Cultural competency in healthcare providers:
A qualitative investigation

by

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ABSTRACT

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Cultural competency is the ability to establish effective interpersonal and working relationships with diverse individuals. In an increasingly diverse society, it is critical that healthcare providers be appropriately trained in issues of cultural awareness and sensitivity. This master’s thesis proposal is part of a larger research program, aiming to evaluate cultural competency in the field and develop an empirically-based training for healthcare professionals. Specifically, this proposal centers on a qualitative investigation targeting the identification of service gaps in the field. In collaboration with Texas Children’s Hospital, we interviewed 45 intensive care physicians, nurses, and patient families about cultural barriers in healthcare and systematically analyzed the resulting transcripts. Key themes included cultural barriers (particularly around end-of-life decision-making), cultural competencies (especially as they relate to team processes), and training interventions (including their evolution over the provider career span). Theoretical contributions, practical implications, and future directions are discussed.

Keywords: culture, cultural competency, teamwork, training, healthcare
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The harmful effects of culturally-based discrimination are complicated and far-reaching, extending into one of the most critical determinants of quality of life: medical care (Beach et al., 2005). Racial and ethnic minorities have been shown to experience lower standards of care, even after access-related factors (such as insurance status and socioeconomic status) are controlled (Smedley, Stith, & Nelson, 2003). Seemingly small disparities during treatment can have serious consequences for health outcomes – for example, biases against patients may result in less physician consultation time and consequent misdiagnoses (Hebl & Xu, 2001). As such, it is important to understand and address these systematic discrepancies in clinical contexts. The overarching objective of this proposal is to **understand and address culturally-disparate behavior in a medical setting**, specifically within a pediatric Critical Care Unit.

This research uses qualitative data to (1) identify the challenges that healthcare providers face when serving diverse patient populations, (2) target the competencies that will increase their competency, and (3) help develop training programs that will be maximally impactful. Interviews with 20 physicians, 11 nurses, and 14 patient family members uncovered several major points, including the role of decision-making as a critical incident structure, the interplay between cultural competency and teamwork, and the need for specialized training throughout the career span. This research concludes with implications for best practices in cultural competency education and future, interdisciplinary directions for research.

**Introduction**

Inequity in healthcare delivery is a serious problem in the United States. Ethnic minorities report lower health care satisfaction and greater discrimination within healthcare systems (The Henry J. Kaiser Family Foundation, 1999). Even when socioeconomic status is taken into account, minority Americans have drastically different experiences in the healthcare
system compared to their majority counterparts (Ford & Cooper, 1995; Gornick et al., 1996; Kington & Smith, 1997; Mayberry et al., 1999; Nickens, 1990; Williams, 1999). Indeed, minority Americans continue to receive comparatively inferior care in systems that provide equal financial benefits, such as the Veterans Health Administration, Medicare, and single health plans (Ayanian, Udvarhelyi, Gatsonis, Pashos, & Epstein, 1993; Carlisle, Leake, & Shapiro, 1997; Conigliaro et al., 2000; Goldberg, Hartz, Jacobsen, Krakauer, & Rimm, 1992; Oddone et al., 1999; Peterson, Wright, Daley, & Thibault, 1994; Robbins, Whittemore, & Van Den Eeden, 1998). Given that financial barriers are irrelevant in these circumstances, there must be other underlying mechanisms driving these differences.

There exist deeply-entrenched historical and socioeconomic systems of power that drive these disparities in healthcare (Fiscella, Franks, Gold, & Clancy, 2000). These complex, macro-level dynamics are beyond the scope of this current paper, which focuses on the individual and psychological units of change. Specifically, researchers and practitioners have identified culture as a potentially powerful contributor to inequity. Over recent decades, healthcare agencies have paid increasing attention to the ways in which cultural differences may place patients in positions of vulnerability. During medical appointments, minorities may suffer from barriers of language, geography, and cultural familiarity (Smedley et al., 2003), which, in turn, contribute to these disparate health delivery. For example, negative outcomes can include: missing opportunities for screening and care, due to lack of familiarity with prevalent conditions among minority groups; failing to consider differing responses to medication and treatment; lack of knowledge about traditional remedies, leading to potentially harmful drug interactions; and diagnostic errors resulting from miscommunication (Lavizzo-Mourey & Mackenzie, 1996; Lawson, 1996; Moffic & Kinzie, 1996). Given the overwhelming number of possible lapses in care, it is critical to
understand the ways in which culture may contribute to these and the ways in which we may address them, including through healthcare providers.

Importantly, healthcare providers are both legally and philosophically bound to provide equal care. However, the manifestations of health inequities have resulted in legislative documentation and action. Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance (United States Congress, 1964). As public servants, healthcare providers fall under the jurisprudence of this federal law, as well as other moral and ethical principles (e.g., the Hippocratic oath). Herein, healthcare providers refer to physicians, nurses, clinical specialists, and other professionals involved in the provision of medical care. The government and healthcare systems thus are bound to serve their constituency fairly – making these problems of “unequal treatment” all the more problematic (Smedley et al., 2003). Altogether, these healthcare delivery trends and legislative policies create a strong demand for culturally sensitive environments, particularly in the realm of healthcare.

Indeed, while the vast majority of healthcare providers morally reject prejudice (defined as unjustified negative attitudes based on group membership; Dovidio, Brigham, Johnson, & Gaertner, 1996), they, like the general population, may not necessarily be exempt from its manifestations. Among the many strong and cross-cutting reasons for stereotyping behavior, one particularly relevant factor is the boundary between one’s own social group or culture. Individuals are driven by a powerful need to belong (Baumeister & Leary, 1995), and may therefore typically attempt to identify closely with a social group, or culture. This behavior, in turn, can influence individuals to heuristically perceive and prescribe different and often negative characteristics to outgroup members (Brewer, 1999). Much of the time, individuals may not be
cognizant of these processes, as described by the large body of work on implicit bias (Greenwald & Krieger, 2006). Indeed, no person is exempt from these behaviors, even the most well-intentioned and educated among us.

As a result, researchers have recently focused on the ways in which stereotypes and biases may interfere with patient care. A field study found that physicians perceive minority patients more negatively than their white counterparts, which can then influence physician behavior (van Ryn & Burke, 2000). This finding is supported by a laboratory study in which physicians, when subliminally primed with negative African American stereotypes and compared to those who were neutrally primed, were more likely to evaluate racially ambiguous patients more negatively (Abreu, 1999). Other experimental studies have found differences in the dosage of medications prescribed and treatments recommended by physicians, based on the race and ethnicity of the patient (Schulman et al., 1999; Weisse, Sorum, Sanders, & Syat, 2001). In another study, medical residents did not consciously indicate biases when reading and responding to vignettes of patient cases. However, participants did implicitly perceive black patients as less cooperative and reported a lower likelihood of treating them, compared to white patients (Green et al., 2007). In practice, the medical field has recognized the possible, detrimental effects of stereotypes in patient care (Chapman, Kaatz, & Carnes, 2013), resulting in a call-to-arms to address these harmful dynamics.

It should be noted that this body of work is, of course, not an indictment against healthcare providers. Rather, it illustrates how implicit biases, which affect all individuals, may enter the healthcare arena. Furthermore, if stereotypes are shortcuts used by the brain to make judgments as Fiske asserts (1993), overburdened people such as physicians are more likely to use them. Today’s healthcare system places increasing responsibilities on the shoulders of providers,
without providing commensurate time or resources to carry out these duties. Studies suggest that the constraints of the clinical encounter may drive health professionals to make decisions without complete and accurate information (Smedley et al., 2003; van Ryn & Burke, 2000). Such high-pressure conditions, in combination with unaddressed biases, are more likely to lead to negative outcomes.

Ultimately, these epidemiological findings point towards an important truth. Healthcare providers are only human, and susceptible to the influences of the society and systems in which they live. However, they also play an important role in society as the gatekeepers and guardians of well-being. As a result, it is critical to understand how culture can shape provider perspectives and lead to downstream effects of healthcare disparity. This background section thus begins with an overview of relevant, interdisciplinary culture theories and then hones on its application in medicine. It illustrates how the individual healthcare provider can be an important point of intervention for the closing of health disparities.

**Culture theories**

Culture, and more specifically cultural mismatch, can create a number of social and behavioral stumbling blocks, resulting in poorer interpersonal interactions and work performance. We define culture as the “integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values and institutions of a racial, ethnic, religious or social group” (Cross, Bazron, Dennis, & Isaacs, 1989, p. 28; Triandis & Suh, 2002). Given this, we operationalize cultural mismatch as an instance in which there is cultural heterogeneity between individuals (e.g., the healthcare provider and patient). Mismatch has also been examined in the medical literature through studies on racial concordance between the patient and provider, wherein demographic differences can drive disparate health outcomes
(Cooper-Patrick et al., 1999). In order to address these instances of mismatch, organizations are paying increasing attention to the development of cultural competencies. Herein, competencies refer to identifiable sets of behaviors, which are attributable to individuals and instrumental in the delivery of desired results or outcomes (Bartram, 2005; Tett, Guterman, Bleier, & Murphy, 2000).

Although the construct of cultural competency has largely been adopted and driven forward by work in healthcare, medicine is not alone in its concern over creating more effective, diverse environments. In fact, the idea of cultural competence has long-standing roots in the behavioral sciences, often with an emphasis on corporations’ expatriate populations. Chiu, Lonner, Matsumoto and Ward (2013) summarize its difficult trajectory as then-editors of The Journal of Cross-Cultural Psychology. In a seminal study synthesizing the experiences of North American sojourners, Hammer, Gudykunst, and Wiseman (1979) defined “intercultural effectiveness” as the ability to manage psychological stress, communicate effectively, and establish interpersonal relationships. Despite its face validity and widespread use, researchers have failed to consistently replicate its factor structure (Abe & Wiseman, 1983; Chiu et al., 2013). Since then, there have been steady attempts to build out theoretical models of cultural competency. Chen and Starosta’s conceptualization of intercultural competence relied on dimensions of sensitivity, awareness, and skills (1997; 1998, 2000). Deardorff (2006) continued to examine this theoretical construct through the synthesis of subject matter expert feedback, concluding that there was great variance in defining cultural competency. This empirical finding is borne out in the literature as well, given conflicting definitions of cultural competency (Lonner, 2013; J. Wilson, Ward, & Fischer, 2013); however, typically these operationalizations entail some component of communication and interaction (Chiu et al., 2013). Matsumoto and
Hwang (2013) attempted to unify these various conceptualizations, but lost specificity and import through an overly-generic definition: “the knowledge, skills, abilities, and other (KSAOs) factors that are necessary to demonstrate competence” (pg. 44). Given such variety of opinion and operationalization, ambiguity continues to surround the construct of cultural competence.

As a result, one of the greatest challenges to cultural competency is its fragmented nature. Its subjective foundations have failed to produce a universal understanding of cultural competency. This issue is further exacerbated when extending beyond academia and looking at how it is practiced in applied settings. Other fields, including private corporations, interdisciplinary subfields, and federal agencies, have explored cross-cultural competency (Abbe, Gulick, & Herman, 2007; Perks & Sanderson, 2000; Ritsher, 2005; Selmeski, 2007). Across these varying arenas, conceptualizations of cultural competency vary widely, often focusing on industry- and role-specific goals (e.g., as awareness of global economies, broad multicultural knowledge, and interpersonal openness) rather than a broad definition (Adler & Bartholomew, 1992). In short, cultural competency means different things, and serves different purposes, depending on who’s being asked. For organizations to perform cross-cultural work maximally and effectively, it is necessary to identify clearly and develop the essential cultural competencies.

Despite these core challenges, the interest in cross-cultural topics remains high – and is only growing – as the world becomes increasingly globalized. In particular, the military has a vested interest in educating its highly mobile workforce on global knowledge, skills, and attitudes. In a technical report published by the U.S. Army Research Institute, Abbe, Gulick & Herman (2007) comprehensively reviewed the cross-cultural literature and synthesized a framework for cross-cultural competence, including antecedents, moderators, and outcomes thereof. Although it was developed with a specific military audience (Army leaders) in mind, the
model is derived from interdisciplinary research and can be generalized and adapted for other fields. Error! Reference source not found. shows this theoretical framework. Colored overlays indicate how it can be transposed onto medicine; however, this specific model has not been tested or applied in healthcare settings.

Antecedent variables refer to pre-existing factors that may make individuals more or less culturally competent initially. They can include: dispositional factors, which include motivation and personality traits; biographical history, or prior experiences; and self and identity conceptualizations, which may involve perceptions of one’s self and efficacy. Individuals may be more or less predisposed to cultural competency, which is particularly true for the unique population of healthcare providers. Given the intensive barriers to entry in the health professions, as well as the highly patient-centric nature of their work, providers may be more predisposed to cultural competency. For example, providers may be more conscientious, given the educational requirements of the field (dispositional factors) – though more achievement-oriented individuals may discount interpersonal concerns for performance-driven outcomes, conversely. Providers are also likely to be more highly exposed to diverse populations, as their trainings may often require relocation (biographical history). Providers are also likely to identify closely as service-driven individuals (self and identity), compared to those in other professions. Every person brings these nuanced predispositions and experiences to the table in their interpersonal interactions. These suggest that clinicians may be more open to building cultural competency, relative to their peers.

These antecedents inform cross-cultural competencies at the middle level in the framework. In general, competencies needed for effective job performance have been sorted into the domains of knowledge, skills, and abilities (and, in many cases, a fourth category of other abilities; Campion et al., 2011). Recent research has suggested, however, that the domain of
“attitudes” may appropriately supplant “abilities” and “other abilities,” particularly when psychosocial constructs such as culture are being investigated (Abbe et al., 2007; Byram & Nichols, 2001; Epstein & Hundert, 2002; McLagan, 1997). This modification also allows interdisciplinary alignment with Bloom (1964)’s seminal taxonomy of learning objectives: cognitive (knowledge), psychomotor (skills), and affective (attitude) outcomes. Thus, Abbe and colleagues (2007) categorized the cultural competencies from study data into knowledge, skills, and affect/motivation (interchangeable with attitudes). In the medical context, competencies may include didactic knowledge of cultures, communication skills, and attitudes of sensitivity. The current research focuses on this building out this level of the framework, through the identification and clarification of key competencies. However, its findings will also extend to other pieces of the model.

Although these cultural competencies are portable, they are also informed by the context in which they are operating. Accordingly, both language and regional competencies overlap critically with the other, more universal competencies. For example, healthcare professionals can learn to identify language barriers and respond to them effectively, using interpreters and translation technology. They can also gain more familiarity with the specific geographic area in which they work, including understanding the characteristics and needs of the particular patient population. Even more specifically, situational and organizational variables can influence the expression of cultural competencies. In the field of healthcare, the type of specialty can moderate which knowledge, skills, and attitudes are most critical; e.g., palliative care doctors may need more awareness of cultural practices than do surgeons.

Ultimately, cultural competencies and their influencing factors will influence multiple tiers of outcomes. Employers are typically most interested in job performance and work
adjustment. Healthcare organizations may quantify through conventional human resources metrics (such as performance evaluations), as well as indices of care: patient health outcomes and patient satisfaction ratings. Conversely, employees may be more directly invested in outcomes that cross the work-life divide, such as interpersonal relationships and personal adjustment. Cultural competency helps facilitate interactions (not just within the patient-provider relationship, but between medical team members as well). Ease of interpersonal relationships may then lead to better personal adjustment. Clinicians who are able to more effectively communicate with others will also experience less stress and burnout overall. Cultural competency can thus create healthier, happier workforces, with positive effects extending throughout the workplace and beyond.

Abbe, Gulick and Herman’s conceptualization (2007), in its comprehensiveness and complexity, demonstrates promise for cultural competency theory. Indeed, it lends itself nearly effortlessly to medical settings, as shown in Error! Reference source not found.. The current research, as will be discussed later, will further develop this framework using empirically-derived findings. First, however, it is important to understand the specific context in which the research takes place – as it will also influence how we understand and operationalize cultural competency.

Cultural competency

Although medical professionals are, by and large, educated, well-intentioned, and rigorously trained, they may not necessarily be formally prepared to serve diverse and different populations. Equipping healthcare providers with appropriate tools can facilitate the delivery of sensitive, fair medical treatment to patients (Paasche-Orlow, 2004). One such conduit for such
change is through emphasizing cultural competency, or the ability to establish effective interpersonal and working relationships with diverse individuals (Smedley et al., 2003).

Healthcare research has forged the path in understanding cultural competency in very specific, applied ways – which, although enlightening, has resulted in a largely atheoretical operationalization. However, Campinha-Bacote has identified five key assumptions of cultural competency in healthcare delivery (2002): (1) cultural competence is a process, not an event; (2) cultural competence consists of five constructs, cultural awareness, cultural knowledge, cultural skill, cultural encounters and cultural desire; (3) there is more variation within ethnic groups than across ethnic groups (intra-ethnic variation; (4) there is a direct relationship between the level of competence of health care providers and their ability to provide culturally responsive health care services; and (5) cultural competence is an essential component in rendering effective and culturally responsive services to culturally and ethnically diverse clients. Many of these factors have also been echoed by cross-cultural theories, including Abbe and colleagues’ (2007) cross-cultural framework depicted earlier. Campinha-Bacote’s model provides a simple, theoretical framework for a more in-depth, concrete exploration of cultural competency within medicine.

Cultural competency should be applied in healthcare in a multi-level system: recognizing social influences on patient beliefs and behaviors; understanding their influences on the system as a whole; and developing interventions to ensure quality care (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003). Culturally sensitive healthcare professionals are more able to communicate and build trust with patients more effectively, potentially leading to greater impacts beyond a single encounter – such as more frequent engagement in care systems and better adherence to prescribed health plans. Systematic reviews have found that training physicians in cultural competencies can improve critical service-oriented knowledge, skills, and
attitudes, ultimately resulting in higher patient satisfaction (Beach et al., 2005; Smedley et al., 2003). Indeed, research thus far has found strong support for the benefit of cultural competency education.

At the same time, the nascent study of cultural competency faces many challenges. These summaries, however, were only able to identify a limited number of appropriate studies; there remains a paucity of high-quality research despite increasing interest in the area (Lie, Lee-Rey, Gomez, Bereknyei, & Braddock, 2010). Few interventions emphasize evidence-based practices or measure outcomes comprehensively and empirically (Beach et al., 2005). Most importantly, there has been no research exploring and establishing the link between cultural competency and patient health outcomes (Beach et al., 2005; Betancourt & Green, 2010). In order to truly obtain organizational buy-in, researchers must establish the link between the “soft skills” of cultural competency and the “hard bottom lines” of clinical results.

