

5-2010

# Perspectives on the Interpreting Program at Logan Regional Hospital and Access to Health Care throughout the Spanish-Speaking Community of Cache Valley

Danielle Babbel  
*Utah State University*

Follow this and additional works at: <http://digitalcommons.usu.edu/honors>

 Part of the [Linguistic Anthropology Commons](#)

---

## Recommended Citation

Babbel, Danielle, "Perspectives on the Interpreting Program at Logan Regional Hospital and Access to Health Care throughout the Spanish-Speaking Community of Cache Valley" (2010). *Undergraduate Honors Theses*. Paper 40.

This Thesis is brought to you for free and open access by the Honors Program at DigitalCommons@USU. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of DigitalCommons@USU. For more information, please contact [becky.thoms@usu.edu](mailto:becky.thoms@usu.edu).



**Perspectives on the Interpreting Program at Logan Regional  
Hospital and Access to Health Care throughout the Spanish-  
Speaking Community of Cache Valley**

by

**Danielle Babel**

**Thesis submitted in partial fulfillment  
of the requirements for the degree**

of

**DEPARTMENTAL HONORS**

in

**Anthropology  
in the Department of Sociology, Social Work, and Anthropology**

**Approved:**

---

**Thesis/Project Advisor**  
Claudia Radel

---

**Departmental Honors Advisor**  
David Lancy

---

**Director of Honors Program**  
Christie Fox

**UTAH STATE UNIVERSITY**  
**Logan, UT**

**Spring 2010**

**Author's Biography:**

Dani Babbel, raised in Corvallis, Oregon, graduated in 2005 from Crescent Valley High School. A Presidential Scholar, she entered Utah State University and quickly declared degrees in both Anthropology and Geography, and then later minors in Spanish and Chemistry. While at USU Dani helped lead a number of different organizations including Students Together Ending Poverty, Aggies for Africa, and Save Higher Education in Utah. She worked as a Spanish interpreter at Logan Regional Hospital for three years, and also volunteered at the English Language Center. Taking advantage of the numerous opportunities to gain international volunteer and internship experience, she has traveled to Peru, Mexico, and Rwanda for a variety of endeavors.

After graduating in May 2010, Dani plans on applying for medical school, and while waiting for acceptance into an institution, hopes to leave the country at least once more and participate in more volunteer or internship work.

**Abstract:**

Language barriers can greatly affect patient-physician interactions, and thus have implications for individual health outcomes. This study uses surveys distributed to Spanish speakers throughout Cache Valley to solicit their views on the interpreting program at Logan Regional Hospital. The surveys reveal whether or not language related issues prevent individuals from seeking medical attention as a part of a routine check up as well as for illness care. Survey results indicate how well known the existence of the interpreting program is throughout the target community, and if the availability of a qualified interpreter increases the likelihood that individuals will seek medical attention when needed.

**Problem Statement:**

As a nation founded by immigrants, ethnic diversity among patrons of the health care system in the United States is not a new phenomenon. Within the last few decades, however, demographic studies have shown a profound increase in non-English speakers. In Utah as well as Arkansas, Georgia, Oregon, Nevada, and North Carolina, the limited-English proficient (LEP) population grew by more than 100% between the censuses of 1999 and 2000 (Gadon et al., 2007). Logan Regional Hospital (LRH) has risen to meet the challenges presented by the diversification of its patient base, and has established an interpreting program with seven qualified Spanish-interpreters. This study seeks the opinions of the target population of the interpreting program, namely limited-English Spanish speakers throughout Cache Valley, on the program. This includes whether or not study participants are even aware of the program's existence. The study also examines the relationship between the rate at which this population seeks health services for both routine and illness care, and their declared level of English proficiency, to see whether or not language is a significant barrier in access to health care.

This study's starting hypothesis is that an individual's lack of English proficiency is indeed a significant deterrent to seeking health care services, thus resulting in a low rate of

visitation to LRH for routine or illness care. Similarly, it is also expected that becoming aware of the free interpreting services offered by LRH will increase the likelihood that survey participants will seek health care services when needed.

### **Literature Review:**

The U.S. census shows that the percentage of Americans over age five that speak a language other than English at home increased from 13.8% to 17.8% between 1990 and 2000. Similarly, the LEP population rose from 6.1% to 8.1%, an increase by one-third, in that same period (Ku and Flores, 2005). Other research estimates that one in five people living in the United States speaks a language other than English at home, and as many as one in fifteen speaks and understands little, if any, English (Lavizzo-Mourey, 2007). People living in the United States now speak more than 300 languages (Partida, 2007). Spanish is currently the most widely spoken non-English language in the U.S. as a result of a 61% increase in the Latino<sup>1</sup> population between 1990 and 2000, and Latinos now make up the largest minority group. Over forty million Latinos (14% of the U.S. population) live in the U.S., and demographers project the population to rise to 47.7 million by 2010 and to 60.4 million by 2020 (Torres et al., 2008). Today, one in ten Americans speaks Spanish at home (Ku and Flores, 2005). Forty percent of these Spanish speakers fall into the LEP category (Torres et al., 2008).

