

Spring 2016

The Physician's Perspective on the Impact of Interpretive Services on the Physician- Patient Relationship

Amrita Pandey

University of Akron, ap110@zips.uakron.edu

Please take a moment to share how this work helps you [through this survey](#). Your feedback will be important as we plan further development of our repository.

Follow this and additional works at: http://ideaexchange.uakron.edu/honors_research_projects

 Part of the [Community Health and Preventive Medicine Commons](#), [Diagnosis Commons](#), [Medical Education Commons](#), [Medical Humanities Commons](#), [Modern Languages Commons](#), and the [Other Medicine and Health Sciences Commons](#)

Recommended Citation

Pandey, Amrita, "The Physician's Perspective on the Impact of Interpretive Services on the Physician- Patient Relationship" (2016). *Honors Research Projects*. 322.

http://ideaexchange.uakron.edu/honors_research_projects/322

This Honors Research Project is brought to you for free and open access by The Dr. Gary B. and Pamela S. Williams Honors College at IdeaExchange@UAKron, the institutional repository of The University of Akron in Akron, Ohio, USA. It has been accepted for inclusion in Honors Research Projects by an authorized administrator of IdeaExchange@UAKron. For more information, please contact mjon@uakron.edu, uapress@uakron.edu.

The University of Akron

The Physician's Perspective on the
Impact of Interpretive Services on the
Physician- Patient Relationship

Amrita Pandey

Department of Modern Languages

Honors Research Project

Resumen

Fundamento: La relación entre médico y paciente se basa principalmente en la comunicación. Se ha sabido que la conversación entre el médico y el paciente es importante en el diagnóstico y el apoyo terapéutico. Sin embargo, según la Oficina del Censo de los Estados Unidos, un veinte por ciento de la población estadounidense no utiliza el inglés como idioma principal. Si se considera Ohio, casi un siete por ciento de la población habla un idioma distinto del inglés en su casa. Los residentes de Estados Unidos que hablan poco inglés enfrentan una gran barrera cada día, incluso cuando reciben atención médica. No reciben los beneficios de las conversaciones con sus médicos y es probable que reciban menos atención médica adecuada.

Objetivo: Se ha producido una gran cantidad de literatura sobre los efectos de las barreras del idioma y la satisfacción de cuidado para el paciente. Sin embargo, el objetivo de este estudio es investigar la perspectiva del médico sobre el uso de los servicios de interpretación y cómo afectan la relación entre médico y paciente. En este estudio preliminar, se examina la perspectiva del médico sobre el impacto de los servicios de interpretación en la relación de médico y paciente usando las siguientes preguntas como guía: ¿el uso de los servicios de interpretación interfiere con la relación entre el médico y el paciente?, ¿el uso de intérpretes efectivamente cierra la brecha de idioma entre los pacientes LEP (pacientes con dominio limitado del inglés) y el médico?, y ¿si médicos tratan de evitar el uso de los servicios de interpretación?

Diseño: La investigación consiste en médicos que se encuentran con pacientes que no saben inglés. La encuesta da una idea de la satisfacción del médico con los intérpretes y los servicios que prestan. La encuesta consiste en diecinueve preguntas, la mayoría de múltiples opciones o la escala de Likert, con una serie de preguntas de respuesta corta. El estudio se centra en los

médicos en Ohio debido a la falta de literatura sobre las barreras lingüísticas en la región del medio oeste de los Estados Unidos. Ohio tiene una población diversa y creciente y se considera como un buen modelo para toda la región del medio oeste.

Método: Se les envió una encuesta por correo electrónico a cuarenta y dos médicos en Ohio. También se enviaron correos electrónicos de notificación a los médicos cada semana. Después de tres semanas, el plazo de la encuesta cerró. Una vez que el plazo de la encuesta cerró, se les envió un último correo electrónico dándoles las gracias por sus respuestas a los médicos que participaron.

