Inpatient Communication Barriers and Drivers When Caring for Limited English Proficiency Children

Angela Y Choe, MD¹*, Ndidi I Unaka, MD, MEd^{1,2}, Amanda C Schondelmeyer, MD, MS^{1,2,3}, Whitney J Raglin Bignall, PhD⁴, Heather L Vilvens, MEd, CHES⁵, Joanna E Thomson, MD, MPH^{1,2}

¹Division of Hospital Medicine, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio; ²Department of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, Ohio; ³James M. Anderson Center for Health Systems Excellence, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio; ⁴Division of Psychology in the Department of Pediatrics, Nationwide Children's Hospital, Columbus, Ohio; ⁵Allied Health Department, University of Cincinnati Blue Ash College, Cincinnati, Ohio.

BACKGROUND: Achieving effective communication between medical providers and families with limited English proficiency (LEP) in the hospital is difficult.

OBJECTIVE: Our objective was to identify barriers to and drivers of effective interpreter service use when caring for hospitalized LEP children from the perspectives of pediatric medical providers and interpreters.

DESIGN/ PARTICIPANTS/ SETTING: We used Group Level Assessment (GLA), a structured qualitative participatory method that allows participants to directly produce and analyze data in an interactive group session. Participants from a single academic children's hospital generated individual responses to prompts and identified themes and relevant action items. Themes were further consolidated by our research team and verified by stakeholder groups.

RESULTS: Four GLA sessions were conducted including 64 participants: hospital medicine physicians and pediatric residents (56%), inpatient nursing staff (16%), and interpreter

mmigrant children make up the fastest growing segment of the population in the United States.¹ While most immigrant children are fluent in English, approximately 40% live with a parent who has limited English proficiency (LEP; ie, speaks English less than "very well").^{2,3} In pediatrics, LEP status has been associated with longer hospitalizations,⁴ higher hospitalization costs,⁵ increased risk for serious adverse medical events,^{4,6} and more frequent emergency department reutilization.⁷ In the inpatient setting, multiple aspects of care present a variety of communication challenges,⁸ which are amplified by shift work and workflow complexity that result in patients and families interacting with numerous providers over the course of an inpatient stay.

Increasing access to trained professional interpreters when caring for LEP patients improves communication, patient satisfaction, adherence, and mortality.⁹⁻¹² However, even when ac-

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Find Additional Supporting Information in the online version of this article. Received: February 18, 2019; Revised: May 1, 2019; Accepted: May 4, 2019 © 2019 Society of Hospital Medicine DOI 10.12788/jhm.3240 services staff (28%). Barriers identified included: (1) difficulties accessing interpreter services; (2) uncertainty in communication with LEP families; (3) unclear and inconsistent expectations and roles of team members; and (4) unmet family engagement expectations. Drivers of effective communication were: (1) utilizing a team-based approach between medical providers and interpreters; (2) understanding the role of cultural context in providing culturally effective care; (3) practicing empathy for patients and families; and (4) using effective family-centered communication strategies.

CONCLUSIONS: Participants identified unique barriers and drivers that impact communication with LEP patients and their families during hospitalization. Future directions include exploring the perspective of LEP families and utilizing team-based and family-centered communication strategies to standardize and improve communication practices. *Journal of Hospital Medicine* 2019;14:607-613. © 2019 Society of Hospital Medicine

cess to interpreter services is established, effective use is not guaranteed.¹³ Up to 57% of pediatricians report relying on family members to communicate with LEP patients and their caregivers;⁹ 23% of pediatric residents categorized LEP encounters as frustrating while 78% perceived care of LEP patients to be "misdirected" (eg, delay in diagnosis or discharge) because of associated language barriers.¹⁴

Understanding experiences of frontline inpatient medical providers and interpreters is crucial in identifying challenges and ways to optimize communication for hospitalized LEP patients and families. However, there is a paucity of literature exploring the perspectives of medical providers and interpreters as it relates to communication with hospitalized LEP children and families. In this study, we sought to identify barriers and drivers of effective communication with pediatric patients and families with LEP in the inpatient setting from the perspective of frontline medical providers and interpreters.

