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FROM: Zeren Chen

RE: Language Justice in Duke Emergency Departments: Legal, Financial, and Strategic Considerations

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I. QUESTIONS PRESENTED

- I. Is Duke University Health System (DUHS) legally compliant with Title VI and Section 1557 in its provision of language services in its emergency departments?
- II. What are the explicit and hidden financial benefits associated with improved language access in Duke EDs?
- III. What evidence-based strategies can enhance language justice in Duke EDs while strengthening institutional performance?

II. BRIEF ANSWERS

Legal Compliance

Duke Health is largely compliant with Title VI of the Civil Rights Act and Section 1557 of the Affordable Care Act, with a formal LEP policy, 24/7 interpreter access, and structured protocols for documentation and refusal of services. However, real-world gaps persist, particularly in emergency departments, where interpreter use is inconsistently applied and under-documented. While no formal enforcement actions have been reported, these implementation lapses expose Duke to potential legal and regulatory risk, especially in high-stakes ED environments.

Financial Implications

Failing to ensure language access drives up institutional costs through avoidable ED revisits, prolonged patient stays, higher readmission rates, and elevated risk of medical error and malpractice claims. For instance, LEP patients are 24% more likely to revisit the ED within 72 hours, and experience longer ED stays and higher in-hospital mortality. Conversely, investments in language access yield measurable financial returns, improved interpreter use has been shown to reduce readmissions, save staff time, and boost HCAHPS scores, protecting value-based reimbursement streams and enhancing throughput efficiency. Language access is not only a legal obligation but a strategic cost-avoidance and performance lever.

Strategic Opportunities

To close the gap between policy and practice, Duke should strengthen ED interpreter availability (e.g., assign on-site interpreters during peak hours), embed language access prompts into EHR workflows, and expand documentation and monitoring of interpreter use. Staff training should go beyond legal basics to include practical interpreter engagement, cultural competency, and language identification protocols. Translation of discharge materials and use of teach-back methods should be standardized to ensure continuity of care. Finally, Duke should integrate language access metrics into performance dashboards and align initiatives with institutional goals on equity, quality, and safety. These steps would move the system from formal compliance toward operational excellence in Language Justice.

III. FACTS AND BACKGROUND

A. Regional Linguistic Landscape

North Carolina's population is increasingly multilingual, with a significant and growing number of residents who speak languages other than English. According to recent demographic data, nearly one million North Carolinians, roughly 11–12% of the state's population speak a language other than English at home¹. In Durham and Wake Counties, the percentage of Limited English Proficient (LEP)² individuals is higher, estimated at 9% and 6%, respectively³. These linguistically diverse communities include both long-established Spanish-speaking populations and relatively newer refugee and immigrant groups from regions such as Afghanistan, Myanmar, the Democratic Republic of Congo (DRC), and Central America. As a result, the Duke University Health System (DUHS) service area is home to a wide array of languages, including Spanish, Vietnamese, Mandarin Chinese, Arabic, Karen, Kinyarwanda, Pashto, and Dari⁴.

Central North Carolina remains a major hub for refugee resettlement and secondary migration, as confirmed by federal data and the U.S. Office of Refugee Resettlement⁵. This ongoing influx of newcomers has important implications for healthcare planning and delivery. Health systems like Duke must be prepared to serve patients across numerous language groups, often with little advance notice. Nowhere is this challenge more acute than in the emergency departments (EDs), where timely and accurate communication can be a matter of life or death. The steady growth of the LEP population places additional strain on EDs, as clinicians must communicate critical information under high-pressure conditions to patients who may not understand English.⁶

LEP patients are disproportionately represented in emergency care settings. Many individuals with limited English skills turn to EDs not only for true emergencies but also for routine or non-urgent health issues that might otherwise be managed in primary care. Several factors drive this pattern of ED overreliance among LEP communities:

- **Communication Barriers in Primary Care:** Miscommunication or inadequate interpreter support in clinics can lead LEP patients to seek care in the ED when issues worsen.
- **Difficulty with Appointment Access:** Language obstacles often make it hard to schedule timely primary care appointments or navigate referral systems.
- **Limited Awareness of Services:** Patients with limited English may not know about available preventive or urgent care services, leaving the ED as the default option.

¹ Michael Cline, "Language Characteristics of North Carolina's Population," North Carolina Office of State Budget and Management, March 4, 2024, <https://www.osbm.nc.gov/blog/2024/03/04/language-characteristics-north-carolinas-population>.

² An individual with Limited English Proficiency (LEP) is someone whose primary language is not English and who has a limited ability to read, write, speak, or understand English, thereby requiring language assistance to access services effectively.

³ "Speaking the Language of Care," Duke Today, July 11, 2018, <https://today.duke.edu/2018/07/speaking-language-care>.

⁴ "Where Refugees in North Carolina Are Arriving From," Stacker, October 9, 2024, <https://stacker.com/stories/north-carolina/where-refugees-north-carolina-are-arriving>.

⁵ U.S. Committee for Refugees and Immigrants, "USCRI North Carolina," accessed May 3, 2025, <https://refugees.org/nc/>.

⁶ Sarah J. Shin et al., "The Impact of Limited English Proficiency on Healthcare Access and Outcomes," *Journal of Immigrant and Minority Health* 26, no. 1 (2024): 1–14, <https://pmc.ncbi.nlm.nih.gov/articles/PMC10855368/>.

Consequently, multiple studies have found that language barriers correlate with adverse healthcare outcomes. LEP patients tend to experience higher rates of repeat ED visits, longer lengths of stay, and increased likelihood of hospital admission compared to English-proficient patients. For instance, one analysis showed that patients with limited English proficiency were 24% more likely to have an unplanned 72-hour revisit to the ED than their English-speaking counterparts⁷. These outcomes in turn drive up system costs and reduce throughput, as more resources are consumed by prolonged or repeat visits⁸. In summary, the region's evolving linguistic landscape – marked by growing demographic pressures of a multilingual population – directly impacts Duke Health's emergency services, underscoring the need for effective language access strategies⁹.

B. Duke Health Emergency Departments: Setting and Language Service

Duke University Health System operates one of the largest and most comprehensive emergency care networks in central North Carolina. Its three primary hospital-based EDs - at Duke University Hospital in Durham, Duke Regional Hospital, and Duke Raleigh Hospital - together serve a high-volume, high-acuity patient population¹⁰. These facilities function as regional safety nets, regularly receiving referrals of complex cases from surrounding counties and medically underserved areas¹¹. Duke's catchment area spans diverse communities across urban centers and semi-rural locales (extending even into regions like Lake Norman), which positions the system as a critical access point for linguistically and culturally diverse populations¹². In practice, this means Duke's emergency staff may encounter patients speaking any of dozens of different languages on a given day, adding complexity to fast-paced clinical workflows¹³.

To meet its legal obligations under federal law (notably Title VI of the Civil Rights Act of 1964 and Section 1557 of the Affordable Care Act), Duke Health has made significant efforts to ensure language access in care. The health system's 2024 Limited English Proficiency (LEP) Plan affirms a commitment to providing "meaningful access" for LEP patients. In concrete terms, this commitment includes offering free professional interpretation services and translated written materials to all patients who need them, in compliance with federal non-discrimination requirements. DUHS employs a hybrid interpreter services model to facilitate communication with LEP patients in the ED and other settings. In-person interpreters are coordinated through a centralized Interpreter Services department for frequently requested languages (such as Spanish and American Sign Language), while on-demand remote interpretation is available via telephone (through LanguageLine and other contracted vendors) and via video devices. Portable video

⁷ Glenn G. Ostir et al., "The Association between Limited English Proficiency and Unplanned Emergency Department Revisit within 72 Hours," *Western Journal of Emergency Medicine* 17, no. 3 (2016): 341–346, <https://pmc.ncbi.nlm.nih.gov/articles/PMC4958500/>.

⁸ Agency for Healthcare Research and Quality, *Improving Patient Safety Systems for Patients With Limited English Proficiency: A Guide for Hospitals* (Rockville, MD: AHRQ, 2012), <https://www.ahrq.gov/sites/default/files/publications/files/lepguide.pdf>.

⁹ Michelle M. Fernandes et al., "The Association between Language Discordance and Unplanned Hospital Readmissions and Emergency Department Revisits: A Meta-Analysis," *PLOS ONE* 19, no. 6 (2024): e11186734, <https://pmc.ncbi.nlm.nih.gov/articles/PMC11186734/>.

¹⁰ "Duke University Hospital: Emergency Room," Duke Health, accessed May 2, 2025, <https://www.dukehealth.org/locations/duke-university-hospital-emergency-room>.

¹¹ "Our Hospitals," Duke Health, accessed May 2, 2025, <https://corporate.dukehealth.org/clinical-care/our-hospitals>.

¹² "Facilities and Services," Duke Department of Emergency Medicine, accessed May 2, 2025, <https://emergencymedicine.duke.edu/patient-care/facilities-and-services>.

¹³ "Facilities and Services," Duke Department of Emergency Medicine, accessed May 2, 2025, <https://emergencymedicine.duke.edu/patient-care/facilities-and-services>.

interpretation units are readily available in ED triage areas and inpatient units, and their use is standard protocol for critical conversations like discharge instructions, where visual cues can enhance understanding.

