Improving communication among patients and healthcare professionals is high on the national healthcare quality agenda. The Agency for Healthcare Research and Quality’s (AHRQ) 20 Patient Tips to Help Prevent Medical Errors in Children largely focuses on encouraging parents to be proactive, persistent, and effective in asking questions and ensuring that a full exchange of necessary information occurs (AHRQ, 2002). Parents and patients need sophisticated communication skills to employ these tips, which may be even less likely to be implemented if parents do not speak English or when assertive communication with professionals is not customary. The U.S. Department of Health and Human Services (DHHS) Culturally and Linguistically Appropriate Services (CLAS) standards and the Joint Commission on Accreditation of Healthcare Organizations’ (JCAHO) culturally and linguistically appropriate care standards also focus on improving communication skills among patients, physicians, nurses, and other healthcare professionals as a key component of ensuring safe and high-quality care (U.S. DHHS, 2001; JCAHO, 2005 [AU: 2005 a or b?]). Unlike the AHRQ tips, these standards assign responsibility for good communication to healthcare organizations and providers, pointing them to requirements in Title VI of the Civil Rights Act of 1964 to provide meaningful language access to programs, services, and activities for limited English proficient (LEP) persons.

Although a recent JCAHO report (2004) identified communication among healthcare professionals as the leading root cause of perinatal death and permanent disability in newborns (it was the cause in 72% of cases), few studies have focused explicitly on the association of communication between patients and healthcare professionals and the quality and safety of hospital care for children. Studies on adult chronic disease care have documented the correlation between communication and timely and accurate diagnosis, patients’ understanding of and adherence to medical regimens, and the receipt of effective care necessary to achieving good outcomes (Center for the Advancement of Health, 1999; DiMatteo, 1994; VonKorff, 1997; Wagner, 1998). There is little reason to believe that these same associations between communication and quality and safety of care do not exist in healthcare for children.

Abstract: The issue of improvement in communication among patients and healthcare professionals is a priority on today’s national healthcare quality agenda. This article discusses a study aimed at reducing communication-related, negative hospital quality and safety events for children from Spanish-speaking, limited English proficient (LEP) families. Twelve focus groups were conducted with parents, providers, and hospital quality improvement (QI) professionals. A survey for Spanish-speaking LEP parents was developed and evaluated for its perceived value for assessing communication-related aspects of quality and safety of hospital care. Parents, providers, hospital staff, and QI professionals perceived that language and cultural differences have a pervasive and often negative effect on the quality and safety of hospital care for children that is only partly related to the availability of language interpretation services. Both common and divergent perspectives regarding improvement priorities and the value placed on the survey topics were found in the responses of parents, healthcare providers, and QI professionals. Findings revealed substantial barriers to measuring or addressing problems with communication. Additional challenges include evaluating how these problems affect quality and safety of care and understanding how differences in language and culture have a unique impact on communication, quality, and safety.

Key Words
children’s healthcare
English proficiency
hospital quality
Some studies have documented the importance of ensuring high-quality language interpretation services to prevent medical errors (Flores, 2003; Ku, 2005). Resolution of communication and quality issues requires more than language interpretation services. A recent study by Cohen et al. (2005) found that Spanish-speaking hospitalized children whose parents were assigned an interpreter still had a two-fold increased risk for serious medical events compared with children whose parents did not need an interpreter. On the basis of these and related studies, we expect that communication will increasingly become a focus of hospital quality improvement (QI) or safety efforts. This study was designed to contribute knowledge and tools needed for such efforts specifically in regard to children from Spanish-speaking LEP families. This was an exploratory and qualitative study as well as a survey development study. Research questions addressed included the following:

1. What are the perspectives of parents, providers, hospital staff, and QI professionals regarding how language and related cultural differences between healthcare providers and families affect communication and, in turn, the quality or safety of hospital care for children?

2. What priorities and strategies for improving quality- and safety-related communication problems between providers and Spanish-speaking LEP families do parents, providers, and QI professionals recommend?

3. Is a parent-report survey tool valuable in assisting hospitals in the assessment of the nature and scope of potential communication-related threats to quality and safety of care for children from Spanish-speaking LEP families?

This study was conducted at children’s hospital sites in south Florida and southern California. Both areas have a relatively high percentage of Spanish-speaking immigrant populations, making sampling more feasible for the parent focus groups and ensuring the salience of the study topic to participating hospitals.

**Methods**

A qualitative research method employing standardized focus group questions and exercises was used to explore and compare perspectives among parents, providers, and QI professionals. No standardized survey tools were available to obtain quantitative data specific to the study questions so that comparisons across study populations could be made. Nor did the study funding provide for a large, sample-survey-based study design. In addition, direct involvement of parents, providers, and QI professionals was essential because medical charts and administrative data do not include the information that was the subject of this study—communication as related to quality and safety of care.

Twelve focus groups were conducted with 72 individuals in south Florida and southern California using standardized participant recruitment and focus group discussion guides and facilitation methods. Six focus groups were conducted in each geographic location. Five focus groups of parents were conducted with Spanish-speaking parents confirmed as having limited English proficiency and a child 0–17 years of age who had been hospitalized within the last 6 months at one of three children’s hospital study sites (n = 25). Focus groups of providers were conducted with physicians, nurses, and other hospital staff who come in direct contact with families and children from Spanish-speaking LEP families in hospital settings (n = 35). The final two focus groups were conducted with QI professionals (n = 12). The parent and provider focus groups followed a panel design in which participants in an initial focus group returned for a second focus group approximately 1 month later. Approximately one half of Round 1 parent focus group participants (n = 12) and two thirds of Round 1 provider focus group participants (n = 21) also participated in the Round 2 focus groups. All materials and protocols were reviewed and approved by the human subjects review committees in each of the four participating institutions, and all participants provided informed written consent prior to the initiation of focus group discussion.