METHODS

Study Design

This qualitative study used Group Level Assessment (GLA), a structured participatory methodology that allows diverse

^{*}Corresponding Author: Angela Y. Choe, MD; E-mail: angela.y.choe@gmail. com; Telephone: 513-636-3893; Twitter: @AChoeMD.

TABLE 1. Participant Demographics Based on Participant Role

	Physicians ^a	Nursing and Ancillary staff	Interpreters	Total
Total participants (n, %)	36 (56%)	10 (16%)	18 (28%)	64 ^b
Duration in current position (years)	3.8 ± 3.7	12.6 ± 10.3	4.8 ± 3.8	5.4 ± 6.0
Non-Hispanic white (n, %)	23 (62%)	9 (24%)	5 (14%)	37 (58%)
Speaks multiple languages (n, %)	29 (59%)	0	18 (37%)	49 (77%)
Speaks multiple languages well (n, %) ^c	9 (31%)	0	18 (62%)	29 (45%)

^aTwo GLA sessions involved physicians, which included attending physicians (n = 16) and pediatric residents (n = 20)

^bTen to 21 participants were present for each GLA session

«Self-reported to be "native/ functionally native" or "advanced" in their proficiency and accuracy in conversing and understanding including communication of health concepts as defined in AAMC residency ERAS® 2018 application²⁰

Abbreviations: AAMC, Association of American Medical Colleges; ERAS®, Electronic Residency Application Service; GLA, group level assessment.

groups of stakeholders to generate and evaluate data in interactive sessions.¹⁵⁻¹⁸ GLA structure promotes active participation, group problem-solving, and development of actionable plans, distinguishing it from focus groups and in-depth semistructured interviews.^{15,19} This study received a human subject research exemption by the institutional review board.

Study Setting

Cincinnati Children's Hospital Medical Center (CCHMC) is a large quaternary care center with ~200 patient encounters each day who require the use of interpreter services. Interpreters (in-person, video, and phone) are utilized during admission, formal family-centered rounds, hospital discharge, and other encounters with physicians, nurses, and other healthcare professionals. In-person interpreters are available in-house for Spanish and Arabic, with 18 additional languages available through regional vendors. Despite available resources, there is no standard way in which medical providers and interpreters work with one another.

Study Participants and Recruitment

Medical providers who care for hospitalized general pediatric patients were eligible to participate, including attending physicians, resident physicians, bedside nurses, and inpatient ancillary staff (eg, respiratory therapists, physical therapists). Interpreters employed by CCHMC with experience in the inpatient setting were also eligible. Individuals were recruited based on published recommendations to optimize discussion and group-thinking.¹⁵ Each participant was asked to take part in one GLA session. Participants were assigned to specific sessions based on roles (ie, physicians, nurses, and interpreters) to maximize engagement and minimize the impact of hierarchy.

Study Procedure

GLA involves a seven-step structured process (Appendix 1): climate setting, generating, appreciating, reflecting, understanding, selecting, and action.^{15,18} Qualitative data were generated individually and anonymously by participants on flip charts in response to prompts such as: "I worry that LEP families__," "The biggest challenge when using interpreter services is__," and "I find__ works well in providing care for LEP families." Prompts were developed by study investigators, modified based on input from nursing and interpreter services leadership, and finalized by GLA facilitators. Fifty-one unique prompts were utilized (Appendix 2); the number of prompts used (ranging from 15 to 32 prompts) per session was based on published recommendations.¹⁵ During sessions, study investigators took detailed notes, including verbatim transcription of participant quotes. Upon conclusion of the session, each participant completed a demographic survey, including years of experience, languages spoken and perceived fluency,²⁰ and ethnicity.

Data Analysis

Within each session, under the guidance of trained and experienced GLA facilitators (WB, HV), participants distilled and summarized qualitative data into themes, discussed and prioritized themes, and generated action items. Following completion of all sessions, analyzed data was compiled by the research team to determine similarities and differences across groups based on participant roles, consolidate themes into barriers and drivers of communication with LEP families, and determine any overlap of priorities for action. Findings were shared back with each group to ensure accuracy and relevance.