Resultados: Se recibieron veinte respuestas de los cuarenta y dos médicos que quienes fueron contactados. La encuesta les preguntó si los médicos eran todavía capaces de formar una relación con sus pacientes, independientemente de la barrera del idioma. Todos los encuestados respondieron diciendo que "sí" pudieron formar una relación a pesar de la barrera del idioma. Según los resultados, la herramienta más utilizada para comunicarse con los pacientes LEP es el uso de un intérprete profesional. La segunda opción más seleccionada es "con la ayuda de un familiar o acompañante". Los médicos seleccionan la opción "usar otros miembros del personal que no tenían ningún entrenamiento en la interpretación "en veinticinco por ciento de las veces" y "conformarse con lo que tiene cuando no hay otros métodos disponibles" el veinte por ciento de las veces. Los resultados muestran que catorce médicos sólo ven a los pacientes LEP una vez al mes, mientras que tres médicos los ven dos o tres veces al mes, y tres médicos ven a pacientes LEP menos de una vez al mes. La escala de Likert revela que quince de los veinte médicos están de acuerdo que los servicios de interpretación están bien informados en la terminología médica. Catorce médicos no están de acuerdo con la afirmación de que "los servicios de interpretación ayudan con las diferencias culturales". Doce médicos también no están de acuerdo con la

afirmación de que "los servicios de interpretación interfieran con la relación entre médico y paciente".

Conclusiones: Los resultados de los datos preliminares muestran que los médicos no creen que los servicios de interpretación interfieran con la relación entre médico y paciente. De hecho, según los datos preliminares, los médicos parecen estar satisfechos con los servicios de interpretación. Sin embargo, no se puede hacer una conclusión contundente con estos datos debido al número limitado de pacientes LEP que los médicos tratan cada semana. A pesar de que esta encuesta consiste en un muestrario pequeño, sin duda, los resultados preliminares revelan que existe un consenso que opine que los servicios de interpretación no ayudan con las diferencias culturales. En resumen, el estudio revela que: 1. El uso de los servicios de interpretación no interfiere con la relación entre el médico y el paciente 2. El uso de intérpretes cierra efectivamente la brecha entre los pacientes LEP y el médico, a pesar de que las barreras culturales reportadas no son eliminadas por los servicios de interpretación. 3. Los médicos utilizan los servicios de interpretación como una primera opción en la comunicación con los pacientes LEP; sin embargo, estos médicos creen que las reglas federales tienen un efecto de intimidación cuando se trata de pacientes con LEP.

Literature Review

The basis of the physician-patient relationship relies heavily on communication. It has been known that conversation between physician and patient is important in both diagnosing and providing therapeutic support. However, according to the US Census Bureau, twenty percent of the US population does not use English as their first language, which is one in every five people. The number of non-English-speaking people living in this country is expected to grow at a rate faster than the growth of the whole population (Ryan). Specifically looking at Ohio, around seven percent of the population speaks a language other than English in their homes. According to the trends observed, an estimated 50,000 more people moved to Ohio from other countries than moved from Ohio to foreign lands between 2010 and 2013. Since 2000, Ohio has seen a sixty six percent increase in the Asian population and a seventy six percent increase in the Hispanic population (Ryan).

The term "Limited English proficient" is used by the US Department of Health and Human Services (DHHS) Office for Civil Rights to define the portion of the population that is non-English speaking or limited-English speaking (Woloshin). The US residents who speak little English face language barriers on a daily basis, including when they are being treated medically. They do not receive the benefits of conversations with their health care providers and are likely to receive less than adequate health care due to the lack of communication. Limited English proficiency is associated with poor access to medical care or lower-quality care, including more invasive management and excess hospitalizations, medical errors, and drug complications, along with poor satisfaction with care (Woloshin). The use of interpreters bridges the language gap between doctor and physician. While common in other environments, professional interpreters are rarely available in health care. New York City, which has one of the largest limited English-

speaking populations in the country, does not employ professional medical interpreters in its public hospital system (Karlner). Instead, as in most of the United States, patients and clinicians rely on other suboptimal options such as ad hoc interpreters (untrained interpreters such as staff members) or family members. These alternative methods of interpretation may compound problems as a result of interpretation errors and the tendency among interpreters not to translate sensitive material. The use of interpreters can also present as an obstacle on the path to forming a communication based doctor-patient relationship. Yet, published studies report general positive benefits of professional interpreters on communication, clinical outcomes, and satisfaction with care (Karlner).

