

## BACKGROUND

Many medical students attend immersion programs to improve language skills with the hopes of learning how to assess and treat patients in that language. It is important for medical providers to be able to make patients feel comfortable, which is efficiently done by speaking the same language. However, it is important that providers recognize their level of proficiency and involve a licensed medical interpreter in the conversation.

In the United States, Title VI of the Civil Rights Act of 1964 mandates the use of an interpreter for persons with Limited English Proficiency (LEP) in institutions that receive Federal financial assistance<sup>1</sup>. However, patients with LEP still encounter barriers in language access due to the low level of awareness and the difficulty in enforcing these legal rights. This has prompted all 50 states to develop their own laws that address language access in healthcare settings<sup>2</sup>.

Healthcare language interpreters must meet several standards, among which is an Interagency Language Roundtable (ILR) score of two according to the National Board of Certification for Medical Interpreters. To that end, there are three recognized language proficiency measuring tests, the aforementioned ILR, the Common European Framework of Reference (CEFR), and American Council on the Teaching of Foreign Languages (ACTFL). Each of these exams uses a different grading scale.

Locally, Pennsylvania follows the standards set forth by the National Council on Interpreting in Health Care, requiring a level "equivalent to ILR Level 3 or ACTFL scale Advanced High" to participate in certification training programs<sup>3</sup>.

The goal of both students was to conduct a medical interview in Spanish with a native Spanish-speaking patient by the end of their time at the Pop Wuj program. The school is in Guatemala and has trained medical students since 1992. The program is associated with a low-cost clinic, where patients are accustomed to working with volunteers with limited Spanish proficiency. This study was conducted to assess Spanish language improvement and compare post-immersion program scores to language interpretation standards in the United States.

The researchers used their own data as the "students" referred to in the results. Therefore, the terms researchers and students heretofore refer to the same individuals.

## PURPOSE

1. To quantify language improvement after a Spanish immersion program.
2. To compare post-immersion program scores to language interpretation standards in clinical settings within the United States.
3. To reflect on the ethical implications of working in a clinic setting with limited Spanish skills.

**FIGURE 1.** Grading Scheme of CEFR proficiency test<sup>4</sup>



## METHODS AND MATERIALS

Two Drexel students with varying levels of Spanish completed four- and six-week periods within the same Medical Spanish Immersion Program.

- Clinic responsibilities: Triage/HPI taking, pharmacy organization, medication dispensation and discussing medication regimens with the patients, physician shadowing
- Daily Spanish Class: Four hours of one-on-one instruction with an experienced Spanish language teacher

Spanish levels were determined with two different before and after quizzes.

- Student One completed a Spanish Placement Exam through Georgetown University (GU) in August 2019. This placement exam is routinely used to place students in Spanish courses at GU.
- Student Two completed Test Your Language Spanish Proficiency exam, an exam representative of the CEFR scale language exam. The exam was completed 2 months before the program and four weeks after.

After the program, both students completed the Test Your Language Spanish Proficiency exam, a free version of the CEFR.

## RESULTS

### Student 1

Previous Spanish Language Experience:

- High school Spanish (four years)
- One Medical Spanish course through Oregon Health and Science University (10 hours)
- One Intermediate level course at Georgetown University
- One Medical Spanish course through Drexel University College of Medicine

Immersion Program Length: six weeks  
Georgetown Spanish Placement Exam

8/21/2019, Score **61/101**  
8/19/2022, Score **75/100**

TestYourLanguage/CEFR: **B1.4**

### Student 2

Previous Spanish Language Experience:

- Grade school Spanish (one year)
- Immersion Program: four weeks  
TestYourLanguage/CEFR:

Before Program: **A1.2**  
After Program **B1.1**

## LIMITATIONS AND BARRIERS

### Program Limitations

- Limited amount of time in clinic due to COVID-19 (only two days per week, four hours per day)
- Limited support during clinic to ask questions
- Lack of formal clinic training
- Lack of cultural experience
- Students within the Spanish Immersion program spoke English during recreational hours

### Project Limitations

- The researchers used their own data to measure language learning
- This research/reflection project was determined after traveling and returning from the program:
- Both students did not take both tests before their language immersion program
- Student 1 took their placement test before an intermediate level Spanish course at Georgetown in 2019. This serves as a limitation because it would be more accurate to measure their level of Spanish directly before the program, like Student 2. However, this is still a useful framework as it reflects generally the difference in level of Spanish before and after the immersion program given that the student did not have any substantial language training since the termination of the Spring 2019 course.
- Oral skills and language confidence improvement were not measured, and to the researchers' knowledge, there is no meaningful measurement to quantify these improvements.

