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Evaluation of Non-English Language Use in Family Medicine Residents

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¿Hablas Español? Evaluation of Non-English Language Use in Patient Care by Family Medicine Residents

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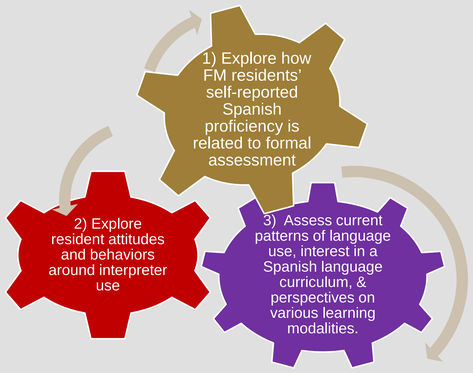
Introduction

According to US Census Bureau, over 50 million people in the US speak a language other than English at home and nearly half report some difficulty speaking English. Patients report lower satisfaction with care, worse quality of primary care, not being able to understand the medical situation and treatment plans, and poor health education. Additionally, studies have shown that language barriers also contribute to worse outcomes including higher readmission risk and increased length of hospital stay. Use of interpreters may mitigate these barriers; however, interpreter services are often underused and introduce other obstacles into patient care. Many physicians are skilled in a language other than English, and language concordance between patients and providers contributes to better healthcare quality and improved outcomes. Physicians report using their skills to communicate with patients, but there have been mixed results regarding the relationship between self-reported proficiency with formal language proficiency.

Objectives.



Methods

Design. This mixed-methods study included family medicine (FM) residents at the University of New Mexico in 2016-2017 and consisted of several components:

Preliminary survey. Assessed interest in a Spanish-language curriculum and preferred modalities for learning or improving Spanish. Participants reported language speaking and understanding proficiency and comfort level providing care in a second language in nonclinical, straightforward clinical, complex clinical, and legal scenarios on a 5-point Likert scale.

Language Assessment. Standardized phone interview assessed sentence mastery, vocabulary, fluency, and pronunciation. Scores given on a scale of 20-80.

Follow-up Assessment. Participants then completed a follow-up survey that contained identical questions to the preliminary survey in addition to questions addressing reactions to the formal assessment.

Data Analysis. Performed using Stata 14.2 statistical software.

Quantitative Data Analysis. To assess the relationship between self-reported speaking proficiency and formal assessment scores, a correlation was calculated. To detect changes in comfort level before and after formal testing, mean change was calculated and the Wilcoxon sign-ranked test was computed.

Qualitative Data Analysis. We conducted two focus groups with 4 to 8 family medicine residents with placement dependent on their self-reported proficiency in their perspective languages. An iterative analytic process was used to analyze the data. Three team members independently review the two transcripts and identified key themes. Data was grouped into broader categories and interpreted.