In practice, there also lacks a uniform approach to the teaching of cultural competency. Cultural competency has taken some foothold in formalized clinician training, with 87% of medical schools covered cultural issues in one or more lectures, but only 8% providing courses specifically focused on culture as of 2000 (Flores, Gee, & Kastner, 2000). Curricula are variable in quality, with programs often differing in content, emphasis, setting and duration. Even within one particular intervention, there can be inconsistencies; for example, one course demonstrated improved outcomes in one area of knowledge, but not others (Copeman, 1989). Although the Association of American Medical Colleges has institutionalized guidelines for cultural competency education, it remains vague and amorphous. It does not establish hourly requirements nor make recommendations for “the ‘informal curriculum’ that may influence student learning or achievement of desired cultural competency,” instead suggesting that each
college conduct focus groups or other alternative evaluations to help plan their curriculum (Association of American Medical Colleges, 2005, p. 8). In short, the teaching of cultural competency is largely left in the hands of the individual institutions, resulting in widely differing interpretations and interventions. Therefore, although the common consensus is that cultural competency trainings are helpful, there are no universal or standardized approaches to guide development and implementation.

Furthermore, cultural issues evolve with ever-changing societies and, consequently, should be continually updated and integrated into continuing education curricula. Recent findings suggest that trainings are absent during the critical period of medical school clinical rotations (Kripalani, Bussey-Jones, Katz, & Genao, 2006). Emphasizing cultural competency early in medical school creates more positive impact on the attitudes of physicians-in-training (Crosson, Deng, Brazeau, Boyd, & Soto-Greene, 2004). Moreover, widely-used continuing medical education delivery strategies, particularly existing shorter courses and didactic approaches, have been ineffective in changing trainees’ behavior (Davis et al., 1999; Davis, Thomson, Oxman, & Haynes, 1995; Levinson & Roter, 1993). In light of this, it is critical that curricula be empirically-based and current with the state of the field and the populations being served in order to encourage training transfer. Further, cultural competency modules should be brief, due to the constraints of the medical system, and adaptable (e.g., implementable at various phases in healthcare providers’ careers). Clearly, there are many aspects through which cultural competency training can be improved.

Indeed, we must recognize that cultural competency will require sweeping change at multiple levels in order to take hold. In a review of sociocultural barriers to care, Betancourt and colleagues (2003) identified three levels of relevance: organizational administration, referring to
leadership and workforce management; structural considerations, in which processes of care must be optimized; and clinical care, wherein the provider and patient encounter is targeted. Cultural competency is part of a much larger, overwhelming societal question centered on group inequities; therefore, the “solution” must naturally involve macro-level and policy interventions. It is important to develop culturally competent providers, as individuals comprise the systems in which inequities function. As such, this line of work focuses on training as a point of intervention. Educating stakeholders can lead to positive downstream effects within that specific network, including value-driven leadership, stronger relationships with patients, and more optimal care delivery. However, it is naïve to believe that educational interventions alone can address such a pervasive and socially-perpetuated problem. Accordingly, although this research is driven by these larger questions about health disparity, it must focus its investigation on one part of the whole: the clinical encounter involving the patient and provider.

**The current study**

My current research program, funded by the National Science Foundation’s Graduate Research Fellowship Program, works towards meeting these goals by aiming to evaluate cultural competency and develop an effective training for healthcare professionals. Accordingly, my line of research involves two phases: (1) an initial exploratory stage and (2) an interventional, quantitative-based one. The first phase is designed to gather data and develop a birds-eye view of the current cultural competency and training landscape. The findings gleaned from this research will effectively acts as a training needs analysis (Brown, 2002), which is a critical step in training design and involves gathering data to identify best practices (Brown, 2002). Results from this step will thus inform the intervention tested in the second and final phase: an experimental investigation on the validity and efficacy of a cultural competency training module for healthcare
professionals. Altogether, these mixed methods will help create a complete picture of cultural competency in practice.

This report briefly touches upon this second, interventional phase in order to clarify the objectives of the broader research stream. Importantly, however, this master’s thesis will center on the critical initial exploratory phase of this program. Specifically, this research aims to understand what cultural competencies are needed and how we can best train them in healthcare providers. This research received National Science Foundation and Society for Industrial/Organizational Psychology funding and full cross-institutional IRB approval; please see the Acknowledgments for more information.

Although this research endeavors to address a very important and broad question (as elucidated earlier), it must begin with a tight, narrow focus. We thus begin by targeting a specific medical environment in order to establish cultural competency’s importance. We decided it was necessary adopt this “bottom up” approach for three major reasons: logistically, operationally, and theoretically. First, given the project’s resources, it is both more practical and effective to find evidence for cultural competency salience within one piece of the larger realm of healthcare before broadening further. Rather than overextending project scope and losing fidelity and impact, we can first implement our program on a smaller scale. Second, it is important to understand that this study functions as a training needs analysis for future work, as mentioned above. Obtaining a focused narrative is therefore critical, so that we may tailor the future intervention for maximal impact (Brown, 2002). We have thus chosen to work with collaborators and participants in a particular specialty (pediatric intensivists). Their particular suitability for our research purposes is further explained in the “Method: Participants” section. Finally, the concept of culture is inherently impacted by the environment within which is studied; it is
contextually sensitive. Therefore, rather than attempting to paint in broad strokes and spread our reach too thin, it is most pragmatic to understand and address the specific cultural needs of this population. Our hope is that, by understanding cultural competency in a bound and controlled environment, we can identify best practices that can be appropriately generalized.

**Methods**

The core of this thesis is a qualitative study, which involves structured interviews with key informants in healthcare. The objective of each of the meetings was to discuss cultural competency training and issues in practice. This is a collaborative effort with Baylor College of Medicine (BCM) through Texas Children’s Hospital (TCH), with consultation from Minerva Work Solutions, PLLC. Please see the Acknowledgements section for the collaborators and assistants to whom I am indebted. This work received full IRB approval, with Rice University acting as the relying institution and a reciprocity agreement in place from BCM on behalf of TCH.

**Grounded theory.** The exploratory nature of this study makes it a practice aligned with grounded theory. Grounded theory research does not set specific research hypotheses prior to beginning the scientific process; rather, it allows areas of interest to emerge and evolve organically, as data are collected and analyzed. More specifically, we began with the application of broad-level questions. Table 1 lists these probes, as well as corresponding interview prompts that target them during qualitative data collection. As more data is collected and analyzed simultaneously, qualitative themes will emerge and guide further lines of inquiry. The systematic, recursive development of research topics ensures that outcomes are clearly derived from their predecessors (Corbin & Strauss, 2007). The qualitative analysis process is explained in further detail in the “Data Analysis” section.
This open-ended approach was suitable for our qualitative research for several reasons. First, it minimized the biases and expectations of the research team. Although there were areas of emphasis, we did not restrict or ignore potential themes that may have arisen. By foregoing hypotheses and allowing data to drive the process, we thereby identified a wider and more relevant swath of issues. We also applied other best practices in grounded theory in order to ensure additional objectivity in our analyses, described in the “Analysis” section. Second, grounded theory, by definition, helps build theory that is rooted in empiricism. As mentioned previously, cultural competency has been relatively atheoretical; therefore, it would benefit largely from an organic, data-driven synthesis of evidence. Finally, this qualitative approach is well-established, and includes precendents in the realm of healthcare and training needs analyses. Prior studies have leveraged grounded theory to identify previously-unknown barriers in medical education; for example, Bhandari and colleagues (2003) used grounded theory in a qualitative study to assess the practice of evidence-based medicine in physician residents’ surgical training. Such research demonstrates that grounded theory is appropriate and valuable within training contexts, helping to clearly and comprehensively identify and assess the needs of interventional programs.

Ultimately, this qualitative research will be applied to empirically and inductively assess the needs of cultural competency training. For now, through systematic, exploratory data collection and analyses, this research functions descriptively. It sheds light on the mechanisms through which culture influences healthcare and avenues through which we can affect positive change.

**Participants.** It is important to note that the purpose of qualitative research is not necessarily to achieve generalizable or representative outcomes, but to capture the diversity of
the content area (Harding & Gantley, 1998). In order to elicit respondents that represent the breadth of the field, we recruited individuals with a range of expertise, education, and experience: (1) physicians (MDs, DOs); and (2) Advanced Practice Providers (APPs; physician’s assistant, nurse practitioner) and registered nurses (RNs); and (3) patient families. These multiple populations allow us to triangulate findings across interprofessional and patient-provider relationships, creating more accurate and nuanced insight.¹

As is standard in qualitative research, there was no predetermined goal number of participants (N). Rather, we ran as many participants as necessary until thematic saturation was achieved – that is, once we reached the point at which conducting more interviews failed to yield new themes or information (Guest, Bunce, & Johnson, 2006). Although this exact number depends on the population and content being examined, prior studies have suggested that twelve interviews can often suffice in reaching saturation (Guest et al., 2006), while others recommend anywhere from 20-50 participants for grounded theory methodology (Mason, 2010). Fusch and Ness provide non-numerical indices of data saturation, including (1) when there is enough information to replicate the study when the ability to obtain additional new information has been attained, and (2) when further coding is no longer feasible (2015). These sources were each considered and a majority of collaborator agreement was required when deciding the point of thematic saturation per participant population.

¹ This study initially proposed to recruit and enroll physician participants only. However, during the process, it became clear that other perspectives should be included. Physician participants repeatedly referred to the criticality of nurses in managing cultural barriers, as well as the importance of including the patient perspective. Accordingly, we extended our research to include these important stakeholders. Not only did this additional data inherently allow for a richer exploration of cultural competency, it also triangulates the perspectives of advanced and bedside healthcare providers and those whom they serve. The inclusion of nurses extends this study into an interprofessional investigation (that is, including providers with varied roles and responsibilities, who are involved at different levels of care). Most importantly, by speaking directly to families, we are able to honor the mission of patient-centered care advanced by our collaborators and include patient voices in the conversation.
Our collaborators at TCH recruited participants affiliated with the Critical Care section, also known as the Intensive Care Unit (ICU). This particular subspecialty of medicine is especially appropriate for our long-term research program, given that we hope to implement and evaluate a training following this exploratory, qualitative research phase. Given that ICUs see the most seriously ill patients (e.g., acute, chronic, complex and comorbid conditions), they bring in interprofessional and interdisciplinary care providers – that is, many levels of clinicians and from various departments. At the same time, however, the variable duration of patient stays allows for the possibility of relationship-building, as opposed to other similarly high-acuity departments like the emergency room (which is constantly triaging and transferring patients). Finally, the high-stakes, high-stress environment allows for barriers, including important cultural challenges, to come to light in clear ways during critical incidents. Taken altogether, Critical Care is both an important and appropriate clinical setting through which to explore questions of cultural competency.

Additionally, pediatrics adds a layer of complexity and richness to our research, given the difficulties in caring for minor-aged patients. Many parties, clinical and personal, must decide on a course of action and cooperate based on the child’s best interests. As a result, many different stores of knowledge and value and belief systems are often brought to the table during these shared decision-making processes. Herein, we use the term “patient family” to describe the guardian(s) of the child, as they are the party with personal (as well as legal) responsibility for the patient. The cultural needs of the patient family and clinical practices of the healthcare providers must be negotiated carefully; conversely, in adult care, decisions often default to the direct consent and wishes of the agentic patient. Therefore, in pediatric care, the inherent emphasis on team and group dynamics results in grappling with more culturally diverse
perspectives during care planning and implementation. Our study inclusion of interdisciplinary providers and patients aims to help illustrate these complex processes.

Recruitment was tailored to each specific participant pool. We sent direct and open invitations to both physicians and nurses in the Critical Care section via emails publicizing a “cultural competency study.” Within the physician pool, we relied on peer referrals for participation. More specifically, the physician pool was partitioned into two categories: U.S.-born vs. foreign-born clinicians. From these two buckets, our collaborators randomly selected thirteen and fourteen faculty clinicians, respectively, and directly invited them to participate in the study; they also sent a broad announcement to other attending physicians to participate. Though we were not able to partition the nursing staff pool similarly due to a lack of previously-known demographic information, our physician collaborators also approached nurses in person and via email, individually and as a group respectively, to participate in our study.

Finally, in order to recruit patient families, we worked closely with the Family Advisory Council, a formal TCH patient advocacy group. An administrator sent a mass email invitation to its registry of Critical Care-associated patient families. Given that “cultural competency” may be an unfamiliar term to the layperson, the study was advertised as an interview regarding “family-provider communication.”

Each recruitment method emphasized the completely voluntary nature of participation. Across all groups, individuals were not offered any compensation (financial or otherwise). Once participants indicate their willingness to participate, they were scheduled to meet with our research team. Please see Table 2 for demographic information and characteristics, by sample and in total.
**Procedures.** Key informants were invited to a 45-minute structured interview, either by phone or in person. If the former, participants were asked to conduct the call in a quiet, private space. If the latter, participants met the research team in a private office on-site at Texas Children’s Hospital or Rice University. At least two study team members, a facilitator (myself) and a note-taker (an undergraduate research assistant) attended each interview. Two secure, reliable audio-recording devices were used simultaneously (in case of one’s failure, though we collected all data successfully) and portable laptop computers were used to document the interviews.

During the informed consent process, the study team described the study and asked participants for separate permissions to participate in and audio-record the session. Participants were assured of their right to pause or stop recording and/or participation at any time; further, if audio data was collected, it would be de-identified during transcription and stored securely. All participants consented to audio-recording. During the sessions, the note-taker typed information during the interview, as comprehensively and verbatim as possible. Standard informed consent practices applied, including giving the participant as much time as necessary to review documents and ask questions. Once consent had been granted, a brief demographic survey (included in the Appendix) was administered and the beginning of audio-recording was announced.

The structured interview script touched upon a number of topics, including: desired cultured key competencies; observed disparities in healthcare provision due to cultural differences; and areas of improvement in education. It was developed collaboratively, with input from the research team at Rice University and each of the co-investigators from TCH and Minerva Work Solutions. As the interview facilitator, I also trained on the conducting of
structured interviews through online workshops and texts. Following this training period, I conducted practice sessions (two pilot interviews with medical collaborators) to refine the structured interview script before deployment. The Appendix lists the full structured interview guide, including the informed consent script (describing study procedures and audio-recording and privacy practices) and more specific probes (used optionally to follow-up and dive deeper into participant responses, as appropriate). Table 1, referenced earlier, outlines of how each major prompt maps onto the study’s research questions, as a reminder of how the protocol addresses the scientific needs of this proposal.

Upon conclusion of the interview, the end of the audio-recording was announced. The participant was thanked for their time and invited to keep in touch with the research team, should any questions or comments arise. Given that there was no compensation, refreshments and any necessary parking reimbursement were provided for in-person interviews; a thank-you card was also sent to the participant afterward as a token of appreciation.

**Analysis**

As mentioned earlier, research assistants took notes during each interview. Afterward, a member of the Rice research team (typically the same research assistant who took notes for the corresponding interview) used the notes and audio-recordings to transcribe each interview. During this process, they eliminated participant names to protect privacy.

Following data collection and transcription, another member of the research team and I conducted the qualitative data analysis using ATLAS.ti, version 7. All coders completed ATLAS.ti online trainings in preparation for the qualitative analysis phase, as well as a rater training session with me in order to establish a shared mental model of coding. Another research member served as a third consensus coder, on standby to facilitate any potential disagreements.
Coding was guided by the broad research questions, shown in Table 1, and principles of grounded theory, as outlined by Charmaz (2015). A modified coding by committee process (Saldaña 2015) was used, which involved two major stages. During Phase 1, we conducted an initial pass of both inductive and deductive coding, which yielded a codebook of common codes and categories. In Phase 2, we synthesized major themes and both independently and collaboratively re-coded all transcripts, ensuring uniformity and accuracy of outcomes. This approach was modified, given that we did not require the involvement of the third coder to the extent described in the original model. Figure 2 illustrates the data collection and analysis procedures.

**Code generation**

In the initial stage of qualitative analysis, codes were developed through a systematic, iterative, and dual-pronged approach, examining both the collected data and the instruments themselves. First, we reviewed the study materials (such as the structured interview guide questions and the study protocol) to develop a list of deductive codes, or elements that we expected to encounter. For example, because our research questions touched upon cultural competencies, we created code families of knowledge, skills, and attitudes. Importantly, these codes were not meant to impose our expectations onto the data, but to create an organizing framework that could be adapted as the codes were created. This essentially built out a skeleton, upon which we could load the actual codes generated from the data.

Second, we analyzed the transcripts themselves to identify inductive codes: common themes that arose from the interviews themselves. This process iteratively and simultaneously with data collection. More specifically, myself and another coder would create and read through ATLAS.ti files of five transcripts at a time. We employed a line-by-line technique in order to
ensure that our coding was closely linked to the data. That is, rather than searching for over-arching themes in large chunks of text or reading intention into the participants’ statements, we read transcripts line-by-line to identify important pieces of information. This fine-grained process assisted us in staying close to the data, ensuring greater objectivity and allowing us to “see the familiar anew” (Charmaz, 2015, p. 69). As we reviewed each transcript, we would identify important quotes and associate them with codes (either generating new or applying previously-created ones). This process was conducted completely independently and without any discussion between coders; any questions were flagged for resolution during our consensus meetings.

Following this individual line-by-line coding, we would then move onto focused consensus coding. After analyzing each group of transcripts, I would merge our ATLAS.ti files together, consolidating our separately-coded files. I would then review the merged documents and eliminate any redundancies. Following this, the other coder and I would meet to review and resolve the remaining discrepancies and questions. We would review the item of interest, explain any coding rationales, and decide on a course of action (e.g., keeping, modifying, or removing the code). A third research team member was available to moderate any complicated coding cases, but her involvement was unnecessary beyond initial meetings to review the codebook; thereafter, the second coders and I agreed on the resolution of analytic differences.

