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Brea M. Stanton

Matthew J. Rivera

Zachary K. Winkelmann PhD, LAT, ATC University of South Carolina, winkelz@mailbox.sc.edu

Lindsey E. Eberman

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# **Publication Info**

Published in Journal of Athletic Training, Volume 57, Issue 2, 2022, pages 148-157.

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# Support Systems and Patient Care Delivery for Nonnative English-Speaking Patients: A Study of Secondary School Athletic Trainers

Brea M. Stanton, DAT, LAT, ATC\*; Matthew J. Rivera, DAT, ATC, LAT\*; Zachary K. Winkelmann, PhD, SCAT, ATC†; Lindsey E. Eberman, PhD, LAT, ATC\*

\*Department of Applied Medicine and Rehabilitation, Indiana State University, Terre Haute; †Exercise Science, University of South Carolina, Columbia

**Context:** Nonnative English speakers (NNESs) in the United States have more than doubled since 1990, increasing the likelihood of their seeking health care and experiencing language barriers. Language barriers in health care result in ineffective communication, a decreased level of care, and a reduction in overall provider satisfaction.

**Objective:** To investigate the experiences of secondary school athletic trainers (ATs) who provided care to patients who were NNESs or communicated with their NNES support systems.

Design: Qualitative study.

Setting: Semistructured interviews.

**Patients or Other Participants:** Fifteen secondary school ATs with experience communicating with NNES patients or their support systems.

**Data Collection and Analysis:** Participants were interviewed, and the interviews were transcribed. A 3-person data-analysis team used the multiphase, consensual qualitative research approach to develop a consensus codebook with domains and categories. Trustworthiness was established through member checking, multiple-researcher triangulating, and auditing.

**Results:** Four domains emerged from the data: (1) communication, (2) welcoming environment, (3) cultural agility, and (4)

resourcefulness. Participants enhanced communication by relying on nonverbal communication, translated resources, and interpreters. The ATs discussed a difference in care delivery based on fluency. Respondents explained efforts to create a welcoming environment by speaking in the NNES's native language, increasing comfort, and serving as an advocate within the health care system. Acknowledging customs, demonstrating respect, and understanding potential fear, shame, or both associated with language barriers were discussed as ways to increase cultural agility. The ATs identified a lack of formal training, which increased their on-the-job training and health information technology use. Participants perceived spending increased amounts of initiation, effort, and time on adaptability while caring for and communicating with NNESs.

**Conclusions:** The ATs perceived that they had little formal training and, therefore, became more resourceful and increased communication strategies to provide equitable care. Participants indicated that adapting their care to meet cultural needs and creating a welcoming environment for NNESs were important when cultivating a patient-centered experience.

**Key Words:** secondary language, English-language learner, cultural agility, cultural competence

# **Key Points**

- Secondary school athletic trainers recognized a difference in their ability to communicate with and provide care to nonnative English speakers (NNESs) compared with native English speakers.
- · Participants felt they were able to improve NNES care and communication by providing a welcoming environment.
- The findings suggest that one can increase cultural agility by acknowledging cultural customs, being respectful, and understanding NNESs' fear, shame, or both surrounding the language barrier and their health care.
- Secondary school athletic trainers believed they had to be more resourceful when providing care for and communicating with NNESs.

he number of nonnative English speakers (NNESs) in the United States has more than doubled since 1990 and continues to increase, which means that the likelihood of health care providers encountering and providing patient care in the presence of a language barrier also continues to increase. Previous researchers found that NNESs were commonly misunderstood. Many cases have been documented of delayed or improper care being

provided due to a language barrier. 1,2-6 Language barriers have been identified in health care, resulting in ineffective communication and lapses in care. 1,2-6 Examples of lapses could include an inequitable standard for the quality of care; providing the wrong medication, intervention, or exercise; and not properly explaining to or communicating with the patient or not educating the patient on his or her condition. The Improper care can lead to poor patient

satisfaction, serious injury, and even death.<sup>2–5</sup> Earlier investigators<sup>6</sup> identified that patients who were NNESs used more resources (time, money, and testing) but had decreased levels of satisfaction with their care.

Athletic trainers (ATs) work in a variety of settings and provide care to patients who vary in culture, ethnicity, and language. The diversity within their patient populations makes ATs' knowledge of disparities or barriers to equitable health care a necessity. Health and health care disparities describe influences on health that are associated with social, economic, and environmental disadvantages.8 For example, populations with less access to health care, socioeconomic status, or education have greater health disparities.<sup>9</sup> A significant contributing factor to health disparities is communication barriers between clinicians and patients. 10 Additionally, a patient's cultural background greatly influences how he or she interacts with the health care system. These concerns require ATs to provide culturally agile care to the diverse patients they treat. Cultural agility refers to clinicians' ability to recognize, understand, respect, and act toward others from different cultural backgrounds than themselves. 11 Furthermore, to be culturally agile, clinicians must not only recognize and respect these differences but also integrate the differences in practices and values of patients into their care plans.<sup>11</sup> An important first step in providing culturally agile care is effective communication with patients.