Duke's language access policies lay out clear operational requirements to ensure consistency across all departments, including the EDs. Key elements of these policies include:

- **Documentation of Interpreter Use:** Clinicians must document every interpretation encounter in the patient's electronic health record (Maestro Care) using a designated "Interpreter" smart phrase. The documentation must indicate the language used and the modality of interpretation (in-person, video, or phone).
- **Informed Refusal:** If a patient declines professional language services, the provider is required to obtain and document the patient's refusal with a signed waiver form (see Attachment B of the LEP policy). This step ensures that the offer of language assistance was made and declined in an informed manner.
- **No Minor Interpreters:** Children under the age of 18 are prohibited from serving as interpreters except in truly emergent, life-threatening situations when no other option is available. This rule is in place to protect minors and to ensure accuracy in interpretation.
- **Staff Training:** Annual training on interpreter policies and effective communication with LEP persons is mandatory for all clinical and administrative staff in patient-facing roles. This training reinforces legal obligations and builds staff competency in accessing and working with interpreter resources.

Despite Duke's comprehensive policies and language access resources, implementation in emergency settings remains inconsistent. Feedback from patients and community surveys—particularly from the RCP Community Survey Data Vault—reveals both strengths and persistent gaps in the system. Many LEP patients report high satisfaction when professional interpretation is available, especially through in-person interpreters who provide more personal and nuanced communication.

In the qualitative data I coded and thematically analyzed using Atlas.ti, DUHS and Duke ED were seldom mentioned explicitly. As such, the conclusions presented here are drawn from a broader regional sample that includes other healthcare providers, such as UNC and Lincoln Community Health Center. Nevertheless, the same patients cited lapses in service. In some emergency department encounters, patients resorted to improvised communication methods such as gestures, drawings, or assistance from bilingual staff or family members who were not trained interpreters. These workarounds often led to misunderstandings, especially in the high-stress ED environment.

Patients also expressed frustration with telephone interpretation. Although readily accessible, it often feels impersonal and inadequate for conveying complex medical information or addressing emotionally charged situations, where visual cues or real-time interaction could enhance understanding. Several individuals reported missing follow-up appointments or misunderstanding discharge instructions due to language barriers during their ED visits, highlighting how communication gaps can extend beyond the clinical encounter and undermine continuity of care.

These local findings align with national research showing that inadequate language access negatively impacts quality of care and health outcomes. Collectively, the evidence underscores the need for a more proactive, system-wide approach to language services in Duke's emergency departments. Strengthening language access will be essential to advancing Duke's goals in health equity, patient safety, and patient-centered care, while improving overall performance in an increasingly diverse region.

IV. LEGAL AND REGULATORY FRAMEWORK

A. Title VI, Section 1557, and Language Access Obligations

Language access is a federally protected civil right. Under Title VI of the Civil Rights Act of 1964, any entity receiving federal funds, including hospitals, must take reasonable steps to ensure meaningful access for individuals with limited English proficiency (LEP). This includes providing interpretation and translation services free of charge. The U.S. Supreme Court affirmed in *Alexander v. Sandoval* (2001) that language-based exclusions can constitute national origin discrimination under Title VI. In effect, language barriers in care delivery can rise to the level of unlawful discrimination.

The Affordable Care Act (ACA) expanded these protections through Section 1557, which prohibits discrimination in healthcare programs based on race, color, national origin, sex, age, or disability. This provision makes clear that failing to accommodate LEP patients through interpreter services or translated materials can expose providers to legal and financial consequences, including loss of funding or civil litigation.

In 2000, Executive Order 13166¹⁴ further codified these requirements by directing all federal agencies and their grantees to implement language access plans. This executive order established the basis for the LEP guidance issued by the Department of Health and Human Services (HHS) and informs regulatory compliance audits and OCR investigations across the country.

B. Compliance Thresholds and Federal Standards

Federal guidance defines a flexible but enforceable compliance framework known as the Four-Factor Analysis, used by HHS and the U.S. Department of Justice (DOJ) to assess whether institutions meet their obligations under Title VI:

1. The number or proportion of LEP persons served;
2. The frequency of LEP patient contact.
3. The nature and importance of the services provided.
4. The resources available and associated costs.

Emergency departments fall into the highest priority category under this analysis. They provide critical, time-sensitive services, frequently serve LEP populations, and have limited tolerance for communication delays. Hospitals like Duke are therefore expected to ensure round-the-clock interpreter availability and consistent documentation of interpreter use.

¹⁴ Rescinded in 2025, but Title VI/Section 1557 obligations remain.

Mara Youdelman, "Despite new Executive Order, Language Access Is Still the Law!," National Health Law Program, accessed May 3, 2025, <https://healthlaw.org/despite-new-executive-order-language-access-is-still-the-law/>

While interpreter services are not always reimbursed under Medicaid or CHIP, lack of funding is not a valid defense for noncompliance. HHS has clearly stated that financial limitations do not exempt institutions from providing necessary services. Additionally, language access is increasingly tied to performance metrics in value-based payment models and accreditation standards, linking compliance to both funding streams and institutional ratings.

C. Duke's Compliance with Title VI and Section 1557

Written Policies and Commitment Duke has an official Limited English Proficiency (LEP) Plan (adopted July 2024) that applies to Duke University and Duke Health¹⁵. This policy explicitly affirms compliance with Title VI, stating that “*Duke will take reasonable steps to provide meaningful access*” for LEP individuals¹⁶. It underscores that Duke does not charge for language assistance and prohibits discrimination based on national origin. The existence of a system-wide plan is strong *explicit evidence* of DUHS's intent to meet legal obligations. Additionally, DUHS's Office for Institutional Equity provides a mechanism for patients to file complaints if they believe they were denied language access¹⁷, indicating an accountability process.

Interpreter Services Availability: DUHS offers a robust menu of interpreter services to patients in all care settings, including EDs. According to Duke Health's patient information, interpreters are available 24 hours a day, 7 days a week, through in-person assistance or on-demand phone and video interpretation in dozens of languages¹⁸. More than 150 languages are offered through phone interpreters, and over 40 languages (including American Sign Language) by video remote interpreting¹⁹. Patients have the right to request an in-person interpreter, and Duke will make “every reasonable effort” to provide one (especially for common languages like Spanish)²⁰. If an in-person interpreter is not immediately available - a scenario more likely in an unpredictable ED environment - staff are instructed to connect patients with a qualified medical interpreter via video or phone²¹.

This tiered system (in-person for planned needs, phone/video for immediate needs) aligns with best practices and legal standards. In fact, Duke's interpreter program is long-established: as of 2018, Duke Health employed approximately 25 full-time medical interpreters, including around 20 Spanish interpreters and others fluent in Arabic, French, and ASL²². These staff interpreters handle about 200 interpretation requests per day across Duke Health, demonstrating considerable capacity. For less common languages, Duke arranges interpreters through external agencies or telephonic services through *Language Line Solutions*, ensuring that even rare language needs can be met²³.

¹⁵ "Limited English Proficiency Plan," Office for Institutional Equity, Duke University, adopted July 2024, <https://oie.duke.edu/limited-english-proficiency-plan/>.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ "Interpreter Services at Duke Health," Duke Health, accessed May 3, 2025, <https://www.dukehealth.org/diversity-equity-and-inclusion/interpreter-services>.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Stephen Schramm, “Speaking the Language of Care,” Duke Today, July 11, 2018, <https://today.duke.edu/2018/07/speaking-language-care>.

²³ “Translation and Interpretation Services,” Duke Clinical and Translational Science Institute, accessed May 3, 2025, <https://ctsi.duke.edu/translation-and-interpretation-services>.

These efforts indicate DUHS's EDs have mechanisms to provide language services on demand, as required. Indeed, DUHS's practices mirror those in states with strict laws (e.g., Massachusetts requires ED interpreter availability by law²⁴), even though North Carolina has no separate state law, showing Duke's proactive stance.

Notice and Signage: DUHS makes an effort to inform patients of the availability of free language services. On the Duke Health website, the "Interpreter Services" page is available in over a dozen languages (Spanish, Arabic, Chinese, Vietnamese, etc.) via a language toggle²⁵. This indicates DUHS's awareness to *proactively communicate* with non-English speakers. In physical settings like ED waiting areas, one would expect "I Speak" cards or multilingual signage indicating interpreters are available, a common requirement under federal guidance. Duke's LEP plan references an "I Speak" card in 38 languages to help patients identify their language²⁶. While I do not have a direct audit of ED signage, the presence of these tools in Duke's policy suggests compliance in notifying LEP patients of their rights.

Qualified Interpreters vs. Ad Hoc: Title VI/Section 1557 regulations and Joint Commission standards stress that only trained, competent interpreters (including bilingual staff who are assessed for proficiency) should be used, and that family members or minors should not be used to interpret except in true emergencies. DUHS's materials emphasize "our interpreters are trained to work in a health care setting and follow all national standards for medical interpreters²⁷." This implies Duke employs qualified professionals or vetted services, consistent with the law. An indirect indicator of compliance is whether unqualified interpretation is being avoided in practice. A recent quality-improvement study in a large pediatric ED (NOT DUKE) found that initially only 36% of LEP encounters used professional interpreters, with frequent ad hoc (untrained) interpreting by family or staff²⁸. After interventions, use of non-qualified interpreters decreased significantly²⁹. DUHS has not publicly reported similar internal metrics; however, Duke's dedicated interpreter staffing suggests that ED clinicians have access to professionals and thus less need to "get by" with ad hoc communication. Duke's 2024 LEP policy also provides contact information for arranging professional interpreters³⁰, reinforcing that *official channels* exist and should be used. There is no public record of DUHS using minors or breaching interpreter standards, which implies general compliance.