These professional interpretive services are required by federal and state laws to be offered to patients. There are various federal and state regulations designed to protect patients from encountering healthcare barriers. Awareness of these laws among providers has not been associated with use of professional interpreters. This suggests that providers may not be aware of their legal obligations to offer linguistic services to their patients, but may also indicate that providers prefer to continue to rely on untrained interpreters. The Office for Civil Rights views inadequate interpretation as a form of discrimination. This originates from the Civil Rights Act of 1964, which states that "no person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination" under any federally supported program. The Office for Civil Rights extended this protection to language, considering it to be a fundamental characteristic of national origin. The Office for Civil Rights also requires DHHS-funded health programs to provide patients with limited English skills access to services equal to those provided to English speakers (Woloshin). Programs that do not comply risk loss of all federal funds, including Medicare and

Medicaid payments. However, the current regulation has many problems. It has been noted as vague, it does not provide adequate funds to implement the regulation, and the entire compliance monitoring program is complaint based. Due to the cost, inaccessibility, and inconvenience of using professional interpreters, physicians are turning to the patient’s family and friends as interpreters (Flores, “The Impact...”). The use of family and friends as interpreters can lead to miscommunication and medical errors. It is known that facts can be left out, these interpreters can offer their own opinions, and control the conversation. This poses a large problem for the facilitation of a doctor-patient relationship and can reduce the satisfaction of care for the patient.

Physicians are presented with several options to overcome the language problems. Table 1 summarizes the four main interpreter types and their associated training requirements, costs, and pitfalls. The use of these types of interpreters lies in the hands of the physician, allowing the physician to choose the option they are most comfortable with.

Interpreter type	Training*	Cost*	Problems
Professional	1-4 y	Full time, \$16,000-66,560/y; contract work, \$10-32/h	Cost
Ad hoc	0-150 h	\$480-1500 (annual bonus), or \$1.00/h differential, or paid overtime	Loss of productivity while away from non-interpreter work, limited availability because of non-interpreter work
Telephone service	Already trained	Subscriber: \$200 initial fee; \$2.20-4.50/min; minimum monthly usage charge: \$50 Non-subscriber: \$4.15-7.25/min plus per call service fee: \$2.50	Requires minimum of 50 h/mo use, can be awkward, appreciation of non-verbal cues not possible
Family member or friend	None	None	Accuracy, confidentiality, avoidance of sensitive issues, disruption of social roles, medical terms may be incorrectly/not translated

Table 1. Interpreter options available to the physician (Woloshin).

Another question that arises is whether interpreters address cultural differences along with language. Along with language, cultural differences are known to become a barrier between physicians and patients. Research done by Glenn Flores discusses the influence of culture,

language, and race on the doctor-patient relationship and how the physician workforce needs to be more diverse to meet the needs of minority patients. A literature review was performed to assess existing evidence for ethnic and racial disparities in the quality of doctor-patient communication and the doctor-patient relationship. The results of the review found consistent evidence that race, ethnicity, and language have substantial influence on the quality of the doctor-patient relationship. The influence of race, culture, and ethnicity cannot be addressed by interpretive services either. The use of interpretive services can address the issue of culture; however, professionals are not required to report any cultural problems they encounter with the doctor's treatment plan. A mutual lack of awareness can lead to misunderstandings such as: ideas about the patient's health problem, expectations of the encounter, and verbal and non-verbal communication styles. Due to a lack understanding of cultural differences on the interpreter side, it is important for physicians to recognize and address potential cultural communication barriers with their patients (Flores, "Culture and the..."). For this reason, several studies have demonstrated the importance of trained medical interpreters for ensuring effective patient-physician communication. Medical interpreters also represent an untapped source of insight into common communication problems. Such insights can contribute to strengthening physicians' cross cultural communication skills (Jacobs, "Overcoming Language..."). Important aspects of quality include providers' respect for traditional health beliefs and practices, access to professional interpreters, and assistance in obtaining social services.

Many patients refuse interpretive services, or sometimes are not offered these services. In these cases, an ad hoc interpreter is often used. An ad hoc interpreter, a family member, friend, or stranger that speaks the same language as the patient is often used. Physicians often rely on these unprofessional sources to facilitate the conversation. However, this can lead to problems as

a result of interpretation errors and the tendency among these “interpreters” to not translate sensitive material. Cultural differences in the aspects of family hierarchy and values can often lead to information being left out or changed. With professional interpreters, physicians follow communication rules they were taught during training. However, physicians do not need to abide by these rules with family interpreters whom they treat as caregivers to the patient. Evidence suggests that optimal communication, patient satisfaction, and outcomes and the fewest interpreter errors occur when LEP patients have access to trained professional interpreters or bilingual providers (Rosenberg).