With the increasing diversity in the United States population, ATs working in the secondary school setting have a high likelihood of encountering an NNES because of their communication with not just patients but also their parents, guardians, and support systems. Athletic trainers must acknowledge the barriers they may encounter while providing care for NNES patients or communicating with a member of the patient's NNES support system, especially in the secondary school setting. The goal is to better define the interventions required to improve patient satisfaction among all patients, including NNES patients. To date, no researchers have evaluated the experiences of ATs who provide care for NNES patients or encounter patients with NNES parents or support systems. The purpose of our study was to investigate the experiences of ATs in the secondary school setting who have provided care for NNES patients or NNES patients and their support systems.

#### **METHODS**

#### Study Design

We used the consensual qualitative research approach to assess the experiences of secondary school ATs who have provided care for NNES patients or NNES patients and their support systems. The interview was semistructured with guiding questions. The study was approved by the Institutional Review Board of Indiana State University.

# **Participants**

We used criterion sampling to identify ATs in the secondary school setting who noted having experience(s) providing care for an NNES patient or a patient with an NNES support system. First, we purchased from the National Athletic Trainers' Association a list containing a random sample of secondary school ATs who had indicated

Table 1. Participant Characteristics

Pseudonym	Age, y	Experience as an Athletic Trainer, y	State of Practice	Fluent in (an)other language(s)?
Ace	51	26	TX	No
Bailey	29	7	NE	No
Bernie	28	6	IN	Yes
Billie	27	5	PA	Yes
Bonnie	26	2	NY	Yes
Dandy	29	7	IL	No
Jolly	28	6	MO	No
Lexi	41	18	IL	No
Lincoln	29	7	PA	No
Lousile	42	19	IL	No
Maggie	38	15	TX	Yes
Phil	24	1	PA	No
Phillis	49	26	NJ	No
Raye	25	3	WI	Yes
Souki	47	25	NY	No

a willingness to participate in research. Next, the National Athletic Trainers' Association sent an email to potentially eligible participants in the secondary school setting. Finally, we used a demographic questionnaire to identify potential participants and exclude volunteers who did not meet the criteria. A total of 15 participants were interviewed. The participants were 34  $\pm$  9 years old with 12  $\pm$  9 years of experience, had various levels of education, and provided care for a widely ranging number of patients in a variety of regions and states across the United States (Table 1).

#### **Interview Protocol**

We created the semistructured interview protocol (Table 2) to investigate the research question related to the experiences of ATs in the secondary school setting who have provided care for NNES patients or NNES patients with their support systems. The interview protocol was then sent to, and reviewed by, 2 ATs with experience in treating NNES patients; we used their feedback to finalize the interview protocol. The protocol was piloted with a small group of ATs who met the inclusion criteria but were not included in the final data collection or analysis. The pilot interview allowed us to ensure that the question sequence flowed logically, establish the time to complete the interview, and practice for follow-up questions that might arise. No changes were made to the interview protocol after the pilot interviews were concluded, and a final set of 10 questions was used for data collection.

# **Procedures**

A recruitment email was sent to the secondary school ATs on the list. It contained a brief study description and an online link (Qualtrics) to the informed consent and demographics survey (Table 1). Specifically, the email indicated that we were seeking to speak with secondary school ATs who had previous experience with NNES patients and their support systems. The participants were able to review the online informed consent and provide their contact information for scheduling an interview. Once a volunteer indicated willingness to take part and completed the demographic survey, the primary investigator (B.M.S.) contacted him or her to schedule an interview. At the scheduled time, the participant joined the primary

#### Table 2. Interview Protocola

- 1. When treating patients, how do you, if at all, consider their culture and language?
- 2. When considering the NNES patient or support system that you provided care to or interacted with:
  - a. What was their native tongue?
  - b. Please describe that experience.
    - 1. How did you communicate with the NNES patient or support system?
    - 2. What were the outcomes of that experience?
    - 3. What were the barriers or challenges to that experience?
  - c. Were you comfortable communicating with and providing care for this patient? Why/why not?
- 3. Prior to interacting with a NNES patient or support system, please describe any knowledge or education you had in interacting with NNES.
- 4. In what ways, if any, do you think being a NNES effects the patient?
- 5. To your knowledge, what are some ways to enhance communication with NNES patients or support systems?
  - a. What strategies, if any, could you incorporate into your athletic training facility?
- 6. What have you learned from your experience(s) of providing care for NNES patients and their support system?
- 7. What changes have you made to your facility to support and promote NNES patients?
- 8. What changes have you made to more effectively communicate and work with NNES support systems?
- 9. What do you think would be effective strategies, if any, to motivate you to engage in professional development to help you with providing care for NNES patients and their support system?
  - a. What methods or platforms, if any, have you used in the past to engage in continuing? professional development regarding the care of NNES patients and their support system?
  - b. Based on your previous experiences, what do you think would be the best methods or platforms that might help others engage in similar continuing professional development opportunities?
- 10. Is there any other relevant information that you would like to share about your experience providing care for a NNES patient or their support system before the interview is ended?

Abbreviation: NNES, nonnative English speaker.

<sup>a</sup> Reproduced in its original format.

investigator on a video and audio platform (Zoom Video Communications) to conduct the interview. During this interview, the primary investigator read a prepared statement to (1) thank the participant, (2) provide the approximate length of the interview, (3) remind the participant of withdrawal procedures, (4) ask if he or she had any questions, (5) gain oral consent, (6) remind the participant of the purpose of the interview, and (7) define the terms of NNES and support system as they would be used throughout the interview. The primary investigator defined NNES as "someone who speaks in another language that is not English, also known as their native tongue. A[n] NNES can speak nearly fluent English, can have a limited ability to speak English, or cannot speak English at all." Support system was defined as "any NNES individual that [sic] has access to the patient's medical information (either inherently or as directed by the patient) which could include, but is not limited to parents, guardians, grandparents, other family members, and coaches."