For purposes of this study, LEP was defined as follows: “individuals who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English may be limited English proficient, or ‘LEP,’ and may be eligible to receive language assistance with respect to a particular type of service, benefit, or encounter” (U.S. DHHS, 2003).
Focus Group Recruitment Process

Only Spanish-speaking LEP parents or guardians of one or more children who were 0–17 years of age and who had been hospital patients overnight or longer during a 6-month period were eligible for the study. In order to determine their LEP status, potential participants were asked several questions from the Pew Hispanic Center/Kaiser Family Foundation 2002 National Survey of Latinos:

1. What language do you usually speak at home? Is it:
   A. Only or mostly Spanish
   B. Spanish and English about equally
   C. Only or mostly English?
2. Would you say that you can carry on a conversation in English, both understanding and speaking,
   A. Very well
   B. Pretty well
   C. Just a little
   D. Not at all?

If parents answered A to question 1 and B or C to question 2, they were eligible to participate in the focus groups.

Participants in the parent focus group were recruited from a pool of candidates using an introductory letter and a follow-up telephone call where a standardized recruitment script and protocol were administered by a single Spanish-speaking recruiter. Candidates for recruitment were identified through one of four methods: (1) a manual review of acute care logs indicating the occurrence of a hospital-stay follow-up appointment for a child during a 6-month period; (2) a computer report including names of parents of children who had an overnight stay during a 6-month period and who were also of Hispanic ethnicity; (3) a manual review of the neonatal discharge dataset to identify those children with a Hispanic or Latino surname; or (4) follow-up calls with parents who reviewed a recruitment letter and completed a recruitment survey (research interest form) during their child’s hospital stay indicating their willingness to receive a phone call about the focus groups. Parent focus group recruitment flyers were also posted in hospital corridors, community agencies, and cultural centers, and interested parties were directed to call a toll-free number for more information. Only parents living within a 1-hour drive from the focus group location were recruited.

The recruitment script described the purpose of the study and the inclusion criteria. Parents who met the inclusion criteria were asked about their interest in and availability to participate in a focus group at one of the scheduled dates, times, and locations. Parents who were available to attend one of the planned focus groups received a more detailed description of the format (audio-taping, informed consent, and procedures for ensuring confidentiality). After this information was delivered, their interest in participating was reconfirmed, and their attendance was scheduled. Parents chose whether to receive a confirmation letter or telephone call. Both the confirmation letter and reminder call included opt-out opportunities and a toll-free number to call if the parent was unable to participate or decided not to participate. Parents were provided a $50 gift for their participation.

The majority of participants in the parent focus group were under 35 years of age and were mothers of children under 4 years of age. The majority of child hospitalizations were for acute conditions such as gastrointestinal problems, kidney infection, fever, respiratory problems, and complications as a result of surgery. Some were hospitalized for congenital or birth-related problems or chronic health problems such as diabetes or epilepsy. Because of Health Insurance Portability and Accountability Act requirements, information on reasons for hospitalization was obtained only from parents who shared that information with the focus group facilitator when they introduced themselves or in the course of the group discussion.

Participants in the focus groups for health-care providers, hospital staff, and QI professionals were recruited using four methods: (1) recruitment flyers posted in the participating hospital common areas; (2) e-mails to pediatric providers and members of the local healthcare quality association; (3) telephone calls to hospital employees eligible to participate, and (4) a fax-back interest form mailed to local pediatric providers. The recruitment flyer directed interested hospital staff and providers to call a toll-free number staffed by a hospital employee. A standardized recruitment script was administered to interested staff and providers by telephone to identify eligible participants. The script described the purpose of the study. All interested candidates were recruited. Both the confirmation letter and reminder call included opt-out opportunities and a toll-free number.
to call if the person was unable to or decided not to participate. Healthcare providers were given $100 for each focus group they attended. Hospital QI professionals were not provided with a financial gift for participation.

At the conclusion of both the parent and the provider Round 1 focus groups, attendees were invited to a follow-up focus group. All original attendees were contacted to re-invite them and confirm their attendance. Attendees received a reminder 2 days prior to the follow-up focus group.

**Focus Group Facilitation and Exercises**

An experienced bilingual, bicultural Spanish-speaking moderator facilitated each of the three parent focus groups in south Florida, and a different but similarly experienced bilingual, bicultural Spanish-speaking moderator facilitated each of the two southern California parent focus groups. The same study investigator conducted each of the provider and hospital QI professional focus groups in both study locations. The first round of parent and provider and QI professional focus groups included four phases: (1) introductions and an open-ended discussion on how participants define good- or poor-quality hospital care; (2) an adapted root cause analysis discussion about specific communication problems participants had witnessed or experienced; (3) a card-sort prioritization exercise to identify key problems perceived by participants (see Table 1 for topics) and discussion of results; (4) specific input on how healthcare organizations should address the issues raised by the focus group participants. Provider, hospital staff, and QI professionals were informed that this study was focused on the experiences of Spanish-speaking LEP parents in particular and were asked to limit their thoughts and comments to this population.

Sixteen potential communication-related problems or issues were included in the card-sort exercise (Table 1). These were identified through a Delphi process among study investigators and six other experts in the field. First, project staff culled relevant literature and assembled a list of key communication-related problems that may affect healthcare quality and safety. The selected topics address issues throughout the hospital experience—from admission to discharge and follow-up. In addition, issues affecting patients’ experience of care, clinical effectiveness, efficiency, safety, equity, and timeliness of care were specified wherever possible. All study investigators reviewed the key problems and issues, as did the focus group facilitators and other experts in the field. Focus group participants were given the opportunity to identify any other issues they experienced that were not represented by one of the 16 potential problems in the card-sort exercise.