RESULTS

Participants

A total of 64 individuals participated (Table 1): hospital medicine physicians and residents (56%), inpatient nurses and ancillary staff (16%), and interpreters (28%). While 81% of physicians spoke multiple languages, only 25% reported speaking them well; two physicians were certified to communicate medical information without an interpreter present.

Themes Resulting from GLA Sessions

A total of four barriers (Table 2) and four drivers (Table 3) of effective communication with pediatric LEP patients and their families in the inpatient setting were identified by participants.

Subthemes	Quotes
Barrier 1: Difficulties accessing inter	rpreter services
Process of scheduling interpreters	• "My biggest challenge when using interpreter services is not understanding the scheduling process or availability""More transparency around how in- person interpreters are scheduled would help teams troubleshoot better." (physicians)
	• "Providers schedule appointment [with interpreters] without confirming with family [at] the last minute [and] interpreters are not used when time requested," "[and] requests from providers [do not have] a realistic and accurate estimate of the time and need for an in-person interpreter." (interpreters)
Knowledge about system and limitations	• "My biggest challenges when using interpreter services are lack of predictability in when we have rapid access or need." (physicians)
	• "I wish [medical providers] understood the difficulties of obtaining resources for rare languages" "[and are] more familiar with alternative interpreting platforms and be willing and open to use them." (interpreters)
Using technology	• "Communicating with LEP families goes poorly when technology doesn't work poor connection [and] the video/audio goes in and out " (nursing staff)
	• "If I could change anything about using phone interpreters, it would be improved directions in how to use [and] improvement in the wait time [I] have waited 10 minutes for an interpreter [on the phone]." (physicians)
Barrier 2: Uncertainty in communica	tion with LEP families
What to share and how to prioritize information during encounters with LEP families	• "There is a danger in [treating] all the data as equal. By the time we get to the end, which is really important stuff, an interpreter [may need] to run to anothe appointment [We] need to make sure [we] get to priorities first." (physicians)
	• "Communicating with LEP families goes poorly when providers use numbers and data with patients the same way they share them with fellow doctors." (interpreters)
What is actually being communicated during interpretation	• "Communicating with LEP families goes poorly when I am unsure if information is being delivered correctly [by the interpreter]" "The most difficult part of taking care of LEP families is feeling frustrated when [information] gets lost in the interpreter conversation." (physicians)
	• "When caring for LEP families, physicians need to speak slowly so all [information] can be interpreted [and] give time for interpreter to interpret." (interpreters)
What families understand	• "The most difficult part about taking care of LEP families is really knowing they are understanding and receiving info the way I think they are." (physicians)
	 "Communication with LEP families goes poorly when everyone speaks for a long time [using] very complicated terminology or sentences that are incoherent" (interpreters)
	• "When taking care of LEP families, I feel they don't understand the importance of what [we are] telling them." (nursing staff) vs "When taking care of LEP families, I [am] worried they don't fully understand the plan or have unaddressed concerns." (physicians) vs "I wish LEP families knew how to express their needs." (interpreters)
Barrier 3: Unclear and inconsistent e	expectations and roles of team members
Communication regarding expectations from multiple stakeholders	 "It [is] difficult to convey info in a very large group, especially [with] intern [or] new learner [who] are trying first hand at the expense of the family. Communicating goes poorly when multiple medical professionals or family members try to talk at once." (physicians)
	• "The way we take care of LEP families would completely change if [medical] providers [communicated] level of seriousness of encounter." (interpreters) vs "I wish interpreters would [communicate] their style [with the team] prior to going [into] a room [Some] have different preferences on how much info is too much." (physicians) vs "Families [don't know] how rounds go [or what they should expect from rounds]." (interpreters)
Roles and scope of practice for each team member	• "I wish interpreters felt empowered to ask us to slow down or clarify We had an untrained student who was presenting during rounds, but I was astonished that interpreter didn't stop him to say that it wasn't working." (physicians) vs "Interpreters [must] stick to their role [and] remain within the code of ethics." (interpreters)
	• "Both family and interpreter defer authority to physician; if you educate that one person, it will change the entire encounter." (interpreters)
	• "I wish interpreters would interpret everything that is said verbatim even when providers are discussing among themselves even if it doesn't seem as important." (physicians) vs "[Interpreting in verbatim is difficult] when everyone speaks for a long time [using] very complicated terminology or sentences that are incoherent [or] contradictory [and] when [there are] distractions during session." (interpreters)
Barrier 4: Unmet family engagemen	t expectations
Provider engagement with the family	• "When providing interpreter services during rounds, I feel [as if] rounding team does not have enough patience to answer families' questions." (interpreters)
	• "When busy, I find it most difficult to provide brief updates that would occur if they were English speaking if interpreter is not scheduled, [I] shy away from doing what is right." (physicians)
	• "When interacting with LEP families, I wish physicians would use a [professional] interpreter and not guess what the family are trying to say." (interpreters)
	 "LEP families do not have much contact with their care teams [and] get as many updates on their child [such as] labs, studies, and assessment as English- proficient families" "[It feels] like I do them a disservice sometimes due to challenges and time needed to arrange appropriate interpretation." (physicians)
Family engagement with the providers	• "When taking care of LEP families, I feel bad for the family because most of the time they do not ask questions and may not know what I am doing I feel like work happens around the patient and family instead of with especially when medical staff is rushed or no interpreter is available." (nursing staff)
	• "When taking care of LEP families I feel inefficient [and] less connected." (nursing staff)
	• "I wish LEP families knew their medical rights and knew how to speak directly to healthcare providers [and didn't] shy away from asking questions or ask for clarifications." (interpreters)
Abbreviation: LEP, limited English profic	iency.