Hospitals nationwide have felt the effects of this dramatic demographic change, as a survey indicated that employees of at least 20% of 861 hospitals encounter more than 15 languages at their work place, and 93% frequently come across Spanish-speaking patients (“Are Hospitals Talking the Talk”, 2007). The rapid growth of Latino patients in U.S.

hospitals has outpaced the expansion of culturally and linguistically competent care (O'Leary, 2003). As already 90 million Americans report having troubles understanding basic health information, language difficulties add an additional barrier (Carmona, 2007). Because only less than one-fourth of American hospitals employ professional interpreters, many of these patients do not receive the care they deserve (Marchione, 2003). Even in hospitals with professional interpreters, services may be underutilized. Some of the many physicians in this country that do not speak a second language have characterized their interactions with LEP patients as "veterinary medicine" (Kugel, 2002).

The rapid demographic change facing U.S. hospitals has resulted in a national health care system with considerable disparities among different patient groups. Because of the great barrier presented by language differences among patients and providers, a number of risk factors compromise the health of LEP patients. Effective communication between patients and providers is crucial in terms of positive health outcomes. Several studies have been done across the nation on the challenges resulting from miscommunication between patients and their providers. One such study found that patients treated by physicians that do not speak their language are more likely to neglect taking their medication, miss appointments, and visit the emergency department than patients treated by physicians speaking the same language (Ku and Flores, 2005). Another study produced similar results, indicating that a patient in need of an interpreter that does not receive one is less likely to understand information regarding medication, including important information on side effects (Lavizzo-Mourey, 2007). A survey with Latino parents indicated that some did not bring their children to the hospital for needed medical care as a result of language barriers (Ku and Flores, 2005). A survey conducted by

Washington state's Medical Assistance Administration (MAA) found that children who had parents whose primary language at home was not English were less likely to receive illness care than children of parents whose language at home was English (42.5% vs. 72.3% of participants respectively). These same children are less likely to receive the recommended number of preventative care visits (37.8% vs. 57.8% for routine care) (McAninch-Dake, 2007). Another survey of Latino parents produced similar findings, as many respondents cited language issues as the single greatest barrier to health care access for their children (Ku and Flores, 2005).

As a result, healthcare disparities among ethnic groups persist. In the case of Latinos, some disparities are worsening as reported by the National Healthcare Disparities Report (Cheng, 2007). The Agency for Healthcare Research and Quality also reported great disparities in healthcare between non-Latino whites and Latinos in the United States, including a decline in a routine source of care for the latter population (National Healthcare Disparities Report, 2006). The Institute of Medicine (IOM) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care also determined after a series of studies that though our country has made much progress in the last 50 years, health treatment is still not equal among racial and ethnic groups, reflecting a society with discriminatory attitudes and behaviors. The committee also concluded that not only do such disparities exist, but that they often result in worse outcomes in many patients (Nelson, 2003).

The installation and continuous improvement of interpreting services is not only in the best interest of LEP patients seeking quality health care, but it is also in the best interest of hospitals. Jacobs and colleagues report on six studies that directly measured the costs

and benefits of interpreting services. All found that ad hoc interpreting by hospital employees not specifically designated as interpreters presented a large opportunity cost in the form of time lost to interpreting. One of these studies, conducted in a pediatric emergency department, found that language barriers between physicians and patients led to a \$38.00 increase in charges for testing, and a 20-minute longer stay in the Emergency Department compared to encounters with no language barriers. Using the mean length of stay (LOS) of 5 days of LEP patients and a mean cost of \$2,900.00 per day, Jacobs and colleagues found that the cost of interpreting services accounted for only 1.5% of the overall cost of patient care in all six case studies (Jacobs et al., 2007). The Office of Management and Budget (OMB) concluded that only a 0.5% increase in the national health care expenditure would be necessary in order to provide universal interpreter service coverage in health care (Gadon et al., 2007). The OMB analysis affirmed that this additional cost is relatively small compared to the current gaps in health care access and medical expenditures for LEP patients (Ku and Flores, 2005).

A number of studies show that even when hospitals do provide interpreting services, providers may not effectively utilize interpreters in the necessary situations. One such study done with resident doctors from the University of Colorado Department of Pediatrics found that 53% of resident doctors not proficient in Spanish admitted to using inadequate language skills in caring for patients either “often” or “everyday” (O’Leary, 2003). Eighty percent of the same individuals in the study reported that they frequently avoided communication with LEP families because of the language barrier, and 75% confessed to using the hospital’s interpreter services “never” or only “sometimes.” Over half of the non-language-proficient resident doctors in this study called on proficient

colleagues instead of qualified interpreters. Research done on ad hoc interpreting has revealed that using seemingly proficient but non-qualified Spanish interpreters greatly increases medical errors (Gadon et al., 2007). An audiotape of a pediatric clinic revealed that ad hoc interpreters made mistakes such as omitting questions about drug allergies, and instructions on taking prescription medicine (Ku and Flores, 2005).

