.

Deaf versus deaf

The focus of this inquiry is on individuals who are deaf, to identify that they have some measure of hearing loss. As Padden and Humphries, who refer to Woodward (1972), explain the convention:

> "…the lowercase *deaf* is when referring to the audiological condition of not hearing, and the uppercase *Deaf* when referring to a particular group of deaf people who share a language—American Sign Language (ASL)—and a culture." (1988, p. 2)

The individuals included in this study are all affiliated with the Association of Medical Professionals with Hearing Losses (AMPHL), an organization whose membership includes individuals who identify as culturally Deaf as well as those that do not. There are also members who identify as hard-of-hearing (HH). Cultural affiliation is not a focus of this pilot, so the term "deaf" is used as the modifier to distinguish the particular subset of physicians and physician trainees who are surveyed and interviewed in this project.

Deaf Physician or Physician Trainee

The populations sampled for this study are deaf persons who have finished their education and training, and are fully-licensed, independently practicing physicians, either allopathic (MD) or osteopathic (DO), or are physician trainees (i.e. medical students, residents, or fellows).

Medical students. Medical students are those physician trainees who have finished their undergraduate education and are matriculating through a medical school curriculum, either MD-granting or DO-granting. The survey was open to medical students in any year of their four-year medical school curriculum, however only students in either their third or fourth year of medical school were eligible to be interviewed.

Residents or resident physicians. Residents are those physician trainees who have successfully graduated from a medical school, and are engaged in advanced training in their chosen specialization (e.g., internal medicine, pediatrics, obstetrics and gynecology, emergency medicine, surgery, psychiatry, family practice). These individuals hold either an MD or a DO degree. Resident physicians were included in the survey and were eligible to be interviewed.

Fellows. Fellows are physician trainees who have successfully completed a residency and have decided to pursue training in a sub-specialization of their chosen field (e.g., pulmonary medicine, palliative care and geriatrics, sports medicine, maternal-fetal medicine). Fellows were included in the survey and were eligible to be interviewed.

Physicians. Physicians are people who have completed all of their training, are either MDs or DOs, and practice medicine independently without supervision. Physicians may or may not have completed a fellowship. Sub-specialization is not required to work as a physician, as many physicians choose to work as generalists, such as primary care physicians, internists, family practitioners, and pediatricians. Physicians were included in the survey and were eligible to be interviewed.

Diplomatic interpreter. A diplomatic interpreter is an interpreter who, based on a long-standing professional working relationship with a high-ranking government official, is the preferred interpreter for that official.

Designated interpreter. While there is not a standard, unified definition, descriptors refer to a signed language interpreter who has worked with a particular deaf professional in an ongoing and exclusive manner over a significant period of time. A designated interpreter is one who is committed not only to the field of signed language interpreting, but to the field and work of the deaf professional for whom they interpret, often taking unorthodox responsibilities set forth by the deaf professional.

Designated Interpreting

Historical Context

The paradigm of a designated interpreter (DI) is closely related to that of a diplomatic interpreter in the spoken language interpreting field. Diplomatic interpreters are those interpreters who are affiliated with high-ranking political figures. Diplomats have long made use of exclusive, trusted interpreters who either accompany or represent them when interacting with other diplomatic authorities (Cook, 2004; Roland, 1999). The diplomatic interpreter, as extension of the diplomat, may function as a sort of ambassador for the envoy (Cook, 2004). These governmental representatives, as preferred interpreters, are designated interpreters.

Modern Context

Since the label of "designated interpreter" entered the field (Hauser, Finch, and Hauser, 2008), the label has been extrapolated to circumstances that do not seem to meet the description of a deaf professional (DP)-designated interpreter (DI) team, based on the

narratives provided by the Cook (2004), Hauser, Finch, and Hauser (2008), and Miner (2015). Hauser, Finch, and Hauser's (2008) compendium of perspectives focuses on a relationship between a deaf professional in a position of relative authority within their work environment and the interpreter(s) with whom that DP works. The relationship is one that has been established over an extended period of time. The paradigm indicates that the interpreter shares a commitment to the DP's goals as well as a passion for their field. A DI works in a manner that is almost exclusively with a particular deaf professional. "Designated interpreter" seems to have become a label that interpreters self-select without consideration for the DP's perspective, seeing it as a job title instead of an identification that represents a reciprocal and often symbiotic professional relationship. The interpreting field seems to have commandeered the term in a very interpreter-centric way, and has not considered both the perspective of deaf professionals and the implication of a relationship that has been established over time.

Common usage has conflated the idea of an interpreter who works one-on-one with a deaf person with a "designated interpreter." A designated interpreter (DI), according to Cook (2004) and Miner (2015) is an interpreter who works closely with the same deaf professional (DP), typically over an extended period of time and in a manner that is almost exclusive. Owing to such an extended and often professionally intimate relationship, the DI and the DP have developed a rapport and trust that is not typically seen between deaf professionals and interpreters in traditional circumstances. Hauser, Finch, and Hauser (2008) have stated that trying to describe the rapport between the deaf professional and the designated interpreter is akin to trying to define "marriage" with only a few couples to use as exemplars.

Role definition, qualities, and traits. In an effort to frame the discussion of a designated interpreter's work, it is important to first conceptualize this role. The difficulty is, there is as yet no generally agreed-upon definition of what a designated interpreter is and does, though there are multiple descriptions that exist despite the small amount of available literature (Cook, 2004; Hauser, Finch, and Hauser, 2008; Miner, 2015). Among these descriptions, there is agreement amongst researchers that the work of a designated interpreter is one that must first be considered as having a basis in human relationships. Just as every relationship will differ, it is important to recognize that inter- and intra-team dynamics will vary when looking at DP-DI partnerships. There may be commonalities between teams, but it is inaccurate to think that every team would look and function the same, and assume that expectations would be consistent between deaf professionals. A final consideration is that the focus of this study is on deaf *medical* professionals, specifically deaf physicians and physician trainees. Medical environments vary greatly within and between institutions (e.g., medical schools), fields (e.g., internal medicine, pediatrics, surgery, obstetrics and gynecology), and settings (e.g., clinic, hospital ward, and operating room). Additionally, where the deaf medical professional falls within the medical hierarchy (e.g., medical student versus attending physician) will also affect how the DP-DI team functions. Therefore, it must be acknowledged that these variations will have an impact on the workings of the DP-DI team. What is the standard for one team cannot be assumed to be the same standard for any other team.

A designated interpreter is, generally, an interpreter who "works closely and consistently with the same deaf person, typically over an extended period of time, in a manner that is ongoing and relatively undivided" (Cook, 2004, p. 58). Multiple authors

have already commented that the longevity of the relationship is a crucial component to the definition (Earhart and Hauser, 2008; Hauser, Finch, and Hauser, 2008; Sedran, 2012; Miner, 2015). This is the hallmark of a DI—the longevity of the partnership is the foundation for everything else. It is the reason that a professionally close relationship may develop and flourish between the DP and their interpreter. This longevity is how the interpreter is able to deeply know and understand the deaf professional's work and communication style, and to maneuver through the DP's professional environment with ease, and to ultimately be considered a *designated* interpreter.

A DI demonstrates a high level of commitment to the job. According to Hauser, Finch, and Hauser (2012), the designated interpreter has a well-developed and advanced commitment to, and interest in, not only the field of interpreting, but to the field of the deaf professional as well. The DI is familiar with and works towards the goals of the deaf professional. Due to the DI's commitment, they are often willing to perform duties beyond those of a traditional interpreter. Some DIs may have a position where they are responsible not only for interpreting but also fill other roles within the work environment (Miner, 2015). For example, a deaf physician is admitting a patient into the hospital. After the medical interview and physical examination is complete, the physician is engaged in entering his or her notes into the computer, placing a bed request, and entering medication and nursing orders into the electronic health record. The DI in this situation might be tasked with contacting the patient's primary care physician's office to obtain the patient's pertinent medical records and current medication list.

The interpreter's ongoing and professionally intimate work with the DP allows the interpreter to not only gain a deeper understanding of the DP's workplace, but the

astute DI will also gain insight and knowledge about the other participants within the environment—other doctors, nurses, and auxiliary medical staff. This will allow for richer, more nuanced interpreting, and will help the interpreter navigate the subtle interpersonal politics of the DP's work environment. As a result, the interpreter is able to develop a level of rapport with the physician that can only develop after extensive interaction. This also builds a level of trust with, and about, the interpreter. The physician can be assured that with such rapport and trust (Miner, 2015) the inter-reliant members of the team will experience successful outcomes.

Qualifications of the designated interpreter. Grooms (2015) suggested that within STEM fields, deaf professionals consistently report a lack of sufficiently qualified interpreters. His research found that the most difficult aspect of securing interpreting services for deaf professionals in the STEM fields was the lack of qualified interpreters. 56% of respondents (32 of 57 individuals) reported a lack of qualified interpreters (Grooms, 2015). This information was considered from various perspectives, ranging from employment sector to geographical location. Interestingly, it was noted that while an interpreter's credentials (e.g., RID National Interpreter Certification) were important, they were less important than the aptitude and the experience of the interpreter in a given setting--abilities that credentials could not predict.

Lack of competence became particularly salient when considering interpreter education. Most interpreter training programs are 2-year programs. The Registry of Interpreters for the Deaf, RID (RID.org, n.d.), lists 75 interpreter training programs at the associate's level, 43 programs at the bachelor's level, and only four programs at the

graduate level[1]. For deaf physicians, whose degrees are at the doctorate level, their education eclipses the educational levels of their interpreters, as nearly 98% of the degree-conferring interpreter training programs in the country are below the doctorate level. There are ASL interpreters with PhDs, either in interpreting or an adjacent field. However, very few work more than part-time as interpreting practitioners.

Even if interpreters hold the current national NAD-RID certification, which implies that the interpreter has met the eligibility requirements that include a bachelor's degree (National Interpreter Certification, n.d.), an NIC-certified interpreter is unlikely to have more than a four-year degree. Witter-Merithew and Nicodemus (2010) address this issue directly with their statement that deaf people, who experience increasing access to society, are employed in professional, specialized jobs. Interpreters, however, are practitioners "entering settings for which they have little or no foundation for effective practice" (p. 137). Establishing appropriate qualifications that are generally accepted for interpreters who work with deaf medical professionals is difficult. Interpreting for deaf medical professionals is still a relatively new phenomenon in a young profession. The interpreting field has barely begun to disseminate appropriate qualifications for interpreters who do traditional medical interpreting--that is to say, interpreting that happens between a deaf patient and a non-deaf provider.

The Collaborative for the Advancement of Teaching Interpreting Excellence, commonly referred to as CATIE, is a program whose activities and research is funded through a grant awarded by the U.S. Department of Education, Rehabilitation Services Administration (https://www.stkate.edu/academics/institutes-and-centers/catie-center).

[1] These numbers reflect only those programs who have self-identified through the Registry of Interpreter for the Deaf (RID)'s searchable database (see https://myaccount.rid.org/Public/Search/Organization.aspx).