Although much research has attempted to answer these questions regarding language barriers between physicians and patients, there is still a need for more investigation. A study done by Rivadeneyra does a thorough literature review of over one hundred and fifty articles pertaining to the subject. Of the articles he reviewed, Rivadeneyra found that the definition of LEP is not standardized. Furthermore, in previous studies the qualification of interpreters used is not clear, sometimes there is no stated difference between professional and “ad hoc” interpreters. A majority of studies under taken also do not account for other factors besides language, such as race, culture, socioeconomic status and literacy. Lastly, little research exists on the physician’s perspective about the issue of language barriers and use of interpreters (Jacobs, “The Need for...”). The physician’s perspective on the use of interpretive services can give insight on how these services can be changed and improved to bridge the gap between LEP patients and the physician. It can also provide a first-hand view on the impact a middle man has when trying to form the physician-patient relationship.

Research Questions

From the perspective of physicians, the use of interpretive services is beneficial to the care of LEP patients but it could interfere with the patient-physician relationship in some cases. Language and culture have a substantial influence on the quality of doctor- patient communication and the doctor- patient relationship. Physicians are known to face challenges developing a strong relationship or communicate as well when working with minority patients. In this preliminary study, the physician's perspective of the impact of interpretive services on the doctor-patient relationship was studied using the following questions as a guideline:

1. Does the use of interpretive services interfere with the relationship between doctor and patient?
2. Does the use of interpreters effectively bridge the gap between LEP patients and the physician?
3. Do physicians tend to bypass the use of interpretive services?

According to the literature review, one can hypothesize that interpretive services are beneficial to the relationship between doctor and patient and can effectively minimize the language barrier. However, previous studies have shown that due to issues with the laws implemented to provide interpretive services to LEP patients, physicians are likely to bypass the use of professional interpretive services and rely on other mechanisms in order to communicate with their patients.

Methods

The target population for this preliminary study consisted of physicians that currently practice in the State of Ohio. The study focused on Ohio because of the increasing diversity and

lack of extant research on this subject in the Midwest region. Ohio also presents as a diverse population in terms of ethnicity, age, and income, allowing this state to be a model for large scale research in the Midwest.

For this study a survey was distributed to physicians. In an attempt to contact physicians, a list was compiled using personal contacts. Several hospital systems were contacted to mass distribute the survey to physicians; however, due to putative privacy issues the request was declined. From personal sources, forty two email addresses of physicians were obtained. An email was then sent to each physician explaining the purpose of the study, along with a link to the survey. The survey could be taken on a computer or on a mobile device since it was mobile compatible. After one week, a reminder email was sent out to all physicians, and two weeks later another reminder was sent announcing the closing of the survey window. The survey was open for a total of three weeks.

The survey was created using Qualtrics, a program offered to students by The University of Akron. The survey included nineteen questions. A majority of the questions were multiple choice, some were optional fill in the blank and it also included a Likert scale series of questions. When tested multiple times by both peers and two physicians, the survey only took three to four minutes to complete. The survey was kept short to receive a maximum number of responses, and to respect the time of the physicians. The questionnaire asked physicians to provide information about their gender, number of years practiced, type of practice; the number of patients they saw per week on average; the number of these patients who did not speak English; the languages spoken by physicians and patients; and the methods used to communicate with non-English-speaking patients. The physicians were asked to rate their satisfaction with the quality and availability of interpretation services on a 7-point Likert scale, with a rating scale of "not

satisfied" to "very satisfied." Respondents were also able to leave their contact information at the end of the survey if they would be willing to participate in an interview to discuss their responses more in depth. The survey is included in the supplementary portion of this paper.

After the three week period, a total of twenty two responses were received. Of the twenty two responses, only twenty were successfully completed, the remaining two were only partially completed. Due to the strict anonymity of these results, no statistical tests could be run on the data so patterns and trends were noted instead.

Results

Of the twenty complete responses received, the respondents were split evenly between working for a hospital versus working in a small group practice of fewer than five physicians. Two of the physicians surveyed stated that they spoke another language fluently (one physician spoke Hindi and another spoke Spanish). As seen in Figure 1, of the reported average of eighty to one hundred and twenty patients seen weekly, the average percentage of non-English speaking patients seen was zero to twenty five percent.

#	Answer	Response	%
2	0-25%	20	100%
3	25-50%	0	0%
4	50-75%	0	0%
5	75-100%	0	0%
	Total	20	100%

Figure 1. This graph shows the results to question number seven, which asks: Out of the average number of patients you see weekly, what percentage are Limited English Proficient (LEP) patients? The results show that the physicians surveyed saw a limited number of LEP patients weekly.

When asked what ethnicity of patients had the most difficult time with communication, twelve respondents selected Asian, while the other eight physicians selected Hispanic. The survey asked whether the physicians were still able to form a relationship with their patients,

regardless of a language barrier. All the respondents replied saying “yes” they could still form a relationship despite the language barrier.