The study done at University of Colorado Department of Pediatrics revealed that physicians may not have used interpretation services because of perceived high costs and inefficiency. Similar findings were found by the American Medical Association in 2005 which held focus groups with small group practitioners in areas that had experienced a large and recent increase in the LEP population. Many of the participants expressed that the cost of interpreting services were high yet few had actual experiences that would support these perceptions. All physicians recognized the risks of using ad hoc interpreters, but admitted to rarely utilizing professionals except for in settings with high liability (Gadon et al., 2007). Partly because of the high perceived cost of interpreting services, physicians were reluctant to use interpreters even while knowing the importance of doing so.

Information management between providers and patients plays a significant role in medical care, and clear communication between these parties is necessary. Care should be conducted in a manner that is patient-centered, taking into consideration the patient's perspective at all times. Not surprisingly, patients whose providers do not speak a language they easily understand have reported low levels of patient satisfaction, and have shown to be less likely to return for follow-up care. Poor communication between patients and their providers can present difficulties with informed consent, understanding of

diagnosis and treatments, and the preparation of birth certificates, and can result in an overall dissatisfaction with care. In the most extreme cases, language barriers can result in malpractice lawsuits and hospital sanctions. In one example, a paramedic interpreted the statement of a young Latino boy as “intoxicated” when really by saying “intoxicado,” he meant “nauseated.” Consequently the boy received drug abuse treatment for several days until he eventually suffered from a ruptured brain aneurysm. He was awarded \$71 million after becoming quadriplegic (Ku and Flores, 2005).

Even if the above-cited reasons were not enough incentive for the development, improvement, and regular utilization of interpreting services by hospitals nationwide, many of these institutions, including Logan Regional Hospital (LRH), must do so for legal purposes. Title VI of the 1964 Civil Rights Act has been interpreted by the U.S. Supreme Court to equate discrimination based on language to discrimination based on national origin (Chen, 2003). Consequently linguistically isolated patients have the right to "reasonable, timely and appropriate language care" (Torres et al., 2008). In 1980 the Department of Health and Human Services issued a notice saying that, “No person may be subjected to discrimination on the basis of national origin in health and human services programs because they have a primary language other than English” (Chen, 2003). Nearly two decades later, the Office of Minority Health (OMH) created national standards for culturally and linguistically appropriate services (CLAS) to a diverse patient base. After input from a broad range of stakeholders, including hospitals, community-based clinics, professional associations, physicians, nurses, educators, patient advocates, advocacy groups, consumers and many other relevant figures, the CLAS standards were finalized in December of 2000 to be adopted or adapted by stakeholder agencies and organizations

(Office of Minority Health, 2001). Earlier that year (in August) President Clinton issued the Executive Order 13166 which requires that all agencies receiving federal funding prepare a plan to improve access by LEP persons to federally conducted programs and activities. In that same year and month the Office for Civil Rights (OCR) for the Department of Health and Human Services (DHHS) created a Policy Guidance for such agencies on how to comply with Title VI (Torres et al., 2008). As a result, not providing adequate interpreting services is a form of discrimination as recognized by the U.S. Department of Health and Human Services, which developed a set of mandates and guidelines for culturally and linguistically appropriate services (Ngo-Metzger, 2007). Noncompliance can result in fines and the loss of federal funding.

### **Methods:**

The first portion of this study involved informal and unstructured key informant interviews, discussing the interpreting program with its directors, including Jenifer Jones, the current program coordinator, and Shauna Sharp the previous program coordinator and creator, as well as Cathy Edwards, a registered nurse at LRH. The second portion of the study was originally designed to include survey distribution to three different parties: LEP patients who have visited LRH, providers at LRH (including physicians, nurses, and staff), and members of the Latino community in Cache Valley who may or may not have visited LRH. The first party included LEP patients who had just concluded a hospital visit with a qualified interpreter. The interpreter would have offered the survey to the patient, while emphasizing that the survey was voluntary, and completing or not completing it would in no way affect the patient's personal quality of care at LRH. The second party would have

included hospital employees covering all LRH departments that had regular patient interaction. The third party, and the only group who actually participated, included Latino community members as referred to by Leo Bravo, the director of Cache Valley's Multicultural Center, as well as by directors at the English Language Center. These participants were enrolled either in the Multicultural Center's driver's education class specifically for Spanish speakers, or in English language courses at the English Language Center. Though it was not a requirement that this group of participants were LEP Spanish-speakers, it was probable that this was their status given their enrollment in these courses. Participants in this party had either visited or not visited LRH for health care services

As mentioned above, the third party was the only group of participants included in the study, as the researcher encountered barriers to survey distribution on hospital grounds. A total of 62 completed surveys were gathered from the Multicultural Center and the English Language Center. Originally the study was intended to include a larger assessment portion of the interpreting program (as evaluated by patients and providers), but distribution constraints ended up tailoring the focus to community member perceptions of the program and their access to health care in more general terms. The surveys were all anonymous and consisted of 17 multiple-choice questions written in Spanish. After data collection, frequency analysis and cross tabulations were performed using PASW (formerly SPSS) to examine survey results. To view the survey instrument, see Appendix I.