Documentation and Data Collection: One aspect of compliance is systematically identifying patients' preferred language and documenting the use of interpreters in medical records. Without proper documentation, hospitals cannot ensure every LEP patient actually received language assistance. An *indirect measure* from DUHS's own research highlights room for improvement: In a retrospective study

²⁴"Massachusetts Interpreters and Translators," Interpreters Unlimited, accessed May 3, 2025, <https://www.interpreters.com/massachusetts-interpreter-translator/>.

²⁵"Interpreter Services at Duke Health," Duke Health, accessed May 3, 2025, <https://www.dukehealth.org/diversity-equity-and-inclusion/interpreter-services>.

²⁶"Limited English Proficiency Plan," Office for Institutional Equity, Duke University, adopted July 2024, <https://oie.duke.edu/limited-english-proficiency-plan/>.

²⁷ Ibid.

²⁸ Emily L. Osterhoudt et al., "Improving Language Access in the Pediatric Emergency Department," *Pediatric Quality & Safety* 9, no. 2 (March/April 2024): e602, <https://pmc.ncbi.nlm.nih.gov/articles/PMC11236402/>.

²⁹ Ibid.

³⁰"Limited English Proficiency Plan," Office for Institutional Equity, Duke University, adopted July 2024, <https://oie.duke.edu/limited-english-proficiency-plan/>.

of Duke University Hospital's ED-to-ICU admissions (data 2020–2021), 40% of patients had no language documented in the electronic record³¹. Only 9% were marked as having a non-English primary language, but the high “language not documented” rate suggests inconsistent screening or recording of language needs. For those identified as non-English speakers in that study, interpreters were utilized (63% had in-person interpreter available; 37% had telephone interpretation)³². The results indicate that when language needs were recognized, Duke did provide services, but the identification process might have been incomplete. Not capturing a patient's language preference (especially in emergency intake) can itself be a compliance gap, since meaningful access can only be provided if staff know an interpreter is needed. Improving this documentation is likely a focus of Duke's quality efforts (and was a key goal in the pediatric ED QI project cited above). The good news is that Duke's systems do allow flagging language needs, patients can set their preferred language in their MyChart (My Duke Health) profile for outpatient visits³³, and staff are trained to ask and record language on admission. Duke's EDs presumably follow triage protocols that include asking “What language do you prefer for medical care?”, though the data suggests this may not happen uniformly every time.

Outcomes and Quality Monitoring: Ultimately, compliance isn't just a checkbox of providing interpreters; it should strive towards *equitable care*. Analyzing patient outcomes can indirectly reveal if language barriers persist. The Duke ED-ICU study found that critically ill LEP patients experienced longer ED stays and higher mortality than English-proficient patients³⁴. Specifically, LEP patients who only had telephone interpretation spent a median 35 minutes longer in the ED awaiting ICU transfer compared to English-speaking patients, and even those with in-person interpreters had a 17-minute longer median ED length of stay³⁵. Their in-hospital mortality was also higher (15% with telephone interpreters vs 9% for English-speaking)³⁶. These disparities could stem from communication delays or challenges in critical settings, a signal that *more could be done* to ensure timely, effective communication. However, it's important to note that this study did not conclude Duke was violating any law; rather, it highlights the practical challenges of emergency communication despite services. DUHS's compliance efforts are ongoing; for example, the adoption of the new 2024 LEP Plan shows Duke is actively reviewing and updating its language access strategy.

D. Operational Insights from Duke's Former Language Services Director and Community-Based Language Navigator Data

Interviews with key personnel and analysis of community-generated data reveal a dual reality at Duke University Health System (DUHS): while the infrastructure for language access is strong and well-developed, real-world implementation might fall short, especially in high-stakes, high-pressure settings like the Emergency Department (ED).

³¹ Siobhan R. Oca et al., "Effect of Language Interpretation Modality on Throughput and Mortality for Critical Care Patients: A Retrospective Observational Study," *JACEP Open* 2, no. 4 (2021): e12477, <https://pmc.ncbi.nlm.nih.gov/articles/PMC8253091/>.

³² *Ibid.*

³³ "Interpreter Services at Duke Health," Duke Health, accessed May 3, 2025, <https://www.dukehealth.org/diversity-equity-and-inclusion/interpreter-services>.

³⁴ Siobhan R. Oca et al., "Effect of Language Interpretation Modality on Throughput and Mortality for Critical Care Patients: A Retrospective Observational Study," *JACEP Open* 2, no. 4 (2021): e12477, <https://pmc.ncbi.nlm.nih.gov/articles/PMC8253091/>.

³⁵ *Ibid.*

³⁶ *Ibid.*

Nouria Belmoulound, former Director of Duke’s Language Services Program and a certified interpreter trainer, described Duke as a regional pioneer in institutional language access. According to her, Duke was among the first health systems in the region to establish a centralized language services department, ensuring trained interpreters were integrated into care delivery across facilities. Duke also contributed to regional capacity-building by sharing language access plans and policies with peer institutions.

Despite this progress, Belmoulound stressed that policy does not always translate into consistent practice. DUHS policy mandates that only trained, validated interpreters, including external vendors, should be used during clinical encounters. Yet Belmoulound recounted frequent departures from protocol, particularly in the ED, where family members, untrained staff, or even children are sometimes asked to interpret in urgent situations. One particularly dangerous case involved a child interpreting for their parent, which nearly led to a surgical procedure without informed consent, a violation only avoided when a qualified interpreter was brought in late in the process.

These incidents are consistent with systemic challenges in emergency care environments, where time pressures, staff variability, and limited overnight interpreter availability create vulnerabilities in communication and compliance. Belmoulound emphasized that enforcing uniform interpreter standards across all staff is essential to reduce clinical risk and uphold federal obligations.

These concerns are corroborated by data from the Refugee Community Partnership (RCP), whose Language Navigators (LNs) are trained community volunteers who escort LEP patients throughout their healthcare appointments, often starting with transportation and extending through check-in, treatment, and discharge. LNs serve as observers and advocates, documenting whether interpretation services are offered and used during medical visits.

RCP’s internal data from 2020 to 2025 paints a mixed picture³⁷. As DUHS saw an increase in LN-accompanied appointments, reflecting expanded outreach to LEP communities, the proportion of appointments with no interpretation also rose:

- In 2023, 75.49% of LN appointments involved interpretation being provided.
- In 2024, that figure fell sharply to 45.93%, while appointments with no interpretation nearly doubled, from 13.73% to 26.67%.
- As of early 2025, 23.08% of appointments were still occurring without any interpretation.

While some cases may reflect patients declining services or speaking insufficient English, the year-over-year increase in unserved encounters is a red flag, especially given DUHS’s available infrastructure. These trends likely reflect a combination of:

- Inadequate provider training on when and how to request interpreters;
- Lack of accountability for policy adherence in fast-paced environments;
- Limited access to rare language interpreters, particularly after hours;

³⁷ Tra Tran, *Illuminating the Shadows: Refugee and Migrant-Led Analysis of Language In-access in Health Care as a Product of White Structural and Cultural Dominance*, Refugee Community Partnership, April 1, 2022 – May 31, 2022.

- Reliance on staff discretion to determine whether interpretation is “needed,” risking under-identification of language needs.

In addition to these quantitative trends, regional qualitative data gathered by RCP continue to highlight serious patient concerns. LEP community members, particularly refugees and immigrants, reported:

- Delays in interpreter availability;
 - Poor communication around diagnoses and care instructions.
- Continued use of unqualified interpreters, including family members.

These stories mirror the issues raised by Belmoulound and show that existing gaps are not isolated but systemic. To address these concerns, community partners and equity advocates should pursue the following actions:

- Establish community-informed patient feedback loops, disaggregated by language, to systematically capture LEP experiences and service gaps;
- Develop real-time monitoring tools to track interpreter use by department, time of day, and language, and flag missed encounters.
- Enforce mandatory use of qualified interpreters during high-risk touchpoints, including consent, diagnosis disclosure, and discharge planning;
- Require public-facing performance reporting, such as an annual language access report, to increase transparency and accountability;
- Invest in staff education, particularly in high-turnover areas like the ED, to reinforce legal obligations and operational procedures related to language services.

Together, these measures can help ensure that DUHS’s policies are translated into consistent, equitable care for every LEP patient. The combination of expert insight, community observation, and real-time data shows that closing the gap between policy and practice is not a matter of awareness but of accountability and systems alignment.

E. Bottom Line

DUHS appears to be broadly compliant with Title VI and Section 1557 requirements regarding language services in its EDs. The health system provides free, 24/7 interpreter access in multiple modalities, has a formal policy in line with federal standards, and dedicates resources (staff and technology) to language assistance. No public reports were found of DUHS facing OCR (Office for Civil Rights) sanctions or lawsuits for failing to provide interpreters. Duke’s practices (such as maintaining full-time medical interpreters and offering phone/video on demand) likely *exceed* minimum requirements, positioning DUHS as a leader in language access in North Carolina.

That said, indirect indicators like documentation gaps and outcome disparities suggest that compliance is not just a yes/no. It’s a spectrum. There is room for DUHS EDs to improve consistency (ensuring every LEP patient is identified and connected with an interpreter without delay) and to monitor quality metrics for LEP populations. These refinements are part of moving from baseline legal compliance to true language equity.

V. FINANCIAL IMPLICATIONS OF INADEQUATE LANGUAGE ACCESS

Language barriers in emergency care don't only pose clinical risks, they carry significant financial implications for both the institution (DUHS) and the broader healthcare system. These costs can be direct (e.g. treating an adverse event or legal liability from a miscommunication) or hidden (inefficiencies, patient behaviors that drive up costs, public health ripple effects). Evaluating these costs for DUHS's EDs involves combining any DUHS-specific data with general research, since hospitals often do not publicly itemize "language barrier costs."