At the end of each of these consensus meetings, we would revise the working codebook to add, edit, re-organize, or delete codes. As guided by Charmaz’s best practices for grounded theory (2015), this focused stage of coding was more directed, selective, and conceptual than the

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2 When merging files, ATLAS.ti typically detects and automatically merges codes that are identical. However, there were frequent instances in which we had to manually merge the same codes (e.g., if we had an identical coding, but did not use the same characters to delimit the boundaries of the relevant quote).
initial line-by-line coding. It is at this stage that we would begin to act upon the data that had been objectively extracted earlier, both in terms of decision-making (e.g., consolidating similar codes) and categorization (for example, organizing them into groups of related codes). This stepwise process was repeated until all the transcripts were coded.

**Theme synthesis**

The second coders and I would discuss findings and synthesize themes based on frequency and salience. Charmaz (2015) refers to this process as raising focused codes to conceptual categories. This is the highest level of analysis, at which point the coders and I would review the codes to identify major themes, reorganizing and categorizing them accordingly. As such, the codes cease to be sole descriptive tools; they are given definition, organized into explanatory categories, and integrated into the narratives of the theory. This is the stage at which we could begin extracting findings.

As these categories were built out, the research team and I also regularly assessed whether or not the point of thematic saturation had been achieved. Despite a delay between the initial data collection and analysis due to logistical issues, we did achieve thematic saturation among our first sample of physician participants. In that process, however, we also identified other thematic areas requiring additional data—namely, perspectives of nursing professionals and patient families. In order to achieve more comprehensive and representative qualitative analyses, we thus extended our study to include these populations, as described earlier in the “Methods: Participants” footnote. This additional data allowed us to *theoretically sample*—that is, fill out the properties of the categories in order to achieve thematic saturation (Charmaz, 2015), beyond the physician-specific codes. As noted by Charmaz (2015), the intent of qualitative research is not to represent a population or increase the generalizability of results, but to develop emerging
theory, elaborating on and better understanding the categories identified. As a result, we decided at several points to continue recruiting and enrolling participants across populations, per the “Methods” section. By extending the scope of our sampling, we were able to triangulate our insights among stakeholders and develop more robust, “three-dimensional” perspectives into cultural competency in the field.

Given the recursive process and completion of data collection and analysis, we generated a comprehensive codebook. Because the codebook had changed substantially since the beginning of the study, the research team and I next ensured that every code had been uniformly and appropriately applied to all transcripts. We thus repeated the process of line-by-line coding: the second coders and I used the final codebook to revisit, review, and re-code all transcripts separately. Overall, these analytic approaches resulted in a codebook that had been holistically developed and dataset that had been comprehensively coded.

**Results**

This qualitative research yielded over 196 thematic codes, which are listed in the Appendix. These codes are roughly organized by the aforementioned research questions they seek to answer (Table 1): cultural barriers (*How does culture influence clinical interactions?*); knowledge, skills and attitudes (*What cultural competencies are needed?*); and training (*What training practices can be used to develop and enhances these necessary competencies?*). Additionally, teamwork emerged as a major theme in our work, and will be described in conjunction with the competencies described in the second research question. It is important to note that, given the large volume of codes that emerged, herein we only describe the themes that most saliently and relevantly address our investigative questions. These were selected based on
frequency of incidence, as well as co-occurrence with other important codes. Below, as codes are discussed, they are italicized.

**How does culture influence clinical interactions?**

Given the broadness of this question, we bisected relevant codes into temporal and content-related areas: When does culture emerge as a barrier; and what types of cultural barriers emerge?

**When does culture emerge as a barrier?**

In our sample, cultural barriers emerged, by and large, during decision-making incidents, in which both the healthcare team and patient family must decide on a course of action during the patient’s care. In the course of clinical care, it can be quite clear what must occur for the patient to be kept healthy – e.g., the function of vital organs and daily hygiene must be maintained. However, patients may arrive at a juncture in which a decision must be made. For example, the implementation of a procedure may involve multiple and differentially affecting outcomes. Because there is no definitive path forward, these moments require collaboration between the patient family and provider to decide the most optimal way forward. As physician Participant #12 summarized, cultural competency “becomes really important [when we] talk about big decisions about support like long-term support, long-term decisions for the medical care, or end-of-life discussions.” Indeed, it is at these major medical crossroads that conflicting beliefs and practices come to surface.

Decision-making is especially complicated when the main stakeholder of the decisions is not able to make those choices directly, instead requiring other parties to converge upon a course of action. In pediatric care, as mentioned previously, multiple individuals must converge on a course of action. Physician Participant #19 elaborates:
It’s different when it’s an adult that can make their own decision; the relationship is totally different when you’re speaking to the patient directly. That alliance [in adult care] is with the patient, as opposed to alliances [in pediatrics] with the family for a patient. Our primary responsibility is to the patient – but we have a very important secondary responsibility to the family. Decisions are being made with that “secondary responsibility” party instead of the primary.

At minimum, the primary physician and patient guardian are involved; however, the process often also includes the interprofessional healthcare team (nurses, physician’s assistants, and other providers), interdisciplinary consultants (any other specialists involved in care, such as oncologists, neurologists, gastroenterologists, and so on), ancillary staff (social workers, interpreters, chaplains), and other family and community members. As physician Participant #1 summarized,

> When we talk about decision making for children, it’s a very different concept than when we are talking about adults… We [the healthcare team] are confused in our own heads, and then you overlay someone else’s concept of these things, so many other cultures, and it’s surprising we get anything done.

This moment of playful honesty underscores the very serious difficulties involved in mutual decision-making. Individuals enter these decision-making spaces with their own unique experiences, beliefs, motives, and understandings of the situation. Oftentimes, although stakeholders share the same overall goal (to provide the best standard of care for the child patient), they may visualize different actual outcomes, given the circumstances. In light of this inherent diversity of opinion, it is no surprise that these are the arenas in which cultural issues emerge most frequently.
These factors are further compressed in the Critical Care services, wherein patients are in tenuous and time-sensitive medical conditions. As physician Participant #12 explained, disagreement “is common in our environment because we’re Critical Care. We definitely do face challenging situations [in which] cultural beliefs might go against what we believe is in the child’s best interest.” In particular, the most impactful decisions concern end-of-life care. When describing culturally critical incidents, nearly all healthcare providers reported at least one event involving planning, beliefs and practices around death. The end-of-life poses many questions, ethical and emotional, including touching upon the meaning of life and the definition of death (Jameton, 1990). What does it mean to live, and what does it mean to die? Individuals, according to their own belief systems, answer each of these questions differently, which may lead to consequent challenges when approaching end-of-life care. For example, the most controversial elements about end-of-life, resulting in the most disagreement between patients and providers, include decisions about life-sustaining treatments (particularly the aggressiveness thereof), dying at home, and the meaning of death (Steinhauser et al., 2000). Of the 31 providers who were asked to recall a culturally difficult event, 26 (83.8%) voluntarily reported at least one critical incident involving planning, beliefs and practices around death. These important factors are influenced by systems beyond the clinical sphere, including deeply-engrained social and personal perspectives.

More specifically, cultures can each conceptualize and delineate life, death, and mortality in ways that conflict with clinical definitions. For example, once the brain significantly and irreversibly deteriorates, patients can be pronounced clinically dead; however, given that the body is still visibly functional, many cultures may not agree that care can be ethically withdrawn. Physician Participant #13 elaborated: “Brain death is a big [barrier], which sometimes isn’t even
quite clear amongst the medical community at times. Trying to describe that to even the most intelligent family… It’s a hard concept to understand, and then when you add a cultural nuance, it just adds to the complexity.” Indeed, end-of-life care ventures into the complex areas of medical ethics and philosophy, such that doing what is “right” is conceptualized differently by individuals (Jameton, 1990). However, patient families often don’t have the resources or bandwidth to grapple appropriately with these issues. At face value, deciding on when and how to plan for a child’s death is an emotionally intense experience, during which time cultural practices can becoming both a guiding light for the family and a source of strife for the healthcare team.

Indeed, research has identified that cross-cultural issues can impact end-of-life treatment through the communication of bad news, locus of decision-making, and attitudes towards advance directives and end-of-life care (Searight & Gafford, 2005). Illustratively, Participant #1, a physician, told the illustrative story of a young Saudi Arabian patient who was ineligible for a necessary, life-saving lung transplant and thus placed on an invasive life support machine:

In the normal course of things, we would say, “We are going to stop this machine,” and create a peaceful death for her. I believe if we had set up these initial conversations better, we could’ve prevented [what happened]. In [American] culture, we go to the family and say, “Do you understand? Is it ok with you we are going to turn off the machine?,” which is a really dumb way to approach anybody, in my humble opinion… In [the family’s] culture, they could not answer that because that would be killing their daughter. They ran to the embassy, talked to their imam [religious leader], and basically agreed with us. They understood she was not going to get better. [However,] if they agreed with us and allowed us to stop the machine, they would be killing her, and a
fatwah [ruling] would be placed against them so they could never go home. We had to keep that child on this heart-lung bypass machine [...] until she finally died. It became very, very contentious, because we all knew that she was going to die and she was miserable.

In this instance, end-of-life care planning became an enormous challenge due to several factors, including defining “living” versus “dying,” invoking cultural norms and societal policy, and identifying the primary decision-maker. Although the healthcare team and patient family achieved the same understanding of the situation (that is, the gravity of the prognosis), they were unable to cooperate on a path forward due to these grave misunderstandings.

In situations like these, a common thread is the negotiation of power and paternalism in the provider-patient relationship. In medicine, paternalism refers to the executive authority of the physician; this is contrasted with patient autonomy, wherein the patient (or, in the case of pediatrics, patient family) wields power. These two constructs are at extremes of a shared decision-making continuum, and it is critical to understand where the ideal “meeting place” for a given patient lies (Kon, 2010). In the United States, the past century has seen a shift in medical decision-making from paternalism to autonomy (Kon, 2010). However, this is not universally true; paternalism remains the dominant decision-making model in other cultures and parts of the world. Given that individual families’ preferences may fall along this continuum, with patient-driven and physician-driven decision-making at opposite poles,(2010) this begs the question: how do healthcare providers discern patient preferences and strike the correct balance between patient- and physician-driven decision-making? Another physician, Participant #19, summarized this phenomenon as seen in the field:
There is a certain degree of autonomy that we allow our patients, [as opposed] to paternalism in medicine. Most of us are trained in, and err on, the side of autonomy when able. [However,] there are certain major decisions [in which], culturally, paternalism is actually the gentler course for the family. […] A paternalistic view in your relationship with the family actually helps, because then they don’t have to make the decision [to withdraw care], even if they feel in their hearts that it’s the right situation for the child. It’s a guarded paternal view [with] vague communication.

Indeed, in our sample of Critical Care stakeholders, both providers and patients expressed a desire to place the onus of decision-making on the clinical care team, decreasing the burden of responsibility from the emotionally-taxied family. Participant #1 continued to illustrate in the example of the Saudi Arabian patient:

We could have allowed her a very peaceful death, but because we didn’t understand [the family’s] cultural or spiritual needs, we put them in a position that they couldn’t back out of. It is my understanding that had they been in Saudi Arabia, the doctor would’ve just come up and said we’re stopping [treatment], and not placed that decision on the parents.

These instances, despite being illustrative of cultural barriers based on patient background, also point to issues based on societal perceptions of healthcare. That is, how do different groups construct and assign authority to healthcare providers, and what are their expectations of the healthcare team? These critical questions determine how patient families and providers enter decision-making spaces.

Although there were a handful of patient families who expressed a desire for more autonomy, the majority of participants agreed that end-of-life decision-making should be
deferred to clinical team members. Participant #35, a Hispanic parent who later became a nurse after losing her teenaged daughter to terminal cancer, illustrated:

It [end-of-life decision-making] is a heavy burden to carry. As a nurse, I have witnessed a couple conversations where the doctors say, “What do you want to do?” My heart hurts for the families because – how could you pick? And what if it goes wrong? […] As Hispanics, I think we look to doctor figure, the expert right? It’s tough. There’s no 100% answers… If you [the patient] can say “Well, I blame the doctor! That’s what he told me to do!” – maybe that’s the wrong thing – but you could share responsibility on the decisions that are made, rather than feeling that you’re taking the burden of your child’s life.

This patient perspective demonstrates the heavy burden of decision-making in pediatrics. In these high-stakes situations, culture can play a significant role in determining how patient care plays out.

Of course, cultural barriers could also emerge during more mundane processes in patient care. In general, physicians reported cultural barriers during more acute moments, such as decision-making; nurses, who provide the majority of bedside care, had more insight regarding the day-to-day influences of culture. The influence of cultural beliefs and practices on clinical care and patient satisfaction is not to be understated, nor the critical role of nursing and ancillary staff in facilitating these interactions. For example, many nurses described easily-honored preferences of patients, such as the posting of meaningful religious idols, the use of prayer mats in patient spaces, the timing of feeding schedules, and the allowance of certain family and community members outside of normal visitation standards. These “smaller” gestures, although not as dire as decision-making incidents, greatly enhance the patient-provider relationship,
building a more human connection in an often sterile medical environment. Accordingly, providers were willing and able to accommodate patient wishes, given that these cultural requests were within reason and appropriately timed. These actions could generate positive effects downstream, building goodwill and trust that would activate during more trying circumstances. Indeed, when the stakes are higher – and when the crossroads become major medical decisions – there are much greater opportunities for irresolvable cultural conflicts.

**What types of cultural barriers emerge?**

Culture is typically discussed along dimensions of nationality, race, and ethnicity. However, even within a population from a similar geographic or ethnic area, there can be substantive within-group differences (Campinha-Bacote, 2002). In medical decision-making, it is critical to understand what finer-grained components of culture can present as problematic. As such, we broke down cultural issues into more specific constructs. The four most common cultural barriers reported were: religion; family structure and gender hierarchy; language; and socioeconomic status and education.

**Religion.** Oftentimes, in public conversation, religion and science are depicted as opposing forces. Although this need not be the case, this generalization was frequently borne out in our study. Providers often discussed conflict involving religious preferences, clinical judgment, and the nuances within and between them. Physician Participant #12 categorized two manifestations of religiosity. In the first, there is not a difference of opinion but operation; the patient family understands clearly what is happening, but cannot move forward with a plan of care. That is, families do not disagree “that their child is going to die; they are just disagreeing that we cannot stop what we’re doing.” These families, as in the earlier example of the Saudi
Arabian patient, suffer from cultural decision-making traditions centered on paternalism and autonomy. However, Participant #12 continues:

Then there are the families that [think] their child is going to be fine. I find that the hardest of all – when you show them the brain scans, the you show them the flat line on the vital signs, and the heart that’s not pumping on the ultrasound – and they think their kid’s going to be fine. That’s incredibly hard. A lot of that is ignorance, but some of it is blind faith… It’s also sorry for me, as a physician who knows what’s going on. At that point, the empathy starts to go away as well. It is the worst thing to lose your child. When that blind faith comes in and all you see is a child suffer, that’s where my empathy starts to lessen and I’m more [aligned] with the child than with the family. I don’t like that feeling. It makes you feel like you are not being a good doctor to the family.

In end-of-life situations such as these, the miracle-centered faith of families directly contradicts the medical realities advanced by the healthcare team. These differences in beliefs often lead to *irresolvable situations*, which we coded as a discrete theme. In our analyses, religion was the cultural barrier that most frequently co-occurred with irresolvable situations, signaling that these differences in beliefs often end in impasses.

Although religion can present itself as a stumbling block to clinical care, however, it is unproductive to place blame on the family for their belief systems. Faith can be a strong coping mechanism when patient families must endure acute, chronic, and complex medical situations. Physician Participant #12 described above, very honestly, the difficulty of maintaining empathy during a contentious end-of-life situation. However, patient participants challenged the notion of being able to fully empathize with such situations in the first place, given the impossible pain
that parents can feel when faced with a dying child. Patient Participant #45 related the story of a physician who would aggressively pressure her to withdraw care for her terminally ill son:

It was a fight every day. [The physician] would come and tell me every day how sick my child was, and how being in a coma for so long could affect him intellectually, and how it wasn’t going to be the same. Well, I get it – and he was right, yes, I didn’t get [back] the same child I had – but when you’re a parent, you don’t care. All you want is for your child to be alive. It was really hard.

Given the intense emotional stress of having a child in the Critical Care unit, it is difficult to blame these families for holding onto optimism – turning to faith and believing in miracles – even when the outlook is bleak. As physician Participant #6 recognized: “being able to view a person’s religious support system as a significant means of coping is important for the provider to realize.” Healthcare providers must therefore learn to acknowledge and negotiate the often-critical role that spirituality plays in the emotional resilience of patient families.

**Family structure and gender hierarchy.** Participants also described cultural barriers revolving around cultural family structures, particularly patriarchic and collectivistic systems. These different family structures can lead to more complicated decision-making processes. It should be noted that, although matriarchal and individualistic social hierarchies certainly exist, providers most often mentioned conflicts involving males controlling or multiple family members complicating the dialogue. Nurse Participant #33 illustrates a case of the former:

I had one patient who [needed] a liver transplant, from Saudi Arabia. Culturally, we could only speak to the males that were present. Her dad did not come with her […] and her brother would not allow us to speak to her mom. We had to speak to him about medical decisions. He wouldn’t speak to me as a nurse; he only wanted to speak to male
doctors… That was a bit difficult because I couldn’t help with some of the stuff I needed to talk to them about and do. I had another pretty similar situation with an Asian boy who had neurosurgery for a tumor removal. We weren’t allowed to speak to the mom. We had to speak to the dad only; he had to make all of the decisions.

In these instances, providers often must defer to the existing family structure and move forward in decision-making with the dominant patient family member. Reactively, however, some providers described feelings of outrage or a desire to advocate when encountering such situations, as in the case of physician Participant #19:

There’s been one or two incidents where only the father speaks and the mother does not speak. I feel like maybe it’s the feminist in me – I really want to empower the mother to share her perspective. Sometimes I will directly ask questions to the mom and usually they speak up with their opinions… That’s potentially me imposing my perceptions of culture and the importance of having a woman having her right to have her voice [heard].

In that way, I recognize a cultural difference and choose to push against it – but, by and large, day to day, I don’t [have to] pay attention to it entirely as much.