### **Situation at Logan Regional Hospital:**

Interviews with Jenifer Jones and Shauna Sharp, employees of LRH, provided a wealth of information on the institution's interpreting program. Sharp commented that a

survey she conducted in 2006 revealed the need for a Spanish interpreting program at LRH. She saw that calls to various Spanish-speaking staff to interpret across the hospital interrupted their work, and placed an unnecessary burden on these individuals as well as the departments in which they worked. In response, Sharp initiated the interpreting program in January 2007, beginning with herself and just a few student volunteers. The program now includes seven volunteers (although not all are actively interpreting), all but one of whom are formally qualified by the Intermountain interpreting program. In June of 2008 the program saw the creation of an official interpreting program coordinator position, since filled by Jenifer Jones, who started out as one of the student interpreters. She is the only paid interpreter working at Logan Regional Hospital.

Despite the relatively high frequency of interpreter-use at the hospital (Sharp claims that interpreter requests can be made anywhere from two to seven times per hour), both Sharp and Jones perceive that the relatively new program is still underutilized. When talking to a technician, Sharp discovered that on average, three to four LEP patients visit the Radiology/Imaging department each day. The number of interpreters called to the department, however, was far less, indicating that patients do not receive care in a language that they understand.

Perceived cost may also deter hospital employees at LRH as well, though Sharp and Jones cited other potential reasons. Both reported that some hospital employees may think they have enough of an ability to speak Spanish to “get by” even if it is far from proficient. Jones has said she has been called midway through a patient’s visit after a physician realized that his Spanish was not proficient enough to communicate effectively with a patient. Cathy Edwards, a nurse at LRH, added that the issue of time also may detract

hospital employees from using qualified interpreters. With the fast pace of the daily routine at LRH, and “so many patients in such little time,” calling for an interpreter is seen as just one more step. Sharp commented that the hospital also receives new staff frequently, and that they may not be aware of the existing interpreter services. Sharp and Jones are working to spread awareness of the program and its benefits throughout the hospital. They would also like all employees to be aware of the legal requirement, including Title VI, for all Intermountain Health Care hospitals to provide such services.

Sharp provided information on patient perspectives as well. She expressed that some LEP individuals may be reluctant to come to the hospital for fear of not being understood, while being unaware of the hospital’s free interpreting services. Because of recent immigration from a foreign country, some may fear refusal of service, or even deportation, because of their legal status. Edwards shared the story of a 15-year-old boy ill with pneumonia. Even though he had been in the hospital for weeks because of his illness, his parents never came to visit because of their legal concerns. Even when there are LEP patients at LRH, Sharp worries that in the event that an interpreter is not used, they may feign comprehension while talking to a hospital employee because of their desire to be polite.

In Massachusetts, a state well known for its exceptional interpreter services, the Executive Office of Health and Human Services says that it is critical to conduct regular institutional assessments of existing interpreter practices, systems, and resources in order to identify areas in need of improvement. They encourage getting feedback from both LEP patients and hospital providers. In addition, the Massachusetts report suggests that studies take into account opinions from LEP communities as well (Torres, 2004). Numerous other

studies have confirmed the need for hospitals to continuously monitor the effectiveness of interpreting programs for constant improvement. The information gained from the key informant interviews and the literature review, including the Massachusetts report cited above, defined the initial research design and survey instrument development (although it was only possible to complete one component of the initial research design).

## **Survey Results:**

### ***English Language Proficiency***

Well over the majority of survey participants spoke Spanish as a primary language in their home (90.2%) while 4.9% spoke English and Spanish, and 3.3% spoke English as the sole primary language in their homes. Forty-eight percent of survey participants described their level of English proficiency by saying that they were “able to understand and speak a few words” of English, while 24% said that they were “unable to communicate in nor understand English” and 10.3% identified themselves as “very fluent” in English.

However, 80% of respondents said that they were more likely to seek health services at LRH for illness care or routine care after learning about the availability of free interpreting services.