A. Direct Institutional Impacts

Medical Errors, Misdiagnosis and Patient Safety Events: Communication failures caused by language gaps can lead clinicians to misunderstand symptoms or patients to misunderstand instructions, resulting in misdiagnoses or treatment errors. LEP patients are 2 to 4 times more likely to experience medical errors in their care³⁸. These errors often have to be corrected with additional tests, procedures, or treatments, each carrying a cost. More gravely, errors can cause patient harm, triggering investigations and raising the risk of malpractice lawsuits. A national study by the Joint Commission found that patients with communication barriers suffer markedly higher rates of preventable adverse events (AEs) and that communication issues were a leading root cause in malpractice claims³⁹.

For DUHS, an adverse event in the ED (e.g. giving a wrong medication dose because a symptom was misinterpreted) means not only immediate costs (additional care, longer hospitalization) but also potential legal and reputational costs. While we do not have DUHS-specific error statistics, the higher mortality and delay for LEP patients in Duke's ED-ICU study⁴⁰ hint that communication barriers can contribute to worse outcomes, which often come with extra expense (longer ICU stays, etc.). Preventable harm is costly: one estimate found eliminating communication barriers could prevent over 670,000 adverse events and save \$6.8 billion annually in the U.S.⁴¹. Even a tiny fraction of that at one health system is substantial. In essence, miscommunication-driven errors represent a hidden tax on DUHS's quality and safety budgets, consuming resources that could be saved with better language access.

Malpractice Risk and Liability: Inadequate language access can directly lead to malpractice claims if a patient suffers harm and it's shown that Duke failed to provide an interpreter or get informed consent properly. A report by the National Health Law Program examined malpractice cases involving language barriers, finding that such cases often stem from lack of interpreters or use of unqualified interpreters. The *financial stakes* are high: language-related malpractice claims have cost hospitals hundreds of thousands

³⁸ "The Cost of Language Barriers in Health Care: A Case for Translation Support," Care to Translate, accessed May 3, 2025, <https://www.caretotranslate.com/news/the-cost-of-language-barriers-in-health-care-and-a-case-for-translation-support>.

³⁹ Richard R. Hurtig, Rebecca M. Alper, and Benjamin Berkowitz, "The Cost of Not Addressing the Communication Barriers Faced by Hospitalized Patients," *Patient Education and Counseling* 101, no. 12 (2018): 2160–2169, <https://pmc.ncbi.nlm.nih.gov/articles/PMC6402813/>.

⁴⁰ Siobhan R. Oca et al., "Effect of Language Interpretation Modality on Throughput and Mortality for Critical Care Patients: A Retrospective Observational Study," *JACEP Open* 2, no. 4 (2021): e12477, <https://pmc.ncbi.nlm.nih.gov/articles/PMC8253091/>.

⁴¹ Richard R. Hurtig, Rebecca M. Alper, and Benjamin Berkowitz, "The Cost of Not Addressing the Communication Barriers Faced by Hospitalized Patients," *Patient Education and Counseling* 101, no. 12 (2018): 2160–2169, <https://pmc.ncbi.nlm.nih.gov/articles/PMC6402813/>.

to millions in settlements or judgments⁴². For example, one infamous case (outside Duke) involved a misinterpreted single word (“intoxicado”), leading to a \$71 million malpractice settlement⁴³. While that case is extreme, it illustrates the liability exposure. According to industry data, the average cost of a medical malpractice suit is around \$242,000⁴⁴. Even if language issues contribute to a small number of cases, each such case could cost DUHS heavily.

Moreover, regulatory non-compliance penalties can loom: Section 1557 allows HHS to impose fines or fund withdrawals for repeated language access violations⁴⁵. From a risk management perspective, investing in interpreters is akin to an insurance policy against lawsuits⁴⁶. DUHS, by maintaining comprehensive interpreter services, likely avoids many potential legal incidents, a cost *avoidance* that is hard to measure but very real. It’s notable that Duke has not been “hit” with a known language access lawsuit, suggesting that up-front investment in language services pays off by preventing costly legal scenarios⁴⁷.

Emergency Department Throughput and Length of Stay: Time is money in the ED. When communication is efficient, patients are evaluated, treated, and either admitted or discharged promptly. Language barriers can slow this process, for instance, it may take extra time to triage an LEP patient or to explain procedures via an interpreter. A study at Duke’s own ED found LEP patients needing interpretation spent on average 17–35 minutes longer in the ED (for critical cases) than similar English-speaking patients⁴⁸. This delay can have cascading costs: prolonged ED stays contribute to crowding (potentially diverting ambulances or requiring opening more beds), increase staff workload, and may necessitate overtime or hallway boarding. If an LEP patient’s diagnosis is delayed by even half an hour, their condition might worsen, potentially leading to longer inpatient stays once admitted. While some literature and industry reports suggest that patients with language barriers may spend more time in the hospital overall, the specific figure of 0.5 to 2 days longer is not directly supported by the Duke study⁴⁹.

For DUHS, even minor throughput inefficiencies in a busy ED translate to real costs—if communication issues keep a patient in the ED an extra 30 minutes, that’s 30 minutes a bed is tied up. Over a year and

⁴² National Health Law Program, "The High Costs of Language Barriers in Medical Malpractice," July 23, 2013, <https://healthlaw.org/wp-content/uploads/2018/09/Language-Access-and-Malpractice.pdf>.

⁴³ Power of CLAS, "The misinterpretation of a single Spanish word in ER leads to the quadriplegia of a young man," June 15, 2023, <https://www.powerofclas.com/post/the-misinterpretation-of-a-single-spanish-word-in-er-leads-to-the-quadruplegia-of-a-young-man>.

⁴⁴ Gilman & Bedigian, "Costs In Medical Malpractice Cases," accessed May 3, 2025, <https://www.gilmanbedigian.com/costs-in-medical-malpractice-cases/>.

⁴⁵ National Health Law Program, "Title VI and Section 1557 Language Access Requirements," May 9, 2024.

⁴⁶ "Language Access Provisions of the Final Rule Implementing Section 1557," HHS, December 5, 2024.

⁴⁷ "The Cost of Language Barriers in Health Care," Care to Translate, accessed May 3, 2025.

⁴⁸ Siobhan R. Oca et al., "Effect of Language Interpretation Modality on Throughput and Mortality for Critical Care Patients: A Retrospective Observational Study," JACEP Open 2, no. 4 (2021): e12477, <https://pmc.ncbi.nlm.nih.gov/articles/PMC8253091/>.

⁴⁹ "The Cost of Language Barriers in Health Care: A Case for Translation Support," Care to Translate, accessed May 3, 2025, <https://www.caretotranslate.com/news/the-cost-of-language-barriers-in-health-care-and-a-case-for-translation-support>.

hundreds of LEP patients, the opportunity cost of those delays is significant (fewer patients served, or more staffing needed). Industry modeling estimates that for a hospital seeing 100,000 patients a year, if 10% are LEP, the added hospital days from language barriers could cost around \$5 million annually, though this figure is based on external modeling rather than peer-reviewed research⁵⁰. While DUHS mitigates some delays by using interpreter technology, the Duke study shows that even with these services, LEP patients experience longer ED stays, indicating that remaining inefficiencies still incur hidden financial costs⁵¹.

30-Day Readmissions and CMS Penalties: Communication at discharge is crucial to prevent return visits. If an ED patient (or any hospital patient) doesn't fully understand their diagnosis, medications, or follow-up plan due to language barriers, they are at higher risk of complications or non-adherence that lead them back to the hospital. Studies confirm that LEP patients historically have higher readmission rates than English-proficient patients⁵². For instance, LEP patients with chronic conditions like COPD have 30-day readmission rates significantly greater than others (e.g., 15.6% vs 11.8% in one study, and those with heart failure have rates of 18.1% vs 13.9%)⁵³. Importantly, when hospitals improve language access, readmissions can drop. At one academic medical center, installing dual-handset interpreter phones throughout the hospital and ensuring their use led LEP patients' 30-day readmission rate to fall from 17.8% to 13.4%, while the English-speaking patients' rate slightly rose in that period⁵⁴. This intervention averted 119 readmissions in 8 months, which translated to an estimated \$1.32 million in savings after accounting for the interpreter program cost. In other words, better communication upfront saved over \$160,000 per month in avoided admissions [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/).

For DUHS, avoidable readmissions are a major financial concern because Medicare imposes Hospital Readmission Reduction Program (HRRP) penalties on hospitals with excessive readmissions for certain conditions. While HRRP focuses on inpatient discharges, ED communication (especially for ED discharges or for the ER component of an inpatient visit) is part of the continuum⁵⁵. A readmitted patient costs Duke twice: once for the initial visit and again for the return, often without full reimbursement for the second if penalized. By ensuring LEP patients understand discharge instructions and medication (e.g. using interpreters and translated instructions), DUHS can reduce readmission-related costs and avoid CMS penalties. Beyond Medicare, any readmission is an added cost (the Duke Margolis Center has noted

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Lisa R. Sun et al., "Association Between Limited English Proficiency and Revisits and Readmissions After Hospitalization for Patients With Acute and Chronic Conditions," *JAMA Network Open* 2, no. 10 (2019): e1913717, <https://jamanetwork.com/journals/jama/fullarticle/2753354>.

