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Medical Spanish Proficiency as an Independent Study Project

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Abstract

As part of a focused, clinical, multi-disciplinary, independent study project, the author of this paper, a fourth-year medical student, completed a rigorous, six-month, longitudinal study of Medical Spanish for the purpose of improving his Medical Spanish proficiency. To accomplish this goal, an independent study plan was developed which included advancing-level Medical Spanish coursework, clinical practicum in Medical Spanish, and formal assessment of Spanish proficiency. An NIH supported Medical Spanish course offered by Canopy Innovations was completed from the beginner through advanced levels. Tests at each course level are offered by Canopy and were passed before continuing on to successive levels. Clinical practicum was completed in vivo with Spanish-speaking patients throughout the student's clinical rotations. Spanish proficiency was assessed as part of this project through independent, third-party agencies specializing in language assessment. Student Spanish proficiency was demonstrated by an Interagency Language Roundtable score of 3+ obtained by the student as part of this project.

Introduction

In a 1975 paper by J.R. Hampton, et al. about disease diagnosis, it was noted that up to 80 percent of the information used in formulating a medical diagnosis was gathered through the collection of the patient history¹; a finding which highlights the common saying in medicine, "The diagnosis is in the history." Physicians rely on their ability to quickly and accurately elicit a medical history in the clinical setting and effective verbal communication is an essential component of this interaction. However, while most patients feel comfortable communicating in English, in many parts of the United States the number of persons who are not English proficient can approach 40 percent². This figure may concern clinicians dependent on English communication, particularly in light of studies showing that ineffective verbal communication in medicine has been shown to endanger the patient's welfare by increasing the likelihood of mistakes, decreasing adherence, and slowing down communication in emergent situations³.

The U.S. Census Bureau records language usage in the United States as part of its 10-year census and estimates that 21 percent of the U.S. population speaks a language other than English at home². In California, that number jumps to almost 44 percent, the highest of any state². For San Diego County, about 38 percent of persons speak a language other than English at home; and of those, 66 percent speak Spanish². Though many of these persons may also speak some English,

of these, only a little more than half will speak English “very well” – a level necessary for discussion of complex topics such as medicine.

Persons with deficiencies in the English language which impair their ability to communicate are recognized as having limited English proficiency. The Joint Commission defines a patient who has Limited-English Proficiency (LEP) as a patient “whose primary language for communication is not English and who has a limited ability to read, write, speak, or understand English.”⁴ The Joint Commission has taken steps to address issues in medicine related to LEP patients through its accreditation of hospitals.⁴

In an effort to protect patients and improve accessibility to healthcare, various laws exist to ensure that medical centers provide foreign language interpreting services for their patients; including most recently, LEP provisions in the Affordable Care Act⁴. As mentioned earlier, the Joint Commission reviews compliance with these laws as part of hospital accreditation in the United States⁴. Independent of these interpreting services, many healthcare professionals have taken the time to learn foreign languages themselves, most commonly Spanish, with the goal of reducing the patient language barrier, improving patient satisfaction, and saving time⁵. Unfortunately, this has created a patchwork of varying language proficiency among providers with many providers lacking certification or assessment of their foreign language competency^{5,6}.

Reassuringly, for those providers who do speak a foreign language with proficiency, patients report greater patient satisfaction, an increased adherence with treatment, decreased medical error, and better follow up with care⁷. On the physician’s side, they often report that they feel more confident dealing with LEP patient populations, they save time in clinic, and feel better equipped to understand their patient’s needs⁸. As an added bonus, these physicians find themselves in greater demand in the job market, they have more opportunities to work with different patient populations, and report greater job satisfaction⁹.

Methods

The Independent Study Project consisted of three key components: 1.) formal coursework in Medical Spanish; 2.) Spanish proficiency assessment; and 3.) clinical practicum in Spanish.

Canopy Medical Spanish eLearning Course

The Canopy Learn Medical Spanish course is an online Medical Spanish instruction program developed for healthcare professionals who have prior familiarity with the Spanish language. It provides training at three competency levels, with modules covering a large breadth of medical terminology and cultural competency topics (Table 1). The course has been recognized by multiple innovation awards from the National Institutes of Health. Teaching is accomplished via online based, multi-media instruction materials, with text, audio, and video components. A Certificate in Medical Spanish is available for participants who successfully complete each Medical Spanish competency level.

Medical Spanish Level I	Medical Spanish Level II	Medical Spanish Level III
1. Pre-Course Assessment Test	1. Sexual Health	1. Tuberculosis
2. Greetings and Introductions	2. Myocardial Infarction	2. Metabolic Syndrome
3. At the Clinic	3. Pneumology	3. Trauma
4. Questions about Pain	4. Pharmacy and Medicines	4. Discharge Planning
5. Physical Exam	5. Urology	5. Breast, Cervical, & Uterine Cancer
6. Diet and Diabetes	6. Pregnancy and Prenatal Care	6. Well Baby Visit
7. Minor Trauma and Accidents	7. Pre- and Post-Op	7. Death and Dying
8. Vaccines and Allergies	8. Elder Care	8. HIV/AIDS
9. Cardiology	9. Alcohol and Drug Abuse	9. Depression and Suicide
10. Screening for Cancer	10. Stroke	10. Seizures
11. Depression and Anxiety		
12. Talking about Headaches		

As part of the Independent Study Project the student obtained access to the Canopy eLearning software via online purchase and completed all three levels of the Canopy Medical Spanish course in succession from beginner (level I) to advanced (level III). The course materials were reviewed throughout the length of the ISP to refresh topics and review past material.