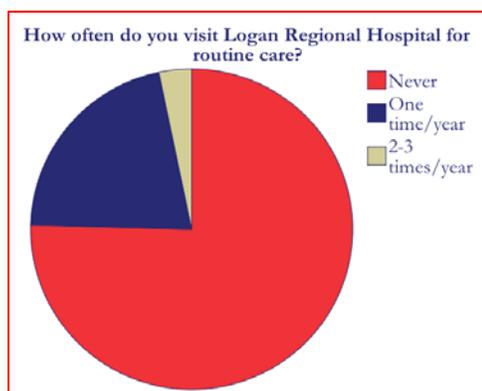
### ***Hospital Visitation and Interpretation Service Knowledge and Use***

Seventy-four percent of respondents did know free interpreting services existed at LRH before taking the survey. Most had never visited Logan Regional Hospital for illness care (58%) nor for routine care (84%). Of those that had visited LRH, 35% of those who had gone for illness care and 40% of those who had gone for routine care received interpreting services at LRH. Eighty percent of those that had visited LRH and had not received

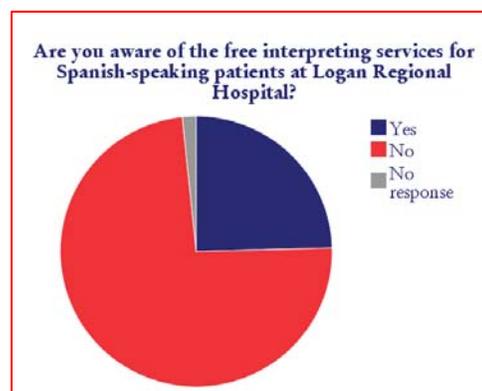
interpreting services said that they wish that they had. One respondent volunteered the information that his or her mother-in-law informally had acted as the interpreter in a visit to LRH. A few respondents either wrote on their survey or verbally expressed that the availability of interpreting services did not resolve the larger barrier to receiving health care services, a lack of health insurance and sufficient money.

***Indicators of Satisfaction with Interpretation Services***

Of those that did receive the services of a qualified interpreter at LRH, 77% said that the interpreter was “very helpful, easy to understand and talk to” while only 3% said that the interpreter was “not helpful at all in improving communication”. Based on his or her experience with the interpreter at LRH, respondents said that they were more 78% more likely to seek care when ill, while 71% said the same thing for routine care at LRH. When asked whether or not a fear of language-related problems was a deterrent to visiting LRH, 67% said “no” while 33% said “yes.” Although differences in rates of LRH visitation based on English proficiency were detected in the sample, these differences were not statistically significant (with chi-square: 4.47, p=0.61 and chi-square: 6.64, p=0.67).



**Figure 1** do these need captions? They seem self-explanatory



**Figure 2**

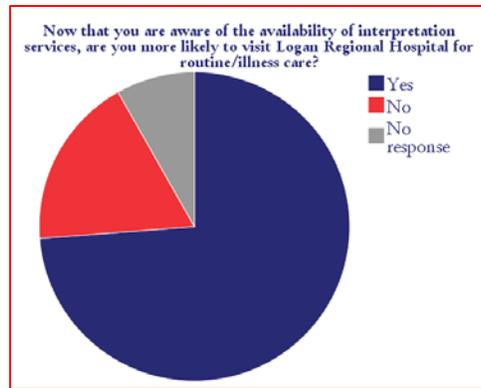


Figure 3

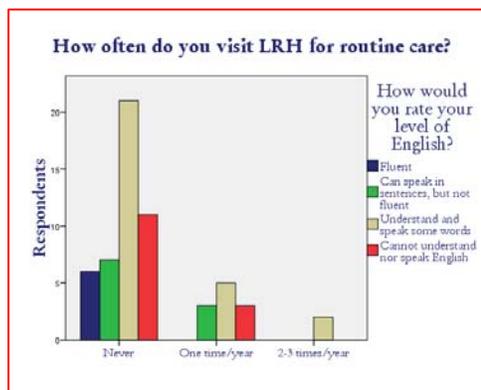


Figure 4

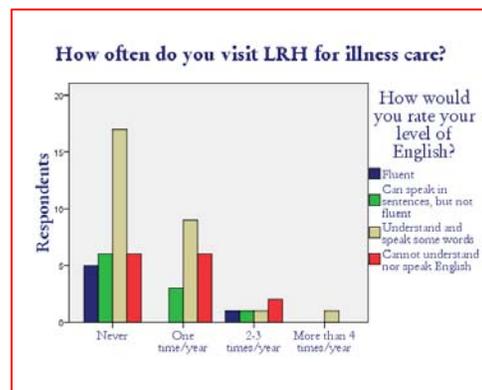


Figure 5

**Discussion:**

The percentage of respondents that do not visit LRH for illness care or for routine care because of a fear of language-related problems ( X %) is not as high as expected, though it is still a considerable number. The finding that language is not a widespread barrier to hospital visitation was further supported by the lack of a statistically significant relationship between respondents' language proficiency and the frequency with which they visit LRH. Given that the frequency with which respondents visit LRH is low (especially for routine care), there likely are other deterrents facing this population in seeking health care, such as financial ones. Although it is also possible that respondents are seeking health care from other (non-hospital) venues. This information was not captured by the survey.