Once oral consent was obtained, the primary investigator began the audio recording and conducted the interview, which lasted, on average, 25 minutes. Each interview was transcribed verbatim, and the transcript was deidentified and checked for accuracy by the primary investigator before being sent to the participant for member checking and clarification before data analysis. The process of member checking is a participant validation technique to ensure the accuracy of the recorded statements. All 15 participants had their interview transcripts returned to them and were asked to ensure that their responses were best captured and still represented their lived experiences. No content changes to the transcripts were requested by the participants during member checking.

#### **Data Analysis and Trustworthiness**

A panel of 3 researchers (B.M.S., M.J.R., and L.E.E.) followed the consensual qualitative research tradition after

a robust, multiphase process to analyze the data. <sup>12</sup> In phase 1, the team reviewed the same 4 transcripts. Each member of the team developed a list of domains that reflected the data presented by the transcripts. The team then met to compare their lists and come to a consensus on the domains. At this meeting, the team also created the initial codebook by using the domains and core ideas that were listed and discussed. In phase 2, the initial codebook was applied independently by each member to 2 of the transcripts used in phase 1 and 2 new transcripts. After the codebook was applied to these transcripts to ensure its reflectiveness, the team met again to confirm or adjust the codebook.

In phase 3, the team split up the remaining transcripts and applied the codebook. Once each transcript was coded, an internal audit was completed, ensuring that each code was confirmed by 2 members of the team. If the 2 coders had differences, these were discussed, and a consensus was achieved. The primary investigator then performed a crossanalysis to confirm that the core ideas were placed accurately in categories. Four coded transcripts were sent to an external reviewer (Z.K.W.) to confirm the consensus codebook. After the external review and cross-analysis, we conducted a frequency count of the categories. Categories were assigned to 1 of 4 frequency classifications as follows: general meant the category was identified by all 15 participants; typical, by at least 8 participants but not all 15; variant, by 4 to 7 participants; and rare, by 3 or fewer participants.9 Of the 15 categories identified, 2 were characterized as general, 10 as typical, and 3 as variant. The final step of the analysis was selecting quotes to support the finding of each emergent category. Credibility and trustworthiness were established using member checking, triangulation of the data, an internal audit, and an external review. 12 The internal audit yielded minor modifications to the terms used in the codebook; however, the external review confirmed the coded transcripts with no

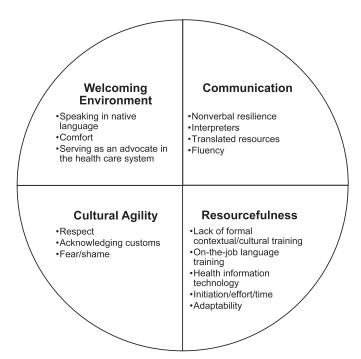


Figure 1. Description of 4 emergent domains and associated categories.

additional changes made to the codebook or coded transcripts.

#### **RESULTS**

We identified 4 emergent domains: (1) communication, (2) welcoming environment, (3) cultural agility, (4) resourcefulness (Figure 1, Table 3).

#### Communication

The participants described explicit experiences related to verbal and nonverbal forms of communication. Four categories emerged within the communication domain: nonverbal reliance, translated resources, interpreters, and fluency. When discussing nonverbal communication specifically, respondents used more alternative forms of communication to improve understanding. For instance, Dandy stated, "I use more visual cues and take things a little bit slower to try to communicate nonverbally as much as possible before doing things," further demonstrating the use of nonverbal communication. The ATs indicated that they relied on interpreters to enhance communication between themselves and NNESs. They also discussed fluency as a barrier to effective communication. Bernie described his actions to become more fluent: "I think trying to learn a bit more Spanish and trying to communicate a bit more will help me, especially with trying to understand what they are saying as well." Supporting quotes for the communication domain are provided in Table 4.

# **Welcoming Environment**

Participants noted ways they enhanced the environment of their athletic training facilities to make them more welcoming to NNESs, which included speaking in the patient's native language, serving as an advocate for the

Table 3. Frequency of Category Mentions During Interviews

	Counto	-
Domains and Categories	Counts, No./15	Frequency Label
Domains and Categories	110./15	riequency Laber
Communication		
Nonverbal reliance	9	Typical
Interpreter	15	General
Translated resources	14	Typical
Fluency	14	Typical
Welcoming environment		
Speaking in native language	7	Variant
Comfort	12	Typical
Advocate in the health care system	7	Variant
Cultural agility		
Respect	11	Typical
Acknowledging customs	10	Typical
Fear, shame, or both	13	Typical
Resourcefulness		
Lack of formal training	15	General
On-the-job training	8	Typical
Health information technology	12	Typical
Initiation, effort, and time	13	Typical
Adaptability	5	Variant

increasing patient comfort, and patient within the health care system. Approximately one-half of the participants (n = 7/15) commented on using the patient's native language when speaking, if possible, to make their facility more welcoming for NNESs. Bonnie said she used Spanish to help improve her patients' comfort: "I do speak Spanish. So, I will automatically switch into Spanish to make them feel more comfortable and then we go from there." Some participants identified that providing a welcoming environment to NNESs allowed them to serve as advocates for NNESs within the health care system by demonstrating that health care does not have to be scary or confusing. Bernie emphatically addressed the role of an advocate:

"It doesn't matter what language they speak as their native tongue, everybody that's human deserves the right to health care and to be treated properly and professionally. I think sometimes we make it more challenging on the clinician and more challenging on the patients."