Spanish Language Proficiency Assessment

Independent language assessment was completed by the student as part of the ISP. Several language assessment providers exist which provide language fluency scores scalable to an Interagency Language Roundtable, a standardized language fluency score. The student completed pre-practicum assessment through CyraCom International's Spanish Language Proficiency Assessment (LPA), a 30 minute telephone-based test which assesses the ability to listen and comprehend, as well as speak and be understood, in general language and cultural topics. CyraCom International is the vendor used by UC San Diego Health to assess multi-lingual healthcare providers. The assessment was taken through the UC San Diego Health Interpreter Services Department following the protocol used by UCSD healthcare providers interested in testing. The LPA offered by CyraCom is scalable to an ILR scale.

Additional confirmatory assessment was completed at the end of the ISP through a separate language assessment provider, Versant Pearson Education, Inc., which also provides an ILR scalable score. The Versant assessment is a mobile app based test which uses various algorithms to assess fluency.

Spanish Language Clinical Practicum

The Independent Study Project included a Spanish language clinical practicum during which the student worked with Spanish-speaking patients in a clinical setting. During these sessions, the student worked on mastering pronunciation, increasing vocabulary, improving retention, and identifying any areas of weakness. A log was used to keep track of practicum hours and topics discussed, with a goal of 90 practicum hours set in the initial ISP proposal.

Before beginning the clinical practicum, the student's Spanish proficiency was assessed by CyraCom LPA and confirmed to be at a fluent level (ILR 3 or greater), as required for multi-lingual healthcare providers at UC San Diego Health. During the student's 4th year clinical

rotations, patients assigned to the student as part of his regular patient assignments and who self-identified as preferring to speak in Spanish were included in the practicum. All components of the patient encounter: history, physical exam, discussion of diagnosis, treatment and follow-up, were conducted in Spanish. Formal medical consent for medical procedures or high risk treatments requiring signed consent were conducted with a certified medical translator and were recorded on a Spanish consent form. A resident and/or attending physician independently confirmed and verified the student's history, exam, and plan for each patient encounter.

The patient encounters took place at the following locations: UC San Diego Hillcrest ED, San Diego, CA; Kaweah Delta Regional Medical Center ED, Visalia, CA; UC San Diego Hillcrest and UCSD Thornton Inpatient Wards, San Diego, CA.

Results

Canopy Medical Spanish eLearning Course

The student completed all three levels of Canopy Medical Spanish and passed each with a score of >90% (minimum 75% required to pass). Each final included assessment of listening, vocabulary, reading, grammar, and cultural competence. Certificates of completion were awarded after passing each assessment at its respective level.

Level I Final:

85 questions

Score 85/85 (100%)

Completed 09/02/2017

Level II Final:

85 questions

Score 84/85 (99%)

Completed 12/26/2017

Level III Final:

86 questions

Score 83/86 (97%)

Completed 01/19/2018

Spanish Language Proficiency Assessment

CyraCom International

ILR Scale:

ILR 1 – Elementary Proficiency

ILR 2 – Limited Working Proficiency

ILR 3 – General Professional Proficiency

ILR 4 – Advanced Professional Proficiency

Discussion

The ability to effectively communicate with patients is central to a physician's role as healthcare provider. Though working with LEP patients may present with challenges, caring for these patients requires the same clarity of dialogue that physicians provide their English speaking patients. Spanish proficiency allows one to communicate with Spanish speaking patients more effectively; however, it should be assessed on an individual basis to ensure competency. For providers in a state with demographics similar to California, Spanish-speakers may represent the largest percentage of LEP patients in their practice, and though this ISP focusses on this patient group, there is certainly a need for providers who speak other languages.

The entirety of this ISP was completed in the San Diego, CA and Visalia, CA regions which have 25% and 32% Spanish speaking residents, respectively.² For the purpose of this ISP, the clinical practicum was facilitated by the large number of Spanish speaking patients presenting to emergency departments during the student's EM rotations. Thus, the benefit of speaking Spanish in these regions is of great value due to these high percentages of Spanish speakers. In areas where another language besides Spanish predominates among LEP patients, it is expected that a healthcare provider will see a greater benefit from speaking said language.

For providers not proficient in Medical Spanish and who prefer to work without an interpreter, a combination of coursework and routine Spanish exposure can improve their fluency and prepare them for working with Spanish speaking patients. However, assessment of fluency should be completed to ensure that patients are being spoken to by providers who have a minimum mastery of the foreign language. The assessments used in this ISP were similar to those used to assess healthcare providers at various institutions (CyrCom LPA is used by UCSD Health), though they are limited in that they assess general Spanish proficiency and do not specifically test Medical Spanish competency. It can be argued that specific *Medical Spanish* proficiency should also be assessed for healthcare providers who speak Spanish to their patients as this work involves use of medical terminology not completely assessed by most language assessments. Alternatively, a provider may find that discussion of complex medical subjects can be facilitated by the use of a certified interpreter until the healthcare provider improves his or her medical vocabulary in the desired language.

The goal of this ISP was to improve the student's Medical Spanish fluency in order to be able to provide the same level of clinical discussion with Spanish speaking patients as the student would with his English speaking patients. Through the use of Medical Spanish coursework and longitudinal clinical practicum, the student was able to obtain certification in Medical Spanish and improve his comfort with speaking to patients in Spanish. During rotations, patients regularly remarked that they were grateful that someone spoke to them in Spanish and subjectively seemed more at ease when describing their medical concerns. For students or healthcare providers interested in improving their Medical Spanish, they can likely benefit from a study plan similar to the one presented here.

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