### Testing Limitations

- Georgetown Spanish placement test was amended in 2020 to add a speaking portion at the end for research purposes at GU. The number of questions changed, but the question type and level were not meaningfully amended.
- The Georgetown Spanish Course placement exam does not correlate to CEFR standards and is not intended for use outside of course placement.
- Healthcare medical interpreter training is costly, and includes testing with an oral component, making it difficult to complete for the purposes of this project.
- The free testing platform for the CEFR had some programming errors with questions lacking substantial information in order to choose the correct answer.

## DISCUSSION

When communicating with patients with LEP (Limited English Proficiency), provider proficiency in the patient's language is imperative for patient comfort and ethical provision of care<sup>2,5</sup>. With this in mind, the present project had a two-prong purpose: to quantify post-immersion program language improvement as well as compare post-immersion program language level to medical interpreter training qualifications.

Both researchers measurably improved in their written language skills and experienced perceived improvements in oral language skills and language confidence. Given the short time period (six and four weeks respectively) of this language learning program, it is the opinion of the researchers that intensive immersion programs are beneficial and worth the investment in exchange for a foundational proficiency in a second language.

Both students achieved their goal of conducting a basic medical interview in Spanish, and consequently presenting patients to the attending physician. However, while the students achieved a basic understanding of medical vocabulary, it is clear to both researchers that conducting health-related activities in a clinical setting necessitates a stronger understanding and command of the language.

Medical interpreters are invaluable members of the healthcare team in a multitude of ways, but most importantly in ethical and legal senses<sup>1,2,3</sup>. Medical interpreter licensing is a multistep process necessitating a language proficiency score of ILR level 3 or ACTFL scale Advanced high, in addition to a licensing exam<sup>3</sup>. Despite the strides in language proficiency following a language immersion program, our findings imply that the level of fluency needed to ethically communicate with patients cannot be reached without many more hours of dedicated immersion to discern the nuance in language that only fluent speakers can understand; a level that may not be compatible to attain or maintain with a student or physician lifestyle. However, the benefit of speaking with patients in their own language, if only to build rapport, is an invaluable skill that both researchers value. In conclusion, the role of medical interpreters cannot and should not be replaced without matching their rigorous medical interpretation language fluency requirements.

### REFERENCES

1. Executive Order. No. 13166, 2000.
2. Basu G, Costa VP, Jain P. Clinicians' Obligations to Use Qualified Medical Interpreters When Caring for Patients with Limited English Proficiency. *AMA Journal of Ethics*. 2017;19(3):245-252. doi:10.1001/journalofethics.2017.19.3.ecas2-1703
3. *National Standards for Healthcare Interpreter Training Programs*. (2011, April). National Council on Interpreting in Health Care. [https://www.ncihc.org/assets/documents/publications/National\\_Standards\\_5-09-11.pdf](https://www.ncihc.org/assets/documents/publications/National_Standards_5-09-11.pdf)
4. CEFR / ACTFL - Test Your Language. Accessed August 30, 2022. <https://testyourlanguage.com/cefr-actfl>
5. Diamond LC, Jacobs EA. Let's Not Contribute to Disparities: The Best Methods for Teaching Clinicians How to Overcome Language Barriers to Health Care. *Journal of General Internal Medicine*. 2010;25(2):189-193. doi:10.1007/s11606-009-1201-8

Thank you to the Pop Wuj Medical Spanish Immersion program. Specifically, thank you to Zulma Mendez, Minor Arrivillaga, and Varzís Trujillo, and Benedicto our Spanish teachers who gave so much of their time to teach us both language and cultural competence. Special thank you to the Global Health Department of Drexel University College of Medicine for sponsoring a portion of our trip.