Eighty percent (n = 12/15) of participants also spoke of increasing patient comfort by using various techniques for NNESs in their facility. For example, Phillis spoke to their efforts to help all patients feel comfortable in their clinic: "My goal in my athletic training office is just to make everybody comfortable and to understand what is going on with them and what we need to do to accomplish recovery and getting back to your sport." Supporting quotes for the welcoming environment domain can be found in Table 5.

# **Cultural Agility**

When discussing the importance of being able to effectively provide patient care for NNESs, the ATs included behaviors related to cultural agility. The cultural agility domain consisted of the categories of respect, acknowledging customs, and fear or shame or both. When referring to respect, participants perceived that demonstrating respect for the patient was beneficial in providing culturally agile care. Many respondents (10/15) recognized that acknowledging a patient's customs related to race,

Category	Supporting Quote		
Nonverbal communication	When patients come to me, I notice cues, whether they are comfortable speaking in English based on their faces and whether I can see comprehension or understanding on their face. – Bonnie  Most of the time, it is a lot of pointing at the pain chart, pointing at [the] part that hurts, having them try to use visual		
	signals when trying to communicate with them Souki		
	I would forget to smile when it is appropriate or just facial expressions and showing emotion. – Raye		
	Using more visual cues and taking things slower to try to communicate nonverbally as much as possible before you do things. Currently that is a little bit more challenging with me as the clinician having to wear a mask all the time. I have realized how many nonverbal cues I do facially that I do not know how they are being received wearing a mask. – Dandy		
Interpreter	You lose some of the nuance because you cannot go more in depth, where I might ask, "Where is the pain?" Then I said, "I will do a special test and does that make it hurt more or less", and if they say "more," I do not really have a way to quantify if it went up by 1 or 4 or 5. — Billie		
	I have a lot of external support, whether it is a teammate, the secretary I mentioned; we also have other Spanish-speaking coaches and teachers. It is just uncomfortable; sometimes it is a little frustrating. Just because I do not think everyone knows how to say it, specifically the right way. Because medical jargon is so different. But I would say, I have no issue with it. – Bailey		
	Communication. Having a translator available was huge. That was incredibly helpful. In the case where I worked at the boarding school, a few students had clinical social workers as in-town contact[s], so that was always helpful when they would need to get to a doctor. – Lincoln		
Translated resources	We always offer forms in Spanish if parents request them, and we make sure that any announcements we put out also go out on the Spanish-speaking radio stations and in the Spanish section of the newspaper. – Ace We have added more English and Spanish signage. All the sports physicals that they need preparticipation		
	paperwork [for], all have English and Spanish [forms] in the office and available online posters everywhere. — Phil One thing that would be really beneficial is if some of the educational materials that I give to my athletes was [sic] also available in Spanish, since that is the primary second language spoken in my district. So, for example, any athlete who has a concussion, they get several pages worth of information. We do not have that available in Spanish. So, I think that that is something that kind of documentation that I said with the athlete would be beneficial if we had it available in their native language. — Lousile		
Fluency	I think the language barrier was frustrating for both me and the patient. There were times where I was trying to get an idea across, and I did not Maggie		
	I would love to be more fluent [in Spanish]. I had 3 years in high school and 2 in college, but I am not remembering too much these days. I can get bits and pieces – Phillis		
	I think trying to learn a bit more Spanish and trying to communicate a bit more will help me, especially with trying to understand what they are saying as well. – Bernie		

ethnicity, religion, culture, gender, or other factors enhanced their ability to supply culturally agile care. For instance, Lousile realized the importance of family dynamics in making health care decisions:

"There are multigenerational families, so understanding that structure and who generally takes care of, say, the medical needs of the family and who would be most important to talk to. Who is going to make the doctor's appointments? Those are all considerations."

The ATs believed that patients were more likely to seek the care they needed when they felt that they and their customs were being recognized and respected. Most participants (13/15) also stated that some NNESs had feelings of fear or shame associated with their native language, ability to communicate, acceptance, or ability to progress through and understand the health care system. Phil observed, "I think it makes it harder for them to come forward with injuries or things that are bothering them because they know the process that it is going to entail." Because NNES patients may experience fear and shame, they may benefit from encouragement to receive necessary care. This fear or shame that is felt by NNESs was identified by the ATs as a barrier to providing culturally agile care to NNESs in their populations or communities. Supporting quotes for the cultural agility domain are given in Table 6.