This center is important for moving the field of sign language interpreting forward towards proper assessment and qualification of interpreters who wish to pursue medical interpreting. CATIE Center developed a conceptualized job description for the medical interpreter, and outlined 80 competencies organized into 13 domains (Domains and Competencies, n.d.) that further detail the knowledge and skills that traditional medical interpreters should possess. This work, which was part of CATIE's former grant cycle and is no longer a funded focus, unfortunately only looked at working in traditional medical settings (i.e., non-deaf provider and deaf patient), and does not address what specialized skills and competencies are needed for interpreters who work for and with deaf and hard-of-hearing (DHH) physicians and/or trainees. Both circumstances—interpreting for deaf patients and interpreting for deaf medical providers—require more focus and literature to better characterize the skills, knowledge, and attitudes needed to be a successful practitioner. Additionally, there continues to be a need for further exploration into what DHH physicians and trainees need and want in terms of skills, knowledge, and attitudes from the interpreters who provide services to them. Moreland and Agan (2012) outline a suggested curriculum for DIs, that encourages inter-professional educational opportunities for interpreters to train alongside medical professionals. These publications offer a look at what qualifications should be considered for interpreters wanting to work in medical settings.

The Literature on Designated Interpreting

The existing literature pertaining to designated interpreters is limited. This is both an advantage and a detriment to this study. The opportunity to explore this emerging paradigm is essentially boundless, yet there exists little to no information from which to

draw conclusions or to provide support for theories regarding this paradigm, leaving mostly anecdotal commentary. The limited information that exists is written jointly by deaf professionals and their interpreter(s) (Kale and Larson, 1998; Hauser, Finch, and Hauser, 2012; Moreland and Agan, 2012), or from the perspective of the interpreter (Grooms, 2015; Kurlander in Hauser, Finch, and Hauser, 2012; Oatman in Hauser, Finch, and Hauser, 2008; Sedran, 2012; Miner, 2015). Rarely have deaf professionals written independently about their experiences with interpreters—designated or otherwise. When they have, the focus has been on how the deaf professional can work with interpreters to make for a successful working relationship, rather than on the experiences of working with a designated interpreter. As one looks for examples of, or information about, deaf professional-designated interpreter teams within particular fields (e.g., law, education, or medicine), the literature becomes exponentially more limited. Grooms (2015) explored the experiences of deaf professionals in the STEM fields, in order to explore their views of interpreters' qualifications. Considering the novelty of the designated interpreter paradigm, coupled with the limited, albeit increasing, numbers of deaf professionals who are in positions of authority within their fields, it is no wonder that contributions to the literature are scant.

An additional complication is that the literature looks at deaf professionals as a single category, regardless of professional affiliation. To parse out individual fields (e.g., medicine, law, education) would further reduce the already small number of deaf professionals, depending on the field. Even so, this study focused specifically on a particular subset of deaf and hard of hearing professionals, those in healthcare—specifically, physicians, fellows, residents, and medical students. Moreland, Latimore,

Sen, Arato, and Zazove (2013) explored the accommodations used by deaf and hard-of-hearing (DHH) physicians and trainees, and whether those physician and trainees were likely to care for patients who were also DHH. Moreland, *et al.* (2013) identified 86 potential participants who met their survey inclusion criteria. Of these physicians and trainees, 13 identified sign language interpreters as a current accommodation, though there was no mention of whether these interpreters were identified as designated interpreters. The study was conducted in 2011. One my presume the number of deaf physicians has increased between the time of the survey and the time of publication, just as the numbers have likewise presumably increased in the subsequent four years (Moreland, *et al.*, 2013, Table 2). With only 13 individuals identified as interpreter users, current studies, such as this one, may not have sufficient sample populations. One must therefore be cautious when considering the generalizability of this exploratory study's results to deaf physicians and physician trainees. Likewise, this information may not be applicable to deaf professionals in other fields.

Diplomatic Interpreters - Designated Interpreters

In the field of signed language interpreting, a designated interpreter (DI) functions differently than a traditional interpreter (TI), who is either a staff interpreter or an independent contract interpreter. In large part, a DI assumes a more expanded role than would a TI (Swabey, Moreland, Agan, and Olsen, 2014). Swabey *et al.* (2014) highlight that a DI may be expected to take on additional duties in the course of their job, for example assisting either the deaf professional (DP) or their colleagues with work-related tasks in such a way that may be considered by some to be a violation of the current Registry of Interpreters for the Deaf's Code of Professional Conduct (RID, 2005) and a

dual role. According to Llewellyn-Jones and Lee (2014), however, interpreters who interact beyond the interpreting task are actually not violating role boundaries and therefore not committing ethical violations. Swabey, *et al.* (2014), highlight this point using several examples, including the following: "agreeing, as appropriate, to pass along information from a (hearing) doctor to the (deaf) doctor or vice versa (CPC, Tenet 3)" and "answering a nonclinical question on behalf of [the DHH physician] when she or he is not present (CPC Tenet 3)" (Swabey, *et al.*, 2014, p. 7). Cook (2004) quotes multiple diplomatic interpreters who discuss their experiences in terms of being appropriate to the given circumstances of the job, though the interpreters interviewed cited the relationship between themselves and the deaf professional as an important consideration in relation to their job. This is, as Cook (2004) recognizes this quandary for diplomatic interpreters, which may be applied to the notion of designated interpreters as well. The deaf physician or trainee, as a member of a high-context culture emphasizes the person over the role, and therefore the relationship develops that may include work expectations beyond what is considered usual for traditional interpreters.

Specialization. According to Witter-Merithew and Nicodemus (2012) interpreter specialization is either *de facto* (self-designated) or *de jure* (possessing specific training or credentialing). However, without a formal testing process available to interpreters who work in medical settings, specialization has been historically *de facto*. Interpreters would promote themselves as having a particular interest in medical settings, yet beyond their professional continuing education transcript indicating medical interpreter training of some sort, there was no way to formally and objectively qualify an interpreter as a medical specialist. In 2016, the Texas Board for Evaluation of Interpreters (BEI)

released the study guide for the Texas BEI Medical Interpreter Certification (MIC), signifying that a specialty certificate was finally available (Texas Board for Evaluation of Interpreters [BEI], 2016). This is a first step in *de jure* specialization for medical signed language interpreters. In order to be considered eligible to sit for this certification, interpreters must, among other requirements, provide proof of having 80 credit hours of medical interpreting instruction, and those hours must have been completed within the last ten years (Texas BEI, 2016).

While the Texas medical certification is a step towards *de jure* medical specialization, this certification should not be seen as a panacea. The test, while focused on a specialized type of interpreting, is still very much a generalist exam. With over 140 different types of physicians (AAMC, n.d.), it is folly to think that passing the BEI MIC will automatically qualify an interpreter to interpret for any and all medical settings. This certification exam is also focused on traditional medical interpreting (i.e., deaf patients seeing non-deaf providers). Therefore, the issue of interpreters' qualifications and education being sufficient to successfully and effectively interpret for DHH physicians and trainees remains unaddressed. Arguably, interpreters with two- or even four-year generalist degrees are still inadequately prepared to interpret for deaf professionals with terminal degrees in specialized fields.

Despite medical interpreting being the second most commonly reported type of interpreting assignment (Walker and Shaw, 2011), deaf people still report a lack of qualified interpreters in medical settings (Steinberg, Barnett, Meador, Wiggins, and Zazove, 2006). If this is the case for patients, one can hypothesize that the issue is

similarly problematic for deaf physicians and trainees, whose daily vernacular is technical, esoteric, and cryptic, even to those who work in medical settings.

Physician and physician trainees attend medical school for four years studying general biomedical concepts, with one result being that students become exposed to and familiar with the basic structure and usage of specialized medical terminology. Medical terms typically have their roots in Greek, Latin, and German—languages that the lay interpreter probably has little knowledge of. Upon completion of medical school, the next step is to pursue training in a field of particular focus (e.g., internal medicine, psychiatry, pediatrics, surgery, obstetrics and gynecology, etc.), sometimes within a field that has a very specific focus (e.g., ophthalmology, dermatology, radiology, physical medicine and rehabilitation). This training can be as short as three years, or, as in some surgical subspecialty fields, as long as ten years. Many physicians go on to further subspecialize. For example, electrophysiology is a combination of internal medicine and cardiology; maternal-fetal medicine combines obstetrics and gynecology; and pediatric neuroendocrinology and epileptology combines neurology, endocrinology, and pediatrics. These sub-sub-specialties add still more time onto physicians' education. Physicians may therefore train for as little as seven years, or as long as fourteen years or more, depending on one's career path and chosen specialty. As a result, physicians are fluent in medical vernacular, though often only comfortably so within their own field of practice (Moreland, personal communication, n.d.). If physicians are unable to understand esoteric, specialty-specific terminology amongst and between themselves despite several years of communication in "medical-ese," how then can interpreters be expected to develop any facile command of such communication? Most interpreter training programs

have, at best, a single semester-long class (or shorter), which focuses on general medical concepts and basic terminology to be able to interpret between a non-deaf provider and a deaf patient. There is no focus on advanced medical terminology, anatomy and physiology, or considerations pertaining to interpreting for deaf medical professionals. This gap in interpreters' knowledge base may prove problematic for DHH physicians who use medical vernacular as a predominant professional "language."

Witter-Merithew and Nicodemus (2010, 2012) are clear that interpreter specialization, while a voluntary decision on the part of the practitioner, must be intentional. Such dedication to one's practice is a step toward protecting the consumer. The advancement of knowledge and competence must be orderly and purposeful, and include supervised practice, on-going performance reflection, evaluation, and peer review. Practitioners must also make scholarly contributions to the field, and need to engage in advanced training to acquire specialized skills and knowledge, in order to distinguish oneself as truly uniquely qualified for the demands of such specialized work. Witter-Merithew and Nicodemus (2010) contend that without intentional development and careful attention to relevant practices, effectively meeting the needs of consumers will remain difficult or even unattainable.

Witter-Merithew and Nicodemus (2010, 2012) and Walker and Shaw (2011) provide commentary on the specialization of traditional interpreters for all settings, but the perspectives and comments hold true for those interpreters who wish to become designated interpreters for deaf physicians and trainees. Moreland and Agan (2012) specifically address educational considerations for healthcare DIs, recognizing that interpreters must not only understand the work, but the context in which the work occurs.

Moreland and Agan (2012), Walker and Shaw (2011), and Witter-Merithew and Nicodemus (2010, 2012) all share the perspective that what has historically been the case for interpreters' skill development, especially for specialized settings, must not continue to be seen as adequate preparation. Moreland and Agan (2012) give particular recommendations for healthcare DIs, considering both the observation-supervision approach of Dean and Pollard (Dean and Pollard, n.d.) as well as recommending curricular topics based on their extensive working relationship.

Walker and Shaw (2011) suggest that interpreter training programs develop and implement specialized training curricula for interpreters. One must wonder how such curricula will be included within a training program that may have to teach language fluency in American Sign Language (ASL) *and* basic interpreting abilities to students whose educational background probably has not included much exposure to advanced science courses, all in two years' time. Even in interpreter training programs that are at the bachelor's degree level, interpreting is presumably a student's major, which means that exposure to, and interest in, basic sciences may be limited to 100- and 200-level university courses. As Grooms (2015) has suggested, interpreters working for deaf professionals in the STEM fields are considered by those STEM professionals to be insufficiently capable of providing effective interpreting. Witter-Merithew and Nicodemus assert "...as deaf people achieve greater degrees of access within society and as services are expanded, practitioners are entering settings for which they have little or no foundation for effective practice" (Witter-Merithew and Nicodemus, 2010, p. 137). One must assume a similar circumstance for those DHH professionals in medical education; however, to date there is no study that looks specifically at this hypothesis.