Awareness of the interpreting program is also low (X %). Despite the potential existence of other barriers to seeking health care, the majority of respondents said they were *more likely* to visit LRH for both illness care (X %) and routine care (X %) after becoming aware of the availability of interpreting services. This finding suggests the need to better publicize the program throughout the target community. In addition, a considerable portion of survey respondents who had visited LRH had desired but had not received interpreting services (X%). This implies that qualified interpreters are either not called upon or are not available in all needed situations, indicating inadequacies in the program. The latter scenario would confirm the suspicions of Sharp, who thought that interpreting services at LRH were underutilized. The interpreters themselves, however, were rated highly by respondents who had received their services.

### **Limitations and further questions**

As the study was initially designed to include survey distribution to patients and providers at LRH, these perspectives on the program are still sought. The following are additional questions for further research:

- Are the frequencies of visiting the hospital for illness or routine care any higher or lower in this population than in the population of proficient English speakers?
- What other factors deter LEP Spanish-speakers from seeking health care services?
- Are respondents seeking health care services from facilities other than LRH?
- If respondents visit LRH for health care, do they rely on other aides to communication such as a friend or relative more proficient in English?
- What would explain the incidences where an LEP Spanish-speaking patient visited LRH and had wanted interpreting services but did not receive them?

**Conclusion:**

Language barriers can influence an individual's perception of his or her access to health care, and providing a qualified and effective interpreter can increase the likelihood that these individuals will seek health care services when necessary. This study has already increased awareness of the interpreting program throughout the target population in Cache Valley, but more efforts should be taken to further publicize the program. Though there may be other barriers to seeking adequate health care services facing this population, effectively erasing the language barrier will help in increasing health care access overall. As this study was unable to do so, it is highly recommended that LRH conduct its own assessment of its interpreting services among providers and the patients that receive the services. Since there are patients that do not receive interpreting services during a visit to LRH when desired, either the program should work to try and enlist the help of more volunteers, or hospital staff should be more active in requesting the services of an interpreter in these situations. An assessment of the program would help in efforts to improve the program, better positioning it to improve patient-provider communication and associated patient outcomes.

This study hopefully adds to the positive changes occurring that parallel the morphing demographic of the patient base in hospitals across the United States. With a concentrated effort, and continual sensitivity to the needs of special patient populations, studies such as this will help in improving quality in health care across all ethnicities.

## Works Cited:

- Agency for Healthcare Research and Quality. (2006). National healthcare disparities report. Rockville, MD. Retrieved November 10, 2008 from <http://www.ahrq.gov/qual/nhdr06/nhdr06.htm>
- “Are hospitals talking the talk?” (2007). *Preview Nursing*, 37(2), 34-35.
- Carmona, R. H., & Zuckerman, E. (2007). Improving language access: A personal and national agenda. *Journal of General Internal Medicine*, 22(Suppl 2), 277–8.
- Chen, A. H., Youdelman, M.K., & Brooks, J. (2003). The legal framework for language access in healthcare settings: Title VI and beyond. *The Annals of Thoracic Surgery*, 76(4), 1377-1381.
- Cheng, E. M., Chen, A., & Cunningham, W. (2007). Primary language and receipt of recommended health care among Hispanics in the United States. *Journal of General Internal Medicine*, 22(Suppl 2), 279–80.
- Gadon, M., Balch, G.I., & Jacobs, E.A. (2007). Caring for patients with limited English proficiency: The perspectives of small group practitioners. *Journal of General Internal Medicine*, 22(Suppl 2), 279–80.
- Jacobs, E.A., Sadowski, L.S., & Rathouz, P.J. (2007). The impact of an enhanced interpreter service intervention on hospital costs and patient satisfaction. *Journal of General Internal Medicine* 22(Suppl 2), 279–80.
- Ku, L. & Flores, G. (2005). Pay now or pay later: Providing interpreter services in health care. *Journal of Health Affairs* 24(2), 435-444.
- Kugel, S. (2002, April 7). Some say hospitals lack vital procedure: Translation. *New York Times*. 4.
- Lavizzo-Mourey, R. (2007). Improving quality of US health care hinges on improving language services. *Journal of General Internal Medicine*, 22(Suppl 2), 279–80.
- Marchione, M. (2003, January 5). Language linked to medical mistakes: Study at Boston clinic examines growing problem of errors made by interpreters. *Milwaukee Journal Sentinel*. Retrieved November 8, 2009 from <http://www2.jsonline.com/alive/news/jan03/108507.asp>.
- O’Leary, S.C., Burbano, F., & Hampers, L.C. (2003). The truth about language barriers: one residency program's experience. *Pediatrics*. 111(5), p.569
- Office of Minority Health. (2001, March). National standards for culturally and