# Resourcefulness

Within the resourcefulness domain, 5 categories emerged: a lack of formal training; on-the-job training; health information technology; initiation, effort, and time; and adaptability. Participants commented that they often had very little formal training, and many voiced that the training they did receive was through either informal live experiences or on-the-job training. For instance, Jolly reflected on her education: "I would say, to my recollection, I did not receive any formal education in dealing with NNES patients, and if so, it was limited." Jolly later discussed how on-the-job training was used to better communicate with NNES patients: "There was no formal education. It was just being made aware of those resources that I could use and then trial and error using those actual resources." Many participants described using health information technology resources to improve the care or communication they were able to provide to the NNESs. Health information technology involved the management and secure sharing of health information between providers and patients. Most of the identified health information technology resources helped the respondents by translating patient education materials. For instance, Bailey shared, "I do not think I have really done any formal professional development, but I have tried to use some language learning apps like Duolingo to learn some basics." In reference to the initiation, effort, and time category,

Table 5. Supporting Quotes for the Welcoming Environment Domain and Categories

Category Supporting Quote Speaking in native language I think everybody is more comfortable communicating in a language that they feel they understand, as a global statement. So, my coworker can provide more reassurance, and I feel like he also receives more questions than I do. - Dandy I do speak Spanish. So, I will automatically switch into Spanish to make them feel more comfortable and then we go from there. - Bonnie For example, in Spanish, it is a long process to explain to someone who has no idea and has never dealt with the return-to-play protocol. So, it is several minutes of me talking, reading their face for their understanding, but just talking. And I think, "Wow, I am giving them a novel in Spanish. Are they picking up on this? Did I lose them 3 minutes ago?" And then stopping and asking, "Does that make sense? Do you have questions? What did you understand from what I just told you?" I would always in advance say I am not fluent, please let me know if you do not understand something, and then at the end, I would say thank you for your patience. I know my grammar is a little shady here and there. And usually we get comments about like, "No, we are understanding you probably better than you realize." So, that was a good confidence boost and then just going into further future conversations with other people. - Raye Comfort And then I think that gives a welcoming vibe to people who do not know me yet so that if they need to express their culture, I think they feel comfortable doing that. - Billie I think that they could sense my empathy of care in that type of situation. - Lexi My goal in my athletic training office is just to make everybody comfortable and to understand what is going on with them and what we need to do to accomplish recovery and getting back to your sport. -It doesn't matter what language they speak as their native tongue, everybody that's human deserves the Advocate in the health care system right to health care and to be treated properly and professionally. I think sometimes we make it more challenging on the clinician and more challenging on the patients. - Bernie I think it affects them in that health care systems are extremely varied worldwide. If they have experience in a different country or limited experience here, their health literacy is typically different or more limited when dealing with our health care system. Making sure that they are educated about the resources that are available to them as well as follow-up services that I might need them to utilize, such as seeing a physician, seeing a physical therapist or anyone else involved in the health care system, depending on what their injury or condition might be, is the biggest one. - Jolly For me at least, I was more empathetic and more compassionate to them because sometimes they truly did not understand what was going on, no matter how much we tried to change it or explain it to them. And it is sad, and it is scary for them, especially when you are dealing with high school-aged and adolescent kids who are, say in a foreign country, and do not understand what is going on. Or they are hurt, and they cannot walk right, or they have a concussion, and they do not understand why their head hurts. It has definitely led to more compassionate, caring, and more empathetic care. -I incoln

participants explained having to put in more of each to supply care, obtain resources, communicate, follow up on referrals and outside care, and make the patient comfortable. Some ATs (5/15) also remarked on having to be more adaptable when providing care or communicating with an NNES compared with a native English speaker. Supporting quotes for the resourcefulness domain are shown in Table 7.

#### **DISCUSSION**

We demonstrated that ATs noted several differences in their approach to care for an NNES compared with a native English speaker. The identified domains—communication, welcoming environment, cultural agility, and resourcefulness—have been addressed by earlier researchers<sup>3,5,6,10</sup> in studies of other health care professions. However, not all of the ideas within each domain have been discussed previously, so our results could inform recommendations for implementing and providing high-quality care and communication to NNESs.

#### Communication

Communication difficulties stemming from language barriers have been commonly recognized. 1,3-6,13 Our ATs stated that despite the language difference, they were able to

communicate with patients using other techniques. All participants discussed either an interpreter or a translation service as being helpful in overcoming the language difference. This finding was consistent with the results of earlier investigators<sup>1,3–6,13</sup> who addressed the aid of interpreters in overcoming language barriers within the health care system. Respondents recognized that interpreters or reliable translation services increased their ability to effectively communicate with NNESs. Previous authors<sup>1–4,7,14–17</sup> evaluated the use of interpreters and their effectiveness based on their fluency, specific training, and role. Many of our ATs also commented on some of these components related to their interpreters and translation services.