Team and teamwork. Katzenbach and Smith (1993, 2005), Tallia, Lanham, McDaniel, and Crabtree (2006), Earhart and Hauser (2008), and Kushalnager and Rashid (2008) addressed the components of an effective and successful team. One would have expected that this would have been a larger theme in this study. However, it was not addressed as a critical component of the relationship between the DP and the DI. This study did reveal an unexpected twist on the concept of a team in that the institution and/or program was said to be a third member of the DP-DI team. The details of this paradigm warrant further research to be able to better elucidate how the DP and the DI can work better and more effectively with not only each other, but how to include the institution as a successful part of this team.

Duty and role. It is difficult to elucidate a DI's duty and role in a way that successfully encompasses the work of every DI. Hauser and Hauser (2012) make the analogy that describing the work of a DI is much like describing a marriage using only a few couples as examples. The marriage analogy is effective, though often misconstrued to mean the DP-DI relationship *is like* a marriage (emphasis added). Sedran (2012) calls this problematic, contending, "marriage assumes a level of intimacy that goes much beyond mutual professionalism" (Sedran, 2012, p. 8). However, the analogy seems *a propos*: the DP-DI relationship may be incredibly intimate, though just in the professional sense. And, just as each marriage will vary depending on the individuals involved, so will each DP-DI team. For example, the responsibilities of a DI working with a resident physician are different than those of a DI working with a staff physician. What is effective for one DP-DI pair should not automatically be assumed to be representative of what will work for any other DP-DI pair. Pairings are based in

commitment and trust (Miner, 2015), though one is emotional and the other is professional. Still, the analogy holds. One cannot look at one or two DP-DI pairings to understand or conceptualize the DP-DI relationship. The DP-DI pairings described in the various articles collected by Hauser, Finch, and Hauser (2012) are all incredibly unique, and none should be seen as the exemplar for any other DP-DI team.

The role and the duty of the interpreter would depend on the deaf professional for and with whom the interpreter works. Even within a given field (e.g., medicine), the duties and role of a designated interpreter may vary. Swabey, Moreland, Agan, and Olsen (2016) surveyed twenty-two DIs about a number of interpreting work tasks that were identified based on two of the authors' previous research. A list of 200 work tasks was compiled, and respondents were asked about importance or frequency of each task. While most respondents had a mean number of 13 years of experience, approximately half reported that they had only been in their position for approximately three years. Tasks that ranked high in both importance and frequency were those pertaining to professional flexibility, knowledge, and linguistic mastery, and occurred at least weekly. Tasks that were at least monthly but not weekly were usually administrative in nature and inferred responsibilities beyond just interpreting. Tasks that ranked lowest pertained to supervision and mentoring responsibilities.

Miner (2015) also looked at the role of designated interpreters. Unlike Swabey, *et al.*'s (2016) task analysis of DIs specifically in healthcare, Miner's (2015) results were focused on relationship aspects of a DI's work, but did not focus on DIs in medical settings. Miner's results focused on situation-specific factors, the interpreter's ability to facilitate relationships between the DP and his/her counterparts, and the interpreter's

willingness to meet the DPs high expectations. Earhart and Hauser (2008) also address the fact that interpreters must meet the deaf professional's high and unorthodox expectations (e.g., aiding in a procedure). Both Miner (2015) and Earhart and Hauser (2008) agree that the interpreter's passion and drive often make meeting unorthodox expectations not seem so unorthodox. Miner (2015) described several other expectations that would assume the DI to be flexible when committing to be a DI. She mentions such expectations as being available at a moment's notice, potentially making one's self available all times of the day, all day every day, and that the DP may look at the DI as "a cook might look upon a preferred knife." This is an ironically depersonalizing simile, considering the personal nature of the relationship between the DP and the DI. These expectations go beyond what most traditional interpreters may consider reasonable or appropriate, but the DI, as someone committed to the goals and work of the DP, may be willing to meet such high expectations. The DI may be expected to be the DP's "ears" in the workplace (Cook, 2004; Earhart and Hauser, 2008). Miner (2015) reflected a similar perspective, stating that often the DP may expect the DI to provide information that is more than just the "message." Kurlander (2008) recognized the potential conflict for a DI with a non-traditional role, and encourages that DIs need specific job descriptions.

Prior research conducted by Earhart and Hauser (2008) as well as Miner (2015) focus on meta-type duties of the interpreter. Earhart and Hauser (2008) explain that the interpreter is always "on," ready at a moment's notice to inform the deaf physician of unusual sounds related to the patient or other ambient information. Miner (2015) highlights this as well by quoting one interview participant as saying, "All the stuff that

goes on environmentally? Way more important than the stuff that goes on directly" (p. 204).

The issue of ethical behavior comes up in relation to the role and duties of a designated interpreter. Cook (2004) examines the role of an interpreter from the ethical standpoint of neutrality. Can a non-neutral position still be ethical? She uses multiple comments from interpreters where they say that they feel they must "hide" what they do on the job, for fear of reprisal. These examples range from developing personal friendships with the deaf professional to sharing information overheard around the office despite the deaf professional not being present. Earhart and Hauser (2008) assert that interpreters must remember that they are still bound by the RID Code of Ethics. Kurlander (2008) recognizes that while interpreters are "technically" bound by RID, there are some responsibilities and duties where employee policies and the RID Code of Ethics are in conflict, resulting in a conundrum where no ethical guidance exists. Kale and Larson (1998) acknowledge that some "tricks of the trade" that interpreters do to make the end result effective may not be "RID-sanctioned."

Relationship considerations. Leykum and O'Leary (2017) frame effective teamwork in the perspective of sense-making-- how do teams establish a shared understanding? In order to do so, communication is crucial in order to co-create meaning. Mickan and Rodger (200) also indicate that communication is necessary, and part of a larger team process of effectively working together. Joint decision making and both structured and *ad hoc* interactions will contribute to more effective communication. Tarricone and Luca (2002), whose work focuses on higher education, agree. They also assert that a key component of a successful team is a commitment to shared success and

shared goals. This seems very much in line with the characteristic of a designated interpreter working towards the goals of the deaf professional, as outlined by Miner (2015), Hauser, Finch, and Hauser (2008), and Cook (2004). Miner (2015) also indicates that communication is enhanced by trust.

Earhart and Hauser (2008) also recognize that trust is an important component to the DP-DI team working relationship. Kurlander (2008) asserts that this sense of trust must be mutual, and is imperative to making the relationship work. Cook (2004) writes that trust develops from personal involvement, as characterized by the interpreter's strong commitment to and interest in the deaf professional's work. Sedran (2012) and Kale and Larson (1998) also write about how trust is a requisite component of an effective and successful relationship between the deaf professional and the interpreter. Kale and Larson (1998) go on to say that trust is multi-layered and must be earned, that an interpreter must demonstrate good judgment and have a good reputation for skill, flexibility, and appearance. Sedran (2012) and Miner (2015) both indicate that such a trust and rapport develops over time, hinting at the fact that longevity of the relationship is a factor in fostering trust. Tallia, Lanham, McDaniel, and Crabtree (2016) identify trust as one of the seven characteristics of a successful work relationship in medical settings. Trust in turn leads to respect, both of which are paramount when faced with shared sense-making in challenging situations. Those in trusting relationships seek input from each other, and respect each other to openly engage one another in discussions about both successes and failures. Oatman (2008) maintains that trust and loyalty are maximized when expectations are clearly defined, bringing us back to the idea of clear communication (Leykum and O'Leary, 2017, Mickan and Rodgers, 2000; Tarricone and Luca, 2002).

Lewicki, McAllister, and Bies (1998), whose work focuses in the business management arena, see trust as the foundation for order and successful interpersonal relationships; trust leads to cooperation and successful collaboration.

The seminal work of Hauser, Finch, and Hauser (2008) is the impetus for multiple other authors (see Miner, 2015; Sedran, 2012; Swabey, Moreland, Agan, and Olsen, 2016) to explore the emerging concept of designated interpreting. Most contributions in the literature are from either DP-DI teams, or from interpreters, who all focus on the roles and responsibilities of designated interpreters in the workplace, and focus on the success and effectiveness of DP-DI teams. However, there remain gaps in the literature. First, there is a noticeable lack of publications from deaf authors writing as solo contributors without an interpreter being a co-author. What do deaf professionals want and expect from designated interpreters? How do deaf professionals define designated interpreting? Do they share the current perspective that "designated interpreter" is more of a job title than a trusted colleague with whom the DP has shared a long-standing relationship? Second, there is a lack of commentary from the perspective of those deaf professionals who do not feel the designated interpreter paradigm is effective, successful, or a "good fit." The information contained in the literature currently all focuses on the positive aspects of working with a DI. What, if any, are the negative considerations? What reasons exist that a deaf professional may wish to not use a designated interpreter? The existing literature focuses on successful examples in a way that implies working with a DI is the preference of all deaf professionals, when this may not be the case. Third, there is an absence of commentary about how and when a DP-DI relationship comes to an end. If, as Hauser, Finch, and Hauser (2008) state, that describing the DP-DI model with only

a few examples is like trying to explain marriage using only a few couples as examples, how then do we understand the process of when a DP-DI team experiences a divorce? As a still-emerging paradigm in the field of signed language interpreting, there remains much to understand about designated interpreting, especially from the perspective of deaf professionals.

METHODOLOGY

There remains much to be known and written about designated interpreting, including who does this kind of unique work, who prefers this service delivery model, and who prefers more traditional arrangements for interpreting services. Additionally, standard practices have yet to be established for this work. Expectations and sentiments of the interpreter practitioners are not known; neither are those of the primary (e.g., deaf and hard-of-hearing) consumers. The information that exits in the current literature seems to focus predominantly on the interpreter, and what he or she does as a designated interpreter. There seems to be a distinct lack of deaf voice in this discussion, particularly around whether interpreters are doing what deaf medical professionals need or want them to do. It cannot be stressed enough that DIs are here for and because of deaf professionals. It is the interpreter who is dependent on the deaf professional for an employment opportunity, not the other way around. With this in mind, it becomes important to consider deaf professionals' needs and preferences, and recognize that those supersede the needs and preferences of the interpreter.

This study hopes to begin to identify the preferences and sentiments of the primary consumers of designated interpreting among deaf and hard-of-hearing doctors who use signed language interpreters as a primary accommodation in their training and/or practice. Results from this research have the potential to inform interpreter education and standards of practice in the field of signed language interpreting.

Survey Instrument Development

This project was qualitative (Hale and Napier, 2013). It was conducted as an ethnographic study, using both a demographic survey and recorded interviews. A

Qualtrics survey was developed that inquired about participants' background especially pertaining to signed language use and working with interpreters. The survey consisted of 15 – 20 questions, designed using skip logic (e.g., when asked their current level of medical education or practice, subsequent questions viewed would depend on the response given). Based on the responses given, respondents meeting a set criteria were invited to participate in an interview, which was an hour in duration. Those individuals were asked to speak more in-depth about their experiences and perspectives about working with designated interpreters.

Recruitment of Participants

The focus of this pilot study was deaf physicians and physician trainees. In order to be eligible, participants had to be deaf or hard-of-hearing, use signed language as their primary accommodation, be in an allopathic (MD) or osteopathic (DO) training program or work as a practicing MD or DO physician, and live and work in the United States.

Participants were recruited through the Association of Medical Professionals with Hearing Losses (AMPHL), an organization of deaf and hard-of-hearing medical professionals that was established circa 1999. According to their webpage, their mission includes information sharing, advocacy, and mentorship for deaf and hard-of-hearing individuals working in healthcare fields (Who we are, n.d.). The focus of this research was on deaf and hard-of-hearing physicians and physician trainees. AMPHL was the organization identified from which to recruit potential survey and interview respondents.