During the follow-up (Round 2) focus groups, the open-ended dialogue and card-sort exercises were repeated, and differences from Round 1 results were discussed. Parents commented on findings from Round 1 provider focus groups, and providers commented on Round 1 findings from parents. In the second round of focus groups, parents and providers reviewed a draft survey on hospital quality and safety and communication designed to collect information from LEP parents. Participants engaged in a mock money-spending exercise in which they were asked how they would spend $100 across different survey measurement concepts. In addition, participants commented on whether and how the survey might be valuable and offered ideas for the most efficient, effective administration techniques and dissemination of findings. (Table 2 lists the topics included in the draft survey for parents.)

Group discussions were taped, transcribed, and translated as needed. Because identifying the range of possible responses to the issues raised in the focus group protocol was the project goal, a content analysis and theme identification process was conducted using iterative reflection techniques (Strauss & Corbin, 1998). Extensive focus group reports were developed for each of the three groups. These reports are available upon request.

**Results**

**Common and Distinctive Themes Identified by Parents, Providers, and Hospital QI Professionals**

Twelve overarching themes emerged across the focus groups that are relevant to understanding parents’, providers’, and hospital QI professionals’ views on whether and how language and cultural differences contribute to communication problems that, in turn, affect the quality and safety of hospital care for children of LEP families.

Participants in the parent and provider focus groups identified four common themes:
# Table 1. Summary of Top Priorities for Improvement Selected by Focus Group Participants

<table>
<thead>
<tr>
<th>Communication-Related Quality and Safety Problems Associated with Differences in Language and Culture</th>
<th>Parents (n = 25)</th>
<th>Provider/Hospital Staff (n = 35)</th>
<th>QI Staff (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital staff and doctors do not respond quickly (card 16)</strong></td>
<td>Rank #1</td>
<td>Rank #9</td>
<td>Not selected as top priority by any participants</td>
</tr>
<tr>
<td>• Sometimes hospital staff and doctors seem hesitant to talk to a Spanish-speaking family because they do not understand their culture and language.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family gives consent for procedures that they do not understand (card 5)</strong></td>
<td>Rank #2</td>
<td>Rank #6</td>
<td>Rank #4</td>
</tr>
<tr>
<td>• A family might feel that they are required to agree to most tests and procedures. Even so, language differences may prevent them from understanding these tests and procedures.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information shared during the hospital admission process is incomplete or inaccurate (card 2)</strong></td>
<td>Rank #3</td>
<td>Rank #1</td>
<td>Rank #2</td>
</tr>
<tr>
<td>• The doctors or hospital staff do not understand all of the child’s health information because they may not speak the family’s language or understand their culture.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Leaving out important information (card 10)</strong></td>
<td>Rank #4</td>
<td>Rank #7</td>
<td>Rank #5</td>
</tr>
<tr>
<td>• A family may share only big issues and not smaller issues because of language differences. Doctors and other hospital staff may do the same thing. The information that seems less important could be just as important.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Families get conflicting information from different doctors (card 6)</strong></td>
<td>Rank #5</td>
<td>Rank #9</td>
<td>Rank #3</td>
</tr>
<tr>
<td>• Sometimes a family can receive different opinions from different doctors. This makes it difficult for the family to understand their child’s condition and how they can get the best care for their child.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lack of communication with child’s community healthcare providers (card 13)</strong></td>
<td>Rank #5</td>
<td>Not selected as top priority by any participants</td>
<td>Rank #5</td>
</tr>
<tr>
<td>• Hospital doctors may not immediately communicate with the child’s regular doctor. This makes it hard for the regular doctor to tell them what to do.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medical tests and procedures are unnecessary or overly stressful (card 3)</strong></td>
<td>Rank #5</td>
<td>Rank #6</td>
<td>Rank #5</td>
</tr>
<tr>
<td>• The child is given tests that the doctor felt were necessary, but had the doctor understood all the child’s health information, he or she may not have felt these tests were necessary.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family is unsure about child’s diagnosis and treatment plan (card 12)</strong></td>
<td>Rank #6</td>
<td>Rank #3</td>
<td>Rank #1</td>
</tr>
<tr>
<td>Sometimes a family may not understand their child’s health problem and what they need to do after they leave the hospital.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Families wait to ask for help until problems are more serious (card 9)</strong></td>
<td>Rank #6</td>
<td>Rank #5</td>
<td>Rank #2</td>
</tr>
<tr>
<td>• A family may not seek treatment for medical problems until they are more serious in order to avoid difficulties with language and culture.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Families hesitate to express concerns about their child’s care (card 8)</strong></td>
<td>Rank #7</td>
<td>Rank #2</td>
<td>Rank #4</td>
</tr>
<tr>
<td>• A family may hesitate to express concerns about their child’s care or how their child is responding to treatment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Getting translation help is delayed or avoided (card 4)</strong></td>
<td>Rank #7</td>
<td>Not selected as top priority by any participants</td>
<td>Rank #5</td>
</tr>
<tr>
<td>• Sometimes a family will not ask for help translating because it is not offered or they worry translators will not do a good job.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hospital admission is delayed or avoided (card 1)</strong></td>
<td>Rank #8</td>
<td>Rank #4</td>
<td>Rank #5</td>
</tr>
<tr>
<td>• A family doesn’t take their child to the hospital until the condition is more serious because they worry about culture and language differences.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Telephone and lay interpreters are insufficient. Face-to-face language assistance services are inconsistently available, lack continuity, and are of varied and often poor quality.

Communication-related problems in obtaining and transmitting clinically relevant information that affects quality and safety of care are common.