TABLE 2. Barriers to Effective Communication with LEP Patients and Families

Table 3. Drivers of Effective Communication with LEP Patients and Families

Subthemes	Quotes
Driver 1: Utilizing a team-base	d approach between medical providers and interpreters
Mutual understanding to optimize current resources	• "[Medical staff need to] request the interpreter in advance, without waiting until the last minute, [and provide] a realistic and accurate estimate of the time and need for a live interpreter" "I wish [medical staff] knew how hard it is to coordinate interpreter resources [and that] we are not machines but human beingsWe are not a burden but a tool to get job done." (interpreters)
	• "In-person [interpretation] is fantastic but [has] logistic challenge[s]. When an iPad/phone [is] ready in the room and available immediately, [it] saves time [and] reduces hassle." (physicians)
Shared expectations for a patient encounter via presession	• "Communicating with LEP families goes [well when] interpreter services [communicate] back to [medical staff] that one is not available or time has changed." (nursing staff)
	• "Communicating with LEP families goes well when a presession was conducted and all parties know what to expect from the interpreter" "[and] medical staff receive[d] training on how to work with interpreters" "[It helps] when the nature of the bedside interaction is considered [and] physicians inform the interpreter of needed info by the sessions begin." (interpreters)
Driver 2: Understanding the ro	le of cultural context in providing culturally effective care
Provider perception of the family's culture	• "When caring for LEP families, [medical providers] need to increase their cultural competencystop making cultural judgments, [and] avoid practicing their "language knowledge" with the families [while] interpreters need to be transparent, accurate, culturally sensitive." (interpreters)
	• "Communicating with LEP families goes well when there is some understanding of cultural differences in communication" "[and] cultural context [that would inform us on] how best to convey information and interact with families". (physicians)
LEP family's knowledge about the culture and healthcare system in the US	• "I wish LEP families knew to speak directly to healthcare providers [and] the hospital [and learn about] their medical rights, the meaning of HIPAA, [and] the new culture in the US different than their own." (interpreters)
	• "When providing interpreter services to LEP families, I believe that the most important source of time loss in each encounter is too many jokes [or] idioms that don't translate to other languages." (interpreters)
Provider insight into one's own preconceived ideas about LEP families	• "If I could change one thing about working with medical staff when providing interpreter services, [it is] medical staff assumptions that family members are capab to interpret for patient/ family." (interpreters)
	• "When providing interpreter services at discharge, I [worry] assumptions of providers that LEP patients are familiar with US life style; [physicians] need to avoid promising help that can't be provided or sustained by the health system." (interpreters)
Driver 3: Practicing empathy fo	or patients and families
Respect for diversity	 "The best part about taking care of LEP families is appreciating other cultures, getting to know other people with different backgrounds, feeling like you are impacting someone's life and their views of the US [by] helping them feel welcome and [that their] voice [is] heard." (nursing staff)
	• "The best part about taking care of LEP families is having diversity in patient care [and] learning about different cultural perspectives; [There is a] different sense of fulfillment [that comes from] attempting to fill in holes in their medical knowledge that other providers may not have done." (physicians)
	• "The best part of providing interpreter services in the hospital is seeing people connect despite language barrier." (interpreters)