In these descriptions, there are two notable dynamics at play. First, the provider must be cognizant of the cultural norms and expectations they carry; as shown, physician Participant #19 recognized her own value judgments being activated in these situations. It can be difficult to step back from one’s own biases, particularly if questions about humane treatment of others and social justice are invoked. There are no clear behavioral guidelines in these cases, given that the patient family ultimately is the gatekeeper to the patient him or herself. Pediatric providers must often defer, or work collaboratively with, the patient family in order to deliver care to the child –
therefore managing conflict and choosing their battles wisely. This thesis will discuss strategies that can help overcome these tensions in the next section.

Second, these instances are not only interpersonally affecting; they can also interfere with the provision of standard care. In this example, as well as the quote prior, decision-making was monopolized on the patient end by one particular individual. The extent of family structure on care can extend from these decision-making processes to actual clinical practices. For example, several participants described a male provider’s inability to conduct medical exams on female patients within certain cultures. Much of the time, these norms and requests are respected by the healthcare team, but can be difficult and costly to accommodate when in moments of crisis. However, if patient families are very insistent, it can also be less effortful to simply give in to a demand (as opposed to resisting and calling upon resources to resolve the conflict). These situations can be complex, time-constrained, and therefore quite challenging.

At the other end of the spectrum, there are families who share decision-making responsibilities broadly, rather than deferring to a single authoritative figure. Physician Participant #21 gave one such example:

I struggled with gypsy families and their kind of group decision-making – parents giving over their decision-making to elders and their whole community and extended family. That can be very challenging… There will be a crowd of 20 to 25 gentlemen in a circle somewhere on the grounds of the hospital, and then the waiting room is always full of that family or community. If you need to speak with the parents about making a decision about the end-of-life, the parents don't want to talk to the doctor alone. They want all four grandparents and uncles and leaders and at least 10 to 15 people there. It gets really hard.
In these situations, the group decision-making poses a number of challenges, including:

- managing the sheer volume of people (particularly in the cramped quarters of the ICU);
- accommodating any requests, cultural and otherwise, from the family members; and
- coordinating many opinions to arrive at a single course of action in a timely manner.

Whether it is one controlling voice or many dissenting opinions, family structures (and the frequent gender hierarchies within them) can be difficult to navigate effectively in a clinical context. One must also keep in mind that, although certain cultures are strongly connected to certain social hierarchies, families are also very unique. The healthcare team must therefore quickly clarify the chain of command in each new patient family. Family structures, in the way that they designate individuals responsible for decision-making and affect the patient-provider relationship, can create major pain points in caring for patients.

**Language.** Perhaps one of the most obvious and self-explanatory cultural barriers is that of language. Even though there are systematic methods of addressing language barriers (through translational technology or trained interpreters), communication can remain problematic.

Physician Participant #3, who is multilingual, summarized the situation:

> I wish I spoke all languages but we [healthcare providers] don’t. I feel that that true connection is lacking sometimes. […] I've heard interpreters translate things in languages that I know, [and] they don’t truly translate what we say. They sometimes do a literal translation, which doesn’t mean the same or it [doesn’t have] the implication, the connotation in your words. It lacks the sentiment. The phrases and words you use, they may sound more harsh [sic] or not, or more compassionate or not.

This quote touches on how language can be critical, both in terms of technical accuracy and perceived experience. Communicative nuances are especially critical when dealing with sensitive
clinical information. Many patient participants expressed how difficult it can be to discuss and understand complex medical situations and decisions, even when communicating in a mutually native tongue. Adding a language barrier between the patient family and healthcare team significantly exacerbates these challenges. Moreover, even when using a translator, there is affective information lost in translation; the emotional nuances, which are key to delivering news under stressful circumstances, are washed out. Given this, several healthcare provider participants expressed a desire to learn how to use translation services (both machines and human interpreters) more effectively. In any case, it is not difficult to imagine how language barriers can seriously impact the quality of care and interaction.

Language issues can also lead to health inequities more rapidly than many other cultural issues, given the opportunity for breakdowns in communication and care. Patient Participant #45 described the situation as a bilingual parent and advocate for fellow families:

I did meet parents who didn’t agree with doctor but they didn’t wanna fight [them] because they didn’t speak English – or what if the translator doesn’t do their job? There’s no trust, that’s why they don’t search [for resources], they don’t know there’s the family advisors… I would always let other parents know that even if their child has Medicaid, [the providers] still gotta do what they’re supposed to be doing. If you gotta argue with them, so what, just argue with them. It’s your child’s health. No one’s gonna care more than you. That’s the thing I can tell you about Hispanics… I was the typical Hispanic who believes in doctors.

Participant #45’s comments referred to the fact that language barriers, in combination with societies who highly value the authority of physicians, can put patient families in very difficult situations. A lack of language can quite literally diminish the voice that the patient family has. In
conflict situations, the patient family then becomes especially vulnerable – particularly when a power differential already exists, and in communities wherein healthcare providers attain high status and authority. The needs, opinions, and expertise of the patient family can be overlooked – not intentionally, as the healthcare team has the best interests of the child at heart, but because of organizational structure, competing priorities, and many other uncontrollable factors. Therefore, it is critical to attend to families who cannot speak the majority language and ensure that they are being included as a part of the healthcare team.

**Socioeconomic status and education.** Finally, socioeconomic status and education emerged as important barriers. Although these two factors can be considered discrete themes, they were collapsed given the considerable overlap during the coding process. That is, often those patients who were from lower socioeconomic levels were also the least formally educated.

The ownership of resources (that is, financial influence or knowledge) can powerfully influence the perspective of the patient. As nurse Participant #23 summarized, “If you cut [across cultural barriers] differently – if you have affluent Caucasian, Asian, and Hispanic [families], they probably have more things in common […] than they would with their own culture. Same in the lower SES statuses. […] I think that the more dominant issue sometimes is the level of affluence.” However, it is important to note that, as stated in the introduction, these access-related factors alone do not predict health disparities. Socioeconomic status and education can absolutely lead to misunderstandings in the course of patient care, as will be evinced below, but are not the sole predictor of these care inequities.

Although it may be easy to think that cultural barriers only arise when patient families are from low-income environments, this is certainly not the case. There are pervasive beliefs that families across socioeconomic statuses hold, centering on how money can “buy” better
healthcare – and how a lack of money can lead to worse outcomes. At one end of the spectrum, low-income families may believe that they can be exploited, given their powerlessness and vulnerability in the system. Nurse Participant #24 has had to explain to such families: “We are not experimenting with [their] kid. We are not doing voodoo magic here. That has been challenging at times, especially for people from other countries or people that just are less educated or less informed about the health care system. It’s challenging.” In these cases, low-SES and uneducated families feel susceptible to poor, unethical, and/or questionable treatment by the clinical team. Unfortunately, the scientific literature does evince health inequities tied to cultural variables in the clinical encounter, as described in the introduction; there are also well-documented instances of medicine exploiting vulnerable populations, though these unethical practices are condemned and discontinued (Thomas & Quinn, 1991). However, healthcare professionals today, by and large, make every effort to adhere to sworn standards of upstanding, universal patient care. Although the healthcare team can attempt to educate families of that fact (as our participant did), it often is not possible due to a lack of resources or trust.

On the opposite end of the continuum, there are families who are wealthy and anticipate a certain level of treatment. Their privilege affords them a sense of entitlement that can influences their expectations concerning clinical care, as well as the nature of patient-provider interactions. Nurse Participant #26 describes:

We have families that come here from all over the world, some with a lot of money. So they expect to be treated a little differently. You’re kind of servants… No matter what [nurses] do, they’re still kind of being treated like the servant in the back room, dismissed and stuff like that. They don’t want to talk to you [nurses], they only want [males or
People that have a lot of wealth come over here and expect you to cure their kid’s cancer, when it’s too late in the game to cure it.

Although wealthy families have much different expectations than low-income ones, the underlying message remains the same: there is distrust and mischaracterization of the healthcare system; and money is necessary to buy you better service. These toxic beliefs can create contentious relations between the patient and provider – and, unfortunately, can spread to communities as well. Although it is true that American medical institutions can include for-profit institutions, healthcare is not bought and sold outright. Additionally, TCH is a not-for-profit organization, serving the diverse communities of Houston and beyond. These beliefs of these patient families are painful indicators of miseducation on a grand scale.

In this sense, education need not refer only to the formal years of learning that a patient family member has undergone. Education can also refer to one’s ability to effectively navigate the healthcare system, including learning about systematic structures (e.g., the difference between a resident and attending physician), knowing one’s rights (such as to an interpreter), and accessing other important resources. Commonly, individuals who are from lower socioeconomic levels or are less educated are already at a disadvantage; they are less familiar with such systems. Patient Participant #45’s story, quoted earlier in the preceding “Language” section, is a good example of this: non-native English speakers did not know that they could request translation, disagree with their provider, or even ask additional questions. Indeed, educating the patient emerged as an important function in overcoming cultural barriers. Although it is not the focus of this particular research, there exists large bodies of literature on the useful role of patient education in ensuring effective care.
Taken together, these barriers introduce a number of unpredictable challenges during the course of patient-provider interaction. Please see Table 3 for a description of common cultural issues. Importantly, we must also recognize the intersectionality of each of these barriers, as they do not operate in silos. In fact, participants often described issues in which several dimensions of cultural discrepancy were comorbid and compounded. This underscored how complex and unique patient-provider interactions can be. As physician Participant #3 summarized:

It [cultural competency] doesn’t necessarily have to do with a foreign person. It doesn’t have to deal with another language. What I learned in training – for example, [when] you’re dealing with a white, English-speaking family in a city, [it’s] very different than working with your white, English-speaking [family] in a rural setting. Priorities, values – all of those are very different. Education is different, right? Cultural competency – there’s so much more, right? It involves economy; it involves education. It involves language, religion, all of the above.

**What cultural competencies are needed?**

Providers and patient families provided ample examples of the ways in which cultural mismatch could interfere with the course of care – begging the question: how do we address these? This research thus sought to identify concrete pieces of knowledge, skills, and attitudes that could aid in these areas of improvement.

Interestingly, as we iteratively collected and analyzed data, teamwork began emerging as a compelling area meriting further investigation. This research did not begin as an investigation on teamwork competencies. Although the structured interview script included probes about teams (Appendix B), these questions were rarely asked and focused primarily on how cultural differences might affect the team as a unit. However, as we extracted competencies from the
transcripts, it became clear that (1) group-level processes were salient in understanding and managing cultural issues, and (2) there were notable commonalities between these two research areas. As a result, after coding a substantial number of transcripts, we revisited and reviewed the codes at a higher level and found an overlap between cultural competency and teamwork dynamics.

A team is a set of two or more individuals that adaptively and dynamically interacts through specified roles, as they work toward shared and valued goals (Dyer, 1984; Salas, Dickinson, Converse, & Tannenbaum, 1992). Teamwork, specifically, refers to the processes that inhibit or contribute to team and task performance; they are simultaneous and recursive (Salas, Stagl, Burke, & Goodwin, 2007). In our research, teamwork appeared as a discrete family of codes (for example, interdisciplinary teamwork and continuity of care were both explicitly described by participants), as well as an overarching framework for cultural competencies (with team-based insights and constructs describing and transposing onto data).

The medical field is well aware of the criticality of teamwork, given the interdisciplinary and interprofessional nature of patient care. Many researchers have examined team processes on performance and effectiveness, finding robust positive effects on patient safety (Barrett, Gifford, Morey, Risser, & Salisbury, 2001; Smith & Cole, 2009; Weaver et al., 2010). Consequently, there has been widespread adoption and implementation of teamwork-related initiatives in healthcare (Clancy & Tornberg, 2007; King et al., 2008; Mayer et al., 2011; Weld et al., 2015). Although cultural competency has almost exclusively been linked to attitudinal markers of care (e.g., patient satisfaction), teamwork has seen the opposite effect. Many teams-based research has focused solely on the clinicians and medical, performance-based outcomes of patient care. As a result, professionals highly value teamwork and its direct clinical outcomes – but less is
understood about how it may impact more relational aspects of care provision. Indeed, scarce research has examined the intersection of healthcare teamwork and the patient-provider relationship.

Thus, one important extrapolation of this research is the inclusion of the patient (which extends to patient families, especially in the case of child patients), in the healthcare team. Half of the healthcare providers interviewed explicitly described the importance of engaging patient families in care. As one physician described: “I start [a] discussion by indicating that we are one team. The core of that team is the family. The patient, child, and his or her parents or family, whoever that family or child… that’s the core. The rest of us, then, are in circles of support.” These sentiments were echoed not only by other providers, but patient family participants as well. Given an inherent investment in the care of their children, patient families want to, and should, feel like a valued member of the healthcare team.

Indeed, the patient fits defining dimensions of team members. They are mutually interdependent (Saavedra, Early & Van Dyne, 1993) with the healthcare professionals. Like the other members of the team, patient families, with their intimate knowledge of individual health history and personal circumstances, can also contribute uniquely through diverse and distributed areas of expertise (Salas, Stagl, Burke & Goodwin, 20017). The movement for patient-centered care, in which patients are empowered to become active advocates for their health (Reynolds, 2009), has been an important step in this direction. By enhancing the patient-provider relationship and encouraging both parties to reach mutual understanding and agreement on the care plan, it elevates the patient’s role such that they have parity in the healthcare team. Trends in American healthcare structures have also increased the authority and autonomy of patients, including during shared decision-making processes (Kon, 2010). Altogether, both these
theoretical and observed dynamics suggest that the patient should be seriously considered as contributing and critical members of the healthcare team.

Not only did our data help re-frame team composition in healthcare, as above, but it also emphasized the team-related abilities inherent in cultural competencies. Indeed, 36 (80%) study participants discussed the importance of teamwork in facilitating culturally sensitive care. Given the prevalence of these themes, we thus applied a teamwork research lens while synthesizing findings. In particular, once we had coded our data inductively, we looked to the teams literature for organizing principles and translatable insights. We thus identified that individual cultural competencies aligned with teamwork constructs, thereby crossing from the person unit to the team levels.

Like cultural competency, teamwork is a “journey” rather than a “destination”; it is not static and time-restrained, but involves ongoing dynamics. In an updated review of team competencies, Salas, Rosen, Burke and Goodwin (2009) identified the three essential coordinating mechanisms that maintain teamwork: creating shared knowledge structures, communicating effectively, and developing trust among members. These constructs took on greater meaning as our research team progressed in data analyses. These mechanisms mapped onto each dimension of cultural competency: shared mental models, closed-loop communication, and mutual trust. In organizing cultural competencies, we built off of the well-established framework of knowledge, skills, and attitudes. Below, we describe these dimensions and their pertinent contributions from the teamwork literature.

**Knowledge**

Clinician participants expressed a desire to obtain knowledge about common cultural groups served by TCH. The most frequently cited groups were *Hispanic/Latino, Muslim, Middle*
Eastern, and Jehovah’s Witnesses cultures. TCH serves a predominantly Hispanic/Latino population (comprising 44.1% of patients in the ICU, compared to 29.0% White and 19.0% Black, the other most common racial and ethnic groups) and has strong partnerships with the Saudi Arabian embassy, among other international areas. Table 4 demonstrates the cultural groups in Houston most commonly cited by study participants, as well as the cultural barriers that frequently coincided with each.

As a physician Participant #18 described, “It’s going to be hard to adapt [to different populations] properly if I do not have a significant amount of knowledge related to different cultures or ethnic groups.” Indeed, one of the difficulties in providing for diverse patient populations is metacognitive monitoring, or “not knowing what you don’t know” – being unaware of the cultural faux pas or trespasses that may occur (Glucksberg & McCloskey, 1981). Although cultural exchanges may not seem directly related to clinical care, it can certainly impact the patient-provider relationship and set up the course of care down the road. For example, physician Participant #17 expressed: “Do I shake a man’s hand? Do I approach a mother? Who makes the decisions in the family? Are there times during the day that I should not enter the room?” Having a functioning understanding of cultural issues, as well as common norms and practices, can greatly assist providers in navigating these interpersonal minefields.

There is an important caveat, however, to increasing such knowledge. Healthcare providers must carefully navigate the tension between familiarity with cultural groups and overreliance on stereotypes. Although it is helpful to understand the breadth of cultural practices and beliefs, it is important not to lapse into prejudiced thinking. As summarized by physician Participant #14: “I don’t think stereotypes are necessarily bad, as long as [they are] not inherently negative, judgmental stereotypes. There are stereotypes there for a reason. There are
real cross cultural issues... I don’t think it is unreasonable to create that” understanding. Indeed, there are benefits to using heuristics, particularly in the time-pressed constraints of medicine. However, it requires careful and responsible awareness and self-monitoring. The goal of cultural competency should not be to perpetuate unhelpful, or even harmful, generalizations.

This begs the question: how can we increase didactic cultural competency without “boxing in” groups of people? The study participants frequently expressed the need to understand patient individual differences – that is, the unique idiosyncrasies of each patient family, independent of group membership. Although knowledge is certainly helpful at baseline, it cannot be comprehensive, given the inherent diversity across families and within populations. Knowledge alone may be too rigid in its characterizations of people; cognitive learning must be augmented with other, more fluid competencies. Skill-based and attitudinal competencies thus help providers maintain adaptive mindsets and adjust behavior to the individual needs of each patient family.

**Team process: shared mental models.** By increasing knowledge about common cultural norms, providers can more readily form shared mental models with their patients: knowledge structures that enable teams to form accurate expectations, coordinate their actions and adapt their behavior (Cannon-Bowers, Salas, Converse, & Castellan, 1993). Shared mental models help groups of individuals establish *mutual understanding* and plan group behavior more effectively, which is particularly salient given our finding that cultural barriers arise most often during decision-making. For example, if a provider knows that certain cultures rely heavily on folkloric medicine, they can address this head-on and compromise with the patient family, such that any alternative treatments are not contraindicated with the medical plan. Healthcare professionals
who have a functional knowledge of common cultural norms will be able to take the perspective of their patients and close any gaps in understanding more effectively.