#	Answer	Response	%
1	Yes	20	100%
2	No	0	0%
	Total	20	100%

Figure 2. This figure shows the results from survey question ten which asks: Do you believe you are able to form a relationship with patients despite language barriers? The results show that all twenty physicians agree that interpretive services do not hinder the relationship between them and their patients.

The most reported tool used to communicate with LEP patients was the use of a trained, professional interpreter. The second most selected option was “enlisting the help of a family member or companion”. The physicians selected the option “using other trained staff that had no training in interpretation” twenty-five percent of the time and “making do when no other methods are available” twenty percent of the time.

#	Answer	Response	%
6	speaking fluently in the patient's language	2	10%
7	using a trained medical interpreter	18	90%
8	using other staff who hadno training in interpretation	5	25%
9	enlisting the help of a family member or companion	11	55%
10	"making do" when other methods are not available	4	20%

Figure 3. This figure shows the responses to survey question eleven, which asks the physicians what methods they use to communicate with non- English speaking patients. The physicians were allowed to choose more than one answer. The results show that a majority of the physicians tend to use a trained medical interpreter over other methods.

The data shows that fourteen physicians reported only seeing LEP patients once a month, while three said they saw them two to three times a month, and three physicians reported only seeing LEP patients less than once a month. The Likert- scale revealed that fifteen out of twenty doctors agreed that interpreters are well educated in medical terminology. Fourteen doctors

disagreed with the statement that “interpretive services address cultural differences”. Twelve doctors also disagreed with the statement that “interpretive services hinder the physician-patient relationship”. Sixteen respondents agreed that with the use of interpretive services, information gets lost in translation. Nineteen physicians agreed that interpretive services are reliable. Fifteen responses indicated that the physicians agreed that the benefits of using interpretive services outweigh the costs. Eighteen respondents agreed that interpretive services were easily accessible.

#	Question	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	Interpretive services are well educated in medical terminology.	0	1	3	15	1
2	Interpretive services address cultural differences.	2	14	3	0	1
3	Interpretive services hinder the physician- patient relationship.	5	12	2	1	0
4	With the use of interpretive services, information gets lost in translation.	0	2	2	16	0
5	Interpretive services are reliable (punctual, accurate, prepared, alert, etc.)	0	0	0	19	1
6	The benefits of using interpretive services outweigh the cost.	0	1	2	15	2
7	Interpretive services are easily accessible.	0	1	0	18	1

Figure 4. This figure shows the responses from the Likert-Scale question on the survey. The results show an overall satisfaction with interpretive services.

When asked about the guidelines set by the government, seventy percent of the physicians believe that the federal government needs to do more to assist LEP patients. Some responses for what more the government could do to assist LEP patients were “teach a second language to all American children in school” and “the patients should pay for the interpreter”. Of the twenty responses, seventeen physicians stated that federal and state guidelines intimidate them when accepting LEP patients. Fourteen of twenty respondents stated that it is challenging to follow the federal guidelines regarding interpretive services. All responses and results from the collected survey data are shown in the Appendix section of this paper.

Discussion

The results of the preliminary data showed that physicians do not believe that interpretive services hinder the physician-patient relationship. In fact, as reported in the preliminary data, physicians seemed to be pleased with the services that interpreters provided. However, a strong conclusion cannot be made with this data due to the low numbers of LEP patients the respondents treat on a weekly basis. Given that this is a small sample size and undoubtedly preliminary data, the results show a strong consensus towards the issue of interpretive services not addressing cultural differences. It also shows that physicians often rely on enlisting the help of a family member or companion to translate during a visit. The third most selected option was using other trained staff that had no training in interpretation, or the use of ad hoc interpreters.

The results from the survey show that: 1. The use of interpretive services do not interfere with the relationship between doctor and patient 2. The use of interpreters effectively bridges the gap between LEP patients and the physician, despite the reported cultural barriers that are not addressed by interpretive services. 3. Physicians tend to use interpretive services as their first choice of communication with LEP patients; however, they reported that federal guidelines intimidate them when dealing with LEP patients and the rules surrounding the subject of the use of interpreters.