In contrast to other health care professions studied, the participants in this study noted challenges with family members, coaches, or other students serving as interpreters, for fear of bias in the information shared, improper translation, or breach of personal health information. In other health care settings, family members are often called on to create cultural safety and trust, and patients benefit from the family members' knowledge of their medical background. The differences between athletic training and other health care professions may have to do with the emergent nature of care, as the medical history may not be relevant to an acute injury. Respondents stated that they

Category	Supporting Quote
Respect	I would just really like to emphasize that they are working very hard to be like everyone else. They do not want to lose their ability to speak Spanish, but they also are trying very hard to fit in. I think there is a lot to be said about that. These kids, they have extra on top of their plate that the normal American high school teenager does not. I think it is really that they want to be just like everyone else, but they have struggles that we cannot understand, so it is important to keep that in mind. – Bailey
	They need and deserve the same level of care as anybody else. – Lexi
	Given the climate in the world. I think everybody could do better in terms of cultural sensitivity Phillis
Acknowledging customs	I would say at the beginning, my own biases and understanding of other languages, their cultural norms when dealing with their health, and how their different cultures view medical care as well. And how their view of medicine from their home countries can affect their view of medicine here. That was an interesting hurdle to get over because in some countries they do not have orthopaedic specialties or anything. They just go to a doctor, and they will say, all right, we will stay off it for a week or take this and you should start to feel better. So, I had to do some background research on medicine and other countries and what their prior experiences with doctors were. – Lincoln
	I think being culturally aware and having a culturally diverse upbringing made me aware that everybody is differer in a sense. So, just because you are comfortable speaking English does not mean they are comfortable speaking English. Just because you are comfortable around them does not mean they are comfortable around you. I think it is important to make sure that you know going into anything that just because you are comfortable does not mean they are comfortable, and you must provide an open, caring setting. Show them that you actually care about them getting better. – Bernie
	Understanding the structure within their family I know within the athletes I work with. There are multigenerational families. And so, understanding that structure and who generally takes care of, say, the medical needs of the family and who would be most important to talk to. Who is going to make the doctor's appointments? Those are all considerations. – Lousile
	A Muslim student who prefers to wear a hijab, we will always ask if she is comfortable with somebody of the othe sex treating her. Obviously if it is an emergency, things are a little bit different. But for continued care at my school, there are 2 of us. There is a male and a female. So, we will ask her if she is comfortable with my male coworker treating her or if you would prefer that I treat her on a regular basis. – Dandy
Fear, shame, or both	I think they are concerned that I will not fully understand what is wrong with them or what they are feeling. – Ace I think it makes it harder for them to come forward with injuries or things that are bothering them because they know the process that it is going to entail. They cannot just come over and say, "hey, my knee's been botherin me. It is not that bad. Just wanted to like let you know." – Phil
	If they're not feeling comfortable and it's a busy day in the athletic training room and they've never been in a group before, anybody's uncomfortable. So if you add a language barrier in it as well, especially when there's, I mean, not necessarily this year, but there's a lot of other kids in here, chattering about and they might be sitting on a table with me trying to communicate and we're struggling, I could see it being a little uncomfortable. – Souki

increased their reliance on nonverbal communication when providing care for and communicating with NNESs. The ATs reflected that although verbal communication may pose a specific barrier, they felt that using nonverbal communication would be beneficial to the overall care provided. However, it is important to note that nonverbal communication is different for some cultures in that actions such as eye contact, shaking hands, and physical gestures can be interpreted with positive or negative connotations. This increased reliance on nonverbal communication also aligns with previous research in health care. 1,6,13 Secondary school ATs should consider using more nonverbal communication when providing care for and communicating with NNESs and may also maximize health information technology to share information through electronic images and resources.

Translated resources were identified as being beneficial to many participants. They discussed putting up signage in and around their facility in other languages, using translated medical forms and documents, and relying on bilingual people as interpreters. The ATs described making, finding, and using translated resources to increase the care and comfort of the NNESs they interacted with, specifically within the health care system. Earlier researchers<sup>4,5</sup> demonstrated the benefits of translated resources in improving outcomes for NNESs. Athletic trainers should use translated resources to improve the communication with and care provided to NNESs.

Health literacy, or the ability of individuals to obtain, understand, and synthesize information to make health care decisions, is vital for patients to be able to make informed decisions. 18 To help the patient make informed health and health care decisions, ATs need to effectively communicate with them to ensure true comprehension of the health information being shared. However, it is important to note that earlier investigators<sup>19</sup> suggested that the use of family members as interpreters can place a heavier burden on a patient's health literacy and introduce complications regarding private health information. The burden on patients and their support system illuminates the need for ATs to seek alternate effective forms of communication, such as translation services and nonverbal communication.

#### **Welcoming Environment**

In the welcoming environment domain, participants specified ways in which they made the environment more welcoming for NNESs. Respondents indicated that they tried to speak in the native language of the NNES if they had the ability to do so. The use of the NNES's native language was perceived by the ATs as increasing patient