**Skills**

By and large, communication was the competency most frequently mentioned by study participants. Healthcare providers can optimize communication through a number of variables surrounding and within discrete clinical encounters. First, by managing the context of the interaction, providers can create literal and figurative space wherein cultural differences can be recognized and resolved. By carefully adjusting the *audience* (e.g., including those who are decision-makers in the family), the *frequency and timing* of the interactions, and the *physical setting*, providers can help ensure patients are maximally receptive and engaged. Of course, this is easier said than done, given the clinical priorities and organizational structures inherent in healthcare. However, providers can attend to some key variables of these moments, as demonstrated by physician Participant #13:

As far as the setting or environment you set up… It becomes dicey, you know. Do you do [meet] in the patient’s room? Do you do this in a separate conference room? There are pros and cons to both. Sometimes parents are more averse to one or the other. […] For an Oncology patient, whose family hopefully has had multiple end-of-life conversations at some point, walking to a solitary room is […] almost dooming. It’s not a walk they like to take, so sometimes they just like to stay where they are in the room and hear it. If it’s not a patient that dies gradually over time, it’s more of an acute process, […] the parents are probably more inclined to leave the room and go with you to a separate environment. Setting up that environment [is part of] the preparatory phase of it.
By managing the variables of surrounding these interactions, providers can ensure that patient families are optimally comfortable (given possibly tragic circumstances), such that cultural barriers can be identified and addressed appropriately.

Once everyone is in the room, it is critical that providers continue to intentionally communicate. Providers must make their best effort to screen patients carefully, including reviewing and documenting culturally relevant information in medical records. During interactions, they can establish mutual understanding through the critical skill of listening and curating wording so that their messages are accessible. These communication components were among the most highly coded themes across the board; importantly, nearly every patient family in the study emphasized listening, as in the case of Participant #47:

We definitely had providers we got along with better. We just felt [they] understood our position better… One of the biggest standouts for why is that they listened. The minute somebody shuts you down, they start answering questions before you can [ask them], I know they’re not hearing what I’m saying… Sometimes we’re so aware that they have a busy schedule, we don’t want to slow them down with questions that you don’t know if they’re important or not. Getting that kind of okay, that you can ask them something, made it a lot easier.

Indeed, communicating not only requires actions, such as listening and wording effectively; it also involves inaction. Providers must step down appropriately so that patient families can be heard, important areas of misunderstanding emerge, and plans of care amended accordingly.

Should any miscomprehension become evident, providers should then educate the patient as much as possible. Notably, patient families described a need for education across many aspects – from hospital resources to clinical conditions – and a desire for more advocacy. Once
again, such tasks are difficult when compounded with other very pressing clinical and logistical needs; however, they can drastically improve the experience and care of the patients and their families. Communication skills can also contribute to the knowledge stores shared by the healthcare providers and participants, demonstrating the synergistic relationship between competencies. Table 5 summarizes each of these points of intervention, demonstrating how effective communication can be optimized through variables both external and internal to the interaction.

**Team process: closed-loop communication.** Each of these behaviors encourages effective communication, such that it is clear all involved parties have received and perceived the same message. In the teamwork literature, closed loop communication is defined as the team’s ability to exchange information, acknowledge receipt of information, and to establish correct understanding of the information. Closed-loop communication is particularly relevant in healthcare, where acknowledgement of requests and shared situation awareness are vital (K. Wilson, Burke, Priest, & Salas, 2005) and where teams of medical professionals are tasked with understanding clinical and environmental clues and transferring critical information in high-stakes settings (Miller, Riley, & Davis, 2009). Closed loop communication is an important component of managing interactions with patients, particularly patients from diverse cultural backgrounds. For example, closed loop communication can be critical in the patient hand-off process in relation to both clinical and interpersonal aspects of the provider-patient relationship. This type of thorough communication process ensures that providers are considering their interactions with patients and other team members in a more holistic manner, considering aspects of the communication process ranging from listening to educating a patient where necessary to sharing vital information about a patient family’s wishes with their team members.
Attitudes

Last but not least, attitudes are an essential dimension of competency, particularly since cultural competency inherently and importantly involves affective prioritization of intragroup diversity. In fact, in order for knowledge- and skill-based competencies to take root, individual attitudes must first be aligned to support cultural competency (Deardorff, 2006). Physician Participant #8 described some of the emotional dynamics of working in the Critical Care unit:

At the end of the day, we are here to provide a service, to take care of people – at least in our field, people’s critically ill children. I never, ever, ever, ever want to know how they are feeling in that moment, because I pray to God every day that I’m never in that situation with my own family or children. That being said, I give a lot of passes [with difficult patient families], because the system is not perfect and the families are under tremendous stress, under extraordinary stress that we just cannot imagine. At the end of the day, my job is not to judge them, but to take care of their child. And look, there are some people who [the healthcare system] doesn’t work for them – they don’t know you, they don’t trust you. But then I see the onus upon me to help build that relationship.

This quote touches upon the need for a sense of shared humanity, echoed by other interviewees. All the participants described the essential nature of feelings and perspectives in cultural exchanges. In healthcare providers, having these open, tolerant attitudes can help build a connection and access more clinically-relevant information. Patients stressed the desire for social support and patience from their providers, especially in times of duress. These attitudes set the foundation for a stronger patient-provider relationship, from which knowledge- and skill-based competencies can flow. However, participants would often use descriptors such as empathy, self-
awareness, sensitivity, and open-mindedness interchangeably. To this end, we defined and categorized attitudes into four major areas, described and illustrated in Table 6.

Although attitudes can and are often understood holistically, it can be helpful to parse apart the many dimensions of affective cultural competency. Compassion and empathy refers to a focus on shared humanity – an understanding that there are mutual elements of the human experience that transcend differences, e.g., the pain of parenting a sick child. Conversely, sensitivity and awareness focuses on recognizing and respecting potentially different aspects of culture; importantly, it is framed in a positive and curious way. Objectivity and open-mindedness takes a related concept but focuses more on individual, rather than interpersonal, processes; it is the acknowledgment of diversity of opinions other than one’s own. Finally, self-awareness and emotional intelligence center on an individual’s own metacognitive processes. In order to be culturally competent, one must recognize his or her own biases and experiences, and the ways in which they inform interactions with the outside world. Collectively, each of these attitudes supports a more culturally competent provider and a more “human” experience with the patient and family.

Indeed, all of the patient participants emphasized the importance of connecting, on a “human level,” with their providers. Not only was it helpful to feel emotionally supported by the staff, but it also helped quell fears. Patient family Participant #45 expanded on a belief common to those from non-Western cultures: “Some people say if I tattletale [on a negative experience], they’re not gonna treat my son, they’ll treat my son even worse.” Patient family participant #10 echoed and expanded on these thoughts:

There's always this fear in the back of your mind that [...] if something were to happen in the night time, [...] they're not going to do [what is needed] for your child. There's this
sense of needing to socially negotiate, even when you're angry or upset – of feeling like you need to finesse the situation [and] maintain a relationship – so that your child's care isn't compromised in some way. I know that's probably more to do with my own psychology, but I talk to many parents who had the same feeling… There's lots of times when I would be angry. I remember one mom told me, "If that was my child, I would just throw a fit." I'm like, yeah, but you know, these people have to take care of my son. I don't want to alienate them or anything, and make them not want to do the best things for my son.

These widespread myths, despite being perpetuated by factors outside of the provider’s control, can be mitigated through the sensitive provision of care during clinical encounters. By creating a more attitudinally welcoming environment, providers can ensure that patient families feel unconditionally supported and safe.

**Teamwork process: mutual trust.** All of the participants identified the key role of attitudes in creating culturally competent atmospheres. Each of these affective components fed into a central, unifying theme from the teamwork literature. Mutual trust, or the shared sense of trust amongst members of a team, has been linked to a number of positive team outcomes including improved performance, team member satisfaction, and problem solving effectiveness (Costa, 2003; Zand, 1972). Mutual trust is a key component in building positive interpersonal relationships amongst team members and has the power to enable teams to buffer the relationship between task and interpersonal conflict, preventing misattribution of task conflict as interpersonal conflict (Simons & Peterson, 2000). In a healthcare setting, mutual trust can facilitate positive relationships amongst healthcare team members, creating a greater sense of continuity of care for patients and a more positive experience with healthcare. Teams high in
mutual trust may demonstrate more compassion, empathy, and sensitivity both within their teams and to their patients.

Relatedly, psychological safety is a shared belief held by members that a team is safe for interpersonal risk-taking (Edmondson, 1999). Extended into a clinical space, it is important for providers and patients to establish attitudes (e.g., empathy and sensitivity) that create confidence in the relationship – such that anxieties, like the one expressed by patient family Participant #45 above, are put to rest. Both patients and providers specifically and frequently mentioned the importance of establishing trust and safety in moving forward in culturally competent, and clinically effective, patient care.

Additionally, a related, key construct drawn from the organizational science oeuvre is that of team orientation, or an individual’s propensity to function as part of a team and accomplish goals through working in group settings (Driskell & Salas, 1992). By fostering atmospheres of inclusivity and openness, providers may create greater feelings of teamwork; this is especially important given that patient families in our study expressed a desire to feel that healthcare providers were “on their side.” By treating patient families and interdisciplinary and interprofessional providers as contributing members of the healthcare team, providers can thus create a unified front and help bridge cultural differences.

**Team composition**

One of the strengths of ethnographic research is the organic emergence and synthesis of previously-unknown themes and relationships. In the process of identifying individual-level cultural competencies, group efforts came up as a method of enhancing care for diverse populations. During these processes, the physician, as a decision-making authority, can help
control many variables; however, they are certainly not the only unit of influence. Specifically, the healthcare team, as a whole, can work together to close the gap in cultural barriers.

In fact, one of the most frequently mentioned strategies was expanding the team by bringing in experts. As mentioned previously, it is critical to consider and include the patient as a contributing member of the healthcare team. Beyond this, primary clinicians can and should also draw on medical and ancillary support staff to close gaps. As physician Participant #7 summarized, it is important for providers to “delegate something [they don’t] have expertise in – delegating it to another role, and then trusting that that role [holder] is going to do their job well.” This is particularly important given pediatric care or more complex clinical cases, wherein patients often have complex conditions requiring many interdisciplinary teams. However, as illustrated by nurse Participant #27, these experts need not be purely clinicians; there are many ancillary and support staff who play critical roles in the delivery of effective care:

We had an Orthodox Jewish patient. Questions arose between different people about whether or not it was ethical to give [the medication] heparin because heparin is a pork derivative, or it’s made from bovine [products]… It was really hard to figure out who to ask. We didn’t really want to ask the family because the patient was actively dying, so we didn’t want to worry the parents about it – but some of the providers were nervous. It would have been easy to know, “We have a rabbi that we can call and ask this difficult question.”

Healthcare team composition can and must extend beyond the clinicians. As aforementioned, it should include the patient and, in some cases, the patient family, as they are increasingly influential and offer key information otherwise unknown. Other support staff and community members should also be involved when appropriate, as they can offer critical resources and
insight into complex situations. Table 7 demonstrates instances in which different experts and ancillary care members may be critical resources.

However, as the size(s) of the healthcare team(s) increase, it is also critical to manage them effectively. Indeed, the adage “too many cooks in the kitchen” holds true here, as too many people can actually create more problems than solutions. Nearly all of the patient family participants described the overwhelming task of managing their child’s care, since children in the critical care often have comorbid conditions requiring multiple specialists. Patient family Participant #35 described these difficulties coming to a head during the final days of her daughter’s life:

We told one of the doctors that we wanted to talk to everybody involved in her care, in one room. [Up until then], everybody was coming and just giving us tiny little bits of information and then they would be gone – and then the next person would come and they would say maybe the same thing, maybe not the same thing. I told him, “Can we all get together and can you all hear each other? I know you’re probably writing this [in the medical records], but can we all hear what everybody is saying [so] that we can make a decision as to where to go?” At the end, we were definitely making more of an effort [to make] decisions than at the beginning. At the beginning, when you first start, not only is there that trust –that you know they’ll take care of it – but there was a definite lead, a definite person who was leading the effort. I think that was lost, a little bit, at the end.

In this situation, as well as others described by participants, the confusion and inconsistency caused by interdisciplinary healthcare teams required the patient family to take on a managerial role – an additional burden in the midst of an emotional and stressful time. Although additional infrastructure would certainly help (e.g., one patient family participant described dedicated “care
managers” assigned to coordinate oncological patients), organizations and individuals can take conscious steps to increase teamwork efficiency. Creating more formalized team management systems can also naturally reduce the burden on the patient family. Therefore, it is critical, but not enough, to have the correct people in the room; there is also a real and pressing need to organize and coordinate them effectively as a team.

Moreover, appropriate team management can increase continuity of care, or the consistency of coordinated care between the patient and healthcare provider(s) (Haggerty et al., 2003). As described above, all of the patient families interviewed discussed, in detail, the difficulties of managing multiple interdisciplinary teams. Here, we can turn to traditional teamwork wisdom. Standard best practices such as debriefing have been shown to positively enhance outcomes including teamwork and patient satisfaction (Smith & Cole, 2009). These essential team management dynamics become even more important when patient families are culturally different and unable to make sense of, or manage, their child’s care. By ensuring that there is a clear plan, chain of command, and work flow, gaps in care can be prevented and addressed.

Overall, the synthesis of our empirically-driven findings suggest an important, interdisciplinary relationship: a culturally competent healthcare provider is also a good “team player.” As physician Participant #18 described:

Theories or principles related to teams or teamwork: that’s probably going to be a good conceptual framework for being culturally competent. Regardless of your ethnic background, your experience, or your languages, if we see each other as equals or part of the team, then that’s not [just] professional identity. That’s almost Humanity 101, right?
Indeed, many of the abilities involved in being an engaged and involved team member (such as building shared mental models, communicating effectively, and creating trust and safety) lend themselves to developing culturally competent environments; a summary of these cross-cutting concepts is shown in Table 8. These organic relationships, however, would not have emerged without the systematic, qualitative approach applied herein. Scientifically, our work also encourages interdisciplinary collaboration, particularly in that managerial research can offer meaningful knowledge to the public health issue of cultural competency.

**What training practices can be used to develop and enhance these necessary competencies?**

Although the vast majority of participants agreed that cultural competency was important, these values were not borne out in practice. Unfortunately, the majority of healthcare providers reported a lack of formal training in cultural competency. Twenty-seven of the 31 physician and nurse participants (87.1%) explicitly mentioned a lack of formal training during their medical education. Much of the time, inexperienced providers had to rely on their own motivation – driven by individual differences to seek out self-directed learning – in order to fill in any gaps in cultural competency. Otherwise, the most common methods of acquisition of cultural competency were through the informal avenues of on-the-job training and modeling. Healthcare providers did report that these methods were adequately useful, but that they were not enough. With few exceptions, they agreed that formalized training would be helpful.

The strongest request in response to this particular research question was a universal training truth: educators must tailor the program, both in terms of content and delivery, to the specific audience. For example, an intervention should consider the specialty of the providers, given that culture may manifest differently given the nature of care. As a nurse Participant #29 described, “Different things would be taught to an ICU nurse to be culturally competent, versus
an acute care nurse.” Indeed, as demonstrated in this research, end-of-life planning was strongly connected with cultural barriers in the critical care unit; in different acute care settings (e.g., orthopedics, emergency medicine), issues may arise during other incidents, such as determining dietary and feeding schedules or medication adherence. These points towards the importance of training needs analyses (Brown, 2002), in which data is gathered and synthesized to identify the needs of a training program. By clarifying interventional goals, trainings can be personalized and optimized, in terms of both content and delivery, to be maximally effective.

Give this, critical care providers in our study identified different training needs, based on stage of career. Table 9 lists each of these stages, the associated competency that should be emphasized therein, and the methods of delivery that co-occurred most frequently based on our qualitative coding. First and foremost, cultural competency is an ongoing process (Campinha-Bacote, 2002); therefore, it should be taught and evaluated continuously, as well. By introducing and revisiting these diversity-related topics, healthcare providers can better stay aware of these issues and internalize their importance.

During the sensitive, developmental stages in a healthcare provider’s career, it is critical, to instill attitudes that prioritize cultural competency. This can be done through formalizing methods of acquisition, including through didactic methods that introduce the importance of cultural competency (e.g., assignment of case studies and incorporation into clinical exposure). One physician described folding in cultural elements with appropriate medical procedures – for example, by discussing psychosocial information when interviewing new patients about their medical histories. By systematically raising awareness of cultural competency early on, the healthcare system can signal its value on impressionable clinicians.
Once providers have completed their graduate training, the emphasis should then shift onto acquiring the *skills* necessary to provide culturally sensitive care. Behavioral competencies are best learned and internalized through *practice*, which is typically seen in *on-the-job training*. Indeed, given the intense needs of post-graduate training, any new information must be streamlined to be maximally impactful. Several providers described glossing over the annual series of online training modules required by their institution. These generalized programs suffer from the problem that many other diversity trainings do – they are perceived as a requisite to “check off,” rather than meaningful activities. Therefore, cultural competency education must be designed and perceived as specifically and usefully as possible.

Finally, as providers near the peaks of their career, *knowledge* should be crystallized, and any gaps therein supplemented with *just-in-time training*. This cognitive internalization of cultural competence positions providers so that they are not only just resources to younger colleagues, but so that they are also able to emphasize the importance of cultural competency once they assume leadership positions. Most importantly, having the support and advocacy of senior faculty creates *organizational buy-in*. The importance of an organizational level of investment, signaled by leadership and demonstrated through policy, cannot be understated in creating lasting change.

Indeed, although this line of research ultimately endeavors to develop a training program, the issue of cultural competency extends far beyond a single, or even a series of, intervention(s). In order to truly turn the tides towards more sensitive and diverse environments, change must occur at multiple levels. Though this qualitative research used a single methodology to analyze training needs (i.e., interviews), it was able to identify gaps at several levels of the healthcare system: individual, team, organization, and system.
At the individual level, cultural competency is simply not maintained in employee consciousness. In the words of physician Participant #6, “Culture is ignored, not intentionally, but it is just not what we focus on as physicians.” Certainly, given the oft-emergent clinical responsibilities of healthcare providers, cultural competency can and should not take precedence. However, sensitivity can be maximized when possible. Training providers throughout the career span can help bring cultural competency to the fore. As mentioned earlier, attitudinal awareness should be imparted early during education, and continually augmented with formal development of knowledge and skills.

Teams may also value and incorporate culture in disparate manners, given that groups may encounter and respond to cultural issues more frequently and appropriately than others. Physician Participant #16 described: “Cultural competency is present in medicine, but it's not global and it's more present... and valued in some specialties than it is others.” Continuity of culturally competent care can be increased through policy: the formalization and communication of procedures that take patient cultural needs into account. For example, by systematically documenting important information (e.g., religious preferences, languages spoken), providers can anticipate and respond uniformly across services.