Display of humanism and compassion toward LEP families	• "The way we take care of LEP families would completely change if we took [the] time to learn about their struggles to come to this country and [in] everyday life" "[Medical providers] need to be more friendly [and] patient with LEP families It takes longer, but it's for a reason" (interpreters)
	• "When caring for LEP families, physicians need to leave their egos at the door" "I wish the physicians would actually [and] really listen [and] avoid sid conversations" (interpreters)
Driver 4: Using effective family	-centered communication strategies
Verbal communication	• "Communicating with LEP families goes well when everyone pauses frequently for the sake of accuracy takes turns talking [avoids] repetitive questions" "[and] uses simple and clear instructions." (interpreters)
	• "Communicating with LEP families goes well when there are short, concrete phrases used [with] moderately frequent intervals of interpreting [and the] team understands importance of avoiding jargon giv[ing] time for interpreter to interpret." (physicians)
Nonverbal communication	• "Using interpreter services goes well during rounds when the team, family, and interpreter are all on time and present" "and awake" (nursing staff)
	• "I wish physicians would look at [and] address the families directly when using an interpreter." (physicians) vs [Medical providers] need to talk to the families (mother and father) if they are present, because sometimes they only speak to the patient. [Furthermore] providers [tend to] speak to English-speaking parent only ignoring the other parent with LEP. [Most] of the time, the mother has LEP, [which] is a problem since mom is the one taking care of the child." (interpreters)
Assessment of family understanding and engagement	• "Communicating with LEP families goes well when families are actively invited for feedback and questions [and] when we remember to do teach-back and better gauge understanding; [it is] a clear confirmation that communication was clear and successful." (physicians)
Abbreviations: LEP, limited English	h anafining an U.S. I laited States

Participants across all groups, despite enthusiasm around improving communication, were concerned about quality of care LEP families received, noting that the system is "designed to deliver less-good care" and that "we really haven't figured out how to care for [LEP patients and families] in a [high-]quality and reliable way." Variation in theme discussion was noted between groups based on participant role: physicians voiced concern about rapport with LEP families, nurses emphasized actionable tasks, and interpreters focused on heightened challenges in times of stress.

Barrier 1: Difficulties Accessing Interpreter Services

Medical providers (physicians and nurses) identified the "opaque process to access [interpreter] services" as one of their biggest challenges when communicating with LEP families. In particular, the process of scheduling interpreters was described as a "black box," with physicians and nurses expressing difficulty determining if and when in-person interpreters were scheduled and uncertainty about when to use modalities other than in-person interpretation. Participants across groups highlighted the lack of systems knowledge from medical providers and limitations within the system that make predictable, timely, and reliable access to interpreters challenging, especially for uncommon languages. Medical providers desired more in-person interpreters who can "stay as long as clinically indicated," citing frustration associated with using phone- and video-interpretation (eg, challenges locating technology, unfamiliarity with use, unreliable functionality of equipment). Interpreters voiced wanting to take time to finish each encounter fully without "being in a hurry because the next appointment is coming soon" or "rushing... in [to the next] session sweating."