Communication-related problems regarding the establishment of relationships and trust are extensive.

Communication-related problems regarding the establishment of effective patient-provider partnerships in decision making and children’s healthcare provision are routine.

Participants in the provider and hospital QI professional groups identified four common themes:

- The unclear relationship between communication and quality and safety is a barrier to action.
- The lack of systems and views of quality related to health outcomes is a barrier to action.
- Communication problems are universal, and participants could not distinguish whether they are specific to or greater for LEP children and families versus English-speaking children and families.
- Broader communitywide and social issues are at play that lead to quality problems for Spanish-speaking LEP children and families.

One theme was unique to parents:
- Dissatisfaction among hospital workers and racism contribute to and exacerbate communication, quality, and safety problems related to language and cultural differences.

Three themes were unique to QI professionals:
- Quality is mostly the same for all patients, regardless of their English proficiency.
- Lay interpreters are generally sufficient to address the needs of LEP patients.
- Measuring and improving communication with LEP families cannot be a QI priority until it is known exactly how to focus improvement efforts.

**Figure 1** provides illustrative statements made by focus group participants for the key themes listed above. It is important to note that no themes were identified by all three groups.

**Priority Problems for Improvement**

Families, healthcare providers, and hospital QI professionals agree and disagree on high-priority issues for improvement in the area of communication, language, and culture. Table 1 summarizes 16 potential communication-related problems that prior research
### Topic Areas and Sample Questions

#### Getting and understanding discharge and follow-up instructions and getting help to implement these instructions

- Was interpreter available to translate explanations of medical tests and procedures? Whom did parents rely on most to help translate explanations?
- Did parent get information in writing about what symptoms or health problems to look out for after discharge?
- Did parent get information in writing about how to give any medicine to child at home? Was information to parents written in parent’s language? Before discharge did anyone tell parent when and how to make an appointment for follow-up with child’s regular doctor or nurse?

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Providers (n = 32)</th>
<th>Hospital QI Professionals (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge</td>
<td>$28.48</td>
<td>$24.09</td>
</tr>
<tr>
<td>Follow-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructions</td>
<td>23 of 32 people spent money on this topic.</td>
<td>9 of 12 people spent money on this topic.</td>
</tr>
<tr>
<td>Implementation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Getting and understanding information about child’s medications

- Were new medicines given to child during hospital stay?
- Was interpreter available to translate explanations of medicines and possible side effects? Did doctors, nurses, or hospital staff ask if child had allergies to medicines before giving child a new medicine?
- Were parents asked about use of traditional methods of healing such as herbs?

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Providers (n = 32)</th>
<th>Hospital QI Professionals (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td>$22.50</td>
<td>$26.58</td>
</tr>
</tbody>
</table>

#### Consenting to and understanding information about child’s medical procedures

- Did parents provide consent prior to medical tests and procedures?
- Was interpreter available to translate explanations of medical tests and procedures? Whom did parents rely on most to help translate explanations?
- How well did parents understand explanations about medical tests and procedures?

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Providers (n = 32)</th>
<th>Hospital QI Professionals (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consent</td>
<td>$20.94</td>
<td>$18.74</td>
</tr>
</tbody>
</table>

#### Overall need for and availability of interpreter services

- Was there a need for language assistance?
- How often were nonfamily interpreters available?
- How often did families experience delays in getting help with translation?
- Did doctors, nurses, or other hospital staff do all they could to get translation help?

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Providers (n = 32)</th>
<th>Hospital QI Professionals (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpreter Services</td>
<td>$19.36</td>
<td>$14.30</td>
</tr>
</tbody>
</table>

#### Getting clear and culturally sensitive help and information to understand child’s health situation

- How often did families experience delays or problems getting help or information needed because of translation or language difficulties? How often did families feel unclear or unsure about child’s situation because of interpreter or language difficulties?
- How much respect and understanding did doctors, nurses, and other hospital staff show toward family’s values and customs?

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Providers (n = 32)</th>
<th>Hospital QI Professionals (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>$18.91</td>
<td>$16.43</td>
</tr>
</tbody>
</table>

#### Availability of written forms in Spanish

- Were forms written in parent’s language?
- Was the content and purpose of forms explained to parent before signing?

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Providers (n = 32)</th>
<th>Hospital QI Professionals (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written</td>
<td>$13.50</td>
<td>$12.00</td>
</tr>
</tbody>
</table>

#### Ease of obtaining interpreter support during hospital admission

- Was an interpreter available?
- Whom did parents rely on most to help translate?

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Providers (n = 32)</th>
<th>Hospital QI Professionals (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpreter Support</td>
<td>$11.36</td>
<td>$12.26</td>
</tr>
</tbody>
</table>

---

**Note.** Average is calculated according to the number of participants spending any money in the topic area.
Telephone and lay interpreters are insufficient. Face-to-face language assistance services are inconsistently available, lack continuity, and are of varied and often poor quality.

- “You call someone, and they say ‘get a [person from] cleaning staff—they speak Spanish.’ So you have an environmental person come over here and speak Spanish to them.” (provider)
- “For a 14-year-old to be translating to the mother that her [newborn] sister isn’t doing too well is extremely traumatic.” (AU: WHO GAVE THIS COMMENT? PROVIDER?)
- “It [phone interpretation] is very impersonal, especially when you are from another culture, and you are not used to that; it doesn’t do the trick. It only works for intake, coming into the floor, where I need some information—what is your age? etc.” (provider)
- “My personal experience with asthma [is] there is a lot of equipment. I can’t use the phone. I need a person to demonstrate, to physically be there.” (provider)

Communication-related problems in obtaining and transmitting clinically relevant information that affects quality and safety of care are common.