Building upon this, the organization has the authority and ability to boost the signal of cultural competency. Institutions (academic medical centers, hospitals, clinics) are responsible for developing organizational cultures that promotes and prioritizes sensitivity to diverse groups of people. Physician Participant #1 recognized that the advancement of cultural competency “might actually take the hospital system to say [we] have a professional responsibility.” Indeed, organizations can signal value through the broadcasting of communications, development of programming, and formalizing of operations.
Finally, the healthcare system, as a whole, needs to value cultural competency. Senior faculty physician, Participant #10, stated strongly that, “You have to have the industry to want to do it [cultural competency] well.” In order to do so, we must create value and incentivize cultural competency. One major way of doing so is by tying it to health outcomes. This connection is critical, given that providers often perceive interpersonal considerations are seen as a hindrance to effective clinical care.

**Discussion**

The overarching goal of this research was not to prove or disprove specific hypotheses, but to extend our understanding of cultural competency organically and as a whole. We can distill the results of this study into five major points: three research findings and two best practices. Taken together, they paint a comprehensive picture of the challenges and strategies surrounding cultural competency in hospital settings.

**Research findings**

This project contributes to the literature in three major ways. First, it identifies a major pain point in the provision of sensitive care. This work has also revealed how teamwork processes may contribute to cultural competency. Finally, its findings allow us to revisit and refine an existing theoretical model of cross-cultural competency.

**Decision-making as the critical incident**

This research identified *when* cultures become salient in a clinical setting, as well as *what* specific issues emerge (i.e., Table 3). Variable cultural barriers may emerge in healthcare settings; in the pediatric ICU, these often revolve around decision-making. Clinical decision-making becomes the stage upon which these interpersonal differences play out, particularly during end-of-life planning and care. Physicians unanimously agreed that there were not enough
resources to help health providers approach end-of-life decision-making with patients. Indeed, as Physician Participant #1 summarized, “We really don’t know where to turn to get help in any of these [cultural competency] areas, especially about really critical decision-making at end-of-life.” These sentiments were echoed across the sample populations, and align with other research indicating the importance of culture during decision-making. Indeed, interprofessional researchers in other subspecialties (e.g., nurses and family physicians) have identified the importance of cultural competency at the end-of-life (Berger, 1998; Crawley, Marshall, Lo, Koenig, & End-of-Life Care Consensus Panel, 2002; Kagawa-Singer & Blackhall, 2001; Mazanec & Tyler, 2003; Norton & Talerico, 2000; Searight & Gafford, 2005).

Accordingly, scientists and practitioners have developed best practices to facilitate these conversations, including: beginning the conversation early and sustaining it; discussing the modification of treatment goals; balancing hope and reality; and maintaining empathy, openness and honesty (Granek, Krzyzanowska, Tozer, & Mazzotta, 2013; Levin, Moreno, Silvester, & Kissane, 2010). Our work, although not necessarily focused on end-of-life conversations, underscored many of these techniques, including communicative and attitudinal adjustments. These strategies can help bolster communication, set expectations, and build trust between the patient, family, and provider, thereby facilitating the transition to end-of-life planning. While it is important to exercise these competencies throughout the course of acute and chronic patient care, they are thrown into sharp relief during decision-making – for example, when patients, families, and providers must choose whether or not to undergo an elective procedure, transition between hospital or home environments, or withdraw treatment entirely. Decisions such as these are particularly complicated, as they inherently tap into deeply engrained personal and cultural beliefs and practices, which require nuanced understanding to mediate.
This specific thesis extends the body of literature on end-of-life decision-making by synthesizing different facets of the process most relevant to intensivists. Indeed, Critical Care providers deal with death in uniquely acute circumstances, thereby requiring efficient identification of cultural barriers. Factors that can create conflict between clinical practices and cultural sensitivity include (but are not limited to): religion, family structure and gender hierarchy, language, and socioeconomic status and education. Each of these categories results in unique complications in the decision-making process, as shown in Table 3. Physicians can therefore be trained in critical knowledge in these areas. The identification of barriers will help inform future cultural competency research and interventions in the critical care and pediatric services, allowing scientists and practitioners to hone in on these especially sensitive areas.

**Cultural competency and teamwork**

Perhaps the most exciting outcome of this work is the contribution of the industrial/organizational literature on teamwork to cultural competency frameworks. The synthesis of our empirically-driven findings suggests an important relationship: a culturally competent healthcare provider is also a good “team player.”

In considering how cultural competency may interact with teamwork, we must also look to the large body of work on the role of diversity within teams. Certainly, cultural competency is a facet of the larger construct of diversity, focusing on the specific type of team formed by patient and provider. More broadly, many social and behavioral scientists have examined how diversity may weaken or strengthen teamwork. We may categorize diversity in terms of demographic diversity (e.g., observable attributes or demographic characteristics such as age, gender and ethnicity) and psychological diversity (which involves underlying attributes, such as skills, abilities, personality characteristics, attitudes, beliefs, and values, and may include
functional, occupational, and educational backgrounds; Landy & Conte, 2009; Van Knippenberg & Schippers, 2007). These distinctions in types of diversity have been determined and explored by prior research – and can also be applied to the patient family-provider team.

It is no surprise that diversity can breed conflict within teams. The teams research aligns with the cultural challenges between patients and provider introduced earlier in this paper. Tsui, Egan and O’Reilly (1991) found that demographically different individuals are less psychologically and behaviorally committed to the organization, potentially due to discomfort. Although this research focused exclusively on work teams, it can also be extended to the patient family-provider context. Many of our participants (both patient families and providers) discussed feeling disconnected from individuals who appeared to be from different cultural groups; some patient families also expressed a desire to work with providers who were more demographically similar to them. The cultural differences between patient family and provider can, therefore, sow seeds for potential breakdowns in teamwork down the line. Unsurprisingly, teams with diverse functional backgrounds and skills also face greater challenges in coordination and communication (Ilgen, 1999). This finding from the literature was certainly supported by our findings, in which cultural mismatch complicated continuity of care.

On the flip side of the coin, however, other research has also identified benefits of diversity within teams. Although homogenous groups may initially perform more effectively, diversity can lead to more creativity, idea-generation, and decision-making (Horwitz & Horwitz, 2007; Magjuka & Baldwin, 1991; Watson, Kumar, & Michaelsen, 1993). That is, diverse individuals bring different perspectives and can therefore generate more innovative solutions. These findings call to mind how patient families and providers must collaboratively develop plans of care. Notably, however, creativity is typically not required of the patient family-provider
team in the same way that it may be beneficial in work teams. The dynamics of power and clinical expertise often favor less fluid leadership by clinicians, such that greater idea generation can create more noise and tension. Thus, although diversity within teams can be a double-edged sword (Jackson & Joshi, 2004; Milliken & Martins, 1996), the downsides appear to outweigh the positives in the patient family and provider relationship. Indeed, as demonstrated by our study, cultural diversity typically impedes the development of the shared mental models critical for clinical decision-making. Therefore, it is critical to bolster teamwork competencies to combat the detrimental effects of cultural diversity among healthcare team members.

This investigation demonstrates important, previously unknown linkages between teamwork and cultural competencies. Indeed, the very definition of cultural competency mentioned previously (“the ability to establish effective interpersonal and working relationships with diverse individuals; Smedley et al., 2003) overlaps with that of teamwork (“processes that inhibit or contribute to team and task performance; Salas, Stagl, Burke, & Goodwin, 2007); both emphasize increasing interpersonal skills to enhance group-level performance. Accordingly, many of the abilities involved in being an engaged and involved team member (such as building shared mental models, communicating effectively, and creating psychological safety) lend themselves to developing culturally competent environments. These relationships, although intuitive in hindsight, may not have been uncovered without a qualitative, open-ended method of inquiry.

The cultural competency-teamwork connection has implications for both science and practice. Scientifically, it encourages interdisciplinary collaboration, particularly in that industrial/organizational psychology can offer meaningful knowledge to the public health issue of cultural competency. In the field, these findings imply that diversity interventions can be
bolstered by team training science. Cultural competency programs can include general teamwork principles to help build necessary abilities. Many of these team-centered programs have useful, actionable tools that can easily be translated into cultural competency contexts. For example, using the team practice of closed-loop communication could help establish mutual understanding with culturally diverse patients, leading to fewer missed opportunities for effective care. These universally useful strategies could make cultural competency trainings more actionable and effective, especially given many of the study providers’ desires for concrete communication tools following any program.

Moreover, the relating of cultural competency and training could also increase organizational buy-in and support. Teamwork training has been universally accepted as an effective tool in healthcare (Hughes et al., 2016); it does not suffer the same skepticism or criticisms plaguing cultural competency. Indeed, as mentioned previously, teamwork has been linked to important patient outcomes, although cultural competency has not yet established these critical ties. Organizations may be more willing to institute a hybrid training model (incorporating diversity and team issues) than a “niche” cultural competency intervention alone. Conversely, cultural issues can be added to team trainings through minor modifications (e.g., changing the patient in a team simulation to one from a culturally mismatched group), thereby bringing in components of sensitivity and awareness. In doing so, organizations can invest more easily, and at lower cost, in healthcare inequity interventions. The overlap between these areas can strengthen the ways in which cultural competency and healthcare team trainings are developed, presented, and implemented.

**An updated theoretical model of cultural competency**
Models of cultural competency can be clarified and updated to include teamwork. Given our study findings, the theoretical model described earlier should be revisited. In Figure 3, I have updated Abbe, Gulick and Herman’s framework with our findings identified by the study.

First, I re-labeled several of the variable categories for clarity. “Antecedents” were renamed “Individual”-level variables, while moderators became “Context”-level variables. These make the distinction between the interaction of the person and the environment in determining cultural competency outcomes. Within mid-level, “regional competencies” was abbreviated to those concerning “geography.” Each of these changes was made for reasons of clarity.

Second, within “individual” variables, “disposition” was broken down into two more distinct categories: “individual differences,” or traits, and “motivation” or states. These are important distinctions, given that our participants discussed the importance of both *individual differences* (meaning an individual’s openness to issues of diversity) and *self-directed learning* (which is dependent on internal drive to seek out information).

Third, I added a second contextual variable. In addition to “situation” and “organization” characteristics, there may also be “task” characteristics that influence the expression of cultural competency outcomes. This is especially relevant, given that we were looking within a subspecialty of medicine. The cultural nuances of the PICU are not attributable to specific situations (e.g., the patient family’s needs) nor the greater organization (the hospital). Therefore, a task-specific variable captures the important influences of the nature of work required.

Fourth, I added a final outcome of cultural competency: “organizational”-level differences. These can include results for the system or institution, such as profit and cultural change. Altogether, the resulting four variables align with Kirkpatrick’s standard model of training evaluation (Kirkpatrick, 1979, 1996), allowing for a more comprehensive understanding.
of outcomes. Most importantly, we developed a visualization of cultural competency’s overlap with the teamwork oeuvre. As shown, effective cultural competency and teamwork share several mutually-beneficial pieces of knowledge, skills, and attitudes.

Although researchers have used qualitative methods to understand cultural competency, none have integrated their empirically-evinced findings with cross-disciplinary theoretical framings. This updated theoretical framework will help us develop and evaluate future cultural competency trainings in several ways. First, it can help elucidate aspects of the audience (“individual” variables) that may influence the design and delivery of the training. It also points to clear variables that can alter the content (e.g., considerations of “language” and “geography,” as well as “context” facets). This model also incorporates our finding on the overlap between cultural competence and teamwork, which is a helpful reminder of the ways in which these two areas can bolster one another. Finally, it draws upon industrial/organizational psychology principles to provide multi-level methods of assessment. This is an important step in creating a more integrated understanding of cultural competency.

Best practices

This research also holds implications for the application of cultural competency in the field. Namely, it highlights the criticality of needs analyses (and, more specifically, the advantages of qualitative interviews). It has also yielded recommendations for the teaching of cultural competency throughout the provider career span.

The role of needs analyses

This research argues for the criticality of open-ended needs analyses in cultural competency training. Prior to data analysis, our research team had not anticipated many of the themes that would emerge and converge. It was only through systematic data gathering and
collection that we could identify the cultural barriers and potential solutions as described above. Moreover, many of the participants discussed groups specific to the institution and geographic location, synthesizing over 28 codes describing specific cultures in the Houston area. The same procedures, conducted elsewhere, would very likely yield different areas of interest and emphases. As mentioned in the introduction, culture inherently is an inherently contextual, ethnographic concept, highly dependent on the area being studied and lens being applied. Therefore, when conducting cultural competency work, as in many other areas of intervention (Brown, 2002), it is especially important to understand the issues specific to that organization. Cultural competency trainings should be preceded by open-ended, qualitative needs analyses.

This research lays the groundwork for some of the best practices in conducting a needs analysis for cultural competency research. Through interviews, it became clear that many of the participants were aware of opportunities to reveal potentially politically incorrect or insensitive beliefs (whether their own or someone else’s). As a result, we recommend using methods that may encourage the psychological safety of the people being interviewed. Emphasizing privacy and confidentiality during data collection is paramount. Qualitative methods, particularly when in person (as opposed to remotely) and one-on-one (instead of in group settings, are also more likely to build feelings of intimacy and encourage participants to share information freely.

However, these require a significant amount of manpower to conduct and analyze; it may be more practical to poll individuals instead. Questionnaire-based data collection is not ideal, given that areas of need may not emerge organically in rigidly-designed surveys. However, if collecting data quantitatively (e.g., surveys or tests), we recommend the use of anonymized surveys in order to encourage truthful reporting of cultural issues. Other, more intensive methods (including job observations, performance appraisals, or assessment centers) may also be useful,
although they require significant infrastructure and organizational buy-in, which may also place constraints on their implementation. A mixed-methods approach may combine the best of both worlds, wherein surveys are broadly administered and a manageable number of individuals are interviewed or observed in detail.

One should also keep in mind that, although needs analyses are critical, there are several areas of cultural competency that appear to be portable. Attitudes, for example, can be cultivated and transported across settings. As mentioned previously, this is a key dimension of cultural competency and should be taught early. Therefore, there is no loss of fidelity or salience in early attitudinal education. For other, more specialized competencies, such as knowledge, needs analyses will be more important in identifying particulars. Overall, although there remains work to be done, our research is helping start an important conversation on needs analysis practices specific to cultural competency.

**The design of training throughout the career span**

Not only does this research generate meaningful findings for a future intervention; it also offers take-aways for cultural competency education as a whole. Cultural competency training should be implemented in specific ways throughout the career span. At each step in healthcare education training, culture can be incorporated and taught in appropriate ways, with particular areas of emphasis. Table 9 illustrates the training content and delivery strategies that co-occurred most often with each of the various phases in a healthcare provider’s career. However, it is important to understand that this is necessarily a *proposed* model for education; rather, it is descriptive of the *current* state. Indeed, we must drill deeper into each of these stages, using the findings as a barometer of common practices, to understand what educational emphases can be helpful or harmful.
First, it is clear that we should attempt to instill attitudinal value systems that prioritize cultural issues early on in training. This will help build a foundation for sensitivity and awareness across the career span. Creating future generations of culturally aware providers is critical in grassroots change, broadening onto the organizational culture level. Therefore, it is important to formally incorporate elements of cultural competency into curriculum. However, it may be possible that attitudes, or belief systems, cannot simply be trained without efforts beyond the classroom. This is particularly true for shorter courses and didactic methods, which have been shown to be less effective in fostering cultural competencies as aforementioned (Davis et al., 1999, 1995; Levinson & Roter, 1993). We also note that, in the context of attitudes especially, it may be helpful to approach this as an educational (rather than training) objective, given that it involves longer-term, more theory-driven approaches. To this end, we must look to other ways in which cultural values can be integrated and cultivated in students. Specifically, the antecedents of the theoretical model shown in Figure 3 include variables with some manipulability, including biographical experiences. For example, by incorporating exposure and immersion to diverse cultures during early graduate education, individuals may be able to organically develop more culturally competent attitudes. These can then be expressed and crystallized through other competencies, including knowledge and skills, and further developed down the road.

During post-graduate training (such as during residency and fellowship), providers typically have more opportunities to practice their skills during on-the-job training. It is during this phase that physicians, nurses, and other clinicians can also apply communication and management strategies that assist with bridging cultural divides. By the time that providers move to more senior levels (e.g., attending physicians, charge or head nurses, administration roles),
their knowledge has crystallized. Accordingly, many of the experienced faculty provider
participants did not express a need for broad cultural competency training. Rather, they preferred
“just-in-time” didactic training, when the need for specialized knowledge arose due to a real
patient case. Such information, on an as-needed basis, would help fill in any gaps in providing
culturally competent care. With a more complete understanding of cultural barriers and care
strategies, senior providers would also be able to advocate for these issues and generate
organizational buy-in, sustaining the cycle of cultural competency.

The participants mentioned a specific type of competency during each stage: attitudes
during basic clinical education; skills during postgraduate training; and knowledge at more
senior career levels. Indeed, this is a parsimonious rule of thumb that can be applied to the career
span. However, it is not to be applied at the risk of neglecting other competencies. Moreover, if
specific competencies are not able to be trained, other dimensions should certainly be bolstered.
For example, attitudes can be difficult to develop; in this case, it is critical to ensure that
providers can at least apply the proper knowledge and skills to deliver effective care, even if
their own personal belief systems may not be aligned. Knowledge, skills, and attitudes are useful
at every stage of the career span. We only present these differentially emphasized competencies
to illustrate how, if resources are few, trainers can maximize their educational programming.

Finally, providers should be trained and evaluated on cultural issues throughout the
lifespan. Given the emotionally taxing and clinically intense nature of work, medical
professionals may often lose their connection with patients. Cultural competency trainings can
not only increase knowledge and skills, but also serve as a reminder of the “human” element of
their work. The participants in this study offered many insights into effective (and, just as
importantly, ineffective) practices that help us understand cultural competency education on a broad level.

**Limitations**

There are several limitations in this study. First, we must address the greatest weakness in this study: its inherently limited scope. This line of investigation was spurred by the looming health inequities suffered by minorities in the United States, as described in the introduction. As a larger program of research, it continues to be driven by these questions concerning disparate health outcomes. However, it is beyond the scope of this master’s thesis to respond to these societal issues directly. Rather, this is a first step in characterizing the cultural competency barriers and strategies unique to a particular setting. In later phases of the research program, we hope to be able to build more robust empirical work and more directly influence issues of health inequity. For the time being, we concede that this is a limited, ethnographic investigation of cultural competency.