AMPHL's members represent a variety of healthcare professions, such as physicians, nurses, veterinarians, and physicians' assistants, to name but a few. Any number of individuals from these various fields could potentially work with designated

interpreters. However, the focus of this pilot inquiry is solely on physicians and physician trainees.

The president and secretary of AMPHL's board were contacted, and asked for permission to contact the membership and invite those who were physicians or physician trainees to participate in the survey. A recruitment flier (see Appendix A) was developed and emailed to the board's secretary, who then posted it in the private FaceBook message group. The flier included the URL for the Qualtrics-based demographics survey. Each week, the secretary received a request/reminder to again re-post the recruitment flier. The flier was posted a total of three times.

The Survey

The first six questions asked about general demographics, such as age and gender, at what age the respondent began to use sign language, and at what educational level did they begin to work with interpreters. No question presented had a forced-answer parameter. If the respondent had the option to not provide a response, the prompt would indicate that the response could be left blank. The next section focused on their medical education experiences. Inquiry focused on whether the respondent attended a medical school in the United States, or abroad; if the medical school was an MD-granting or DO-granting program; and, for those attending schools in the United States, in which region of the country the school was located. Due to the small size of the population from which respondents were sampled, questions were designed to be more general in nature. It was felt that questions which provided granular answers could easily lead to inadvertent identification of the respondents. For example, when asked about the location of one's medical school, response options were configured following the four (4) regions

established by the Association of American Medical Colleges (Regional memberships by state, n.d.). Participants who indicated they were in their first and second year of medical school would be presented a different skip logic pattern of questions than those participants who indicated that they were either later in, or had completed, their training. First- and second-year medical students were presented fewer questions than second- and third-year students, who in turn were presented with fewer questions that residents, and so on. Based on the responses from the survey, the respondents were "ruled in" or "ruled out" of eligibility for a video-recorded interview using a skip logic pattern embedded in the survey flow.

To be "ruled in," respondents must meet several criteria. They must have some sort of hearing loss; live and work in the United States; be either a physician (MD or DO), or a trainee (medical student, resident, or fellow) in an MD- or DO-granting program; and use signed language interpreters as a primary accommodation in their practice and/or medical education. The prevailing sense in the literature to define a "designated interpreter" is a working relationship based on longevity. Respondents must therefore have used interpreters for at least two years to qualify for inclusion in this study.

Those individuals who were "ruled in" as potential interview candidates were given a survey prompt inviting them to participate in a video-recorded interview. The response options were "No thank you" or "Yes [please follow this link]". The link exited the respondent from the demographic survey and launched a new, separate Qualtrics survey. This survey was simply instructions to enter their name and preferred contact email.

The survey was open from 9 February 2018, through 28 February 2018. The names of those expressing interest were to be collected and entered into a random-number generator to identify between 5 and 10 individuals to invite to an interview. Unfortunately, the response rate to the survey was unexpectedly small, comprised of only four respondents, all of whom also expressed interest in being interviewed. Due to the time constrains of this project, the survey was closed on 28 February 2018, and the four individuals were contacted via email to set up a date and time to be interviewed.

The Interview

Four respondents were contacted via email to arrange for an interview. Interviews were conducted via the preferred video-conferencing platform of each respondent. Interviews were designed to be an hour in duration, per study design, and each discussion was kept to a 60-minute time frame (see Appendix C for discussion prompts). This was done for several reasons. First, the invitation for interview stated that they would last approximately one hour. The interviewer chose to be faithful to the timeframe indicated on recruitment materials. Second, the interviewer wanted to be respectful of each respondent's time. As all interviews happened during daytime business hours, it was assumed that each of the participants may potentially have clinical duties to attend to, and any extra time spent in discussions of their experiences could further interfere with patient-care activities. Finally, keeping each interview at the one-hour mark allowed for consistency in terms of data collection. No one participant could therefore be seen as having been given preference of any sort in terms of time allotted to the interview. At the end of each interview, respondents were asked to choose a pseudonym by which to be identified. The gender traditionally associated with the pseudonym chosen did not have to

match the gender of the respondent. The pseudonyms chosen are as follows: Adam, Sam, Mr. Culpepper, and Jesse.

Audio-visual files. Adam, Sam, Mr. Culpepper, and Jesse were all interviewed via FaceTime. Interviews were conducted in various language modes, including American Sign Language (ASL), "sim-com" ("simultaneous communication," which is when the speaker signs and speaks at the same time), and spoken English. Interviewees were allowed to choose their communication method of choice, and the interviewer conducted the interview in the chosen method. All interviews were video-recorded using QuickTime, and for interviews that included spoken English, audio files were recorded via electronic tape recorder, and audio MP4s were subsequently created. For interviews conducted in ASL, the interviewer created a spoken English interpretation after the interviews were complete. Audio recordings of all spoken English recordings were then transcribed into written English. All audio, video, and transcription files were saved on a password-protected external hard-drive, and kept in a locked office at the researcher's residence.

Interview focus. Interview questions focused on the experiences that each of the respondents had working with interpreters through medical school, residency, fellowship, and/or in their practice. It was emphasized that the questions were intended as prompts only, and respondents could be as general or detailed as they wished to be when answering. Respondents were allowed the opportunity to respond as they wanted, and the interviewer did not force the discussion to stay on a particular topic. They were also allowed the right to not answer any question, for any reason, without needing to provide an explanation. Question prompts (see Appendix C) were written in such a way to not

elicit a "yes/no" response, but rather to encourage a narrative that would detail their experiences. It was stressed at the beginning of the interview that the intention was not to try to discover the identity of any interpreters discussed. No one would be asked directly or indirectly to identify their interpreters. Given the fact that the deaf medical community is small, and that of those individuals, only a small sub-set use interpreters, it could be easy to surmise identities of either the respondents or the interpreters with whom they've worked.

Analysis undertaken looked for shared themes and commentary among the respondents. While there was much commonality among the respondents, none of this should be taken as representative of the larger population of deaf physicians and/or deaf physician trainees as the *n* of this pilot study was four (4) respondents. Most themes and comments echoed the information discovered in the literature review. Differences however were noted in regards to some themes (such as the consideration of whether or not deaf physicians and trainees considered their interpreters "qualified"); additionally, there were variances in the comments provided in the interviews. This was not unexpected as the overriding focus of this study was on relationships between individuals—like any relationship between two (or more) persons, there are bound to be differing perspectives.

RESULTS AND FINDINGS

The original population from which participant samples were recruited was already small and relatively discrete. AMPHL is a small organization, and most of the members, regardless of specialty, are at least acquainted with one another. This project looked at a small subset of that already small population. It is very possible that the participants were acquainted with one another, and with each other's interpreters. Furthermore, it is possible that the interpreters were also all already acquainted with one another, and were familiar with the other respondents in this pilot. The more details that were included, the probability of a respondent being identified increased. With this in mind, it is crucial to reflect upon and discuss the information only in the most general of ways.

The Survey

The community of deaf medical practitioners is small, yet growing (Moreland, Latimore, Sen, Arato, and Zazove, 2013). The community of interpreters who work with and for deaf medical professionals is likewise limited. Both of these groups are relatively well acquainted with one other. To discuss responses in too great a detail would introduce risk of being able to triangulate responses and surmising who the respondents were and what information they provided. Therefore, responses will be talked about in the aggregate, and gender pronouns will be replaced with the gender-neutral constructs of "their," "they," and "them." These pronouns will be used in both the singular and plural sense. Not all respondents answered all questions. This could either be the result of the skip logic used in the survey or it could be that a respondent chose not to answer a question.

Respondents' demographic information.

All respondents' ages ranged between 25 and 45, and there were both male and female respondents. When asked at what age they began using signed language, most of the respondents indicated that they were less than 5 years of age, and only one indicated that they were an adult. All respondents indicated that they attended a mainstream or a magnet primary and secondary school. Half of the respondents indicated that they began using signed language interpreters in elementary school (grades K-6), while the other half indicated that they did not use interpreters in K-12 settings. Three respondents volunteered that they used their own voice (as opposed to signing their comments and using an interpreter to interpret into spoken English) while one respondent did not indicate either way. This information was shared voluntarily and was not solicited in the survey or interview.

Medical education. Respondents represented both MD-granting and DO-granting medical education, and all attended a United States-based medical school. They represented the full gamut of regions of the country, as determined by the AAMC (AAMC, n.d.), as well as both physician and physician trainee levels of education and/or practice. Three respondents indicated that they had completed their residency training, and only one said they had completed a Fellowship training program. When asked if they were enrolled in PhD or MPH degree tracks during training, one respondent indicated that they were. All respondents used interpreters throughout their training and/or into their practice, though only three indicated that they used interpreters in medical school.

Working with interpreters. The main thrust of this study was to explore how deaf physicians and physician trainees viewed their interpreters. The responses provided

through the survey provided interesting insights. Whether or not the perspectives held by the respondents were shared with the interpreters with whom they worked is unknown.

As part of the survey, respondents were asked if they considered the interpreters with whom they worked to be designated interpreters or not. A definition of what constituted an interpreter being a "designated" interpreter was not given, but instead solicited from the respondents as a way to elucidate why they would identify the interpreter as a designated interpreter or not. Two respondents indicated that yes, they felt their interpreters to be designated interpreters. The reasons given included mention of role, as well as longevity of the working relationship, and an advanced familiarity with the respondent's setting and related vocabulary. One respondent indicated uncertainty, as they did not have a clear definition in their own mind about how a designated interpreter was defined; one respondent indicated that no, they preferred the interpreters' role to be more traditional in nature.

This last response was particularly interesting. Anecdotally, the prevailing assumption seems to be that the DI paradigm is one that is desired by all deaf physicians who work with interpreters. However, one respondent seems to represent a dissenting voice in the discussion, with a perspective that strongly diverges from other physicians and physician trainees involved in this study. It was unfortunate that this study's *n* was so small—it would be interesting to note if this "75/25" split is representative of the deaf physician community in general. Another consideration this brought up, and lies outside of the focus of this study, is whether or not the opinions expressed by the respondents match with the opinions and views held by the interpreters they work with.

Themes

Several general themes have been identified from the interviews, including definitions, qualities, and traits of a DI; qualifications and skills; specialized training; duty and role; and relationship considerations. Each will be discussed, beginning with the ways in which the information in the literature was supported by responses from study participants, followed by information mentioned in the literature that was not present in the study, and finally by considerations suggested by study participants that was not present in the literature.

It is worth commenting that there are some themes that presented in either the literature or in study (survey, interviews, or both) that are not reflected in the other. This should not be understood to mean that the information exists only in one domain. What is more likely is that the information could be present in both the literature and participants' experiences, however it just was not revealed in this exploratory study.

Definitions, qualities, and traits.

When asked directly about particular qualities possessed by DIs, three respondents said unequivocally that professionalism was the number one preferred quality. This trait could manifest itself in different ways, but the interpreters' behavior had to meet the DPs' expectation of what professionalism looked like. This reinforced Kale and Larson's (1998) suggestion that interpreters must demonstrate good judgment, possess well-developed practical skills as an interpreter, and present themselves professionally both in terms of behavior and appearance. Half of the respondents mentioned dress specifically as an example of professionalism. It was important that the DI's attire matched the circumstance. For example, if the schedule included days in the

operating theater or similar setting (e.g., on an obstetrics rotation where the DP will work with women giving birth), then the expected attire was scrubs. Contrast this example to working in an outpatient clinic where business attire would be the expectation. It was felt how the interpreter presented themself reflected on the DP. Interpreters needed to have an inherent sense of how not to draw attention to themselves.