Results

Figure 1. Retention

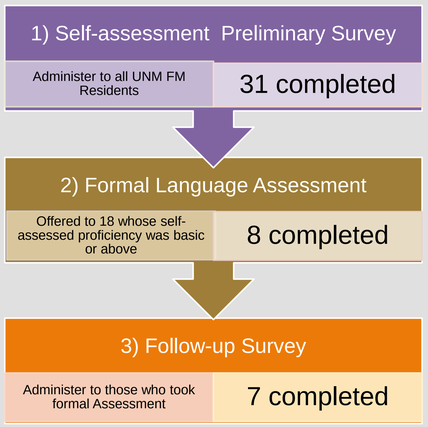


Figure 2. Languages Spoken by FM Residents

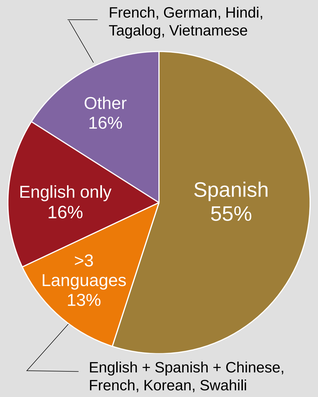


Figure 3. Interest in Spanish Learning/Improving Modalities

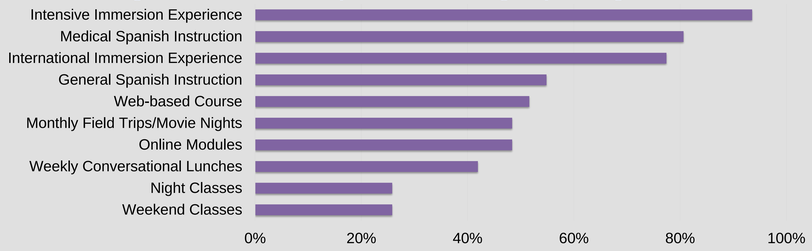


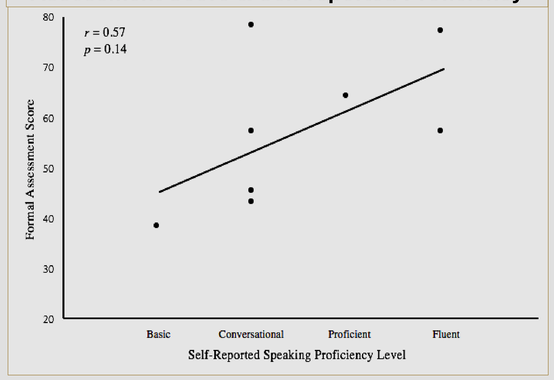
Table 1. Focus Group Domains & Sample Resident Comments

Domain	Resident Comments
When residents provide direct care: simple, brief, or urgent encounters	• *"I'm not very good at Spanish…if I'm in OB triage or something…is happening very urgently and I don't have time, I just get very basic information from a patient…while we're calling the interpreter just to get an idea of what's going on."*
Pressures to use second language	• *"I think it's unfair just to say oh, because you speak the language, I'm going to give these patients to you. But nobody else needs to learn how to use an interpreter."*
Perspective on use of interpreters & barriers	• Phone interpreter: *"You can hear them doing stuff like in the background. You can hear children…"* • Cultural biases: *"I can tell that they're not translating things based on cultural bias. Like if it was a male interpreter and I was talking to a woman about a female sensitive topic, I can tell that the interpreter would kind of pause and figure out what he wanted to say and there were whole segments where he wouldn't say anything,"*
Perspective on the proficiency test	• *"I was just really amazed at the complexity and the different levels. And it really made me realize my strengths and weaknesses with Spanish and my ability."* • *"I don't think that particular score has really helped me to know what I should be comfortable with."*

Table 2. Reported Comfort Level in Clinical Scenarios Before & After Formal Testing

Scenario Type	Pre-Survey Comfort		Post-Survey Comfort				
	Mean	SD	Mean	SD	Mean change	t-test	p-value
Nonclinical	4.5	0.58	4.5	0.50	0	0	1.0
Straightforward Clinical	4.37	0.84	4.11	1.04	-0.26	-0.84	0.79
Complex Clinical	3.14	1.15	2.71	1.10	-0.43	-1.16	0.27
Legal	3.14	1.14	2.67	1.23	-0.48	-1.64	0.10
Overall Comfort	3.82	0.87	3.52	0.94	-0.31	-1.07	0.49

Figure 4. Relationship between Formal Assessment Score & Self-reported Proficiency



Conclusions

Our results demonstrate that FM residents at the University of Mexico are interested in a language curriculum and in becoming bilingual providers. Residents currently use their second language skills in both simple and urgent encounters with most comfort using their skills in nonclinical and straightforward clinical scenarios. Although proficiency testing is not a standardized criteria for providing care in a second language, residents' self-rated proficiency seems to correlate with tested proficiency in this study. While the use of interpreter services remains valuable to bridge communication gaps between providers and patients, many barriers still exist for interpreter use with time constraints and work demands being the primary concerns on the part of the residents. To best provide care for patients in a time efficient and interpersonal manner, it is important for residency programs to consider a language curriculum to encourage and cultivate competent bilingual providers and to increase awareness about the importance of humility when using one's own second language skills.

Limitations & Future Directions:

Our results should be considered in the context of several study limitations. First, our sample of residents is from one specialty at one institution. Our small size, particularly for formal assessment, greatly affected the power of our study. Finally, there were limitations to our choice of formal language assessment. We intend to use these results as a platform for developing curriculum tailored to the needs of our residents and their clinical practice, and to work with resident leadership as well as experts in curriculum development and assessment.

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