⁵³ Mary Lindholm et al., "Convenient Access to Professional Interpreters in the Hospital Decreases Readmission Rates and Estimated Hospital Expenditures for Patients With Limited English Proficiency," *Journal of General Internal Medicine* 32, no. 3 (2017): 332–338, <https://pubmed.ncbi.nlm.nih.gov/articles/PMC5309198/>.

⁵⁴ "Medical Interpreters Make Healthcare Equitable for LEP Patients," *Certified Languages International*, accessed May 3, 2025, <https://certifiedlanguages.com/blog/how-medical-interpreters-can-make-healthcare-more-equitable-for-lep-patients/>.

⁵⁵ "Medicare's Hospital Readmission Reduction Program in Surgery," *Annals of Surgery*, <https://pubmed.ncbi.nlm.nih.gov/articles/PMC4248020/>.

that even with payment reforms, readmissions generally represent inefficiency)⁵⁶. Thus, inadequate language access that leads to a preventable readmission might cost thousands in extra care and lost revenue. Conversely, language services, which might cost a few hundred dollars per patient, can yield net savings by preventing that outcome⁵⁷.

Patient Experience and Reimbursements: Patient satisfaction directly impacts financial incentives through value-based purchasing (VBP) programs, which tie reimbursement to performance metrics like HCAHPS scores. Communication quality is a core HCAHPS domain, and limited English proficiency (LEP) patients in Duke EDs or hospitals who experience poor communication (e.g., lack of interpreters) are more likely to rate these domains lower. For example, non-English speakers report 19% lower satisfaction with provider communication and are 40% more likely to report unresolved concerns compared to English speakers⁵⁸. Lower scores risk reimbursement penalties under VBP and harm institutional reputation, particularly in immigrant communities where negative experiences may deter timely care-seeking, increasing reliance on costlier acute visits⁵⁹.

Providing professional interpreters significantly improves LEP patient satisfaction, with studies showing their use enhances trust, adherence, and follow-up rates. Hospitals with robust language services report 20–30% fewer missed appointments and higher compliance with discharge instructions⁶⁰. While the exact dollar value of patient trust varies, improved satisfaction correlates with operational efficiency and reduced administrative burdens from complaints⁶¹.

B. Broader Societal and Public Health Costs

Beyond the hospital's balance sheet, inadequate language access in emergency care has public health and societal cost implications that, while harder to quantify, are important for a holistic evaluation:

Community Health Outcomes: When language barriers deter people from seeking care early, manageable conditions can escalate into emergencies. For example, a Spanish-speaking patient who doesn't understand how to take a new asthma medication might end up with a severe asthma attack in the ED. Society then bears the cost of higher acuity care and lost productivity from the patient's illness⁶².

⁵⁶ Duke-Margolis Center for Health Policy, "Strengthening Specialist Participation in Comprehensive Care through Condition-Based Payment Reforms," November 2022, <https://healthpolicy.duke.edu/sites/default/files/2022-11/Strengthening%20Specialist%20Participation%20in%20Comprehensive%20Care%20through%20Condition-Based%20Payment%20Reforms.pdf>.

⁵⁷ Mary Lindholm et al., "Convenient Access to Professional Interpreters in the Hospital Decreases Readmission Rates and Estimated Hospital Expenditures for Patients With Limited English Proficiency," *Journal of General Internal Medicine* 32, no. 3 (2017): 332–338, <https://pmc.ncbi.nlm.nih.gov/articles/PMC5309198/>.

⁵⁸ "Impact of Language Barriers on Patient Satisfaction in an Emergency Department," *Academic Emergency Medicine* 6, no. 1 (1999): 82–87, <https://pubmed.ncbi.nlm.nih.gov/10051778/>.

⁵⁹ "Measuring Success in Health Care Value-Based Purchasing," *Health Services Research* 52, no. S2 (2017): 2077–2096, <https://pmc.ncbi.nlm.nih.gov/articles/PMC5161317/>.

⁶⁰ "The Effects of Interpreter Utilization on Patient Outcomes," *Journal of Emergency Nursing* 49, no. 3 (2023): 397–408,

https://journals.lww.com/ehpf/fulltext/2023/06020/the_effects_of_interpreter_utilization_on_patient.1.aspx.

⁶¹ "A Case Study of the Impact of Language Concordance on Patient Satisfaction," *Journal of Immigrant and Minority Health* 25, no. 2 (2023): 450–457, <https://pmc.ncbi.nlm.nih.gov/articles/PMC9959935/>.

⁶² "Implications of Language Barriers for Healthcare: A Systematic Review," *Journal of Patient Experience* (2020): <https://pmc.ncbi.nlm.nih.gov/articles/PMC7201401/>.

Populations with language barriers often have worse overall health outcomes-including higher rates of uncontrolled chronic diseases and lower use of preventive services⁶³. This creates a cycle of health disparities that require public health intervention at taxpayer expense. In Durham and surrounding areas, if LEP residents don't feel Duke's system can communicate with them, they may delay care until they are critically ill, increasing the burden on emergency services and EMS - another public cost⁶⁴.

Public Health Emergencies: In situations like disease outbreaks or pandemics, lack of language access can hinder effective response. If EDs cannot communicate isolation instructions or contact tracing info to LEP patients, it can contribute to wider spread of illness. This was observed during COVID-19 surges in many communities, language barriers led to misunderstandings about quarantine and treatment, exacerbating outbreak severity⁶⁵. The *societal cost* is measured in additional cases and healthcare resources needed. While Duke's EDs did employ interpreters during COVID, one can imagine that any gaps would have had community ripple effects. Thus, language access in the ED is a front-line defense for public health: effective communication helps contain health issues at the source⁶⁶.

Economic Productivity and Social Cost: Patients who suffer adverse outcomes due to language miscommunication may experience long-term disability or complications. For instance, a medication error due to a language barrier could leave a patient with organ damage requiring lifelong treatment. These long-term consequences mean lost workforce productivity and higher dependency on social services. At scale, a region's economy can be impacted if a segment of the population has systematically poorer health. North Carolina's rapidly growing immigrant workforce is an asset; ensuring they have equitable emergency care keeps them healthier and more productive⁶⁷. Conversely, "getting it wrong" in the ED due to language issues might result in a family's primary breadwinner being out of work for weeks or months, a cost that radiates to employers, schools (if children must care for parents), and beyond⁶⁸.

Trust in the Healthcare System: A more subtle societal cost is the erosion of trust. If language minorities believe that hospitals won't understand them or might treat them poorly, they may not engage in health-promoting activities or cooperate with public health directives. Rebuilding trust often requires expensive community outreach and education campaigns⁶⁹. It's far more cost-effective to maintain trust by providing respectful, understandable care from the start. DUHS, as a prominent health system,

⁶³ "Why Breaking Language Barriers Is Key to Achieving Health Equity," Carenet Health (2024): <https://carenethealthcare.com/why-breaking-language-barriers-is-key-to-achieving-health-equity/>.

⁶⁴ "Language Barriers in an Out-of-Hospital Setting," JEMS (2024): <https://www.jems.com/patient-care/language-barriers-in-an-out-of-hospital-setting/>.

⁶⁵ Sarah E. Rosenbaum et al., "Disparities in COVID-19 Testing and Outcomes in New York City: The Role of Language Barriers," *Journal of General Internal Medicine* 36, no. 5 (2021): 1339–1341, <https://link.springer.com/article/10.1007/s11606-021-06668-8>.

⁶⁶ National Health Law Program, "Language Access and the COVID-19 Pandemic: Ensuring Effective Communication with LEP Communities," July 2020, <https://healthlaw.org/resource/language-access-and-the-covid-19-pandemic/>.

⁶⁷ Glenn Flores, "Overcoming Language Barriers in Health Care: Costs and Benefits of Interpreter Services," *American Journal of Public Health* 94, no. 5 (2004): 866–869, <https://pmc.ncbi.nlm.nih.gov/articles/PMC1448350/>.

⁶⁸ "Implications of Language Barriers for Healthcare: A Systematic Review," *Journal of Patient Experience* 7, no. 3 (2020): 430–435, <https://pmc.ncbi.nlm.nih.gov/articles/PMC7201401/>.

⁶⁹ "Impact of Language Barriers in Doctor–Patient Relationship," *Journal of Family Medicine and Primary Care* 7, no. 2 (2018): 386–391, <https://pmc.ncbi.nlm.nih.gov/articles/PMC9842973/>.

influences how healthcare is perceived by diverse communities in the Triangle region⁷⁰. Leading with strong language access can yield a more engaged public that uses resources appropriately; failing in this area could mean higher costs in *educating or re-engaging* alienated groups later⁷¹.

In summary, while DUHS's immediate incentive is to avoid the direct costs of poor language access, there is also a compelling *business case* and *moral case* for society. Effective language services in EDs lead to healthier communities, reduce the strain on public health infrastructure, and promote economic well-being by preventing medical miscommunications from cascading into larger problems. Literature suggests that money spent on interpreter services has a ROI (return on investment) in avoided downstream costs, it's evident that providing professional interpreters in all clinical encounters would be cost-saving on a per-patient basis when factoring in prevention of errors and improved outcomes. Investing in language access is not just compliance or compassion, it's also financially prudent when considering the full picture.