Indeed, this study looked at a very specific sample of healthcare providers and patient families, both in terms of specialty (critical care), patient population (children), organization (TCH), and geography (Houston). Although this research endeavored to examine a universal issue, cultural competency, however, it did not intend to characterize it universally – a near-impossible task! As mentioned earlier, qualitative research also does not aim to be generalizable, but descriptive (Harding & Gantley, 1998). Rather, we attempted to clearly understand the nature of cultural competency in a controlled setting, such that we could later implement and evaluate an effective training program in the near future.

Accordingly, this study generated several codes specific to the setting. For example, 28 codes referred to Houston-area cultural groups; these, although not broadly useful in cultural
competency research, will help inform the future interventional research in this program. Notably, many of these cultural groups are associated with international patient populations. Patients travel from the world over to receive cutting-edge medical care at TCH, a major academic medical center. The problem statement in this thesis focused largely on domestic health disparities in America. However, the needs analysis and data from this research expanded beyond this focus, including new cultural groups particular to the organization. Although not necessarily a limitation, it is an important consideration given the initial introduction to cultural competency in the United States.

It is also important to note that this particular slice of the healthcare industry carries with it several idiosyncrasies. Pediatrics, in general, appears to value cultural competency. While pediatric clerkships value culturally competent care (e.g., over 90% agreed that such education is important, enhances the physician/patient/family relationship, and improves patient outcomes), only a quarter of respondents reported receiving cultural competency teaching (Mihalie, Dobbie, & Kinkade, 2007). In a more recent study, conducted 10 years later, pediatric unit directors reported cultural competency trainings at a greater rate of 90%, though the operationalization thereof differed (including linguistic training) and the response rate was substantially lower (50% as compared to 80%) (Mendoza et al., 2015). In any case, these findings suggest that pediatric units are concerned with cultural competency and desire more training in those areas, which has been borne out in our own experiences working with our enthusiastic participants. This demonstration of high motivation to learn may not be shared by other providers in other specialties. Higher-than-average motivation to engage in cultural competency topics enhanced participants’ introspection and consideration of our research. Should we extend the research to
discuss increase in buy-in, then this sample would certainly be insufficient and require extension to less motivated populations.

Relatedly, there are serious issues of sampling in the patient family sample as well. The patient families were recruited through a mailing and membership list maintained by the Family Advisory Council, a formal patient interest group at TCH. This pool of potential recruits thus often shared a number of defining traits, including: having positive experiences with their child’s care, given that they willingly continued engagement with TCH; having more resources, since they were able to psychologically and logistically commit to committee involvement; and speaking English, as all communication with the Council is conducted in English.

Moreover, from this self-selecting pool of participants, we invited those families who were willing and able to share their story. Unsurprisingly, this resulted in a rather homogeneous sample of mostly white, Christian females, as shown in our demographics Table 2. It should be noted that one of the forefathers of grounded theory, Glaser (1992, 1998, 2013) stressed that data should not be “forced” into preconceived category – that is, researchers should not assume the significance of demographic variables (e.g., age, sex, race, and other “face-sheet variables”) prior to beginning the study. However, as data was collected and analyzed, it became clear that perspectives from individuals from more underserved populations would be useful. This non-diverse sample did not develop for lack of trying; our research team made several attempts to recruit broadly through the TCH Family Advocacy Group. We were not able to extend our patient family recruitment efforts beyond this avenue, given concerns around privacy and protected health information. Over six months of repeated recruitment and enrollment, we arrived at the sample herein. Accordingly and regrettably, these families were not able to speak to the breadth of cultural barriers identified by our provider patients.
That said, the patient perspectives were still invaluable in understanding the care process at TCH. Although many of the patient family participants experienced privileges that set them apart from other, more vulnerable populations, this also afforded them a unique vantage point. They were able to spend extensive time at TCH and observe diverse interactions, both within and outside of the critical care unit. As a result, a number of patient family participants were able to compare and contrast their experiences with those of other families around them. For example, one-third of families reported being assigned beds near non-English-speaking patients, during which they gained some insight on care difficulties and discrepancies due to language barriers. Importantly, however, we do not suggest that our patient family participants can truly understand or adequately speak to the lived experiences of others, particularly those of people of color and other disadvantaged group membership. Rather, we attempted to address the limitations of our homogenous sample by opening up the conversation. We used specific interview probes to discuss cultural barriers that participants may have witnessed, prefacing each instance with a statement acknowledging the limits of their understanding. Thereafter, we carefully considered any patient family discussion of others, with the knowledge that such information was inherently biased and deficient. Indeed, these second-hand observations were not ideal. However, given the major issues with recruiting participants of more diverse backgrounds, this technique provided more meaningful information than if it had not been employed.

It should also be noted that, although we triangulated the data among three populations (physicians, nurses, and patient families), we were not able to capture all stakeholders mentioned. Specifically, Table 7 lists the many healthcare team members who may be invested in a patient care plan, many of whom were not able to be interviewed. As a result, we may have not captured the entire spectrum of cultural barriers faced and consequent strategies used by the
healthcare team. That is, child-life specialists, who must advocate for the child’s comfort and care, may have unique communication techniques to help overcome cultural misunderstandings between patients and providers; the same applies for social workers, translators, and the other personnel listed in Table 7. Unfortunately, this was not an unintentional oversight, but the result of logistical challenges. Given the time and resource parameters of our research, we were not capable of extending our study recruitment and enrollment to further include these important voices. If possible, we hope to be able to collect an additional wave of data among these stakeholders. Certainly, we recommend that other such studies and needs analyses include many ancillary support staff as much as possible.

Overall, these sampling constraints do pose serious issues to the generalizability of our research. Our research questions concerning the types of cultural barriers and competencies, especially, may not be representative of the full spectrum of the respective areas. However, the data that we did collect and analyze still remain and characterize real issues in the field. For example, changing the sampling approach may not necessarily change the outcomes or import of our theoretical framework. Although our sample was constrained to a certain context, it also did not detract from the richness of the data that we did extract (e.g., the types of barriers described), nor the overarching findings synthesized. In the phases and studies to follow, we hope to address the real-world issue of interventional training and the academic gaps in methodology.

**Future directions**

As mentioned in the introduction, the objectives of my greater NSF research program can be broken down into two specific aims: (1) understanding problem areas in current cultural competency training and (2) to develop and evaluate an appropriate and effective training for healthcare providers. This thesis describes the first exploratory phase, which not only provides a
comprehensive, current and necessary understanding of cultural competency; it also served as needs analyses for the training program, to be tested in the later phase of the research program.

Based on these findings, I will develop and refine a cultural competency training curriculum for healthcare professionals. The program will be tailored using TeamSTEPPS, a training originally created for the U.S. Department of Health and Human Services (King et al., 2008), as the point of departure. The program will be piloted and then implemented (expected to be with the same collaborators and participants at Texas Children’s Hospital). This will be a mixed-methods line of research; while qualitative analyses were conducted in this phase, quantitative methods will be used to evaluate the program’s effectiveness (e.g., self-report and naturalistic observational data). This second phase will help identify critical remaining questions about cultural competency, and will complete the first of what I hope is a long and informative line of research advocating for health equity.

Indeed, this project is only the tip of the iceberg. As aforementioned, there needs to be more empirically-backed research in cultural competency, not only in developing and understanding the theory behind it, but also in the development of trainings. My hope is that this research program will provide both theoretical and applied scientific pieces. Following its full execution, future studies could further develop and refine cultural competency interventions. As suggested, upcoming research could test hybrid models of “culturally competent teamwork” training, measuring a number of outcomes: patient satisfaction, health outcomes (which has not yet been proven in the cultural competency literature), and organizational results and buy-in.

Moreover, the issue of timing has emerged as an important consideration. The current project and other researchers suggest that there may be differences in trainee outcomes based on the timing of cultural competency training in a physician’s career (Crosson et al., 2004; Kripalani
et al., 2006). If, as stated earlier by Campinha-Bacote (2002), cultural competency is a process, both early and continuing education should be considered, tested and studied as critical points of intervention. In considering the timing of training, learning transfer, particularly over extended or lagged time periods, should also be considered and assessed. Furthermore, the finding that educators should emphasize different types competencies throughout the career span should be further examined. Attention must be paid not only to the effectual cultivation of cultural competency, but its maintenance and potential for long-term effects.

As the research describes, cultural competency “as a formal, integrated, and longitudinal thread within the overall curriculum, is still in its infancy” (Crandall, George, Marion, & Davis, 2003, p. 588). Smedley and colleagues summarize several challenges facing the field, including the need to define educational core competencies, reach consensus on approaches and methodologies, determine methods of integration into existing curriculum, and develop and implement appropriate evaluations thereof (2003). In short, although there is a growing demand for research in this vein, there lacks structure and clarity – a united front on how to define increase and assess cultural competency.

This research program is an important first step towards addressing these issues, underscoring issues in specific critical care and pediatric settings, highlighting best practices in needs analyses, and revealing important connections to the teamwork literature. Studies, such as this project, that empirically demonstrate the value of cultural competency would powerfully bolster its significance in the medical and greater communities’ consciousness. It hopes to change the way that academics and practitioners perceive cultural competency – not just as an amorphous buzzword, but as a useful, relevant, and organized construct, rooted in theory and supported by science.
References


https://doi.org/10.1177/1525822X05279903


https://doi.org/10.1038/sj.ijo.0801681


https://doi.org/10.1016/j.genhosppsych.2010.04.007


https://doi.org/10.1097/ACM.0b013e3180555ace


https://doi.org/10.1111/j.1365-2834.2009.00978.x


### Table 1

*Research questions and interview prompts*

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Interview prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does culture influence clinical interactions?</td>
<td><em>Tell me about two incidents where culture was a problem in your clinical work.</em></td>
</tr>
<tr>
<td>What cultural competencies (knowledge, skills, and attributes) are needed?</td>
<td><em>Name three cultural competencies that you think all physicians should have (e.g., knowledge, skills, and attitudes).</em></td>
</tr>
<tr>
<td>What training practices can be used to develop and enhance these necessary competencies?</td>
<td><em>What three things would you like to see in a cultural competency training?</em></td>
</tr>
</tbody>
</table>
Table 2

*Participant demographics*

<table>
<thead>
<tr>
<th></th>
<th>Physicians (n=20)</th>
<th>Nurses (n=11)</th>
<th>Patient families (n=14)</th>
<th>Total (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10 (50%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>10 (22%)</td>
</tr>
<tr>
<td>Female</td>
<td>10 (50%)</td>
<td>11 (100%)</td>
<td>14 (100%)</td>
<td>35 (78%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>0 (0%)</td>
<td>1 (9%)</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>25-34</td>
<td>3 (15%)</td>
<td>5 (45%)</td>
<td>3 (21%)</td>
<td>11 (25%)</td>
</tr>
<tr>
<td>35-44</td>
<td>8 (40%)</td>
<td>3 (28%)</td>
<td>7 (50%)</td>
<td>18 (40%)</td>
</tr>
<tr>
<td>45-54</td>
<td>6 (30%)</td>
<td>1 (9%)</td>
<td>3 (21%)</td>
<td>10 (22%)</td>
</tr>
<tr>
<td>55-64</td>
<td>2 (10%)</td>
<td>1 (9%)</td>
<td>1 (8%)</td>
<td>4 (9%)</td>
</tr>
<tr>
<td>65-74</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>74+</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Asian American</td>
<td>4 (20%)</td>
<td>1 (9%)</td>
<td>0 (0%)</td>
<td>5 (11%)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>0 (0%)</td>
<td>1 (9%)</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>White, Caucasian, Anglo, European-American</td>
<td>12 (60%)</td>
<td>9 (82%)</td>
<td>14 (100%)</td>
<td>35 (78%)</td>
</tr>
<tr>
<td>American Indian/Native American</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Mixed</td>
<td>3 (15%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3 (7%)</td>
</tr>
<tr>
<td>Other</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>Religious or spiritual affiliation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agnostic</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>1 (7%)</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>Atheist or none</td>
<td>4 (20%)</td>
<td>3 (27%)</td>
<td>4 (29%)</td>
<td>11 (25%)</td>
</tr>
<tr>
<td>Christian – Catholic</td>
<td>4 (20%)</td>
<td>2 (18%)</td>
<td>1 (7%)</td>
<td>7 (16%)</td>
</tr>
<tr>
<td>Christian – other</td>
<td>8 (40%)</td>
<td>6 (55%)</td>
<td>8 (57%)</td>
<td>22 (49%)</td>
</tr>
<tr>
<td>Jewish</td>
<td>2 (10%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>Muslim</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
</tr>
</tbody>
</table>

*Although none of the patient family members indicated that they identified as “Hispanic or Latino” in the demographic survey, there were two patient family participants who indicated otherwise at later points in the study. Participants #35 and #45 discussed their experiences as “Hispanic” and/or “Mexican” during the qualitative interviews; these quotes are available in the text of this thesis.*
Table 3

*Common cultural barriers*

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>• The family may not agree with the clinical prognosis (e.g., the patient is nearing end-of-life).</td>
</tr>
<tr>
<td></td>
<td>• The family’s beliefs may contradict clinical care (e.g., blood transfusion).</td>
</tr>
<tr>
<td></td>
<td>• The family may not feel they are able to withdraw care.</td>
</tr>
<tr>
<td>Family structure</td>
<td>• Decision-making may be shared in an extremely limited way (e.g., only one of the parents) or broadly (e.g., the extended family and community).</td>
</tr>
<tr>
<td></td>
<td>• The family may only defer to providers of a certain gender, ethnicity, or status (e.g., male doctors).</td>
</tr>
<tr>
<td></td>
<td>• Gender interactions must be micro-managed (e.g., male providers are not allowed to interact with female family members).</td>
</tr>
<tr>
<td>Language</td>
<td>• The family may not be able to communicate with healthcare providers.</td>
</tr>
<tr>
<td></td>
<td>• Interpreters are not readily accessible at the point of care.</td>
</tr>
<tr>
<td></td>
<td>• Untrained persons (e.g., family members, clinical team member) translate information incorrectly.</td>
</tr>
<tr>
<td>Socioeconomic status and</td>
<td>• The family may not understand the clinical prognosis or the plan of care, due to wording (e.g., use of medical jargon) or education (e.g.,</td>
</tr>
<tr>
<td>education</td>
<td>unfamiliarity with health processes).</td>
</tr>
<tr>
<td></td>
<td>• The family may not have the resources to maintain or implement the plan of care.</td>
</tr>
<tr>
<td></td>
<td>• The family may expect their financial resources to afford them different levels of care.</td>
</tr>
</tbody>
</table>
### Table 4

**Most frequently cited cultural groups and co-occurring barriers**

<table>
<thead>
<tr>
<th>Cultural group</th>
<th>Cultural barrier (number of co-occurrences)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>• Language (20)</td>
</tr>
<tr>
<td></td>
<td>• Religion (6)</td>
</tr>
<tr>
<td></td>
<td>• Racial/ethnic differences (4)</td>
</tr>
<tr>
<td>Muslim</td>
<td>• Religion (14)</td>
</tr>
<tr>
<td></td>
<td>• Family structure (12)</td>
</tr>
<tr>
<td></td>
<td>• Patient individual differences (4)</td>
</tr>
<tr>
<td>Jehovah’s Witnesses</td>
<td>• Religion (6)</td>
</tr>
<tr>
<td></td>
<td>• Irresolvable differences (6)</td>
</tr>
<tr>
<td></td>
<td>• Patient individual differences (1)</td>
</tr>
<tr>
<td>Middle Eastern/Arabic</td>
<td>• Family structure (8)</td>
</tr>
<tr>
<td></td>
<td>• Religion (5)</td>
</tr>
<tr>
<td></td>
<td>• Patient individual differences, and racial/ethnic differences (2)</td>
</tr>
<tr>
<td>Christian</td>
<td>• Religion (10)</td>
</tr>
<tr>
<td></td>
<td>• Patient individual differences (2)</td>
</tr>
</tbody>
</table>
Table 5

*Skills involved in the clinical encounter*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Point of intervention</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing context of interaction</td>
<td>Audience</td>
<td>• Who would the patient prefer to be in the room?</td>
</tr>
<tr>
<td></td>
<td>Frequency and timing</td>
<td>• Who makes the decisions in the family?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How often would the patient like to speak with the medical team?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Is the patient emotionally capable of processing information?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Are multiple meetings necessary to establish understanding?</td>
</tr>
<tr>
<td>Physical setting</td>
<td></td>
<td>• How private is the space?</td>
</tr>
<tr>
<td>Communicating within interaction</td>
<td>Screening patient</td>
<td>• Has the medical team documented the family’s concerns, requests, and other characteristics?</td>
</tr>
<tr>
<td></td>
<td>Listening</td>
<td>• What are the family’s concerns?</td>
</tr>
<tr>
<td></td>
<td>Wording</td>
<td>• What are the family’s clinical goals?</td>
</tr>
<tr>
<td></td>
<td>Educating patient</td>
<td>• Does the patient understand the medical terms that are being used?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Does the patient have questions?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Does the patient need an interpreter, or other ancillary staff member for assistance?</td>
</tr>
</tbody>
</table>
### Table 6