- “I treat with very significant medicine, and I have to explain how difficult and toxic those medicines are. Very often I have trouble convincing [parents] that’s a better way to go than letting the disease just march on. So communication is huge, and trust is huge, in what I do.” (provider)
- “The mom or dad can’t say to you, ‘they did this down in the ED last night, and he started having seizure-like activities.’ That’s a huge point—that the patient is having seizure activities. That the patient’s family is not able to communicate that to me is a quality and a safety issue.” (provider)
- “I’m sure we don’t know if we have gotten the complete information from patients and families, and we do tests and procedures that may have already been done.” (hospital QI professional)
- “If I would have explained all of my child’s medical history, then maybe they would have not needed to do certain testing.” (parent)
- “The nurse did not identify any needs. I [an interpreter] come 5 minutes later and identify five needs.” (provider)
- “My daughter is sick and in the hospital for 40 days. I was not told how I should treat her, that I had to follow a certain treatment. [The telephone translation was not adequate.]” (parent)
- “I had to go back two times because [my daughter] got sicker. It was not the right treatment for what she had . . . maybe because of a doctor error or because they did not immediately give me a translator.” (parent)
- “[If] the child is allergic to some type of medication and we won’t know how to mention that he is allergic, then maybe they [the hospital staff] could give that child that medicine.” (parent)
- “We had an expiration in the emergency center, and it was a Spanish-speaking family who said they were not listened to.” (hospital QI professional)
- “I know the nurse noted all this stuff [vital signs], but ‘as soon as she drank that, she threw it up’—I don’t know that information. I just don’t think that’s the same level [of care provided] as for someone who can actually communicate with me.” (provider)
- “There was a case of a child where the toes have been blue and [the child] actually almost [had] a toe lopped off because of a loss of circulation just because they were doing a discharge that was inadequate where pain control issues aren’t communicated.” (provider)

Communication-related problems regarding the establishment of effective patient-provider partnerships in decision making and children’s healthcare provision are routine.

- “I think there is a different amount of time that is spent, by at least physicians—you see the patients whose language you are most comfortable with.” (provider)
- “When a person does not speak English . . . the doctor says, ‘Well, this one does not speak English. What am I doing here? I am wasting my time.’ They [the doctors] take the easiest way out. They cut information. They do not help the person.” (parent)
- “When you talk with them [providers and hospital staff], they only tell you the basics. I think they do not explain [details] to us because they feel we will not understand.” (parent)
- “[With] asthma, you better go home and do the treatments, and if we can’t talk to them, it doesn’t happen . . . We say ‘take all of the antibiotics’—it says 2 weeks, so I take 2 weeks’ worth. If I don’t speak the language, then I can’t impress upon you that the outcome [if all the antibiotics aren’t taken] isn’t good. So to have a process and a good outcome, you have to have a good shared communication.” (hospital QI professional)

The unclear relationship between communication and quality and safety is a barrier to action.

- “I provide excellent care to my Hispanic patients. . . . There are some barriers, but it doesn’t affect my level of care or recommendations for treatment.” (provider)
- “I think the quality of patient care is excellent, but the quality of building relationships with someone that you can’t communicate with, I think is a lot less.” (provider)
suggests may arise because of differences in language and culture and that may also affect healthcare quality and safety. The ranking assigned by focus group participants to each problem (according to how many selected a problem as one of their top two priorities for improvement in the card-sort exercise) is also shown.

Of these 16 potential communication-related problems identified by prior research, at least 25% of participants in at least one of the three groups identified the following 11 problems (via the card-sort activity) as being one of their top two priorities for improvement. (See Table 1 for more information.)

1. Hospital staff and doctors do not respond quickly to LEP families.
2. Families give consent for procedures and treatments that they do not understand.
3. Information shared during the hospital admission process is incomplete or inaccurate.
4. Families hesitate to express concerns about their child’s treatment or response to treatment.
5. Families are unsure about their child’s diagnosis and treatment plan.
6. In order to avoid language difficulties, families wait until problems are more serious before they ask for help.
7. Both families and providers leave out seemingly unimportant, but clinically relevant, information because of language differences.
8. Families receive conflicting information from different doctors and nurses and through different interpreters translating for those providers.
9. Hospital doctors do not contact the child’s primary care provider to explain the child’s hospitalization and treatment.
10. Medical tests and procedures are unnecessary or are overly stressful because of problems with language and cultural sensitivity.
11. Hospital admission is delayed or avoided because of worries associated with language and cultural differences.

Parents, providers, and hospital QI professionals varied in their top two priorities for improvement (Table 1). Overall, parents ranked “doctors do not respond quickly” as their highest priority for improvement, and providers selected this as their lowest priority, even though providers openly acknowledged during the focus groups that they avoided LEP families and children or spent less time with them. Also notable is that providers and QI professionals were much more likely to identify problems related to how language and cultural differences may lead to parents’ hesitancy to share information or concerns or to seek care for their child. Although these were acknowledged as issues for parents, fewer than one quarter of parent participants selected these as top priority problems.

**Strategies for Improvement**

Issues identified in the priority problems exercise summarized in the previous section provide insight into what participants describe as clinically relevant quality and safety problems affected by communication. The ideas for improvement shared by focus group participants also point to the potential root causes of communication-related threats to quality and safety associated with differences in language and culture. From the perspective of participants, a lack of attention to the ideas for improvement may perpetuate these problems.

Parents, providers, and QI professionals set forth 11 specific ideas for improvement. All three groups contributed these four ideas:

- Provide more medically trained interpreters through each phase of the hospital stay. Ensure continuity of interpreters for families and providers. Telephone translation is insufficient—it is impersonal, does not consider body language, and prevents demonstration of use of equipment and medication dosing.
- Develop a universal focus on improving communication skills.
- Be patient with families and encourage and help them to be more empowered and to speak up.
- Provide a checklist and information form so that parents can record their questions in preparation for the arrival of interpreters.