This study had many limitations. The first barrier faced was the collection of data. Gaining access to physician contact information proved to be difficult due to hospital privacy issues. Getting around the privacy issue could have been aided by gaining approval from the Institutional Review Board (IRB). A lack of guidance and communication within the IRB slowed down the process of sending out the survey. Further research using this preliminary model

should gain contact information from smaller practices and private physician offices. If this study were to be repeated, the survey would be constructed differently. With IRB approval, more detailed questions could be asked without infringing on the rights of the physicians and statistical analyses could be performed. In order to gain a more profound insight into the effects of interpreters on the doctor-physician relationship, the survey needs to be more detailed and less general. It would also help support the data if interviews were conducted. Interviewing physicians would give the researcher a more in depth analysis the ways interpreters can benefit or harm the relationship between patient and physician. Another problem was the lack of previous research on this subject matter and more specifically from the view of the physician. A tremendous amount of scholarship exists analyzing view point of the patient in situations in which interpreters are involved. Similarly, many studies have considered the view point of the interpreter; however the story has not been told from the physician's perspective and because of the lack of literature, constructing a survey was difficult. Creating questions that gathered information about the physician's perspective proved to be a challenge considering every physician or physician's office operates differently. This is why focusing on just hospital based doctors or solely on private practices would facilitate the process of creating a survey.

The preliminary data obtained from this study should be used to further the investigation on the perspective of physicians regarding interpretive services. The results of this study were confined to the state of Ohio. Future research should be expanded throughout the Midwest allowing for more data to be collected and for broader conclusions to be made about the entire region. Another issue faced during the collection of data was the limited number of physicians who encountered interpretive services often. Most of the data collected from this preliminary study was from physicians who reported only encountering interpretive services one to three

times a month. Physicians who use interpretive services on a regular basis should be interviewed and surveyed to get a better sample of the physician's perspective.

In conclusion, the results show a strong consensus towards the issue of interpretive services not addressing cultural differences. Further investigation on this subject can improve the services interpretive services provide as well as improve the relationship between physician and patient. Another area that needs further research is the use of other methods to communicate with LEP patients. Further inquiry done on the effectiveness of using ad hoc interpreters or family members as a bridge to communicate with patients will benefit the patients. These studies can show how reliable or unreliable these alternative methods are which can be brought to physicians' attention. Eliminating the reliance on methods other than professional interpretive services could benefit both the doctor and physician.

Appendix

Survey

1. How many years have you been practicing medicine (post-internship)?

< 5

5-9

10-14

15-19

20 or more

2. Is your practice

Hospital based

An individual practice

A small group practice (5 or fewer physicians)

A large group practice (6 or more physicians)

Other

3. What is your medical specialty?

(dropdown menu of options to choose from)

4. Do you speak any other languages besides English?

Yes

No

5. If yes, what language(s) do you speak besides English?

Spanish

German

Chinese

Hindi

French

Other (specify)

6. How many patients do you treat on average per week?

0-20

20-40

40-80

80-120

>120

7. Out of the average number of patients you see weekly, what percentage are Limited English Proficiency (LEP) patients?

0-25%

25-50%

50-75%

75-100%

8. What ethnicity are the patients you encounter the most?

African American

Asian

Hispanic

Pacific Islander

White

Native American

9. What ethnicity do you believe encounters the most problems with language barriers?

African American

Asian

Hispanic

Pacific Islander

White

10. Do you believe you are able to form a relationship with patients despite language barriers?

Yes

No

11. What method(s) do you use to communicate with non-English-speaking patients?

Speaking fluently in the patient's language

Using a trained medical interpreter

Using other staff who had no training in interpretation

Enlisting the help of a family member or companion

"Making do" when other methods are not available

12. How often do you treat patients while an interpreter is present?

Never

Less than once a month

Once a month

2-3 times a month

Once a week

2-3 times a week

Daily

13. The next section refers to the use of interpretive services:

Choices for each statement: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree

-Interpretive services are well educated in medical terminology.

-Interpretive services address cultural differences.

-Interpretive services hinder the physician- patient relationship.

-With the use of interpretive services, information gets lost in translation.

-Interpretive services are reliable (punctual, accurate, prepared, alert, etc.)

-The benefits of using interpretive services outweigh the cost.

-Interpretive services are easily accessible.

14. Do you think the federal government is doing enough to accommodate the growing diverse population?

Yes

No

15. What more do you feel the federal government could do to assist LEP patients?

16. Do federal and state guidelines intimidate you when accepting LEP patients?

Yes

No

17. Is it challenging to follow the federal guidelines regarding interpretive services?

Yes

No

18. Would you be interested in participating in an interview about the effects of interpretive services on the physician- patient relationship?