- linguistically appropriate services in health care: Final report. *U.S. Department of Health and Human Services, OPHA, Office of Minority Health*. Retrieved April 8, 2009 from
- Partida, Y. (2007). Addressing language barriers: building response capacity for a changing nation. *Journal of General Internal Medicine*, 22(Suppl 2), pp. 279-80.
- Torres, B. (2004). Best practice recommendations for hospital-based interpreter services. Office of Minority Health. Massachusetts Department of Public Health.
- Torres, M., Parra-Medina, D., & Johnson, A.O. (2008). Rural hospitals and Spanish speaking patients with limited English proficiency. *Journal of Healthcare Management*, 53 (2), pp.107-120.
- U.S. Census Bureau. Question and Answer Center. (2009, March 23). Definition: Hispanic or Latino origin. Retrieved April 10, 2009 from [http://ask.census.gov/cgi-bin/askcensus.cfg/php/enduser/std\\_adp.php?p\\_faqid=315&p\\_created=1078334778&p\\_sid=jyU9WIrj&p\\_accessibility=0&p\\_redirect=&p\\_lva=&p\\_sp=cF9zcmNoPTEmcF9zb3J0X2J5PSZwX2dyaWRzb3J0PSZwX3Jvd19jbnQ9MTI2LDEyNiZwX3Byb2RzPSZwX2NhdHM9JnBfcHY9JnBfY3Y9JnBfcGFnZT0xJnBfc2VhcmNoX3RleHQ9aGlzcGFuaWM\\*&p\\_li=&p\\_topview=1](http://ask.census.gov/cgi-bin/askcensus.cfg/php/enduser/std_adp.php?p_faqid=315&p_created=1078334778&p_sid=jyU9WIrj&p_accessibility=0&p_redirect=&p_lva=&p_sp=cF9zcmNoPTEmcF9zb3J0X2J5PSZwX2dyaWRzb3J0PSZwX3Jvd19jbnQ9MTI2LDEyNiZwX3Byb2RzPSZwX2NhdHM9JnBfcHY9JnBfY3Y9JnBfcGFnZT0xJnBfc2VhcmNoX3RleHQ9aGlzcGFuaWM*&p_li=&p_topview=1).

## **Appendix I: Survey (English)**

### **Community Member Survey**

1. What is the primary language spoken in your home?
  - a. English
  - b. Spanish
  - c. Other:
  
2. How would you rate your ability to speak and understand English?
  - a. Very fluent
  - b. Can form sentences, but not completely fluent
  - c. Able to understand and speak a few words
  - d. Unable to speak or understand English
  
3. Are you aware of the free interpretation services available at Logan Regional Hospital (LRH) by qualified interpreters?
  - a. Yes
  - b. No
  
4. Have you ever visited Logan Regional Hospital because of illness?
  - a. Yes
  - b. No
  
5. How often do you go to the LRH due to an illness?
  - a. Never
  - b. Once a year
  - c. 2-3 times a year
  - d. More than 4 times a year
  
6. Did you receive interpreting services during any of these visits?
  - a. Yes
  - b. No
  
7. If you answered no to the question above, would you have liked to receive interpreting services?
  - a. Yes
  - b. No
  
8. Have you ever visited Logan Regional Hospital for routine care?
  - a. Yes
  - b. No
  
9. How often do you come for routine care?
  - a. Never

- b. Once a Year
  - c. 2-3 times a year
  - d. More than 4 times a year
10. Did you receive interpreting services during any of these routine care visits?
- a. Yes
  - b. No
11. If you answered no to the question above, would you have liked to receive interpreting services for routine care visits?
- a. Yes
  - b. No
12. How would you rate the effectiveness of your interpreter?
- a. Very helpful, easy to understand and talk to
  - b. Helpful but could have improved communication better
  - c. Helped only somewhat in improving communication
  - d. Not helpful at all in improving communication
13. Based on your experience with a qualified interpreter, are you more likely to seek care when ill at LRH?
- a. Yes
  - b. No
14. Based on your experience at Logan Regional Hospital with a qualified interpreter, are you more likely to seek care regularly at Logan Regional Hospital as a routine check-up?
- a. Yes
  - b. No
15. If you have not visited Logan Regional Hospital, is it because you fear problems with language?
- a. Yes
  - b. No
16. Knowing that the LRH has interpreting services, are you more likely to seek care when ill?
- a. Yes
  - b. No
17. Knowing that the LRH has interpreting services, are you more likely to seek care regularly for routine check-ups?
- a. Yes
  - b. No



## Appendix II: Survey (Spanish)

### Encuesta para el miembro de la comunidad:

1. ¿Cuál es el idioma que se habla principalmente en su hogar?
  - a. El inglés
  - b. El español
  - c. Otro idioma:
  
2. ¿Con qué facilidad habla usted el inglés?
  - a. Lo hablo con facilidad.
  - b. Lo puedo hablar en oraciones completas, pero no lo hablo con fluidez.
  - c. Lo puedo entender y puedo hablar unas palabras
  - d. No puedo comunicarme en ni entender el inglés.
  