VI. BEST PRACTICES AND RECOMMENDED STRATEGIES

“Language justice” in healthcare refers to a framework where all patients, regardless of language, have equal ability to communicate and benefit from care. Achieving this in a fast-paced environment like the ED requires systematic approaches. DUHS has a solid foundation, but as noted, there are areas to strengthen. The following evidence-based strategies are recommended to enhance language justice in Duke's EDs. Each is chosen for its potential to also boost institutional performance, from patient satisfaction and quality metrics to staff efficiency and financial sustainability. Where possible, examples from comparable academic medical centers and published studies are included to illustrate real-world impact:

A. Optimize Interpreter Services Delivery in the ED

Ensuring rapid, convenient access to professional interpreters at the point of care is paramount. Duke already has phone and video interpreter systems; the goal is to make their use in the ED as seamless as talking to an English-speaking patient.

Deploy Dedicated ED Interpreter Resources^{72 73 74}: One strategy is to have on-site interpreters assigned to the ED during peak hours. Many large hospitals with significant LEP volume station a Spanish interpreter (or other high-demand language interpreter) in the ED, ready to assist on the spot. This reduces

⁷⁰ "Communication Breakdown: How Language Barriers Erode Patient Trust," LinkedIn, August 5, 2024, <https://www.linkedin.com/pulse/communication-breakdown-how-language-barriers-erode-patient-bruce-dxb9e>.

⁷¹ "Bridging the Language Gap," Medecision, February 10, 2024, <https://medecision.com/bridging-language-gap/>.

⁷² "Best Practices for Caring for Patients with Non-English Language Preferences and/or Who Are Deaf/Hard of Hearing in Emergency Departments," American Academy of Emergency Medicine, accessed May 3, 2025, <https://www.aaem.org/interpreter-service-best-practice-guide/>.

⁷³ Ann D. Bagchi et al., "Examining Effectiveness of Medical Interpreters in Emergency Departments for Spanish-Speaking Patients With Limited English Proficiency: Results of a Randomized Controlled Trial," Mathematica Policy Research, https://www.imiaweb.org/uploads/docs/using_professionally_trained_interpreters_to_increase_patient_provider_satisfaction.pdf.

⁷⁴ Karen C. Lion et al., "Evidence-based best practices for identifying patients with LEP and using professional interpretation are well described but inadequately implemented," *Pediatrics* 135, no. 4 (2015): e709–e716, <https://pubmed.ncbi.nlm.nih.gov/articles/PMC8759339/>.

wait times to get an interpreter and can speed up processes like triage and consent for procedures. For instance, some academic medical centers in California and Texas have hired “ED interpreter liaisons” who round on new arrivals with LEP and proactively assist, resulting in improved throughput and provider satisfaction (as cited in language access conferences, albeit not published formally). Duke could analyze ED volume by time-of-day/language to justify scheduling its in-house interpreters accordingly (e.g. a Spanish interpreter 12pm–12am daily when most patients arrive). Having a human interpreter physically present can be faster and can handle simultaneous tasks (helping with forms, explaining delays) in a way phone interpreters cannot.

Leverage Technology for Instant Access⁷⁵: For languages where on-site staff isn’t feasible, invest in the fastest possible connection to remote interpreters. Duke already uses video interpreting on tablets/carts – ensuring these devices are readily available in every ED room and triage is key. A best practice is to integrate interpreter video calls into the clinical workflow: e.g., nurses in triage can have a tablet logged into the interpreter service as they start the encounter, minimizing any lag in calling. *One study found that having dual-handset interpreter phones permanently in each patient room led to a clear reduction in LEP readmissions* because staff could not say “it wasn’t available”, it was literally at arm’s reach⁷⁶. Duke could adopt a similar approach with its Vocera badges or other comm systems – perhaps a one-button speed dial for an interpreter. The easier it is, the more it will be used. Regular drills or simulations in the ED (like “stroke code on an LEP patient” scenario) can ensure the team practices calling interpreters without delay⁷⁷.

Innovative Tools (with Caution): Some hospitals have experimented with translation apps for basic communication when interpreters are not immediately available. For example, Massachusetts General Hospital tested a tablet-based app for simple questions to supplement interpreter use⁷⁸. However, any technology like AI translators should be *additive, not replacement* for human interpreters due to accuracy and nuance concerns. If Duke explores such tools (perhaps the Care to Translate app⁷⁹, which provides pre-translated medical phrases), it should be in low-risk interactions (greetings, non-clinical info) and always followed up by professional interpretation for clinical decision-making. The priority remains quality and accuracy of communication.

By optimizing interpreter service delivery, Duke’s EDs can reduce communication delays, thereby improving ED flow (saving costs) and improve clinical outcomes (which boosts quality metrics). Also, when providers can communicate efficiently, they can see more patients in less time, a win for

⁷⁵ "Best Practices for Caring for Patients with Non-English Language Preferences and/or Who Are Deaf/Hard of Hearing in Emergency Departments," American Academy of Emergency Medicine, accessed May 3, 2025, <https://www.aaem.org/interpreter-service-best-practice-guide/>.

⁷⁶ Elizabeth A. Jacobs et al., "Use of Communication Technologies to Cost-Effectively Increase the Availability of Interpretation Services in Healthcare Settings," *Journal of General Internal Medicine* 25, no. 4 (2010): 276–280, <https://pmc.ncbi.nlm.nih.gov/articles/PMC2992399/>.

⁷⁷ "5 Ways to Improve Language Access in Healthcare," AMN Healthcare, May 3, 2023, <https://www.amnhealthcare.com/amn-insights/language-services/blog/5-ways-to-improve-language-access-in-health-care/>.

⁷⁸ "Translation App Streamlines Imaging Exams During COVID-19," Massachusetts General Hospital, April 16, 2021, <https://advances.massgeneral.org/radiology/article.aspx?id=1390>.

⁷⁹ "Care to Translate on the App Store," accessed May 3, 2025, <https://apps.apple.com/us/app/care-to-translate/id1281460003>.

productivity. Studies show that even though using an interpreter adds a little time to an individual encounter, it saves time overall by preventing misunderstandings that would require longer interventions later. In summary, *making interpreter access instantaneous and routine in the ED* is a cornerstone of language justice that pays off in better care and efficiency⁸⁰.

B. Strengthen Staff Training and Awareness

Even with services in place, front-line staff (physicians, nurses, etc.) must fully buy into using them and know how to use them effectively. A recurring issue in EDs nationwide is underutilization of interpreters – sometimes due to time pressure, or lack of awareness of how critical it is. DUHS can address this through targeted training and culture-building:

Cultural Competency and Interpreter Utilization Training: Duke can incorporate regular training sessions for ED clinicians on working with interpreters and cross-cultural communication. This might include modules on Title VI/1557 obligations (so staff understand it's not optional), case studies of errors that occurred due to not using an interpreter, and practical skills for using phone/video interpreters (e.g. how to pause for interpretation, speak in short segments, etc.)⁸¹. According to a 2024 study⁸², involving professional interpreters in medical school training greatly improved young clinicians' comfort and skills in communicating with LEP patients. Duke could extend this concept to ED staff through workshops that include interpreter-facilitated role-play with simulated patients. When providers are confident in these skills, they are more likely to engage interpreters even in hectic situations.

Physician Education and Sensitivity: The American College of Emergency Physicians (ACEP) has highlighted that physician attitudes matter – if doctors see interpreters as allies rather than burdens, usage increases. Duke's ED leadership should communicate a clear message: *Using a trained interpreter is a sign of good care, just like using the correct diagnostic test*. Recognizing and celebrating clinicians who consistently provide language-concordant care (for example, mentioning in performance reviews or awards) can shift culture. Conversely, gently correcting instances where, say, a provider relied on a patient's family member to interpret when a phone interpreter was available can reinforce expectations. The 2018 Annals of Emergency Medicine analysis by Dr. Jay Brenner et al. suggested that improving provider training and sensitivity is vital to overcome underutilization. Duke can implement those suggestions by ensuring every ED provider attends periodic refreshers on this topic.

Workflow Protocols and Prompts: Sometimes, in the heat of emergency care, calling an interpreter might be forgotten. DUHS can integrate prompts into the ED workflow. For instance, if a nurse marks "Spanish" as preferred language at triage, the electronic system could pop up a reminder: "Use interpreter for all communications, click here to connect!" Similarly, checklists (like an ED admission checklist) can include an item "Interpreter present?" to nudge staff. By making it a standard part of the ED checklist (just as one would check allergies or identity), it normalizes the practice. Some hospitals have

⁸⁰ "Providing Interpreter Services in Healthcare: Enhancing Care," Certified Languages International, January 13, 2025, <https://certifiedlanguages.com/blog/providing-interpreter-services-in-healthcare/>.

⁸¹ "The Role of AI in Medical Translation: Advancements & Limitations," Globibo, March 30, 2025, <https://globibo.blog/the-role-of-ai-in-medical-translation-advancements-limitations/>.

⁸² "The Effects of Interpreter Utilization on Patient Outcomes," Journal of Emergency Nursing 49, no. 3 (2023): 397–408, https://journals.lww.com/ehpf/fulltext/2023/06020/the_effects_of_interpreter_utilization_on_patient.1.aspx.

successfully used such nudges to boost interpreter usage rates dramatically.

Diversify the Workforce and Language Skills: Training isn't only formal education, it's also about having a workforce that reflects the community. DUHS should continue to recruit bilingual staff and clinicians. When patients see someone who speaks their language, it builds trust quickly. While one cannot staff every language, having Spanish-speaking providers or nurses in the ED can be hugely beneficial (not to replace interpreters for complex discussion, but to facilitate comfort and basic communication). Duke might consider a pay differential or credentialing for staff language skills. For example, nurses who pass a medical Spanish proficiency test could wear a badge indicating they are bilingual and receive a small pay bump⁸³.