Parents and providers recommended four additional ideas for improvement:

- Require routine provider and staff training in cultural sensitivity.
- Let parents know when interpreters are expected to arrive.
- Increase Spanish-language signage and the availability of written materials in Spanish.
• Provide parents with trustworthy and knowledgeable support personnel.

Parents suggested two distinctive actions expected to address the quality- and safety-related communication problems identified through the focus group discussion:
• Identify language assistance needs early.
• Hire more nurses.

Figure 2 provides illustrative statements made by focus group participants for some of the ideas for improvement listed above.

Value of Surveying LEP Parents

Participants from each of the focus groups expressed the view that information derived from a Spanish-speaking LEP parent survey would be necessary and valuable to inform, shape, and track efforts to improve communication, quality, and safety of hospital care for children. Parents were not as familiar with the concept of a survey and expressed some doubt that survey findings would actually be used by hospital leaders to improve care for children. However, the parents were eager to have their views understood by hospital leaders and healthcare providers, and they found the draft survey topics (itemized in Table 2) relevant to the issues they raised during the focus group sessions.

Providers and QI professionals noted that currently no information regarding the communication-related quality and safety issues specific to Spanish-speaking LEP parents is collected in a standardized or routine way. Yet participants in both groups expressed questions and concerns about the logistics and use of this information by management, noting issues of sampling and administration and noting also the importance of comparing findings from LEP families with those of English-speaking families.

Table 2 summarizes how much value, on average, providers, hospital staff, and QI professionals placed on the seven topics included in the survey. Results show that the greatest value was placed on collecting information from Spanish-speaking LEP parents about “getting and understanding discharge and follow-up instructions and getting help to implement these instructions,” “getting and understanding information about child’s prescription medications,” and “consenting to and understanding information about child’s medical procedures.” Participants’ least-valued topics related to “availability of written forms in Spanish” and “ease of obtaining interpreter support during hospital admission.” Providers and QI professionals demonstrated similarities in their ranking of the value of getting information from parents across the survey topics. Although QI professionals spent about the same amount as providers on “ease of obtaining interpreter support during hospital admission,” nearly all of these participants spent at least some money on this topical area, whereas only some providers did so.

Limitations

As is the case in nearly all focus group studies, input received by participants may not be representative of all members of a target population. In particular, we hypothesize that the selection bias in this study limited the participation of parents who are more disenfranchised from the healthcare system or whose lives are more hectic because of various socioeconomic and psychosocial stressors. In this way, results could underestimate the intensity and nature of problems that such vulnerable families may experience. In addition, findings may not be applicable to hospitals with very few Spanish-speaking LEP patients, because this study focused on sites with a relatively high proportion of such patients to ensure salience of study topic and feasibility of sampling for parent groups.

A second study limitation is the result of implementing an adapted root-cause-analysis questioning sequence. Here, rather than identifying underlying causes of one specific problem, the group context required that similar issues identified by several focus group participants be assessed using a series of questions to probe into perceived underlying causes and issues that could be acted on. This method yielded a wide range of input that allowed us to identify common problems and perceived underlying causes for each of the focus groups. The focus groups were more structured than usual and the discussion was directed to a large degree because we used the root cause approach, which possibly limited the nature of data elicited and limited the opportunity for unanticipated issues to arise through the participants’ discourse. To minimize this limitation, participants were provided with several opportunities to identify issues not otherwise raised in the structured discussions and exercises.
Figure 2. Ideas for Improvement: Examples of Participants’ Comments

Provide more medically trained interpreters through each phase of the hospital stay.
- “I took the training on how to be an interpreter . . . it is a lot different when a interpreter is professionally trained. It is totally different.” (provider)
- “If a person doesn’t have training in how to do medical translation, then how are they sure that the information they are giving the family is being understood and that the family is asking appropriate questions and is able to voice their concerns?” (hospital QI professional)
- “When you do get that translator, the tone is always rushed, because that poor person has 2 minutes. During your whole translation they are being consistently paged, getting up, and interrupting your interview or your assessment, which absolutely impacts your relationship with the patient, the information that is being [conveyed and received]—half the time you are repeating what you are trying to do. It’s very chaotic.” (provider)
- “I think if we have unit-specific translators that have a base knowledge of the issues that go on in our specific unit clinically, that’s going to help. I’ve actually seen translators who come on the unit, and they’ve seen these patients before. Because he’s built this relationship, it increases that level of trust. And I think we can get better outcomes from that relationship.” (provider)

Be patient with families and encourage and help them to be more empowered and to speak up.
- “We have to give them some space for questions. We did this with our patients, and they rattle off 14 things they don’t get.” (provider)
- “When I am admitting them, I say, ‘You know the child best. Please write down questions. Here’s a piece of paper so you can do that.’ I let them know that when we do get a translator, we want to be ready to talk.” (provider)

Provide a checklist and form so that parents can record their questions in preparation for the arrival of interpreters.
- “When I am admitting them, I say, ‘You know the child best. Please write down questions. Here’s a piece of paper so you can do that.’ I let them know that when we do get a translator, we want to be ready to talk.” (provider)

Ensure that hospital managers are committed to addressing these issues and have a strategy for addressing them.
- “Administration needs to recognize that this is a problem, and they do not recognize that this is a problem because there are people all over the place that are . . . band-aiding the situation.” (provider)
- “I would say do not assume because I don’t get a safety report on it then it’s not a problem, because obviously it is. And then measure and see what we can do to make a difference.” (hospital QI professional)
- “The Spanish-speaking population is skewed to the pediatric population more so than the adult population, so the pediatric population sees the need more, but the pediatric population isn’t that population that brings in the dough to the hospital.” (provider)