How the interpreter carried themself was also felt to reflect on the DP. An interpreter's interaction with other staff and clinicians in a given setting, or on social media, was an issue. This also manifested in how the DP saw a DI's commitment to understanding and contextualizing the work environment. Inappropriately joking around with members of the clinical staff was one example used to illustrate this point.

The ability to be comfortable with uncertainty was another quality that was identified as important for DIs to have. Change can be unsettling for many people. In medical education, a trainee's environment changes approximately every four to six weeks, which means the topic, setting, and vernacular all change accordingly. Interpreters must be able to adapt quickly to new circumstances, regularly landing in the grey zone of not knowing the appropriate protocols and procedures of the new environment. Thinking on one's feet is imperative. Often, the deaf trainee does not know who their supervisor will be until arriving at the clinical site on the first day of the new rotation. Change is a fundamental part of a physician's schedule, both during training and often in practice, as the environment is dynamic.

Adam and Sam agreed that it was important for DIs to have the ability to "read" the situation and know how to not call attention to them-self. Adam described this skill as crucial, saying "I think another crucial requirement is the interpreter has to have the

ability to blend in and not stand out… you also need to know how to take up less space in an environment." Sam likewise alluded to this skill, using the examples of knowing how to identify high stakes situations, or, as Sam states it, "[S]ometimes it was difficult when someone was not socially aware of what was going on in a situation." Mr. Culpepper described this skill from the perspective of performing a physical examination of a patient. Mr. Culpepper used a situation from an obstetrics setting, where a pelvic examination on a pregnant patient needed to be done, and the interpreter was male. The interpreter needed to understand that in this situation, he needed to step behind the curtain or outside of the room. Insisting on staying to be able to interpret for Mr. Culpepper during the patient's physical examination was inappropriate.

The ability to read a situation and recognize that not everything had to be about access, or made into a "deafness issue," as Adam described it, was also critical. Just as Mr. Culpepper's obstetrics example highlighted this, Adam described it more in depth. On clinical rotations during medical school, the environmental hierarchy was that students would stand deferentially towards the back of the group. When the medical team, which consisted of the supervising physician, the upper-level resident, the intern(s), and various medical students would all enter a patient's room for bed-side discussions with the patient, the medical students were typically at the back of the group. As a result, it was often difficult to hear what was being said at the front of the group when the attending was talking with the patient. Having the ability to read this situation and recognize that all of the medical students were at the back and probably all were having a difficult time hearing the interaction was the expectation. However, it was problematic when a DI did not have the situational awareness or ability to situate the interaction

within the medical hierarchy and would either stand at the back with the other students and ask that everyone speak up to make the setting more accessible, or would position themself at the front of the group in order to hear more clearly to be able to interpret to a medical student—violating the unspoken understanding of the hierarchical structure of rounds in a medical setting. Three of the four interviewees agree that the DI needs to conceptualize their work within the healthcare system. "Not everything has to be a 'deaf thing'."

Sam and Mr. Culpepper also described the ability to "read the room" from a different perspective—the ability for DIs to understand when to engage them in conversation, and when to not. Conventional wisdom in the interpreting field is to engage the deaf person in order to foster connection and a sense of community. One does not want to seem rude and aloof when interacting within a high-context community such as the Deaf community. Sam agreed, emphasizing that DIs need to be able to recognize an appropriate time for social discussion. Mr. Culpepper's comments aligned with Sam's. Mr. Culpepper focused on how the interpreter needs to recognize that just because the DP seems available for a social discussion, the DP may be mentally engaged in considerations having to do with patient care. Mr. Culpepper said that it would be better for DIs to let the DP take the lead in initiating social discussions.

Three interviewees indicated that DIs needed to have a willingness to learn quickly. Mr. Culpepper stated that the medical environment had a "steep learning curve." The medical environment, as described by Jesse, is highly dynamic; Sam used the term "stressful." Clinical settings change frequently and regularly. With each new clinical setting comes the need to again understand and contextualize one's work within that

setting. Additionally, the terminology changes in each setting. Jesse described this as "needing to learn a new language, multiple times over." Along with "learning a new language" came the need to come up with ways to express new terminology, or new meanings for already-familiar words, in sign language. Even simple terms such as "blood transfusion" have different connotations depending on the environment (Moreland and Agan, 2012). The challenge here, of course, is that the linguistic corpus of medicine in spoken English does not have one-to-one equivalence in signed language. The highly technical language of medicine may not have a simple translation into signed language. Disease eponyms (e.g., Wernicke's, Osler's), symptomatology (e.g., neutropenic, cholestatic), medications (e.g., rituximab, fondaparinox, cisplatin) diagnoses (e.g., calciphylaxis, aplastic anemia, hemorrhagic gastroenteritis), and anatomical structures (e.g., foramen, epiphysis) are examples of terms that have no translation and may require a DI to either fingerspell the term or work with the DP to determine an acceptable way for the team to express the term or concept in signed language. Sam also identified effective communication skills and respect for colleagues as important qualities for DIs.

Three of the interviewees expressed that DIs should be "invested" and "engaged" not only in the team—in the sense of the DP and other DIs—but also the DI should be engaged in deepening their understanding of the DP's work environment. Organizational savvy and the ability to situate the DPs work within a larger system were also felt to be important abilities that a DI should be able to do. This echoes Hauser, Finch, and Hauser's (2012) assertion that DIs must have a passion for not only interpreting but for the work of the DP. Cook (2004) and Kale and Larson (1998) also wrote of the interpreter's shared commitment to the work of the DP. Particular examples were not

solicited from the interviewees, but Adam and Sam mentioned how a designated interpreter's work differed from that of a traditional interpreter. In particular Sam described the difference was expecting a DI to situate and contextualize the work that they (the DI) would do. Sam said, "I think DIs should invest the time to learn what deaf professionals as individuals or as a group need, what that need looks like, what the process of the deaf individual was to get to their current position…", and went on at length about this expectation. Sam said there is an expectation for the DI to have not only organizational awareness, but also situational and national awareness of the DPs work in relation to their job and field. There were greater expectations that DIs would learn the system in which the DP worked, to develop an organizational awareness, to understand and recognize that hierarchies that exist in medical education settings, and to understand who people were in relation to the DP.

Other qualities that DPs looked for were flexibility (identified by Sam, Jesse, and Adam), strong coping skills—which Sam identified outright, and which Jesse strongly implied when discussing that interpreters needed to be comfortable with uncertainty—and a need for strong time and organizational management skills. Jesse and Sam both identified the need to be able to compromise.

Qualifications and expertise

Grooms (2015) noted that deaf professionals who worked in specialized fields (e.g., STEM-related fields) often felt that the interpreters with whom they worked were often insufficiently qualified. Whether this was because of a universal unpreparedness, the likes of which Witter-Merithew and Nicodemus (2012) reference, or due to a scarcity of interpreters in general is unknown. When hiring interpreters, all four interview

respondents said that they had varying amounts of input in the identification, screening, interviewing, and hiring of their DIs, though the process and the amount of involvement in the process was variable. Three respondents reported that their involvement in the interpreter hiring process was limited, especially at the beginning of their medical school experiences. However, as they advanced in their medical education experiences, they had more involvement and were given more deference in terms of preferences for hiring interpreters. Two interviewees stated that the pool of interpreters from which to hire from was limited by various factors (e.g., institution preference, geographic location). Another challenge when building the interpreting team was the interpreter candidates' interest in, or willingness to take, full-time work. Interpreters who in one circumstance were considered preferable by one DP turned out to be only interested in a part-time position, or subbing only occasionally. All respondents in some way drew from their local interpreting communities to build their team of interpreters. Three respondents all had experiences where interpreters relocated to join the interpreting team. All of the respondents used interpreters who had some form of medical interpreting experience. Sam, along with Mr. Culpepper and Adam, expressly stated that their interpreting teams consisted of at least one interpreter who had experience working as a DI in medical settings before.

All interviewees indicated that, as Jesse succinctly put it, "…prior medical interpreting experience, or prior experience as a DI was not predictive of success." Even certification was seen as not indicative of ability. Mr. Culpepper stated "[C]ertifications aren't really worth much. I have seen certified interpreters who are not great interpreters, and I have seen other interpreters who are not certified but are much better interpreters."

While Mr. Culpepper recognized that a certification may have value, "…in my view, it really does not matter." While Grooms (2015) noted that a lack of qualified interpreters was an issue cited by DPs in STEM fields, the issue of certification versus qualification was not a topic of consideration in this study. Conversely, Adam noted that having newer interpreters with not a lot of experience in the field was a positive experience. Those DIs "did not have a lot of pre-established habits or notions about how to work as an interpreter, so they were more open to meeting expectations that might not work for traditional interpreters."

While credentials or years of experience were not seen as indicative of success, other qualifications were seen as more preferential. For example, Adam indicated the ability to keep pace with a speaker was critical. As a speech-reader with some residual hearing, it was imperative that a DI's processing time not be too long. "…I have a lot of residual hearing, so if an interpreter is too far behind, it is distracting for me to not be able to reconcile what I am hearing from the patient with what I am seeing from the interpreter." Mr. Culpepper, as mentioned previously, also felt having the ability to interpret effectively was a necessary qualification. Sam's view was that interpreters needed to excel at attending to issues pertinent to the interpreting process. Sam also emphasized, "In terms of skill, there is a certain minimum skill, of signing proficiency" that is expected.

Duty and role

The role of the designated interpreter was recognized by both interviewees and within the literature to be one that is often considered to be expanded beyond what is considered traditional (Adam, 2018; Jesse, 2018; Sam, 2018; Cook, 2004; Earhart and

Hauser, 2008; Swabey, *et al.*, 2012; Miner, 2015). Earhart and Hauser (2008) asserted that the interpreter is "always on," an observation also made by Jesse, and may be expected to assume duties and responsibilities not easily or comfortably assumed by a traditional interpreter.

A shared conception of the interpreter's role is important, especially since all interviewees alluded to how they saw the work as a designated interpreter different from the work of a traditional interpreter. Jesse spoke about how the interpreter's role changed and depended on the physician's position and role; Sam mentioned the difference in terms of what they expected the interpreter to know and how an interpreter functioned in the medical education setting. Mr. Culpepper discussed the issue from the perspective of shared expectations within the work setting, and that it was important for the DI to recognize the DPs expectations and defer to those preferences. If the expectations of the DP and the DI were incompatible, "maybe this is not the right place for that particular interpreter."

Three respondents all agreed that what works for one DP-DI team should not be expected to be the same for another DP-DI team, or even the same as one DP with multiple DIs. The duty and role of each DI will vary, depending on the DP. In fact, it was felt by all the interviewees that the DI's role is ultimately determined by the DP, as has been already stated.