This incentivizes language skills among staff (promoting workforce equity by valuing those skills) and increases the likelihood that at any given time, someone on duty can directly communicate with Spanish-speaking patients for immediate needs. Hospitals like UCSF⁸⁴ and NYU⁸⁵ have implemented such bilingual pay differentials as part of their language access programs, which improved staff morale and retention of bilingual employees. Duke's Office of Institutional Equity and Duke Health can collaborate on this strategy, aligning with Duke's diversity/inclusion goals.

In sum, empowering ED staff through training and a supportive culture ensures that having interpreter services translates to *using* interpreter services. This yields safer care (reducing errors), higher patient satisfaction (patients feel respected when an interpreter is used), and even improved clinician satisfaction (fewer frustrating miscommunication incidents). A well-trained staff will help DUHS maximize the return on its existing language services infrastructure.

C. Enhance Procedures for Identifying and Documenting Language Needs

As noted earlier, one weak link can be the identification of LEP patients. Duke should aim for 100% identification rate so no one "falls through the cracks." Strategies here include:

Universal Language Screening at ED Intake: Just as every patient is screened for emergency severity, every patient should be asked in their preferred language, "What language do you prefer to discuss your healthcare?" Duke can implement a standardized script for registrars/triage nurses, and provide them tools (like the "I Speak" card with multiple languages) to help patients communicate their choice. If a patient doesn't speak English at all, staff should not default to trying broken communication, they should immediately engage an interpreter to even complete the intake. The presence of an interpreter right at triage can then expedite further steps. One best practice is to have multi-lingual signage or flags at triage" e.g., a sign in multiple languages that says "If you speak Spanish, we will get you an interpreter at no cost," prompting patients to self-identify. Given the diversity in Durham (which also includes languages like Chinese, Arabic, Karen, etc., in smaller numbers), having a poster listing common languages and the

⁸³ "Advantages of Being a Bilingual Healthcare Worker," Joyce University, November 18, 2024, <https://www.joyce.edu/blog/advantages-of-being-bilingual-in-healthcare/>.

⁸⁴ "Salaries & Benefits," Department of Family and Community Medicine, UCSF, accessed May 3, 2025, <https://fcm.ucsf.edu/salaries-benefits>.

⁸⁵ "The Benefits of Bilingual Pay Differentials in Healthcare: A Guide for Healthcare Employers," Alta Language Services, accessed May 3, 2025, <https://altalang.com/beyond-words/bilingual-pay-differentials-in-healthcare/>.

message about free interpreters can prompt LEP individuals to point out their language.

EHR Integration and Alerts: Duke's Epic electronic health record should be optimized to capture language preference prominently. If a patient has a known preferred language from a past visit (stored in MyChart or registration), that should auto-populate in the ED track board or patient banner. And if "Language: Spanish (needs interpreter)" is in the chart, the system could place an icon next to the patient's name visible to all caregivers⁸⁶. Some hospitals use a little flag icon or a globe symbol in the EHR tracking board for LEP patients. This acts as a constant visual cue that any clinician seeing the patient must use language services⁸⁷. During handoffs, clinicians should mention language needs just as they mention allergies or code status. Essentially, treat language needs as a core part of the patient's identity in care documentation⁸⁸. This not only improves compliance but also data for quality improvement, Duke can run reports on. For instance, how many Spanish-speaking patients visited the ED and how often interpreters were documented as used.

Monitor and Feedback: As part of quality improvement, DUHS EDs could regularly audit a sample of LEP patient charts to see if interpreter use was documented during key events (history taking, consent, discharge)⁸⁹. The pediatric ED study at Boston Children's showed improvement in documentation of interpreter usage after QI interventions⁹⁰. Duke could establish a similar monitoring program: e.g., the ED nurse manager or quality officer reviews 10 LEP cases a month. If they find, for example, an instance where a consent for procedure was obtained without an interpreter noted, that can be followed up (was it an oversight in documentation or was an interpreter truly not used?). Providing feedback to ED teams that "last month we achieved 90% proper documentation of interpreter usage, let's get to 100%" creates accountability. It also surfaces systematic barriers (if staff say "we didn't have time to get an interpreter in this code situation," that might indicate a need for a faster solution in code scenarios)⁹¹.

Why this matters: By perfecting identification and documentation, Duke will minimize the chance of an LEP patient not receiving help. It also generates data to showcase compliance (useful if ever queried by regulators). From a financial angle, thorough documentation can protect Duke in case of any legal question ("see, we had an interpreter at 3:00pm noted here"). And knowing the volume and patterns of LEP patients helps plan interpreter services (which languages to staff for, what times are busy, etc.). In short, you can't fix what you don't measure. Duke should measure and record language needs meticulously as part of routine ED practice.

⁸⁶ "Turn that frown upside down: implementation of a visual cue improves communication during emergency department to inpatient hand-offs," *BMJ Open Quality* 11, no. 4 (2022): e002078, <https://bmjopenquality.bmj.com/content/11/4/e002078>.

⁸⁷ "The Utility of Dot Phrases and SmartPhrases in Improving Physician Documentation of Interpreter Use in the Emergency Department," *Western Journal of Emergency Medicine* 25, no. 2 (2024): 123–130, <https://pmc.ncbi.nlm.nih.gov/articles/PMC11112665/>.

⁸⁸ "Informing Visual Display Design of Electronic Health Records," *Patient Safety* (2023): <https://patientsafetyj.com/article/77769-informing-visual-display-design-of-electronic-health>.

⁸⁹ Elizabeth A. Jacobs et al., "Improving Identification of Interpreter Need in the Pediatric Emergency Department," *Pediatric Emergency Care* 39, no. 3 (2023): 227-232.

⁹⁰ Emily L. Osterhoudt et al., "Improving Interpreter Access in the Pediatric Emergency Department," *Pediatric Quality & Safety* 9, no. 2 (2024): e602.

⁹¹ Elizabeth A. Jacobs et al., "Improving Identification of Interpreter Need in the Pediatric Emergency Department," *Pediatric Emergency Care* 39, no. 3 (2023): 227-232.

D. Expand Translation of Written Materials and Use Teach-Back

Oral interpretation is critical in the ED, but patients are often sent home with paperwork: discharge instructions, medication schedules, referrals. If those are only in English, LEP patients may not benefit from them, leading to errors or readmissions. Two strategies address this:

Provide Key Documents in the Patient's Language: DUHS should ensure that discharge instructions and consent forms are available in the most commonly needed languages (certainly Spanish, and others like Chinese, Vietnamese, Arabic depending on volume). This may involve maintaining a library of translated discharge templates for common conditions (e.g. asthma care, wound care instructions). Many peer institutions use vendor services or share resources for translated materials. Given DUHS's size, it might invest in translating the top 20 discharge instructions into Spanish and other top languages. Additionally, simpler things like medication labels and prescriptions can be printed in other languages via pharmacy systems. Duke could activate those features so that, for example, a prescription printout says “tomar una tableta por la mañana” for a Spanish-speaking patient. Patients are far more likely to adhere to instructions they can read. From a cost perspective, this reduces the chance of misuse of medications (avoiding ED revisits due to confusion). It also reinforces informed consent, a patient who signs a form in their own language is more likely to truly understand it, reducing legal risk.

Teach-Back and Visual Aids^{92 93}: Regardless of language, EDs struggle with patients retaining information. For LEP patients, Duke providers (with interpreters) should employ the “teach-back” method. Asking patients to repeat in their own words what the plan is, to confirm understanding. This technique, recommended by AHRQ, ensures that any miscommunication can be caught before the patient leaves. Interpreters can assist by conveying the patient's explanation and any points of confusion. Additionally, providing visual aids or demonstration can transcend language. For instance, an ED doctor can show how to use an inhaler physically while the interpreter narrates. The visual plus audio in the patient's language is powerful⁹⁴. Duke could create simple pictographic instruction sheets for common ED situations (some hospitals give illustrated medication schedules, or pain scales with faces that have captions in multiple languages). These help patients of any literacy level. Ensuring comprehension at discharge directly ties to fewer readmissions and higher satisfaction (patients feel cared for when someone takes the time to confirm they understand)⁹⁵. Duke can take inspiration from such models to improve the transition from ED to home or to admission for LEP individuals. Every prevented bounce-back saves money and improves outcomes, so these communication investments pay dividends.

E. Community Engagement and Outreach for Language Access

⁹² "Case Studies: The Impact of Visual Aids in Patient Education," Virginia Creative Group, September 5, 2024, <https://virginiacreativegroup.com/visual-aids-case-studies/>.

⁹³ "The teach-back method: Communicating more effectively with patients to improve health outcomes," WebMD Ignite, January 1, 2025, <https://webmdignite.com/blog/teach-back-method-communicating-more-effectively-patients-improve-health-outcomes>.

⁹⁴ "Use and Effectiveness of the Teach-Back Method in Patient Education," Patient Education and Counseling (2019): <https://pmc.ncbi.nlm.nih.gov/articles/PMC6590951/>.

⁹⁵ "AHRQ Health Literacy Universal Precautions Toolkit, Second Edition," Agency for Healthcare Research and Quality, accessed May 3, 2025, <https://www.ahrq.gov/sites/default/files/publications/files/healthlittoolkit2.pdf>.