Yes

No

19. If yes, please enter your information below in order to be contacted regarding an interview.

First Name:

Last Name:

Phone Number:

Email:

Best time of day to reach you:

Data received from survey

1. How many years have you been practicing medicine (post-internship)?

#	Answer	Response	%
0	< 5	0	0%
1	5-9	2	10%
2	10-14	8	40%
3	15-19	8	40%
4	20 or more	2	10%
	Total	20	100%

2. Is your practice

#	Answer	Response	%
0	hospital based	10	50%
1	an individual practice	0	0%
2	a small group practice (5 or fewer physicians)	10	50%
3	a large group practice (6 or more physicians)	0	0%
4	Other	0	0%
	Total	20	100%

3. What is your medical specialty?

#	Answer	Response	%
1	Anesthesiology	0	0%
2	Cardiovascular surgery	0	0%
3	Emergency medicine	2	11%
4	Family practice	8	42%
5	General surgery	1	5%
6	Hematology/oncology	5	26%
7	Internal medicine	2	11%
8	Neonatology	0	0%
9	Neurology/neurosurgery	0	0%
10	Obstetrics/gynecology	0	0%
11	Otorhinolaryngology	0	0%
12	Ophthalmology	0	0%
13	Orthopedic/surgery	0	0%
14	Pathology	0	0%
15	Pediatrics	0	0%
16	Plastic surgery	0	0%
17	Psychiatry	0	0%
18	Radiology	1	5%
19	Thoracic surgery	0	0%
20	Urology	0	0%
	Total	19	100%

4. Do you speak any other languages besides English?

#	Answer	Response	%
1	Yes	2	10%
2	No	18	90%
	Total	20	100%

5. If yes, what language(s) do you speak besides English?

#	Answer	Response	%
1	Spanish	1	50%
2	Chinese	0	0%
3	French	0	0%
4	German	0	0%
5	Hindi	1	50%
6	Other (specify)	0	0%
	Total	2	100%

Other (specify)
This table has no data available

6. How many patients do you treat on average per week?

#	Answer	Response	%
1	0-20	0	0%
2	20-40	0	0%
3	40-80	1	50%
4	80-120	1	50%
5	>120	0	0%
	Total	2	100%

7. Out of the average number of patients you see weekly, what percentage are Limited English Proficiency (LEP) patients?

#	Answer	Response	%
2	0-25%	20	100%
3	25-50%	0	0%
4	50-75%	0	0%
5	75-100%	0	0%
	Total	20	100%

8. What ethnicity are the patients you encounter the most?

#	Answer	Response	%
1	African American	0	0%
2	Asian	7	35%
3	Hispanic	8	40%
4	Pacific Islander	0	0%
5	White	5	25%
6	Native American	0	0%
	Total	20	100%

9. What ethnicity do you believe encounters the most problems with language barriers?

#	Answer	Response	%
1	African American	0	0%
2	Asian	12	60%
3	Hispanic	8	40%
4	Pacific Islander	0	0%
5	White	0	0%
	Total	20	100%

10. Do you believe you are able to form a relationship with patients despite language barriers?

#	Answer	Response	%
1	Yes	20	100%
2	No	0	0%
	Total	20	100%

11. What method(s) do you use to communicate with non-English-speaking patients?

#	Answer	Response	%
6	speaking fluently in the patient's language	2	10%
7	using a trained medical interpreter	18	90%
8	using other staff who hadno training in interpretation	5	25%
9	enlisting the help of a family member or companion	11	55%
10	"making do" when other methods are not available	4	20%

12. How often do you treat patients while an interpreter is present?

#	Answer	Response	%
1	Never	0	0%
2	Less than once a month	3	15%
3	Once a month	14	70%
4	2-3 times a month	3	15%
5	Once a week	0	0%
6	2-3 times a week	0	0%
7	Daily	0	0%
	Total	20	100%

13. The next section refers to the use of interpretive services:

Choices for each statement: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree

#	Question	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total Responses	Mean
1	Interpretive services are well educated in medical terminology.	0	1	3	15	1	20	3.80
2	Interpretive services address cultural differences.	2	14	3	0	1	20	2.20
3	Interpretive services hinder the physician- patient relationship.	5	12	2	1	0	20	1.95
4	With the use of interpretive services, information gets lost in translation.	0	2	2	16	0	20	3.70
5	Interpretive services are reliable (punctual, accurate, prepared, alert, etc.)	0	0	0	19	1	20	4.05
6	The benefits of using interpretive services outweigh the cost.	0	1	2	15	2	20	3.90
7	Interpretive services are easily accessible.	0	1	0	18	1	20	3.95

14. Do you think the federal government is doing enough to accommodate the growing diverse population?

#	Answer	Response	%
1	Yes	6	30%
2	No	14	70%
	Total	20	100%

15. What more do you feel the federal government could do to assist LEP patients?

Text Response	
View	Teach second language to all American children in school
View	The patients should pay for the interpreter.