Relationship considerations

All participants spoke to different aspects of the relationship between the deaf professional (DP), regardless of the level that the DP was at in their career (student, resident, fellow, or practicing physician). Interestingly, two interviewees expressed that

the relationship included not only the DP and the DI, but also the institution or program. The institution and program had to be considered because this was the framework inside of which the relationship between the DP and the DI would develop. Jesse stated it most clearly saying, “I know that this interview focuses on the relationship between the deaf professionals and the designated interpreters but I think the third party in the relationship is the host program. Having understanding of what these goals are, are important for things to go smoothly, in my experience.” Sam also alluded to the institution or program being a third participant in the relationship, saying that the program director and the department manager were included in considering the establishment of the chain of command. In order to engage these individuals, they had to be seen as also being a part of the relationship as well, as communication with these individuals was an important component of a successful working environment. Jesse also stated that the relationship between the DP and the DI was “complex and nuanced” and “often in flux,” and the type of interactions had between the DP and the DI would be influenced by setting and circumstance, as well as the DP’s role in a given situation.

All four respondents spoke about the need for good interpersonal communication skills. The characteristics to good communication include trust, honesty, transparency, and responsibility. Communication styles and needs are highly individualized; each team dynamic will be different. No two DPs will have the same communication needs. Communication needs to be as open and honest as possible. All interviewees discussed feedback as a major form of communication within the team, and it was emphasized that feedback needed to be bidirectional, whether between the DP and the DI, or between one DI and another. There seemed to be a common approach identified among respondents as

to how feedback happened. Three interviewees talked of how feedback seemed to happen more *ad hoc* or in- the-moment during their time in medical school, and how the feedback was, therefore, generally informal. Sam also spoke about the importance of scheduling time for formal sit-down feedback discussions as a team. Jesse echoed this perspective, also emphasizing that such meetings needed to be regular and on-going. Jesse also stated that feedback, as well as negotiation and compromise, were important components to interpersonal communication. The clarity of the feedback was important, as was timing. One interviewee observed that feedback that was not given in a timely matter resulted in issues either not being addressed because they were forgotten by the time the team would meet for feedback, or were only discussed in vague terms, because the issue was long passed.

Another issue mentioned was compatibility, which was also considered by Kale and Larson (1998) and Hauser, Finch, and Hauser (2008), both in relation to communication-style and to personality. Compatibility was discussed from the perspective of respect—whether this was respect for the DP's preferences, or respect for the DP's position on the medical team. Mr. Culpepper described this as being respectful of their preferences about how the interpreter would function. They emphasized the need for the DI to not function in a way that would interfere with the DP's ability to grow their professional identity. Mr. Culpepper, Jesse, and Adam all spoke about respect as also needing to consider how the behavior of the DI was felt to reflect on the DP. The use of social media (i.e., Facebook) and development of personal relationships with other non-deaf faculty and staff were particular areas of ambiguity. Activities and behaviors from the DI that in some way interfered with the DP's ability to develop rapport and engage

with peers, supervisors, and patients were areas of contention. The interpreter has a responsibility to facilitate the rapport between the DP and their patients, colleagues, and peers; the interpreter should not usurp those opportunities by trying to develop relationships of their own. The DI must be careful how they develop relationships with others within the environment. It can happen but it should not impede, hinder, or supersede the DP's opportunity to develop professional and personal relationships with their peers and colleagues.

Trust and respect. All four respondents emphasized trust as an overriding issue. As the DP-DI relationship is a human relationship, trust is foundational to a successful relationship. This theme was identified by multiple authors (Kale and Larson, 1998; Lewicki *et al.*, 1998; Cook, 2004; Tallia *et al.*, 2006; Earhart and Hauser, 2008; Kurlander, 2008; Oatman, 2008; Sedran, 2012; Miner, 2015). Three interviewees all specifically noted how trust is an important component of the relationship, and must be present in order for the relationship to be not only effective, but also healthy. Two respondents specifically addressed behaviors that the DI might exhibit that would diminish or damage trust. One interviewee indicated that, from their perspective, interpreters in traditional medical settings (where the patient was deaf and the physician was not) were often accustomed to advocating on behalf of the patient in such a way to facilitate that the deaf patient gets what they need in terms of helping the patient navigate the complicated healthcare system. This is a distinct difference between how an interpreter for a deaf patient functions when compared how an interpreter for a deaf physician or physician trainee functions.

Deaf disempowerment. A DI must never behave in a way that shifts the power differential in the DI's favor, or assumes a position of authority (real or otherwise) over the DP. Furthermore, DIs are not clinicians, and must not exhibit behaviors that lead any of the DP's colleagues to assume as much. Two of the interviewees specifically stated that they worked with interpreters who would at times be uncomfortable with, and resistant to, the DP taking the lead. Both DPs stated that this gave them the sense that the DIs were judging their performance and abilities as physicians, second-guessing their decisions or doubting their competencies. Comments by respondents also included frustrations with interpreters who would interact with nursing staff in such a way that left the DP feeling their position of authority as a physician was compromised by the interpreter's behavior. Such actions were seen as harmful to the sense of trust in the relationship and to the DPs autonomy and authority as a physician (whether in training or practice). Additionally, the interpreter should behave in a way that provides the DP the opportunity to foster and develop rapport with the DP's colleagues, peers, and coworkers. DIs must bear in mind that the work environment is first and foremost the work environment of the DP. The DI may hold a staff position of some sort within the DP's institution, department, or program, but as Mr. Culpepper pointed out, the DI is there *because of* the DP. A DI may leave—regardless of whether the leave-taking was of their own accord or not—and can be replaced with another interpreter. The DP will still have a position within the institution. However, if the DP were to leave, the DI would no longer have reason for that particular employment.

Boundaries. The issue of boundaries was an important consideration for the DPs interviewed in this study. Boundaries are related not only to relationship aspects, but are

also heavily tied to the concept of an interpreter's role. The DI's role is often expanded, and, as Miner (2015) noted, "…the role is seen as one that includes different responsibilities than those of a freelance or staff or community interpreter, based on the job demands of the Deaf professional" (p. 198). It is hard to know where exactly boundaries lie. Three interviewees emphasized the need for DIs to be aware of personal and professional boundaries, though Jesse is the most clear about boundaries being "fluid." At times it may be difficult to appreciate where the boundary lays; as Jesse describes it, "It is important that the DP and the DI live the question together." Jesse described how, even when not actively interpreting, the DI is still "on." Deaf people access the world through a visual means, whereas non-deaf people access the world visually as well as auditorily. Unlike auditory information, which the ear receives without effort, information accessed visually must be intentionally attended to. As a result, the DP generally cannot be charting while simultaneously attending passively to environmental circumstances. The DI should still then be attending to environmental cues in order to fill the DP in on conversation or events in the environment that one would pick up via an auditory pathway. The implicit expectation is that a designated interpreter will have an advanced understanding of the environment in order to recognize when information is important enough that it should be either passed along to the DP at the first opportunity, or should be immediately brought to the DP's attention. Sam, in particular, felt that DIs have a responsibility to develop such organizational and environmental awareness and understanding, however felt that it was "unreasonable" to expect such awareness from a non-designated interpreter.

There were similarities noted between DIs and traditional interpreters (TIs) in terms of appropriate role boundaries. The DI was considered to be part of the medical team, just as a nurse, physical therapist, or pharmacist is part of the medical team. Like all members of the team, each has a defined set of responsibilities. The DIs responsibilities pertain to language access and information flow, and fostering (as opposed to impeding) the DPs ability to develop rapport with their patients, colleagues, and peers. The DI is not a clinician and should not be assuming responsibilities associated with patient-care activities, except in rare cases as directed by the DP (see Earhart and Hauser in Hauser, Finch, and Hauser, 2008). It would seem that this should go without saying: the interpreter is not a physician, nurse, or advanced practice provider (i. e. nurse practitioner or physicians' assistant). Mr. Culpepper expressed concern about interpreters who behaved in such a way that had the potential to misrepresent the interpreter's role as being a clinician on the team. The interpreter's role is to "facilitate communication," and not "be responsible for patients' care."

Insights and perspectives from interview participants parallel the existing literature regarding role, personal qualities, professional qualifications, and relationship issues such as trust and respect. Perhaps the most striking commentary is that offered by two respondents centering on disempowerment of the DP. Such observations have implications for the establishment or erosion of trust in a relationship, and how—if at all—a healthy working relationship can be established.

The next section will address limitations of the study and recommendations for future study.

STUDY LIMITATIONS AND FUTURE DIRECTIONS

Limitations

This study was inspired by what seems to be a lack of commentary from deaf professionals about working with interpreters who are identified as "designated interpreters." This is an exploratory study with small sample size, examining a specific subgroup of deaf professionals. The definition of "deaf professional" was not well described at the outset of this study, nor was the definition "medical professional." For the purposes of these study, deaf physicians and physician trainees (e.g., medical students, resident physicians, fellow physicians) were all considered to be medical professionals. A comprehensive description "designated interpreter" was also not clearly described, though descriptive factors from various authors (Cook, 2004; Hauser, Finch and Hauser, 2008; Miner, 2015) are mentioned. The interpreters with whom deaf medical professionals included in this study worked are considered to be designated interpreters.

Definition of a Designated Interpreter

The idea of what constitutes a designated interpreter remains nebulous and relatively unaddressed in this study. The initial demographic survey asked specifically about whether the respondent considered their interpreters to be "designated interpreters" and to explain why (see Appendix B). Two respondents expressed that they were either unsure, or that they did not see their interpreters as DIs; one respondent stated that their perspective on the interpreters' role differed from how their interpreters saw their role.

Two respondents specifically replied in the affirmative, citing issues such as the interpreters' familiarity with medical vocabulary, medical settings, and that the interpreters have worked with the respondent for several years and are familiar with the

respondents' communication needs. One respondent specifically addressed role, saying that it was the interpreters "role to work with me as a deaf health professional." Despite all of this, there was not a unified common definition that established discrete traits of what made an interpreter a *designated* interpreter. There was a struggle to find consensus on how a designated interpreter should be described.

Deaf and Hard-of-Hearing Professionals

The respondents were drawn from a discrete population, which was arguably a sliver of a limited subset of an already small population. As already mentioned, Moreland, *et al.* (2013) attempted to identify deaf physicians, in order to survey their experiences with various accommodations (e.g., interpreting, computer assisted captioning) and their satisfactions with such. In their study, they were able to identify a total of 86 deaf or hard-of-hearing physicians, and had a response rate to their survey of 65% (56). Of these, 23% (13) indicated that they used signed language interpreters. In correlating Moreland *et al.*'s findings with the number of individuals included in this exploratory study, one could make a number of presumptions that have bearing on the generalizability and applicability of the experiences of the respondents involved with this study.

First, one may presume that not everyone invited to participate in Moreland *et al.*'s study responded. However, it is difficult to surmise exactly how many DHH practice within the United States, as "…no published articles describe the numbers or characteristics of this population…" (Moreland, *et al.,* 2013, p. 224). Even with considering that a number of invited physicians did not participate in the survey, the number of deaf physicians is small.

Second, despite the limited number of DHH physicians identified by Moreland and his co-researchers, it may also be assumed that in the interval since 2013, the number of DHH physicians has increased. The Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are allowing DHH people to enter into various professions, including medicine, in numbers not previously seen (Moreland, *et al.,* 2103). Even with an interval increase, the numbers of DHH physicians is still thought to be small (Moreland, personal communication).

Generalizability and applicability

The generalizability of this pilot study is difficult to determine. This exploratory study identified four (4) individuals who use interpreters as their primary accommodation. This represents one-quarter (25%) of the number of individuals identified by Moreland *et al.*'s study, who indicated using signed language interpreters as a primary accommodation. While this seems that there is potential for generalizability of the information contained within this study, one still must be cautious to do so, as the number of DHH physicians may have increased in the last seven years, as previously noted.