Barrier 2: Uncertainty in Communication with LEP Families

Participants across all groups described three areas of uncertainty as detailed in Table 2: (1) what to share and how to prioritize information during encounters with LEP patients and families, (2) what is communicated during interpretation, and (3) what LEP patients and families understand.

Barrier 3: Unclear and Inconsistent Expectations and Roles of Team Members

Given the complexity involved in communication between medical providers, interpreters, and families, participants across all groups reported feeling ill-prepared when navigating hospital encounters with LEP patients and families. Interpreters reported having little to no clinical context, medical providers reported having no knowledge of the assigned interpreter's style, and both interpreters and medical providers reported that families have little idea of what to expect or how to engage. All groups voiced frustration about the lack of clarity regarding specific roles and scope of practice for each team member during an encounter, where multiple people end up "talking [or] using the interpreter at once." Interpreters shared their expectations of medical providers to set the pace and lead conversations with LEP families. On the other hand, medical providers expressed a desire for interpreters to provide cultural context to the team without prompting and to interrupt during encounters when necessary to voice concerns or redirect conversations.

Barrier 4: Unmet Family Engagement Expectations

Participants across all groups articulated challenges with establishing rapport with LEP patients and families, sharing concerns that "inadequate communication" due to "cultural or language barriers" ultimately impacts quality of care. Participants reported decreased bidirectional engagement with and from LEP families. Medical providers not only noted difficulty in connecting with LEP families "on a more personal level" and providing frequent medical updates, but also felt that LEP families do not ask questions even when uncertain. Interpreters expressed concerns about medical providers "not [having] enough patience to answer families' questions" while LEP families "shy away from asking questions."

Driver 1: Utilizing a Team-Based Approach between Medical Providers and Interpreters

Participants from all groups emphasized that a mutual understanding of roles and shared expectations regarding communication and interpretation style, clinical context, and time constraints would establish a foundation for respect between medical providers and interpreters. They reported that a teambased approach to LEP patient and family encounters were crucial to achieving effective communication.

Driver 2: Understanding the Role of Cultural Context in Providing Culturally Effective Care.

Participants across all groups highlighted three different aspects of cultural context that drive effective communication: (1) medical providers' perception of the family's culture; (2) LEP families' knowledge about the culture and healthcare system in the US, and (3) medical providers insight into their own preconceived ideas about LEP families.

Driver 3: Practicing Empathy for Patients and Families

All participants reported that respect for diversity and consideration of the backgrounds and perspectives of LEP patients and families are necessary. Furthermore, both medical providers and interpreters articulated a need to remain patient and mindful when interacting with LEP families despite challenges, especially since, as noted by interpreters, encounters may "take longer, but it's for a reason."

Driver 4: Using Effective Family-Centered Communication Strategies

Participants identified the use of effective family-centered communication principles as a driver to optimal communication. Many of the principles identified by medical providers and interpreters are generally applicable to all hospitalized patients and families regardless of English proficiency: optimizing verbal communication (eg, using shorter sentences, pausing to allow for interpretation), optimizing nonverbal communication (eg, setting, position, and body language), and assessment of family understanding and engagement (eg, use of teach back).

DISCUSSION

Frontline medical providers and interpreters identified barriers and drivers that impact communication with LEP patients and families during hospitalization. To our knowledge, this is the first study that uses a participatory method to explore the perspectives of medical providers and interpreters who care for LEP children and families in the inpatient setting. Despite existing difficulties and concerns regarding language barriers and its impact on quality of care for hospitalized LEP patients and families, participants were enthusiastic about how identified barriers and drivers may inform future improvement efforts. Notable action steps for future improvement discussed by our participants included: increased use and functionality of technology for timely and predictable access to interpreters, deliberate training for providers focused on delivery of culturally-effective care, consistent use of family-centered communication strategies including teach-back, and implementing interdisciplinary expectation setting through "presessions" before encounters with LEP families.