16. Do federal and state guidelines intimidate you when accepting LEP patients?

#	Answer		Response	%
1	Yes		17	85%
2	No		3	15%
	Total		20	100%

17. Is it challenging to follow the federal guidelines regarding interpretive services?

#	Answer		Response	%
1	Yes		14	70%
2	No		6	30%
	Total		20	100%

Works Cited

- Diamond, Lisa C., Harold S. Luft, Sukyung Chung, and Elizabeth A. Jacobs. "Does This Doctor Speak My Language?" Improving the Characterization of Physician Non-English Language Skills." *Health Serv Res Health Services Research* 47.1pt2 (2011): 556-69. Web.
- Flores, Glenn. "Culture and the Patient-physician Relationship: Achieving Cultural Competency in Health Care." *The Journal of Pediatrics* 136.1 (2000): 14-23. Web.
- Flores, Glenn. "The Impact of Medical Interpreter Services on the Quality of Health Care: A Systematic Review." *Medical Research and Review*. U.S. National Library of Medicine, June 2005. Web.
- Gadon, Margaret, George I. Balch, and Elizabeth A. Jacobs. "Caring for Patients with Limited English Proficiency: The Perspectives of Small Group Practitioners." *J GEN INTERN MED Journal of General Internal Medicine* 22.S2 (2007): 341-46. Web.
- Hudelson, P. "Improving Patient-provider Communication: Insights from Interpreters." *Family Practice* 22.3 (2005): 311-16. Web.
- Jacobs, Elizabeth, Alice Hm Chen, Leah S. Karliner, Niels Agger-Gupta, and Sunita Mutha. "The Need for More Research on Language Barriers in Health Care: A Proposed Research Agenda." *The Milbank Quarterly* 84.1 (2006): 111-33. Web.
- Jacobs, Elizabeth A., Diane S. Lauderdale, David Meltzer, Jeanette M. Shorey, Wendy Levinson, and Ronald A. Thisted. "Impact of Interpreter Services on Delivery of Health Care to Limited-English-proficient Patients." *J Gen Intern Med Journal of General Internal Medicine* 16.7 (2001): 468-74. Web.
- Jacobs, Elizabeth A., Donald S. Shepard, Jose A. Suaya, and Esta-Lee Stone. "Overcoming Language Barriers in Health Care: Costs and Benefits of Interpreter Services." *Am J Public Health American Journal of Public Health* 94.5 (2004): 866-69. Web.
- Karliner, Leah S., Elizabeth A. Jacobs, Alice Hm Chen, and Sunita Mutha. "Do Professional Interpreters Improve Clinical Care for Patients with Limited English Proficiency? A Systematic Review of the Literature." *Health Serv Res Health Services Research* 42.2 (2007): 727-54. Web.
- Rivadeneira, Rocio, Virginia Elderkin-Thompson, Roxane Cohen Silver, and Howard Waitzkin. "Patient Centeredness in Medical Encounters Requiring an Interpreter." *The American Journal of Medicine* 108.6 (2000): 470-74. Web.

- Rosenberg, Ellen, Yvan Leanza, and Robbyn Seller. "Doctor–patient Communication in Primary Care with an Interpreter: Physician Perceptions of Professional and Family Interpreters." *Patient Education and Counseling* 67.3 (2007): 286-92. Web.
- Ryan, Camille. "Language Use in the United States: 2011." United States Census Bureau. N.p., Aug. 2013. Web.
- Vasquez, Carmen, and Rafael Art. Javier. "The Problem With Interpreters: Communicating With Spanish-Speaking Patients." *PS Psychiatric Services* 42.2 (1991): 163-65. Web.
- Weibel, Nadir, Colleen Emmenegger, Jennifer Lyons, Ram Dixit, Linda Hill, and James Hollan. "Interpreter-Mediated Physician-Patient Communication: Opportunities for Multimodal Healthcare Interfaces." *Proceedings of the ICTs for Improving Patients Rehabilitation Research Techniques* (2013): n. pag. Web.
- Woloshin, S. "Language Barriers in Medicine in the United States." *JAMA: The Journal of the American Medical Association* 273.9 (1995): 724-28. Web.