The applicability of this study to other deaf medical professionals is dubious at best. There seems to be no study to date looking at the total number of deaf medical professionals training or practicing in the United States. It may be understandably difficult to determine a definition of the term "deaf" and who qualifies under this definition. Is the definition intended to include those that have any measure of hearing loss, including age-related presbycusis? Is there a minimum level of decibel loss that is required? Taken further, the applicability to deaf professionals in any field is even more

difficult to presume. The definition of what constitutes a "professional" was not clearly outlined in this pilot. Additionally, performing a national census of every DHH professional in every field is substantially outside of the scope of this study. It would be impossible to infer the number of individuals to whom the findings of this study would apply.

Future Considerations

Definition of a Designated Interpreter

Original characteristics as described by Hauser, Finch, and Hauser (2008), which build on the concepts of a diplomatic interpreter as described by Cook (2004) and Miner (2015), focus on issues pertaining to a long-standing working relationship. This is in contrast to current trends in the field, seeing DIs as interpreters with specialized skills (see designatedinterpreters.com). Future research may focus on establishing a general consensus of the definition of a designated interpreter. It may prove interesting to compare and contrast the perspectives of interpreters with those of deaf professionals, as well as between DPs in different fields and professions.

Ethics

The literature review identified ethical themes that were not addressed or explored in this study. Ethical considerations, identified by Kale and Larson (1998), Cook (2004), Earhart and Hauser (2008), Kurlander (2008), and Swabey, Moreland, Agan, and Olsen (2012) were touched on briefly but were not considered in depth. Kale and Larson (1998) and Cook (2004) included information about how, when aligned with one particular deaf consumer, interpreters began to worry if decisions they were making to support the deaf professional's work and goals were ethically appropriate. Earhart and Hauser (2008) and

Kurlander (2008) recognized that the interpreters must at all times strive to follow the Registry of Interpreters for the Deaf's (RID) Code of Ethics. Swabey, Moreland, Agan, and Olsen (2012) explored the idea of ethically appropriate behaviors for DIs, commenting that the expanded role of the DI was actually very much in line with ethically appropriate decision making, even though this might be seen by some to be outside of the RID Code of Ethics. Future research focusing on the ethical considerations faced by a DI is needed.

Training and Specialization

Moreland and Agan (2012) provided recommendations for a DI curriculum that would include focus on multiple topic areas including systematic knowledge of the American healthcare system and the medical education system, legal aspects of medicine (e.g., HIPAA, EMTALA, PPACA), and medical ethics. Such educational efforts would coincide with the perspectives written about by Witter-Merithew and Nicodemus (2010, 2012) pertaining to intentionality of specialization. Interpreters wishing to work as DIs may see themselves as *de facto* specialists, however Witter-Merithew and Nicodemus (2010, 2012) and Moreland and Agan (2012) recommend interpreters be *de jure* specialists. Opinions shared by interviewees did not reflect this view, stating that certifications and medical interpreting experience were not necessarily indicative of a well-prepared DI. However, if an interpreter's training were more akin to the training that medical professionals (physicians, nurses, physical therapists, etc.) received, would this make a difference not only in interpreters' skills but the perspectives that DPs have about interpreter training? This is another opportunity for future review and research.

Deaf disempowerment

This project is deeply personal.

It was born out of a deep admiration for the deaf professionals for whom I have interpreted. When Hauser, Finch, and Hauser's publication on designated interpreting was released in 2008, I had been an interpreter for a deaf physician for approximately 7 years. What I was reading was describing not only the work that I was doing, but my interest in and commitment to the work of the physician for whom I was interpreting. I was excited to see that there were others who shared my experiences.

As the term "designated interpreter" made its way around the interpreting community, I began to witness interpreters adopting the term to fit situations that were not reflective of those described in Hauser, *et al.*'s (2008) book. The term was morphing from how I understood it—an interpreter who worked with a deaf person in, what Cook (2004) described, a manner that is consistent and over a period of time, on-going and relatively undivided, almost exclusive, and demonstrating a high level of commitment to the job—to become no longer about respect and commitment to a particular deaf person and their goals, but to represent a job title absent any relationship longevity. A review of the literature revealed a lack of commentary about working with designated interpreters solely from the perspective of the deaf professional. This, to me, was a gap that needed to be addressed. I hope that I have begun to contribute to filling that gap by adding the deaf voice to the conversation about designated interpreting.

The history of signed language interpreting begins with those individuals who were members of the Deaf community—those who had parents, family, or close friends who were Deaf. Interpreting was originally the work of native or heritage American Sign

Language users. With the arrival of laws such as The Rehabilitation Act of 1973 and later the Americans with Disabilities Act of 1990, interpreter training became available to the mainstream public. Individuals with no immediate connection to Deaf people began to enter the field, and over time the connection to the Deaf community—once an integral part of an interpreter's formative experiences—was passed over in favor of politely distancing oneself from the Deaf consumer. In our efforts to "help" Deaf people access the world around them, we arguably alienated ourselves from the people we were trying to serve. As the field of ASL/English interpreting transitioned through various models (i.e. helper, conduit, communication facilitator, ally) we worked to somehow not only reconnect with the Deaf community but to align ourselves with them as well. Our professional transformation, I would argue, is still not complete.

It may be that DIs are experiencing a similar progression. When Hauser, Finch, and Hauser's (2008) book was first released, the focus was on deaf professionals and their interpreters, teams who had been working together for extended periods of time, and had professional (and often personal) relationships that were founded in longevity and trust. These concepts were already existent in the field of interpretation, as noted by Kale and Larson (1998) and Cook (2004). It seems, however, that we have moved from relationships built on personal connections into a distancing of ourselves. Conceptualizing a DI as a job title rather than a trusted coworker with whom the deaf professional has worked with over an extended time may be the DI equivalent of a "helper" or "communication facilitator." As interpreters begin to see the DI as a position title, we distance ourselves, perhaps detrimentally, from the professionals and people we serve. As a result, conflict is introduced into the DP-DI arrangement, as interpreters are

unable to accept, honor, or even recognize the DP's preferences for whom the DI works. Mr. Culpepper speaks of this as "deaf disempowerment."

Themes revealed in this exploratory project suggest in a subtle way that interpreters in DI positions are not always considering the work from the perspective of the deaf medical professional. Three respondents mentioned the importance of letting the DP take the lead. Interpreters are historically accustomed to deaf people in disempowered positions in the workplace and society, however physicians, regardless of audiology, are allowed a great deal of authority and autonomy. Interpreters need to recognize and accept this. The medical milieu for DIs is now the 'home turf' of the deaf physician or physician trainee. As such, it is incumbent on the interpreter to allow the DP to discover this setting on the DP's own terms. The DP's experiences, expertise, and education should trump that of the DI. For DPs who are still training, DIs must allow them to develop their skills and acumen without our judgment or paternalism. A DI may have a wealth of experience working in medical settings, and may have even worked with a deaf healthcare professional prior; still, it is imperative for the DI to recognize that each DP is an individual with their own needs and expectations. It should be the DIs that follow the DPs' lead, not the other way around. The medical arena is the deaf physician's workplace, and the DI is just a visitor. The DI's employment is dependent upon the DP. It is not only disrespectful, but disempowering to think otherwise.

The DI should be facilitating the relationships of the DP and their colleagues, patients, and peers. As three of the four participants stated, DIs need to have the ability to "read" a situation. This, I believe, extends to the ability to "read" the fact that the DP needs to be able to develop rapport with those with whom they work. When the DI tries

to develop rapport with the people in the DP's work environment, interpreters run the risk of impeding the DP's ability to forge bonds of rapport with patients and coworkers. The DPs relationships should never come as secondary to those of the DI.

While these points were made clearly in interviews, I feel their import may have been diluted by the other topics that were discussed. Future studies that explore how DPs want DIs to facilitate relationships will be vital for the DIs to understand and embrace. The challenge here lies in understanding that each DP will be different in their expectations of DIs, and DIs must remember that their prior experience with one DP cannot and should not be assumed to apply to all DPs.

CONCLUSIONS AND RECOMMENDATIONS

The designated interpreting paradigm is no longer new in the field of signed language interpretation, though the label is only about ten years old, having first entered into our professional vernacular in 2008 with the publication of Hauser, Finch, and Hauser's (2008) text. Since that time, a slow but growing body of literature has emerged (see Hauser, Finch, and Hauser, 2008; Kurlander, 2008; Miner, 2015; Moreland and Agan, 2012; Oatman, 2008; Sedran, 2012; and Swabey, Moreland, Agan, and Olsen, 2016). The focus on this evolving professional construct has mainly been from two perspectives. The first perspective, that of hearing interpreters and the deaf professionals with and for whom they work, is a compendium of anecdotal experiences about what has been effective for DP-DI teams, focusing mainly on how the interpreter can best function to support the deaf professional's work and professional interactions. The second perspective is that of hearing interpreters writing about the role of a designated interpreter, and how that differs from the role of a traditional interpreter. There is additional consideration of the various tasks which designated interpreters engage in at work (e.g., tasks pertaining to "soft skills" and interpersonal relationships, relationship-building, scheduling). There was one mention of a suggested curriculum for interpreters that may consider becoming a designated interpreter. In reviewing the available literature, there seem to be three major areas of opportunity for future contribution to the literature.

The first opportunity for contribution is for a more extensively considered curriculum for interpreters wishing to become DIs for deaf or hard-of-hearing healthcare professionals of any sort (e.g., physicians, nurses, physical therapists, pharmacists). This curriculum should elevate and honor the perspectives, experiences, and preferences of the

deaf medical professional. To do this it is critical that DPs be the driving force in the development of any such training(s). There is currently only a single contribution (Moreland and Agan, 2016) that offers suggestions for such a curriculum. Such a contribution could begin with a general assessment of what deaf and hard-of-hearing healthcare professionals have in common in order to establish a foundational curriculum to interpret for any health profession. Subsequently, this suggested curriculum would need to consider the educational requirements of various health professions, which would then inform a curriculum for interpreters for physicians, which would be different from that of for nurses, veterinarians, physical or occupational therapists, *et cetera*, and which would offer suggestions for educational foci for each field. This curriculum, however, would only represent didactic-based medical knowledge that interpreters who are interested in working as DIs for healthcare professionals (i.e. physicians, nurses) should possess and understand. Curricula would need to be modified or expanded to include information that would apply to working with other allied healthcare professionals (i.e. physical or occupational therapists, medical technicians of various types).

The second opportunity would be to explore what qualifications and credentials would be preferable for designated healthcare interpreters to have. While certifications offered by such authorities as the Registry of Interpreters for the Deaf (RID) or the Texas Board for Evaluation of Interpreters (BEI) do have an already established credibility in the field of signed language interpreting, Witter-Merithew and Nicodemus (2010, 2012) and Grooms (2015) have already suggested that such credentials alone are insufficient for the linguistic facility and educational background that deaf professionals may need their interpreters to possess.

Third, and in the perspective of this researcher, the addition and elevation of the "deaf voice" to the narrative is necessary. Thus far, the preferences of deaf and hard-of-hearing professionals have been offered in tandem with that of the interpreters who interpret for them. However, the literature lacks information that is from the deaf professionals' perspective. In order for interpreters to become designated interpreters, they must acknowledge, understand, and work to support the needs and preferences of the deaf professionals with and for whom they work.