Category	Supporting Quote		
Lack of formal training	I would say, to my recollection, I did not receive any formal education in dealing with non-native English-		
-	speaking patients, and if so, it was limited. – Jolly		
	I think it [communicating with a nonnative English-speaking patient] is an area that is not touched upon a lot		
	in entry-level athletic training education. I do not know how to incorporate it, but I think that is something		
	that could help [us to] be a more well-rounded clinician Lincoln		
	Cultural competency and language, maybe as a secondary part; I think sometimes the language needs a		
	cultural context for it to make sense for your patient Billie		
On-the-job training	There was no formal education. It was just being made aware of those resources that I could use and then		
	trial and error using those actual resources Jolly		
	When I worked in an area where I would have a lot of Spanish-speaking patients, I tried to learn more		
	Spanish so that I can communicate better with them Lexi		
	I would say working with the diverse populations that I have these last couple of years has shown that no		
	matter if you are comfortable, that does not make everyone else comfortable Bernie		
Health information technology	I do not think I have really done any formal professional development, but I have tried to use some language		
<b>.</b>	learning apps like Duolingo to learn some basics. Also, I am not sure which part of the NATA [National		
	Athletic Trainers' Association] it is, but they have that Latinx side of it, and they put out a lot of great		
	resources and then just actually on Facebook. – Bailey		
	I have pulled out the Google Translate app, and then I have liked the Latinx group. They are a group on		
	social media, and they just have been posting like infographics with different versions of medical		
	terminology in English and Spanish. – Billie		
	Things are much easier now. You have applications, you have everything online. Everything is so much		
	easier than back when. – Phillis		
nitiation, effort, and time	I think the changes that I have made, aside from having them bring somebody is just checking in with their		
, , , , , , , , , , , , , , , , , , , ,	ESL [English as a second language] teachers. One of the ESL teachers that we have is also a coach, she		
	is a great resource to communicate with and stop by and say, "How is this person doing in class?"		
	because they will see them more often than I will. So, it is important that I realize her as a resource to		
	make sure that they are doing what they need to do during the school day. And then also the secretary,		
	who is bilingual, I am checking in with her to make sure that you know we have talked to parents that we		
	know when it needs to happen. So, it is about taking that little extra step to make sure that everyone is on		
	the same page. – Bailey		
	As much as possible, in terms of their parents being nonnative speakers, I am still comfortable [providing		
	care]. I just feel like the process takes a little bit longer. Sometimes you need to establish more regular		
	checkpoints and check-ins so that you are still providing them with appropriate updates, opening the door		
	to that communication, and initiating it more on my end versus on theirs. – Dandy		
	At the beginning, we would send the email just to touch base and say here is who we are, what we do, why		
	we would be reaching out to them, and then if anything happens, send an email, call, and really keep		
	those lines of communication open. – Lincoln		
Adaptability	I have learned that you must be creative in how you are communicating and consider there is a language		
, остратиту - постратиту	barrier going on both sides, so you must be creative and how you explain things. You [must] have patient		
	on both ends. – Maggie		
	I tried to figure out what the best form of communication for them will be. I am thinking, I have an Italian		
	family where over the phone we do not communicate well, but in person, we can get by with me speaking		
	Spanish and them speaking Italian. So, I have learned that when [with] this family or if the student gets		
	hurt, I will ask him to have his parents come up to my office before he gets picked up and then we will		
	have a conversation. And then there is a family who speaks Mandarin, where it is easier to do it by email,		
	because I think they will take what I wrote and then put it into Google Translate and then write in Mandarii		
	and then translate it back to English. So, I think for the support systems, just like I have the information, I		
	can give the information in any way. If it is better over the phone or in person or over text, whatever is		
	easier for them and makes them feel like they are being understood and heard, I can adapt to that. – Billie		
	So, I would usually ask the kids, "Hey, can you call Mom or Dad and ask them to come in. They are coming		
	later to pick you up anyways," and then once they got there, we have the conversation. So if I knew I was		
	going to be having it, [it] would be at least a half hour until they arrived, allowing a chance to kind of prep		
	for it. – Raye		
	ю п. — пау <del>с</del>		

comfort and helping the NNES feel welcome and safe in their facilities. Nonetheless, this factor was not cited by all participants, which could have been because they were not all able to speak in the native language of their NNESs. Speaking in the patient's native tongue was found by previous authors<sup>3,13,16</sup> to help provide a caring and more welcoming environment for patients. Although it is not practical for ATs to speak in all languages of the populations they serve, it is worth noting that some participants who could use the native language of their

NNESs thought it offered a more welcoming and accepting environment.

Respondents also commented on attempting to increase NNES comfort within their facility. The ATs increased NNES comfort in many ways and deemed patient comfort an important responsibility. Participants reflected that by making their facility comfortable for NNESs, they were able to build more trust and rapport. This comfort increased patient satisfaction and outcomes in several studies. 1,3,5,6,13 When ATs can form trusting relationships, they are often able to better serve and provide care for their patients.

By increasing trust and rapport, ATs may also be able to better serve as NNES advocates within the health care system. Secondary school ATs have the benefit of direct access to patients when they present with a symptom or concern. If ATs can establish good relationships with NNESs by providing a more welcoming environment, they can also serve as advocates for NNESs within the health care system if a referral is necessary. The AT can help the patient progress through the health care system by aiding in scheduling appointments, interpreting results, educating the other providers about language differences, or finding a provider who speaks the native language if one is available. Secondary school ATs, with their increased exposure and easy access, may be the first, and are often the only, health care providers that some NNESs know and trust. These ATs could serve as valuable advocates, both for NNESs within the health care system and to the health care system through their knowledge of how to create a welcoming environment for NNESs.

# **Cultural Agility**

Similar to the welcoming environment domain, the cultural agility domain focuses on ensuring that NNESs feel accepted. However, instead of concentrating on only the language differences or the environment, this domain focuses on the entire culture of the NNESs. Participants discussed acknowledging and respecting customs, acting with respect, and sensing fear or shame or both when referring to cultural agility. Substantial debates have occurred both inside and outside health care about the concepts of cultural competence, cultural proficiency, cultural humility, and cultural agility. Cultural competence centers on knowledge acquisition about other cultures and is thought to have limits in that providers can learn the attitudes and skills of other cultures to supply culturally competent care. Cultural proficiency is thought to take this idea a step further by focusing on the application of this knowledge. Cultural humility refers to a mindset of lifelong reflective practice but has also been criticized as a potential replacement for cultural competence. Our participants' responses were limited to behaviors and actions and, therefore, we do not know if the ATs routinely engaged in proactive reflection that demonstrated the components of humility.

