

Medicine in Spanish Program

A longitudinal program to train Spanish-speaking medical students.
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Introduction and History

In 2009, a group of University of Michigan Medical Students conducted a needs assessment within the UMMS and found an interest among students to create a curriculum to improve Spanish-language skills with the goal of training physicians that would be able to serve the Spanish-speaking community in the US and internationally.¹ Their work created a Medicine in Spanish elective that became an official Medical School pre-clinical elective in 2014, which is housed within the Department of Learning Health Sciences and taught by Ana Gonzalez. Our program has expanded to include a student-taught introductory class, a physician-led discussion group, service opportunities, and a clinical M4 elective taught by Ms. Gonzalez. Currently, the Medicine in Spanish program is directed by the Medicine in Spanish Curriculum Committee (MSCC), a group of students within LANAMA (the Latin American and Native American Medical Association). The MSCC oversees the success of the elective but also works to continually develop new resources and opportunities for medical students to improve their Medical Spanish skills.

Pre-Clinical Elective Course Objectives:

1. Utilize Spanish medical and anatomical terminology in a clinical setting
2. Take a complete medical history in Spanish with simulated patient native-speakers at the level expected at the end of M1 year
3. Perform a physical exam in Spanish at the level expected at the end of M1 year
4. Have an understanding of sociocultural aspects specifically affecting Latino communities
5. Have a basic understanding of how to identify and to address the health needs more commonly affecting Latino communities.

The Longitudinal Program

Intro to Med Spanish

- Student-taught beginner course
- 8-15 pre-clinical students
- Meets once a week
- Informal, discussion-based meetings
- Focus on medical terminology
- Basic patient-doctor interaction exercises
- Introduce cultural competency in Latino populations

Med Spanish Pre-Clinical Elective

- Formal UMMS elective taught by Ana Gonzalez
- Intermediate-Advanced level
- Two sections with 14 students each
- Meets twice a week for 20 weeks
- Systems-based medical terminology
- Focus on taking a detailed medical history
- Cultural competency
- Standardized Patient Interviews
- Service Learning Project
- Interpreter Shadowing

Discussion Group

- Case-based discussion
- Meets twice a month
- Led by Spanish-speaking physicians
- Designed for fluent and advanced students
- Opportunities to go on rounds with physicians in Spanish

Clinical Elective

- 4 week advanced class taught by Ana Gonzalez
- Advanced Medical Spanish skills
- Focuses on Physician-physician professional interactions
- More contact time in hospital with patients, physicians, and interpreters



Methods in Evaluating the Pre-Clinical Elective

Students complete a pre- and post-course written exam and Standardized Patient Interview (SPI) to measure how the course has helped them improve their Medical Spanish. The results from the 2013-2014 and 2014-2015 school years are shown below.

Students also complete a formal course evaluation through the UMMS Office of Evaluation and Assessment. This evaluation consisted of 17 questions on a 5-point Likert scale that asked about various components of the course. There were also 3 qualitative questions asking about the strengths and weaknesses of the course. Selected survey items and qualitative comments are listed below from the 2014-15 class.

Evaluation	Pre-course Average (SD)	Post-course Average (SD)	Average Improvement (SD)
Written Exam 2013-14	58.3% (11.5%)	95.5% (2.3%)	37.3% (13.0%)
Written Exam 2014-15	58.6% (17.5%)	94.2% (3.4%)	35.6% (16.8%)
SPI 2013-14	41.8% (12.3%)	79.6% (5.9%)	37.9% (13.0%)
SPI 2014-15	68.8% (12.1%)	89.5% (7.8%)	20.2% (10.2%)

Survey item	Mean	Standard Deviation
The elective improved my ability to take a history in Spanish.	4.86	0.48
This elective improved my ability to use Spanish anatomical and medical terminology in a clinical setting.	4.71	0.56
Practicing patient interviews in Spanish with Standardized Patient Instructors improved my ability to practice medicine in Spanish.	4.86	0.48
Overall, this elective was:	4.50	0.51

Qualitative Responses

Time was allowed and dedicated in class for learning by practicing. Also, I felt that the topics were well condensed and most of the information provided was very high yield.

Contact with the language is absolutely critical so perhaps some possible external resources for listening to spoken Spanish outside of the classroom [could be provided].

Ana was a fantastic teacher who incorporated creative learning techniques into each lesson (e.g. role-playing, vocabulary games, etc).



Service-Oriented

Given that Latinos are the largest ethnic minority in the US², UM medical students see the importance of being trained to address their specific healthcare needs. Both the Medicine in Spanish and LANAMA student groups facilitate opportunities to serve the Spanish-speaking population and address the barriers they face in health care³.



Students present posters at a Latino Health Fair



Hospital interpreters explain their role in health care



Conclusions

After several years of development and implementing improvements, the Medicine in Spanish program has become a prominent part of the UMMS curriculum. The program has grown both in the number of students participating and the breadth of programs offered. Results from assessments, self-evaluations, focus groups, and formal course evaluations show that the Pre-Clinical Medicine in Spanish elective is effective in improving skills and a valuable part of Medical Student training. Active practice of Medical Spanish has proven to be one of the most important resources for improvement, and we hope to increase the opportunities available throughout the four years of Medical School.

Future Directions

- Increase the breadth of systems-based vocabulary quizzes on our new Canvas website to help students prepare for clinical encounters, including some case-based learning with audio-visual resources
- Initiate a 6-hour M2 elective, taught by Ana Gonzalez, as an Advanced rapid review course
- Create a seminar series for beginner-level students
- Find more ways to engage with the Spanish-speaking community in Michigan and facilitate more opportunities for students to continue practicing their Medical Spanish and serving this community
- Consider ways that our program will integrate with the UMMS Curriculum Transformation

¹Holaday, et al. Development of a novel pre-clinical Medical Spanish program at the University of Michigan. UMMS Regional Conference Poster. 2013.

²Ennis SR, Rios Vargas, M, Albert NG. The Hispanic Population: 2010. 2010 Census Briefs. 2011 May

³Kanter, MH, Abrams, KM, Carrasco, MR, et al. Patient-Physician Language Concordance: A Strategy for Meeting the Needs of Spanish-Speaking Patients in Primary Care. Perm J. 2009 Fall; 13(4): 9-84.