Language justice isn't only achieved within the hospital's four walls; it also involves engaging the community so that people know how to navigate the system. Duke can boost its standing and effectiveness by extending efforts outward:

Community Education: Partner with local community organizations (Refugee Community Partnership is a great place to start), ethnic media, and clinics to spread the word that Duke Health offers free interpreter services and that no one should fear coming to the ED due to language⁹⁶. This addresses a hidden barrier: some immigrants or LEP residents may assume they won't be understood and avoid seeking care. For example, Duke can run a public service announcement on a Spanish radio station about the availability of Spanish interpreters 24/7, it may encourage someone to get care earlier, preventing a worse emergency. It also builds trust, showing Duke respects and welcomes non-English speakers. The ACEP recommendations include "*increasing community engagement to empower local residents to know their rights before they have an emergency.*"⁹⁷ Duke could hold health fairs or info sessions in multiple languages (perhaps in partnership with Durham County Public Health and an organization like Refugee Community Partnership) where they demonstrate how to use an "I Speak" card or what to expect in the ED. Empowered patients make for smoother encounters (they might bring their "I Speak Spanish" card and hand it to staff, saving time in identification).

Feedback Mechanisms: As part of outreach, Duke should solicit feedback from LEP patients about their ED experiences. This can be done via patient surveys translated into their language or through community advisory boards. Hearing directly from patients can uncover issues that data might miss, it's possible that signage is confusing or patients felt rushed even with an interpreter⁹⁸. By addressing feedback, Duke improves services and shows responsiveness, further increasing trust. Some hospitals have Language Access Patient Advisory Councils composed of bilingual community members who periodically review materials and give suggestions. Duke could institute something similar, aligning with its mission of community partnership⁹⁹.

Policy Advocacy and Leadership: As a leading health system, DUHS can influence broader change by sharing its successes and challenges. Engaging in initiatives like the National CLAS (Culturally and Linguistically Appropriate Services) standards implementation or collaborating with other academic medical centers on research can help refine strategies¹⁰⁰. For example, Duke researchers contributed to studies on interpreter modality impact; continuing such research and publishing QI outcomes from Duke ED interventions would position Duke as a national leader in language justice¹⁰¹. This can attract grants or federal support (e.g., demonstration projects on innovative interpreter technology), indirectly benefiting

⁹⁶ "Language Access in Community Health Centers: Ensuring Care for All," Global Interpreting, October 29, 2024, <https://globalinterpreting.com/blog/language-access-in-community-health-centers-ensuring-care-for-all/>.

⁹⁷ "Community Outreach and Language Access: Engaging Multicultural Populations," Global Interpreting, October 9, 2024, <https://globalinterpreting.com/blog/community-outreach-and-language-access-engaging-multicultural-populations/>.

⁹⁸ Themes prevalent in patient surveys.

⁹⁹ "Guide To Developing A Language Access Plan," Centers for Medicare & Medicaid Services, accessed May 3, 2025, <https://www.cms.gov/about-cms/agency-information/omh/downloads/language-access-plan.pdf>.

¹⁰⁰ "Making the Case for Implementing the National CLAS Standards," Centers for Medicare & Medicaid Services, accessed May 3, 2025, <https://www.cms.gov/files/document/making-case-implementing-national-clas-standards.pdf>.

¹⁰¹ "Strengthening the - Institute for Patient and Family-Centered Care," IPFCC, accessed May 3, 2025, https://www.ipfcc.org/bestpractices/dei-and-pfacs/IPFCC_Strengthening_Diversity.pdf.

Duke financially and reputationally¹⁰².

By looking outward, Duke also ensures that its internal efforts are culturally informed and patient-centered. A community that feels Duke “sees us and speaks our language” will more readily seek care appropriately, which ultimately reduces the strain of late-presenting illness on the ED.

F. Align Language Access with Performance Improvement Goals

To secure institutional support, it helps to tie language access initiatives to DUHS’s broader performance metrics. Many suggestions above inherently do so, but making it explicit can drive resource allocation:

Include Language Metrics in Quality Dashboards: Duke can introduce metrics like “% of LEP patients with documented interpreter use” or “LEP patient experience score” into its ED quality dashboard alongside wait times and door-to-doc times. What gets measured gets managed. If an ED sees that its LEP patients have longer waits or lower satisfaction, that becomes a catalyst for improvement projects (just as they would act on any other disparity). For example, noticing that LEP patients had a 10% higher rate of leaving without being seen could prompt hiring more interpreters or tweaking triage¹⁰³.

Frame as Patient Safety and Equity Issue: Duke’s institutional goals include health equity and patient safety. Language access improvements can be framed as addressing both. The Joint Commission and other accrediting bodies have put increasing emphasis on communication as part of patient safety and equity in care¹⁰⁴. By exceeding standards here, DUHS strengthens its accreditation compliance and may gain recognition (some hospitals have gotten awards for their language access programs, kudos for their reputation)¹⁰⁵.

Financial Analysis of Interventions: When proposing any investment (like additional interpreter FTEs or new equipment), include the kind of cost-benefit data mentioned earlier: e.g., “Adding X interpreters or Y devices may cost \$Z, but could save an estimated \$Z*2 by reducing readmissions and errors.” The example of saving \$1.3 million in 8 months by preventing readmissions can be very persuasive to administrators¹⁰⁶. If Duke can replicate even a fraction of that, the program pays for itself. Also, note that Medicaid and Medicare now reimburse interpreter costs in some cases (for instance, Medicaid in NC may

¹⁰² "Patient Advisory Councils: Giving Patients a Seat at the Table," American Academy of Family Physicians, July 2015, <https://www.aafp.org/pubs/fpm/issues/2015/0700/p22.html>.

¹⁰³ "Hospital Language Services: Quality Improvement and Performance Measures," in Patient Safety and Quality: An Evidence-Based Handbook for Nurses, Agency for Healthcare Research and Quality, 2008, <https://www.ncbi.nlm.nih.gov/books/NBK43719/>.

¹⁰⁴ "The Joint Commission health equity National Patient Safety Goal takes effect," Health Communication Partners, July 14, 2023, <https://healthcommunicationpartners.com/the-joint-commission-health-equity-national-patient-safety-goal-takes-effect/>.

¹⁰⁵ "Overcoming the challenges of providing care to limited English proficient patients," The Joint Commission, <https://www.jointcommission.org/resources/news-and-multimedia/newsletters/newsletters/quick-safety/quick-safety-issue-13-overcoming-the-challenges-of-providing-care-to-lep-patients/overcoming-the-challenges-of-providing-care-to-lep-patients/>.

¹⁰⁶ Mary Lindholm et al., "Convenient Access to Professional Interpreters in the Hospital Decreases Readmission Rates and Estimated Hospital Expenditures for Patients With Limited English Proficiency," *Journal of General Internal Medicine* 32, no. 3 (2017): 332–338.

provide some funding for language services)¹⁰⁷. Duke should ensure it takes advantage of any such reimbursement to offset costs.

By clearly linking language justice initiatives to improved quality metrics, risk reduction, and financial returns, DUHS leadership can justify and sustain these efforts. Essentially, the idea is to bake language access into the DNA of ED operations and continuous improvement, rather than viewing it as a standalone “extra” service.

VII. CONCLUSION

Duke University Health System’s emergency departments have made commendable strides in providing language services, aligning with the letter and spirit of Title VI and Section 1557. Explicit evidence, from Duke’s official LEP plan to the availability of 24/7 professional interpreters, indicates that DUHS is largely compliant with federal language access requirements and is actively working to include everyone in their care mission. At the same time, indirect indicators such as documentation gaps and outcome disparities for LEP patients remind us that compliance is an ongoing journey, not a one-time box to tick. Addressing those gaps is not just a legal or ethical imperative, but a strategic one for Duke Health.

The analysis of costs revealed a compelling narrative: inadequate language access is expensive, in human and financial terms. Miscommunication leads to more errors, longer stays, higher readmissions, and greater liability, all of which carry hefty price tags for DUHS and society at large. Conversely, investing in language access (interpreters, training, translated materials) can prevent costly adverse events and improve efficiency, effectively paying for itself through avoided expenses. In a healthcare environment increasingly focused on value, improving language access is a value strategy.

Finally, the recommended strategies for enhancing language justice in Duke’s EDs provide a roadmap to go from solid compliance to true excellence. By optimizing interpreter access, training staff, tightening processes, translating key information, and engaging the community, DUHS can ensure that no patient is left behind due to language. These interventions, drawn from evidence and peer institutions, also bolster Duke’s goals in quality, equity, patient satisfaction, workforce development, and financial stewardship. For example, something as simple as installing dual-handset interpreter phones in every ED room could measurably reduce readmissions and improve patient understanding. Training clinicians to work seamlessly with interpreters can prevent errors and boost satisfaction for both patients and providers. In sum, language access improvements create a virtuous cycle: better communication = better outcomes = lower costs = ability to reinvest in care.

DUHS operates in a diverse community and holds a reputation as a leading academic health system. Embracing language justice in emergency care is both an obligation and an opportunity to lead by example. By implementing the strategies outlined and continually measuring its performance, Duke Health can move beyond basic legal compliance to achieve a model of emergency care where every patient, regardless of language, receives equitable, safe, and compassionate treatment. This would fulfill

¹⁰⁷ "Medicaid and CHIP Reimbursement Models for Language Services," National Health Law Program, March 31, 2024, <https://healthlaw.org/wp-content/uploads/2024/03/Medicaid-and-CHIP-Reimbursement-Models-FINAL-2024-1.pdf>.

not only the requirements of Title VI and Section 1557, but also Duke's own core values of respect, trust, inclusion, and excellence, ultimately improving the health of the populations it serves and strengthening DUHS's standing as a healthcare provider of choice for all.

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