**Major attitudinal competencies**

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Representative quote</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compassion and empathy</strong></td>
<td><strong>Provider</strong></td>
</tr>
<tr>
<td>Conceptualization</td>
<td>The biggest thing is that you need to teach someone the way you want to be treated… If it was your kid or father in the hospital, you’d never want to be cut short in terms of time or being educated from the practitioner in order to help you make that decision… Always approaching patient interactions with that in mind will help a practitioner make quicker [relationships] and gain the trust of the family.</td>
</tr>
<tr>
<td><strong>Patient</strong></td>
<td>I know doctors have to have that cold heart – but [they need] empathy… I don’t want you to cry with me, but I don’t want you to be so cold. The doctor that we had was great. If she couldn’t tell me it was gonna get better, she was good at giving a hug. I know some people don’t like to be hugged, but something like a handshake, something to make me feel like you understand… “I’m sorry,” or “What can I help you how can I make this process easier?”</td>
</tr>
<tr>
<td><strong>Objectivity and open-mindedness</strong></td>
<td><strong>Provider</strong></td>
</tr>
<tr>
<td>Conceptualization</td>
<td>I think the key is understanding that your point of view is not an absolute. The way people think and live, especially the critical situation of those children, can vary based on where they live, they come from and their educational level – and obviously also cultural and religious points of view.</td>
</tr>
<tr>
<td><strong>Patient</strong></td>
<td>I never felt like I was being looked at wrong for my faith. It was encouraged no matter if they were Christian or not. They never were like, “We’re not gonna talk about that.” … If I was a Christian, wonderful. And if I wasn’t, they didn’t know and it wasn’t looked at strangely at how vocal I was about it.</td>
</tr>
<tr>
<td><strong>Self-awareness and emotional intelligence</strong></td>
<td><strong>Provider</strong></td>
</tr>
<tr>
<td>Conceptualization</td>
<td>We would all like to pretend that we are color-blind, spirituality-blind, racially blind, economically blind, language-ly blind – that it’s all just great and we’re all just one… But at the end of the day, every single human being is shaped by his or her experience in life. We were a product of the environment, how we were raised. […] We all have biases. Being honest with ourselves, honest with our patients, our families, our teams, about those potential barriers is important.</td>
</tr>
<tr>
<td><strong>Patient</strong></td>
<td>I would say to tell the doctors and nurses not to say, “I know how you feel.” Granted, they might have [lost] mom or dad and they might have lost a child, but they still don’t know exactly what you’re going through. They know bits and pieces. They do not know exactly what you’re going through.</td>
</tr>
<tr>
<td>Attitude</td>
<td>Representative quote</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------</td>
</tr>
<tr>
<td><strong>Conceptualization</strong></td>
<td><strong>Provider</strong></td>
</tr>
<tr>
<td><strong>Sensitivity and awareness</strong></td>
<td>Recognizing that, even if someone looks like you, they are coming from a different culture [is important]. Even if they are American, they are coming from a different culture. […] Getting in touch with what they’re “about,” besides the obvious… That’s key for every single family, because every single family is coming to you with their own medical background, with their own religious community, with a lot of baggage. Recognizing that is really hard. We’re not really good at it and we need to get better at it. Just like we teach anatomy, we need to teach how to talk to families, how to engage them, and make them feel like they are part of the medical setting.</td>
</tr>
</tbody>
</table>
Table 7

*Expert healthcare team members*

<table>
<thead>
<tr>
<th><strong>Appropriate situations</strong></th>
<th><strong>Representative quote from physician participants</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bioethics and legal boards</strong></td>
<td>Patient families whose beliefs have consistently and seriously hindered clinical care, resulting in irresolvable situations</td>
</tr>
<tr>
<td><strong>Chaplains</strong></td>
<td>Patient families who require general spiritual support</td>
</tr>
<tr>
<td><strong>Community members</strong></td>
<td>Patient families who make decisions as groups</td>
</tr>
<tr>
<td><strong>Nurses</strong></td>
<td>Patients who receive continued care</td>
</tr>
<tr>
<td><strong>Other consultants and specialists</strong></td>
<td>Patients whose clinical care requires interdisciplinary expertise</td>
</tr>
<tr>
<td><strong>Patient advocacy and rights groups</strong></td>
<td>Patients who require education about the healthcare system</td>
</tr>
<tr>
<td><strong>Religious leaders</strong></td>
<td>Patient families who require specific spiritual support</td>
</tr>
<tr>
<td><strong>Social workers</strong></td>
<td>Patients who need to be connected to resources</td>
</tr>
</tbody>
</table>
### Cultural competency dimensions and teamwork contributions

<table>
<thead>
<tr>
<th>Competency area</th>
<th>Team coordinating process</th>
<th>Cultural action items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>• Developing shared mental models</td>
<td>Understanding patient individual differences</td>
</tr>
</tbody>
</table>
| Skills          | • Creating closed-loop communication | Managing the context of the interaction:  
  • Audience  
  • Frequency/timing  
  • Physical setting  
  Communicating within the interaction:  
  • Screening  
  • Listening  
  • Wording  
  • Educating |
| Attitudes       | • Fostering psychological safety | Demonstrating:  
  • Compassion and empathy  
  • Open-mindedness and objectivity  
  • Self-awareness and emotional intelligence  
  • Sensitivity and awareness |
### Table 9

*Cultural competency training needs, based on career stage*

<table>
<thead>
<tr>
<th>Career phase</th>
<th>Emphasized competency</th>
<th>Suggested methods of delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughout: training implementation &amp; evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate training (medical/nursing school)</td>
<td>Attitudes</td>
<td>Formal acquisition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Didactic training</td>
</tr>
<tr>
<td>Post-graduate training (residency/fellowship)</td>
<td>Skills</td>
<td>On-the-job training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practice</td>
</tr>
<tr>
<td>Career (faculty)</td>
<td>Knowledge</td>
<td>Just-in-time training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organizational buy-in</td>
</tr>
</tbody>
</table>
Figure 1. A general framework for cross-cultural competence in Army leaders; framework from Abbe, Gulick & Herman (2007) and adapted by using colored overlays.
Figure 2. *Qualitative coding procedures.*
Figure 3. *An updated theoretical framework for cultural competency.*
Appendices

Appendix A:

Demographic surveys

Healthcare providers

Please indicate how you identify in each of the following categories, noting that each question is optional.

Age:
- □ 18-24
- □ 25-34
- □ 35-44
- □ 45-54
- □ 55-64
- □ 65-74
- □ 75+

Languages spoken: ________________________________________

Gender: ____________________

Ethnicity: ____________________________________________
- □ Asian or Asian American, including Chinese, Japanese, and others
- □ Black or African American
- □ Hispanic or Latino, including Mexican American, Central American, and others
- □ White, Caucasian, Anglo, European American; not Hispanic
- □ American Indian/Native American
- □ Mixed; Parents are from two different groups (please specify): ____________________
- □ Other (please specify): ____________________

Country of origin: ________________________________________

Was any portion of your training in a different country?
- □ Yes; please specify: ____________________
- □ No

Were you trained at Texas Children’s Hospital?
- □ Yes; please specify (residency, fellowship, etc): ____________________
- □ No
Status:

- Physician (MD, DO)
- APP (Advanced Practice Provider)

Years as faculty at Baylor:

- 1-4
- 5-9
- 10-19
- 20+

Religious or spiritual affiliation: _________________________________________

Have you had culturally challenging or enriching experiences in other communities (lasting one week or longer)? Please check all that apply.

- Volunteer medical services abroad (e.g., global initiatives or missions, Doctors Without Borders)
- Immersion in diverse communities domestically (e.g., underserved clinics)
- Living or working as a minority in the immediate community
- Travel for conferences
- Travel for pleasure
**Patient families**

Thank you for your willingness to partner with us on this important research project aimed to improve communication between families and healthcare providers. As a parent who understands the importance of strong family-provider relationships, your contributions are invaluable to us as we work to help clinicians better understand, communicate with and support families making important medical decisions for their child.

The questions on this survey are directly related to crucial conversations you had with the healthcare team while your child was cared for in one of the Texas Children's Hospital intensive care units (CVICU, NICU, PCU or PICU). The questions are formulated to help us better understand and support the unique needs of families from diverse backgrounds. While the questions can greatly help our work to improve communication between families and the healthcare team, they are optional. Any information you feel comfortable providing is strictly confidential.

Are you an employee of Texas Children's Hospital?
- Yes
- No

Do you work in the medical field?
- Yes
- No

How long has your child been cared for at Texas Children's in any department?
- Less than a month
- 1 to 3 months
- 3 to 6 months
- 6 months to 1 year
- 1 to 2 years
- 2 to 4 years
- Over 4 years

In which Texas Children's intensive care unit have you had to make decisions with your child’s healthcare team? Please select all that apply.
- Cardiovascular Intensive Care Unit (CVICU)
- Newborn; Neonatal Intensive Care Unit (NICU)
- Progressive Care Unit (PCU)
- Pediatric Intensive Care Unit (PICU)
How long has your child been cared for at Texas Children's in any of the above Critical Care units?

- Less than a month
- 1 to 3 months
- 3 to 6 months
- 6 months to 1 year
- 1 to 2 years
- 2 to 4 years
- Over 4 years

Did your child pass away?

- Yes
- No

What other experiences have you had at Texas Children's? Please select all that apply.

- Making major medical decisions for my child.
- Traveling out of town to receive care for my child.
- Overcoming a language barrier with the healthcare team.
- Having an interpersonal conflict with the healthcare team.
- Lacking trust with the healthcare team.
- Receiving bad news about my child’s health status or prognosis by the healthcare team.
- Planning for medical care at home for my child.
- Other (please indicate in the space below)

The next questions focus on demographic information (such as gender, age, income, ethnicity, etc.). We ask these questions because we value hearing from families of many different backgrounds. This information can help us better understand and support the unique needs of families.

As a reminder, while these questions can greatly help our work to improve communication between patient families and the healthcare team, they are optional. Any information you do feel comfortable providing is strictly confidential.

What is your gender?

- Male
- Female
- Other (please indicate in the space below)
What is your age?
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75-84
- 85-94
- 95+

What is your religious or spiritual affiliation, if any?

________________________________________________________________

Are you Spanish, Hispanic, or Latino or none of these?
- Spanish, Hispanic, or Latino
- None of these

Are you Spanish, Hispanic, or Latino?
- Spanish
- Hispanic
- Latino

Choose one or more races that you consider yourself to be:
- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Other ________________________________________________

What is the highest level of school you have completed or the highest degree you have received?
- Less than high school degree
- High school graduate (high school diploma or equivalent including GED)
- Some college but no degree
- Associate degree in college (2-year)
- Bachelor's degree in college (4-year)
- Master's degree
- Doctoral degree
- Professional degree (JD, MD)
Please indicate the answer that includes your entire household income (from the previous year) before taxes.
- Less than $10,000
- $10,000 to $19,999
- $20,000 to $29,999
- $30,000 to $39,999
- $40,000 to $49,999
- $50,000 to $59,999
- $60,000 to $69,999
- $70,000 to $79,999
- $80,000 to $89,999
- $90,000 to $99,999
- $100,000 to $149,999
- $150,000 or more

Are you now married, widowed, divorced, separated or never married?
- Married
- Widowed
- Divorced
- Separated
- Never Married

If you are married or in a relationship, please describe your partnership. Please select any that apply to you. If you are not married or in a relationship, please skip to the next question.
- My partner is of the same sex.
- My partner is of a different race or ethnicity.
- My partner is of a different religious faith.

Please indicate your relationship to your child. Please select any that apply to you.
- I am the legal guardian of my child.
- I am the biological parent of my child.
- I am not the biological parent of my child.
- I am a step-parent to my child.
- I adopted or fostered a child.
- I am the grandparent of my child.
- I am the biological aunt, uncle, or other non-immediate family member of my child.

Please tell us anything else you would like us to know about your experiences during your child’s care at Texas Children's.
Appendix B:

Structured interview guide

Introduction

*Introduce research team and associated institutions.*
We are working to better understand cultural competency in healthcare providers. We define cultural competency as the ability to establish effective interpersonal and working relationships with diverse individuals. Our long-term goal is to use this information to develop and refine educational programs. In order to do so, we are gathering insight from clinicians on how they’ve been trained in, and practice, cultural competency.

*If participant has not yet signed informed consent:*
This document explains the nature of the study and our commitment to confidentiality. Please read the statement and feel free to ask us any questions you might have. If or when you are ready, please indicate your consent to participate and be recorded before we begin.

We’re speaking to you because you are a knowledged and experienced healthcare provider. We will be asking you questions about your training history and your experiences in the field, especially as they relate to culture. We understand that you are only speaking about your own experiences. Everything you say will be kept confidential.

This interview is expected to last 30-45 minutes. You are free to ask questions, decline to answer any questions, and to stop participating at any time. Before we head into the discussion, we have a short survey for you to fill out. Once you are done, we will announce and begin the (audio-recorded) interview. Do you have any questions before we start?

*If interviewee consents:*
- *Administer demographic survey.*
- *Announce interview portion of the study and beginning of audio recording.*

Participant background
- How would you describe what you do in one to two statements?
Training and education

- **Name three cultural competencies that you think all physicians should have (e.g., knowledge, skills, and attitudes).**

- **Formal education**
  - Did your medical training involve any coverage or emphasis on cultural competency? If so, can you elaborate?
    - What form did this take (e.g., a complete course, a module within a broader training)?
    - At what stage was this delivered (e.g., medical school, continuing education)? Was this provided at one time, or spread out over time?
    - What content did the training cover?
    - How was this content delivered? What kinds of activities, if any, were involved in the training? (E.g., didactic, based on written materials or lectures; experiential, in which you were given the opportunity to model or practice behaviors)

- Have you ever spent time in cross-culturally immersive settings? Global medical initiatives, Doctors Without Borders, etc?

- Have you spent considerable time with diverse communities (working in underserved areas, in settings in which you are the minority)?

Field experiences

Patients

- **Tell me about two incidents where culture was a problem in your clinical work.**
  - What would have been good to know prior to this situation (e.g., knowledge, skills, attitudes)?

- Has it been your experience that you’ve had patients from other cultural backgrounds (e.g., race/ethnicity, spirituality)? How often does that happen?

- How often do you feel culturally disparate from your patient and/or patient’s families?
  - Are you comfortable/confident interacting with patients from different cultures? Why or why not?
  - How has it impacted your understanding of the family’s medical situation?
  - How does it impact the way you communicate with the family?
  - How does it impact decision-making around patient care?
  - Can you describe an instance in which culture interfered with providing ideal care?

- What challenges have you seen in terms of providing culturally competent care to patients?

- What cultural dimensions have been potentially or frequently divisive, in your experience? (E.g., race or ethnicity, spirituality, sexuality, etc.)
  - What types of tasks or care areas are most influenced by cultural differences? (E.g., end-of-life conversations, decision-making)

- Are there any populations that you feel care providers are not adequately prepared to serve? That is, what populations require more education or awareness of differences? (E.g., certain religious, sexual minorities)
Teams (time permitting)

• How often do you encounter cultural differences within your care team?
  o In your experience, are these cultural differences based on race/ethnicity, religion, training background, status, service, or other dimensions?
  o How does culture influence the way your team works? (E.g., communication, decision-making)

Future directions

• What three things would you like to see in a cultural competency training?
• What content would you like to see covered in cultural competency training?
  o What (declarative) knowledge, skills, abilities, or other characteristics should be emphasized? (E.g., facts about different common cultures, techniques to listen from others, ways to adjust your attitude working with others, or other areas)
• How much time would you be willing to commit to a cultural competency training – both in terms of overall hours and frequency (that is, a single class vs. a series)?
• Do you have any other suggestions or thoughts on how cultural competency education can be improved?
Appendix C:

Codebook

• Clinical barriers/differences
  ○ Children versus adults
  ○ Continuity of care
    ■ Primary nursing
  ○ Interpersonal conflict
  ○ Disease states
  ○ Technology
• Cultural barriers/differences
  ○ Decision-making
    ■ End-of-life
    ■ Post-mortem
  ○ Delivering bad news
  ○ Dietary issues
  ○ Family structure/gender hierarchy
  ○ Patient individual differences
  ○ Physician individual differences
  ○ Irresolvable situations
  ○ Language
  ○ Patient biases
  ○ Racial/ethnic differences
  ○ Religious differences
  ○ Regional differences
  ○ SES/education
  ○ Sexuality
  ○ Social/geographical isolation
  ○ Socio-political climate
  ○ Stereotypes
  ○ Unspecified barrier

• Cultural competencies
  ○ Knowledge
    ■ Cultural knowledge
  ○ Attitudes
    ■ Awareness/sensitivity
    ■ Compassion/empathy
    ■ Emotional resilience
    ■ Flexibility/adaptiveness
    ■ Honesty
    ■ Open-mindedness/objectivity
    ■ Self-awareness/emotional intelligence
    ■ Patience
Acquisition
- Formal
- Informal
- Lack of formal
- Lack of informal
- Immersion/exposure
  - Clinical settings
  - Personal settings
- Individual differences
- Mentorship
- Modeling/observing
- Nursing/medical school
- Self-directed learning

Organizational
- Leadership
- Organizational buy-in
  - Patient health outcomes
  - Patient satisfaction
  - Social media/PR
- Organizational culture
  - Generational differences
  - Institutional representation
  - Specialty-specific
- Non-TCH
- Resources
  - Time
  - Translators
- Structure
  - Lack of system
- Texas Children’s Hospital

Skills/tools
- Accommodate patient wishes
  - Accessibility
  - Pray with family
  - Set boundaries
Bring in experts
- Bioethics, legal boards
- Chaplains
- Community members
- Family
- Nurses
- Other consultant/specialist
- Patient advocacy/rights groups
- Religious leaders
- Social workers
- Trainee physicians

Communication
- Communication
- Listening
- Non-verbal
- Wording

Translation (language)
- By person, interpreter
- By machine, technology

Manage relationship
- Advocate for patient
- Educate patient
- Engage patient family
- Establish mutual understanding
- Establish trust/safety
- Power/paternalism
- Relate to patient
- Screen patient

Manage interaction
- Audience
- Frequency and timing
- Physical setting

Visual aids/Mnemonics

Teamwork
- Inter-team
  - Debriefing
  - Consistency
- Intra-team
  - Conflict
  - Consistency
  - Delegation
● Theoretical issues
  ○ Benefits of CC
  ○ Status of CC
  ○ Definition of culture
  ○ Prioritization of CC

● Training
  ○ Training assessment
    ■ Objectives
    ■ Training assessment
  ○ Training content
    ■ Cultural knowledge
    ■ Critical incidents
    ■ Language/Translation
    ■ Self-reflection
    ■ Stakeholder perspectives
  ○ Delivery
    ■ Didactic
    ■ Discussion
    ■ Experiential
      ● Immersion/exposure
      ● Simulation
      ● Practice
    ■ Feedback
    ■ Mixed methods
    ■ Observation
    ■ On the job/trial and error
    ■ Online
    ■ Small groups
    ■ Technology
  ○ Training structure
    ■ Audience
    ■ Specialized
    ■ Mandatory
  ○ Timeline
    ■ CME
    ■ Junior faculty
    ■ Just-in-time (JIT)
    ■ Medical school
    ■ Residency/fellowship
    ■ Senior faculty
    ■ Spaced/throughout
  ○ Practices to avoid
- Cultural groups
  - Houston
    - Immigrants
  - Non-Houston