3. ¿Conoce usted de los servicios gratuitos de interpretación, con un intérprete calificado, que ofrece el Hospital Regional de Logan?
  - a. Sí
  - b. No
  
4. ¿Ha visitado usted al Hospital Regional de Logan cuando ha estado enfermo(a)?
  - a. Si
  - b. No
  
5. ¿Con qué frecuencia va usted al Hospital Regional de Logan cuando ha estado enfermo(a)?
  - a. Nunca
  - b. Una vez por año
  - c. 2-3 veces por año
  - d. Más de 4 veces por año
  
6. ¿Recibió usted los servicios de un intérprete durante algunas de estas visitas?
  - a. Sí
  - b. No
  
7. Si respondió 'no' a la pregunta anterior ¿le habría gustado usted tener un intérprete durante su visita?
  - a. Sí
  - b. No
  
8. ¿Ha visitado al Hospital Regional de Logan para recibir control rutinario de salud?
  - a. Sí
  - b. No

9. ¿Con qué frecuencia va a Logan Regional Hospital para control rutinario de salud?
- Nunca
  - Una vez por año
  - 2-3 veces por año
  - Más de 4 veces por año
10. ¿Recibió usted los servicios de un intérprete durante alguna de estas visitas?
- Sí
  - No
11. Si respondió 'no' a la pregunta anterior ¿le habría gustado usted tener un intérprete durante su visita?
- Sí
  - No
12. ¿Cómo calificaría usted la eficacia de su intérprete?
- Muy servicial; fue fácil entenderlo y hablarle
  - Servicial, pero podría haber facilitado la comunicación mejor
  - Ayudó solo un poquito en facilitar la comunicación
  - No ayudó en facilitar la comunicación
13. ¿Basado en su experiencia con un intérprete calificado en el Hospital Regional de Logan, es más probable que usted venga al hospital para recibir cuidado de salud cuidado de salud cuando esté enfermo(a)?
- Sí
  - No
14. ¿Basado en su experiencia con un intérprete calificado en el Hospital Regional de Logan, es más probable que usted venga al hospital para recibir cuidado de salud como parte de un régimen regular de cuidado de salud?
- Sí
  - No
15. Si usted nunca ha visitado al Hospital Regional de Logan, ¿es por miedo de problemas de comunicación relacionados al idioma?
- Sí
  - No
16. ¿Ahora que usted conoce de los servicios gratuitos de interpretación, con intérpretes calificados, que ofrece el Hospital Regional de Logan, es más probable que usted venga al hospital para recibir cuidado de salud cuando usted esté enfermo(a)?
- Sí
  - No

17. ¿Ahora que usted conoce de los servicios gratuitos de interpretación con intérpretes calificados, que ofrece el Hospital Regional de Logan, es más probable que venga al hospital para recibir cuidado de salud como parte de un régimen regular de cuidado de salud?
- a. Sí
  - b. No

**Appendix III: Table of Survey Results**

Question	Percentage of Respondents
<b>What is the primary language spoken in your home?</b>	
English	3.3
Spanish	90.2
English and Spanish	4.9
English and Other	1.6
<b>How would you rate your level of English proficiency?</b>	
Very fluent	10.3
Can form sentences, but not completely fluent	17.2
Able to understand and speak a few words	48.3
Unable to communicate in nor understand English	24.1
<b>Are you aware of the free interpretation services available at Logan Regional Hospital (LRH) offered by qualified interpreters?</b>	
Yes	26
No	74
<b>Have you ever visited Logan Regional Hospital as a response to illness?</b>	
Yes	42.7
No	57.3
<b>How often do you visit LRH as a response to illness?</b>	
Never	57.4
Once a year	32.8
2-3 times a year	8.2
More than 4 times a year	1.6
<b>Did you receive interpreting services during any of these visits?</b>	
Yes	31
No	69
<b>If you answered no to the previous question, would you have liked to?</b>	
Yes	80
No	20
<b>Have you ever visited Logan Regional Hospital for routine care?</b>	
Yes	14.6
No	84.4

<b>How often do you visit LRH for routine care?</b>	
Never	75.4
Once a year	21.3
2-3 times a year	3.3
More than 4 times a year	0
<b>Did you receive interpreting services during any of these visits?</b>	
Yes	28
No	72
<b>If you answered no to the previous question, would you have liked to?</b>	
Yes	80.5
No	17.1
<b>How would you rate the effectiveness of your interpreter?</b>	
Very helpful, easy to understand and talk to	74.1
Helpful, but could have improved communication better	8.6
Helped only somewhat in improving communication	14.4
Not helpful at all in improving communication	2.9
<b>Based on your experience with a qualified interpreter, are you more likely to seek care at LRH in response to illness?</b>	
Yes	78
No	19.2
<b>Based on your experience with a qualified interpreter, are you more likely to seek services at LRH for routine care?</b>	
Yes	71.4
No	28.6
<b>If you have not visited LRH, is it because of a fear of miscommunications due to language differences?</b>	
Yes	33.4
No	66.7
<b>Knowing of the free interpreting services offered at LRH, are you more likely to seek care in response to illness?</b>	
Yes	80.4
No	19.6
<b>Knowing of the free interpreting services offered at LRH, are you more likely to seek services for routine care?</b>	
Yes	80.4
No	19.6

| \*Translated from Spanish to English

|