Require routine provider and staff training in cultural sensitivity.
- “I think it’s terror sometimes on the physicians’ part and the nurses’: ‘How am I going to speak enough Spanish to get through on my own? Did they really understand what I’m saying? Am I hearing them correctly?’ It’s really frightening to be in that position.” (provider)
- “I [a female doctor] will explain all the things with a translator to the mom and dad, but then the dad comes back out looking for the male physician to speak with.” (provider)

Increase Spanish-language signage and the availability of written materials in Spanish and in English—especially discharge and prescription medication information.
- “That is very important (to have medication directions in Spanish) because at times we don’t know—we forget, we are distracted or preoccupied, and we don’t remember specifically how many it will be. And if we don’t know how to read it, we don’t know how to give it, and it is very difficult to be home with a medicine and not remember it. That is dangerous—we could give it wrong.” (parent)
- “If they get the wrong medicine, if I [a translator] am not there to check out the right medicine, the patient will die. I have had cases like that.” (provider)
- “While our computer in our retail pharmacy automatically translates the directions or what have you into Spanish, of course when the label comes out, I have no idea whether it’s right or wrong [because he does not read Spanish].” (hospital QI professional)

Provide parents with trustworthy and knowledgeable support personnel.
- “There’s one more strategy, and that is using parents, which we do in our clinic. We have a parent liaison. Spanish-speaking parents can act as coaches for each other.” (provider)

Identify language assistance needs early.
- “It would be nice if we were notified ahead of time [that a patient or family was going to need a translator].” (provider)
Although dramatic differences in findings were not found between the southern California and south Florida populations, possible differences were not systematically explored. Regional differences in the viewpoints of patients, providers, and QI professionals have been shown to have a significant effect upon healthcare processes and outcomes (Payer, 1988). However, the study does elucidate difficulties for Spanish-speaking LEP families at the general level and introduces findings that promise to have broad national application.

**Discussion**

This study shows how language and cultural differences between patients and healthcare providers may affect communication and, in turn, lead to or exacerbate existing problems with the quality and safety of hospital care for children from Spanish-speaking LEP families. The common and distinctive perceptions obtained from parents, healthcare providers, hospital staff, and QI professionals enrich our understanding of the specific issues that arise in practice and help to lay the groundwork for formulating improvement strategies. The finding that providers and professionals understand that communication problems are universal and not limited to LEP children and families confirmed the findings of other studies (Sobo & Seid, 2003).

The ideas for improvement shared by focus group participants align with all but 2 of the 14 national CLAS standards for ensuring culturally and linguistically appropriate healthcare services. (The two national CLAS standards that did not align with input provided by focus group participants are (2) Healthcare organizations should implement strategies to recruit, retain, and promote at all levels of the organization a diverse staff and leadership that are representative of the demographic characteristics of the service area, and (14) Healthcare organizations are encouraged to regularly make available to the public information about their progress and successful innovations in implementing the CLAS standards and to provide public notice in their communities. In addition, the survey questions for parents identified in this study are relevant to assessing most of the issues set forth in the AHRQ’s 20 Patient Tips to Help Prevent Medical Errors in Children. More information on the draft parent survey may be obtained from Christina Bethell and is available through a toolkit developed in this study.

If these findings can be generalized, fundamental barriers to implementing the many strategies for improvement set forth by focus group participants exist. In particular, we found a propensity for many providers and QI professionals to acknowledge a range of serious communication problems yet to dismiss the impact of these problems on quality and safety of care until further group discussion took place. This finding suggests the need to discuss further with healthcare providers and QI professionals how communication and the quality and safety of care can be linked. It is equally critical to move beyond what appears to be a non-outcomes-oriented definition of quality of care among providers (the view that quality is “doing your best in the moment” vs. “meeting patient needs and getting good outcomes”). Ironically, the common perspective of hospital professionals that communication, quality, and safety problems are not necessarily more prominent for LEP families than English-speaking families presents a barrier to action rather than a motivating perspective.

The often-shared opinion that existing language assistance services that significantly rely on the telephone and lay interpreters rather than on medically trained, face-to-face interpreter services are sufficient presents a barrier as well. Although a number of perspectives were shared by all participants, it is important to move beyond a qualitative assessment to a quantitative and standardized approach to measuring communication and quality and safety of care. In fact, our findings confirm that quantitative measurement is perceived as critical. Linking child-level data from something like the draft survey for parents used in this study with data on quality and medical errors collected in administrative or medical records was viewed favorably by parent, provider, and QI professional participants and may be a starting point for further defining in what areas, for whom, and how communication and healthcare quality and safety are related and may be addressed.

Our findings suggest that communication problems influence the timely, accurate, and effective exchange of clinically relevant information and the degree to which mutual trust, respect, and working partnerships with families are established. They also support the conclusion that, their pervasiveness
notwithstanding, quality- and safety-related problems with communication and patient-centered care are likely to be more of a problem for Spanish-speaking LEP families than for English-speaking families. Recently released findings from the National Survey of Children’s Health (NSCH), which surveyed over 100,000 families regarding the health and healthcare their children receive, support this conclusion. NSCH data show that children from Hispanic families that speak Spanish at home are more likely to lack a personal doctor or nurse who knows their child and more commonly report poor communication with the healthcare provider(s) their child does see compared with children from non-Hispanic families that speak English as their primary language (68.5% versus 29.9%, \( p < .001 \)) (CAHMI, 2005).