Respondents perceived how acknowledging customs and respecting the NNESs for who they are, including their customs, culture, and language, increased the comfort and feelings of acceptance in their facility. This feeling of acceptance has been shown to increase patient satisfaction and outcomes. 1.3,5,6,13,17 Providing culturally agile care to patients is always important and increases the quality of care. Acknowledging customs and respecting all people as individuals are beneficial in all circumstances, and this is no different in health care. Health care providers should deliver high-quality, moral, and ethical care to patients, and offering culturally agile care by acknowledging, respecting, and implementing customs and patients' cultures, values, and beliefs is part of that duty.

Participants referred to NNESs' perceived feelings of fear, shame, or both within their facilities and health care. These feelings could be present for a multitude of reasons and have been identified by previous researchers as barriers

for NNESs seeking health care. 1,3-6,13 Respondents discussed how feelings of fear, shame, or both could prevent NNESs from seeking medical attention in the early stages of an injury or illness, feeling accepted by the AT or environment, or offering complete information or trust to the provider. Earlier authors<sup>3-6</sup> demonstrated that these feelings were warranted, as major lapses in care have been attributed to language differences in health care. This fear or shame that NNES patients exhibit related to their native language is consistent with previous findings. 1,3-6 The potential for fear or shame felt by these patients needs to be discussed and addressed in the profession and health care in order to provide better, more equitable, and competent care to NNESs.

#### Resourcefulness

Provider resourcefulness in health care has been studied. 1,3,6 Many health care professionals have little to no formal education or training in communicating with or supplying care for NNESs. 1,3,5,6 This lack of formal training could negatively affect the care delivered to NNESs, as providers have not been educated on how best to give care, learn what challenges to expect, or know the resources available to them. Many of the participants noted that what little training they did have was motivated by their desire to provide better care to NNESs due to their experiences and not because of their formal education. Thus, ATs who have recognized a difference in the care provided for NNESs may seek more knowledge to supply better care and improve their patient outcomes. In relation to the lack of formal training and responsive motivation to clinical experiences, many respondents remarked that they engaged in some variation of on-the-job training to increase their knowledge and ability to provide equitable care to NNESs.

Other health care professionals have acknowledged the increased amount of initiation, effort, and time that is needed to communicate with and provide care to NNESs. 1,3,14 Previous investigators 6 began to explain the increased resource use in trying to improve clinician care for NNESs. When verbal understanding and communication are lacking, clinicians may feel forced to rely on other measures to help them feel comfortable in providing care. Some of these measures may include additional testing, more time for communication, interpreters, and follow-up calls. Participants also discussed how the increased amount of initiation, effort, and time not only helped the NNESs feel more confident about the care received but also helped the ATs feel more confident about the care they provided. It allowed them extra time to ask questions and ensure understanding as well as to demonstrate extra effort to convey that the care of the NNESs was important to the ATs.

All of the categories within the resourcefulness domain illuminate the differences in care provided to NNESs compared with native English speakers. To provide equitable care to NNESs, both the participants and earlier authors<sup>3,6</sup> found that increased resources were needed. These resources come in a variety of forms, such as bilingual health materials, interpretation services, and organizational interpretation policies. Increased resources highlight the need for improved education and experience in delivering health care for NNESs and to help enhance provider quality of care as well as NNESs' satisfaction.

#### Limitations and Future Research

Our participants volunteered to engage in the interview process. The population studied is possibly representative of those with an interest in care for NNESs and language fluency. Because they were asked in the recruitment email about secondary language fluency status, it may be that more ATs who were fluent in a second language volunteered to participate in the interview. We did not examine whether the ATs were bilingual or multilingual. It is also possible that those with more experience in providing care for and communicating with NNESs volunteered to participate. This could be attributed to the number of experiences they had or the importance they placed on their experiences.

Further research is needed regarding communication with and care of NNESs in athletic training and health care. To this point, no exploration has been conducted of secondary school ATs to determine the effects of language differences on patient care. This work could supply a foundation of knowledge about the perceptions of secondary school ATs on the effects of language differences. However, this study was descriptive and should be replicated across a larger population to be more representative of all secondary school ATs' experiences. Future investigators should confirm these perceptions across a larger population, characterize how to address these effects in an AT's care and education, and identify ways to increase equitable care for NNESs using athletic training services.

#### **CONCLUSIONS**

The ATs who participated in our study perceived themselves as being comfortable providing care to NNESs; however, many differences have been described in the care given to NNESs in comparison with native English speakers. The ATs reported having received little formal training in providing care to NNESs. This gap increased their resourcefulness and their use of different communication strategies to supply more equitable care. The participants also adapted their care to meet the cultural needs of NNESs. Creating a welcoming environment for NNES patients and their support systems was important in cultivating a patient-centered experience and delivering high-quality care.

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Address correspondence to Matthew J. Rivera, DAT, ATC, LAT, Indiana State University, 567 North 5th Street, Terre Haute, IN 47809. Address email to matthew.rivera@indstate.edu.