Curricular training, while an important consideration for one's knowledge base, is not the only issue that must be considered. The DP-DI team is first a relationship based in trust. Each of the interview participants commented on this. In order, then, for the DP-DI relationship to succeed, efforts must be made that foster the trust between the DP and the interpreter. With trust must be respect. Without respect, there can be no trust, and the DP-DI paradigm suffers, causing potential friction between the DP and their interpreter.

What still remains, however, is an agreed upon definition of what exactly a designated interpreter *is* and *does.* This will require more effort to bring deaf professionals' perspectives and opinions to the forefront of the discussion. This is not a decision that interpreters can or should make in isolation. Further study with a larger sample population is required. Ideally, the sample should be inter-professional in nature so that the results may be more easily generalizable and applicable to multiple professions.

What appears to be absent from the discussion is whether we know what deaf and hard-of-hearing colleagues want us to do that we thus far are not doing, *or*, what we are doing that our deaf and hard-of-hearing colleagues wish we did not do. Interviewees have

commented on how DIs are felt to be disregarding the preferences of DPs regarding the expected role of the DI. More attention needs to be given to how the conception of the role of the DI has changed over the last decade. In what ways do DPs and DIs agree on the DI's role? In what ways do they disagree? How do we ensure that DIs understand that it should be the DPs' preferences that are accommodated primarily?

This study was exploratory in its focus, and looked at a very small and defined population of deaf professionals. Future research should not only attempt to look at a larger, potentially more representative sample of deaf physicians and physician trainees, but also look at how deaf professionals in other healthcare specialties (nursing, physical therapy, veterinary science, *etc*.) consider and work with designated interpreters.

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Appendix A: Recruitment flier

DOCTORS

Are you an MD or DO who uses interpreters?
Are you a medical student, resident, or fellow who uses interpreters?
I'd love to hear from you!

My name is Todd Agan, RID CI & CT, Texas BEI IV/Master & Medical, and I am conducting a study about deaf physicians' experiences with designated interpreters. I am interested in all perspectives and experiences.

To qualify, you must:

- Have a hearing loss;
- Live and work in the United States;
- Be either a physician (MD or DO) *or* a physician trainee (medical student, resident, or fellow);
- Use sign language interpreters as a primary accommodation in your practice and/or medical education.

If you volunteer to participate, you will:

- Complete a short on-line survey of approximately 25 questions (this should take about 10 minutes of your time);
- Review and sign a consent form;
- At the end of the survey, you may be invited to participate in an interview to talk more in-depth about your perspectives and experiences.

If you meet the above criteria and are interested in participating, please email Todd Agan (tsagan@stkate.edu) or copy and paste this link into your browser: [LINK REDACTED]

This study has been approved by the St. Catherine University Institutional Review Board (#987). You may contact the IRB office with any questions (jsschmitt@stkate.edu or 651-690-7739).

Appendix B: Demographic survey

Q1 THANK YOU for your interest and participation in this survey about your professional experiences working with designated interpreters.

Your responses will be confidential and you will never be asked to identify yourself or any interpreter with whom you've worked.

This survey, consisting of approximately 25 questions, should take you no more than 10 minutes to complete. Most questions are multiple choice, with a few free-text boxes. You may stop this survey at any time, however any completed answers will be tabulated into the aggregated data and cannot be removed. There are no incentives associated with this survey.

There are no foreseeable risks for participating in this study; the benefit is to contribute to the knowledge about interpreters and the interpreting profession. Your participation is completely voluntary, and no compensation is available for your participation. Your decision whether or not to participate will not affect your relationships with the researcher or St. Catherine University. If you decided to stop at any time you may do so. You may also skip any item that you do not want to answer. If you have any questions about this project please contact me, Todd Agan (tsagan@stkate.edu), MAISCE student and researcher, MAISCE Program Director Dr. Erica Alley, NIC-Advanced (elalley@stkate.edu; 612-255-3386vp or 651-690-6018v), or the Institutional Reviewer Board Chair John Schmitt, PT, PhD (651.690.7739v; jsschmitt@stkate.edu). By responding to items on this survey you are giving us your consent to allow us to use your responses for research and educational purposes.

Clicking the arrow button at the bottom of this screen will start the survey, and indicate your consent to participate.

Q2 Great! Let's get the general stuff out of the way first.

How old are you? If you prefer not to answer, you may leave this field blank.

_____

Q3 What is your gender? If you prefer not to answer, you may leave this field blank.

_____

Q4 At about what age did you start using sign language?

_____

Q5 Now if you don't mind, please tell me about your educational experiences prior to medical school.

During your K-12 years, did you attend a mainstream program, a residential school, or a mix?

- ○ I attended a mainstream or magnet program (1)
- ○ I attended a residential school (2)
- ○ I had a mix of both experiences (3)

Q6 At what educational level did you start using signed language interpreters?

- ○ Elementary school (K - grade 6) (1)
- ○ Middle school/junior high school (grades 7 - 8) (2)
- ○ Senior high school (grades 9 - 12) (3)
- ○ College (4)
- ○ I did not use interpreters in school growing up (5)

Q7 Now let's start talking about your medical education experiences.

Is/was your medical school and MD-granting or a DO-granting program?

- ○ MD-granting (1)
- ○ DO-granting (2)

Q8 Was/is your medical school a US-based medical school?

- ○ Yes (1)
- ○ No (2)

Skip To: Q9 If Was/is your medical school a US-based medical school? = Yes

Skip To: Q10 If Was/is your medical school a US-based medical school? = No

Q9 In which state/territory is your medical school located?

▯ AL Alabama (1) ... WY Wyoming (52)

Display This Question:

If Was/is your medical school a US-based medical school? = No

Q10 Please tell me what country your medical school was in

_____

Q11 What is your current level of education or practice?

- I have completed training (1)
- I am in a fellowship training program (2)
- I am in a residency training program (3)
- I am in medical school (4)

Skip To: Q11.1 If What is your current level of education or practice? = I have completed training

Skip To: Q12 If What is your current level of education or practice? = I am in a fellowship training program

Skip To: Q13 If What is your current level of education or practice? = I am in a residency training program

Skip To: Q14 If What is your current level of education or practice? = I am in medical school

Carry Forward All Choices - Displayed and Hidden from "In which state/territory is your medical school located?"

X→

Q11.1 In which state/territory do you work?

▯ AL Alabama (1) ... WY Wyoming (52)

Q11.2 In what setting do you primarily work?

- ○ Inpatient/hospital-based (1)
- ○ Outpatient/ambulatory clinic-based (2)
- ○ (Other) (3) _____

Q11.3 Please indicate your current role.

If you choose more than one option, please indicate the percentage of your time that you spend in each role (the total percentage should be 100%).

- ☐ % Administrative (1) _____
- ☐ % Clinical (2) _____
- ☐ % Research (3) _____
- ☐ % Teaching (4) _____

Q11.4 Did you complete a fellowship training?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Did you complete a fellowship training? = Yes

Carry Forward All Choices - Displayed and Hidden from "In which state/territory is your medical school located?"

X→

Q12 In what state or territory is/was your fellowship training program?

▯ AL Alabama (1) ... WY Wyoming (52)

Display This Question:

If Did you complete a fellowship training? = Yes

Q12.1 In what field is/was your fellowship?

_____

Q12.2 If you are currently a fellow, in which year of your fellowship are you? (Ex: first, second, fourth, etc.)

- I am: (1) _____
- I am not currently or am no longer in my fellowship (2)

Carry Forward All Choices - Displayed and Hidden from "In which state/territory is your medical school located?"

Q13 In what state or territory is/was your residency program?

▯ AL Alabama (1) ... WY Wyoming (52)

Q13.1 I did my residency in the following field:

_____

Q13.2 Did you do a preliminary or transitional year?

- No, I did not (1)
- I am/did a preliminary year in the following field: (2) _____
- I am/did a transitional year in the following field: (3) _____

Display This Question:

If Was/is your medical school a US-based medical school? = Yes

Carry Forward All Choices - Displayed and Hidden from "In which state/territory is your medical school located?"

Q14 In what state is/was your medical school located?

▯ AL Alabama (1) ... WY Wyoming (52)

zQ14.1 Are/were you enrolled in any of the following degree tracks?

- ☐ MD/PhD (1)
- ☐ DO/PhD (2)
- ☐ MPH (3)
- ☐ No, I was not (4)

Display This Question:

If What is your current level of education or practice? = I am in medical school

Q14.2 In what year of medical school are you currently?

- ○ First (1)
- ○ Second (2)
- ○ Third (3)
- ○ Fourth (4)

Skip To: Q14.2.1 If In what year of medical school are you currently? = First

Skip To: Q14.2.1 If In what year of medical school are you currently? = Second

Skip To: Q14.2.2 If In what year of medical school are you currently? = Third

Skip To: Q14.2.2 If In what year of medical school are you currently? = Fourth

Display This Question:

If In what year of medical school are you currently? = Second

And In what year of medical school are you currently? = First

Q14.2.1 Did/do you use signed language interpreters in medical school?

- Yes (1)
- No (2)

Display This Question:

If In what year of medical school are you currently? = Third

And In what year of medical school are you currently? = Fourth

Q14.2.2 Did/do you use signed language interpreters in medical school?

- Yes (1)
- No (2)

Skip To: Q15 If Did/do you use signed language interpreters in medical school? = Yes

Skip To: Q99 If Did/do you use signed language interpreters in medical school? = No

Q15 Do you consider the interpreters with whom you work to be designated interpreters? Please take a moment to briefly explain why or why not.

_____

_____

_____

_____

_____

Q15.1 Based on your responses, you meet criteria to be considered for an interview.

Would you be willing to participate in an interview to discuss your experiences with interpreters? It would last no more than an hour, and be conducted via internet based video conferencing (e.g., appear.in). It would also be video recorded.

Those completing an interview will receive a $40 gift card for their time.

- ○ $40? Sure, throw my name in the hat! (1)
- ○ Sounds like a great offer, but I decline. Thanks, anyway! (2)

Skip To: Q16 If Based on your responses, you meet criteria to be considered for an interview. Would you be willin... = $40? Sure, throw my name in the hat!

Skip To: Q99 If Based on your responses, you meet criteria to be considered for an interview. Would you be willin... = Sounds like a great offer, but I decline. Thanks, anyway!

Q16 Thank you for agreeing to be considered for an interview about your experiences and perspectives on working with designated interpreters. Please enter your contact information below, and I will contact you to set up a date/time to be interviewed.

- ☐ Please check the box, then enter your name: (1) _____
- ☐ Please check the box, then enter your preferred contact information: (2) _____

Q99 That's all, folks!

I appreciate your time and the information you've shared. Remember your answers will be aggregated and de-identified.

Thanks again for your time!
t.

Appendix C: Survey prompts

Interview Guide

(These questions will not be asked in any specific order.)

- Tell me about your work with interpreters in your medical school, residency, fellowship, and/or practice.
    a. What has been effective?
    b. What has been less effective?
- How long have you been using interpreters?
- How long have you worked with this particular team?
- What input do you have/have you had in the recruitment, hiring, and retention of your interpreters?
- Are/were there specific qualifications that you look for or want your interpreters to have?
- Do you consider your interpreters "designated interpreters"?
    a. Why or why not?
    b. If you were to design a "designated interpreter" what qualities, skills, and/or qualifications should a designated interpreter have?
    c. What does the relationship between the deaf consumer and the interpreter look like?
- Are there any other thoughts or comments you have that you would like to share about working with interpreters?