**Conclusions**

In the present study, the input received from focus group participants confirmed findings from earlier studies that language and cultural differences have a pervasive and often negative effect on the perceived quality and safety of hospital care for children. They also suggest that substantial barriers to measuring or addressing problems with communication exist. Additional challenges lie in evaluating how these problems affect healthcare quality and safety and understanding how differences in language and culture have a special effect on communication, quality, and safety. Findings from this study lend support to the following seven conclusions:

1. **All aspects of quality can be affected.** Language and related cultural differences between LEP families and hospital providers and staff can present pervasive and often serious threats to the quality and safety of hospital care for children. Patients' experience of care, timeliness of care, effectiveness of care, efficiency, equity, and safety of healthcare—the key domains of quality—(Institute of Medicine, 2001) may all be affected by language and cultural differences.

2. **Multiple levels of change are involved.** Preventing and addressing communication problems requires involvement across the hospital and within the community. Strategies for improvement are required at the level of the provider-patient relationship, within the care setting, across the organization at large, and within the community and policy environment that influences hospital priorities and resources.

3. **Divergent perspectives may limit progress.** Divergent perspectives among parents, providers, hospital staff, and QI professionals about the nature of the problem and who is responsible for addressing problems can make progress difficult. Efforts may be needed to create a shared understanding and shared accountability for reducing quality and safety problems associated with communication, language, and cultural differences.

4. **Measurement is important.** To understand and track improvements, more measurement of needs and problems may be required. In particular, parent and family input may be useful in identifying the nature and extent of communication problems that are associated with healthcare quality and safety.

5. **Parents are key partners in ensuring good communication and the quality and safety of care.** As outlined in the AHRQ 20 Patient Tips to Help Prevent Medical Errors in Children, parents and children play an important role in ensuring good communication and the quality and safety of hospital care for children. In many ways, hospital staff and providers count on parents to be empowered, ask questions, and be persistent. At the same time, little is done to encourage or support parents in this role, which the data suggest is often subverted by healthcare policies and practices. Linguistic and related cultural differences make this even more of a challenge for Spanish-speaking LEP parents.

6. **Communication problems are not limited to Spanish-speaking LEP patients.** Problems with communication and quality and safety of care experienced by Spanish-speaking LEP families likely reflect a more universal issue with the culture of medicine that works against a partnership-oriented and culturally sensitive model of healthcare (Sobo & Seid, 2003).

7. **Hospitals can take action now.** Although further research is needed to specify effective interventions and improvement
efforts, hospitals do not need to wait to address the problems of Spanish-speaking LEP families. Federal regulations (Title VI of the Civil Rights Act) and national standards (e.g., CLAS standards) require hospitals both to ensure meaningful language access and to compel hospitals to address the universal and specific communication problems LEP families experience that threaten the quality and safety of hospital care for children. JCAHO and other organizations are actively involved in projects to assist hospitals in this area (Hasnain-Wynia & Pierce; JCAHO, 2005). Moving from awareness of the issues and requirements for change to improvement will require continued research and efforts to translate this research into practice. In particular, research is needed to develop tools that hospitals can use to further document and demonstrate the link between communication and healthcare quality and safety, to assess current performance in this area, and to design and test strategies for improvement such as those set forth in the National Initiative for Children’s Healthcare Quality’s (NICHQ) report “Improving Cultural Competency in Children’s Health Care” (NICHQ, 2005). The ideas for improvement identified in the field to date have implications spanning from the training and development of healthcare professionals to the education and empowerment of families and children to the design and application of clinical information systems. Hospitals willing to participate in the development, testing, and implementation of the needed tools and strategies for improvement are critical to ensuring that the many communication-related threats to the quality and safety of hospital care for children from Spanish-speaking LEP homes are minimized.

Acknowledgments
The authors would like to thank the Commonwealth Fund and the California Endowment for their support of this project and Glenn Flores for his consultation on project design and analysis. We also thank family focus group facilitators Milagros Abreu, MD, Leticia Reyes Gelhard, MA, and Lillilan Barreiro, who assisted in focus group recruitment and translation of materials and transcripts, as well as Alissa Green, who provided excellent assistance in the final formatting and submission of this paper.

References


### Authors’ Biographies

Christina Bethell, PhD MBA MPH, is associate professor at the Oregon Health and Science University and the founding director of the Child and Adolescent Health Measurement Initiative, Portland, OR.

Lisa Simpson, MB MPH BCh FAAP, is the endowed chair in child health policy and director at All Children’s Hospital and the University of South Florida, Department of Pediatrics. She was formerly the deputy director at the Agency for Healthcare Research and Quality at the U.S. Department of Health and Human Services.

Debra Read, MPH, is a senior research associate with the Child and Adolescent Health Measurement Initiative, Portland, OR.

Elisa J. Sobo, PhD, is associate professor in the Department of Anthropology, San Diego State University, and associate clinical professor in the School of Medicine, University of California–San Diego.

Judi Vitucci, PhD ARNP, a nurse practitioner and medical anthropologist, is executive director of the Healthy Start Coalition of Pinellas, Inc., a nonprofit service agency focused on pregnant women and infants in Pinellas County, FL.

Brooke Latzke is a senior research assistant with the Child and Adolescent Health Measurement Initiative at Oregon Health and Science University, Portland, OR.

Susan Hedges, MPH CHES, is a research associate and adjunct faculty member at the Maternal and Child Health Initiative for the Institute of Public [AU: WORD MISSING?] in the Graduate School of Public Health at San Diego State University, San Diego, CA.

Paul S. Kurtin, MD, is vice president for clinical innovations and director of the Center for Child Health Outcomes at Children’s Hospital, San Diego, CA. He is also the founding medical director of the Child Health Accountability Initiative, a collaborative of 15 children’s hospitals working together to improve care for hospitalized children and children with special healthcare needs.

For more information on this article, please contact Christina Bethell by e-mail at bethellc@ohsu.edu.