Participants elaborated on several barriers previously described in the literature including time constraints and technical problems.^{14,21,22} Such barriers may serve as deterrents to consistent and appropriate use of interpreters in healthcare settings.9 A heavy reliance on off-site interpreters (including phone- or video-interpreters) and lack of knowledge regarding resource availability likely amplified frustration for medical providers. Communication with LEP families can be daunting, especially when medical providers do not care for LEP families or work with interpreters on a regular basis.14 Standardizing the education of medical providers regarding available resources, as well as the logistics, process, and parameters for scheduling interpreters and using technology, was an action step identified by our GLA participants. Targeted education about the logistics of accessing interpreter services and having standardized ways to make technology use easier (ie, one-touch dialing in hospital rooms) has been associated with increased interpreter use and decreased interpreter-related delays in care.23

Our frontline medical providers expressed added concern about not spending as much time with LEP families. In fact, LEP families in the literature have perceived medical providers to spend less time with their children compared to their English-proficient counterparts.²⁴ Language and cultural barriers, both perceived and real, may limit medical provider rapport with LEP patients and families¹⁴ and likely contribute to medical providers relying on their preconceived assumptions instead.²⁵ Cultural competency education for medical providers, as highlighted by our GLA participants as an action item, can be used to provide more comprehensive and effective care.^{26,27}

In addition to enhancing cultural humility through education, our participants emphasized the use of family-centered communication strategies as a driver of optimal family engagement and understanding. Actively inviting questions from families and utilizing teach-back, an established evidence-based strategy²⁸⁻³⁰ discussed by our participants, can be particularly powerful in assessing family understanding and engagement. While information should be presented in plain language for families in all encounters,³¹ these evidence-based practices are of particular importance when communicating with LEP families. They promote effective communication, empower families to share concerns in a structured manner, and allow medical providers to address matters in real-time with interpreters present.

Finally, our participants highlighted the need for partnerships between providers and interpreter services, noting unclear roles and expectations among interpreters and medical providers as a major barrier. Specifically, physicians noted confusion regarding the scope of an interpreter's practice. Participants from GLA sessions discussed the importance of a team-based approach and suggested implementing a "presession" prior to encounters with LEP patients and families. Presessions—a concept well accepted among interpreters and recommended by consensus-based practice guidelines—enable medical providers and interpreters to establish shared expectations about scope of practice, communication, interpretation style, time constraints, and medical context prior to patient encounters.^{32,33}

There are several limitations to our study. First, individuals who chose to participate were likely highly motivated by their clinical experiences with LEP patients and invested in improving communication with LEP families. Second, the study is limited in generalizability, as it was conducted at a single academic institution in a Midwestern city. Despite regional variations in available resources as well as patient and workforce demographics, our findings regarding major themes are in agreement with previously published literature and further add to our understanding of ways to improve communication with this vulnerable population across the care spectrum. Lastly, we were logistically limited in our ability to elicit the perspectives of LEP families due to the participatory nature of GLA; the need for multiple interpreters to simultaneously interact with LEP individuals would have not only hindered active LEP family participation but may have also biased the data generated by patients and families, as the services interpreters provide during their inpatient stay was the focus of our study. Engaging LEP families in their preferred language using participatory methods should be considered for future studies.

In conclusion, frontline providers of medical and language services identified barriers and drivers impacting the effective use of interpreter services when communicating with LEP families during hospitalization. Our enhanced understanding of barriers and drivers, as well as identified actionable interventions, will inform future improvement of communication and interactions with LEP families that contributes to effective and efficient family centered care. A framework for the development and implementation of organizational strategies aimed at improving communication with LEP families must include a thorough assessment of impact, feasibility, stakeholder involvement, and sustainability of specific interventions. While there is no simple formula to improve language services, health systems should establish and adopt language access policies, standardize communication practices, and develop processes to optimize the use of language services in the hospital. Furthermore, engagement with LEP families to better understand their perceptions and experiences with the healthcare system is crucial to improve communication between medical providers and LEP families in the inpatient setting and should be the subject of future studies.

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