

Sí, Tu Puedes: An Integrated Spanish Language Acquisition in Residency Utilizing Personal Instruction

Setting and Problem

The Lawrence Family Medicine Residency aims to train full-spectrum family medicine residents with a focus on care for underserved populations. While many US residency programs provide training in settings serving a majority of non-English-speaking patients, and some provide support for language training during residency, we believe ours is distinct in providing integrated, multidimensional Spanish language instruction including 1-on-1 training. Lawrence, Massachusetts, has a long history as a destination for immigrants. In the 2010 census, the population of Lawrence was 73.8% Hispanic/Latino. This setting is ideal to provide excellent Spanish language instruction to resident physicians, especially those who intend to continue working in underserved settings.

Our Spanish Language Acquisition program balances 2 major competing demands—the need for more Spanish-speaking physicians and the already grueling demands of residency training. Starting with an objective assessment of fluency at the start of residency, we are able to design personalized programs within residents' zone of proximal development and eliminate less-effective group classes. Additionally, residents work in a functional immersion environment in their continuity clinic, supported by medical assistants and translators who encourage their independence as their abilities grow.

Intervention

We utilized the Clinician Cultural and Linguistic Assessment from ALTA Language Services (<http://www.altalang.com/language-testing>) to assess Spanish proficiency of residents. This telephone language assessment was developed by Kaiser Permanente to

TABLE

Potential Cost Savings From Teaching Residents Spanish

% of Spanish-Speaking Patients	No. of Encounters in Second and Third Years	Cost of Interpreting (Average Cost of Video Interpreting)	Total Potential Savings
25%	1400	\$31.32/ encounter	\$10,962
50% ^a	1400	\$31.32/ encounter	\$21,924
75%	1400	\$31.32/ encounter	\$32,886

^a This proportion is our patients' self-reported prevalence.

assess proficiency in clinical settings. Residents' Spanish-speaking skills are evaluated on entry, then annually until residents score "proficient" on the assessment (score $\geq 80\%$). A Spanish curriculum is integrated into residency training as part of the work day. There are 4 curricular components:

1. Intensive Spanish language instruction and immersion course during orientation;
2. Individual Spanish lessons integrated into all first-year rotations or until proficiency is achieved;
3. Daily use of Spanish with interpreter support during clinical work; and
4. Second intensive Spanish language instruction and immersion elective during the first year.

The initial intensive Spanish language instruction and immersion takes place at the Rassias Center for World Languages and Cultures at Dartmouth College—a 10-day, live-in course providing 100 hours of instruction. Multiple levels of instruction are offered, from beginner to advanced, so the entire incoming intern class can attend. After July, residents are scheduled for individual 1-hour language lessons with a private teacher who is contracted with the program. These occur once to twice per week for beginners, every other week to monthly for those with intermediate Spanish, and monthly to quarterly for more advanced residents. Residents who matriculate with beginner or intermediate Spanish use their 2-week elective for a second intensive language experience at an international language school, for at least 50 additional hours of formal language instruction.

Outcomes to Date

Our residency program has used this model for the last 4 years (having selected components from 23

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years of Spanish instruction). Spanish fluency is *not* a prerequisite for acceptance in our program. In fact, upon entry, 11% of entering residents scored < 10% (no Spanish), while 22% tested at or above proficiency. Significantly, 98% scored at or above proficiency prior to graduation. Average training cost is \$7,975 for a resident who enters the program with no Spanish and \$6,750 for a resident who enters with intermediate Spanish. A cost analysis on the value of the Spanish program found that if just 25% of residents' patients speak Spanish, the cost of teaching Spanish to residents is less than interpreting costs for the second and third years of residency (TABLE). Thus this "new idea" of 1-on-1 language instruction helps residents achieve fluency and save money.

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Turning Mortality Discussions Into Process Improvements

Setting and Problem

The Morbidity and Mortality (M&M) conference is a traditional forum that provides residents with an opportunity to discuss and analyze medical errors. On a national level, M&M conferences appear to be increasing focus on systems of care and plans for process improvements. Unfortunately, academic discussions and hypothetical plans that occur during the M&M conferences often are not translated into actionable improvement plans. Without designated stakeholders to serve as a driving force to connect the academic discussions to a multidisciplinary forum, mortality reviews may not lead to process improvements or change in practice. In order for M&M conferences to lead to actionable plans, Stony Brook Internal Medicine Residency Program has established a multidisciplinary forum that is specifically tasked with creating process improvement projects stemming from M&M discussions.

Intervention

In an effort to focus on systems change and process improvement, the residency program restructured the content of the M&M to emphasize principles of patient safety and system-wide improvement strategies. The chief resident presents a structured timeline of the case. The conference follows an interactive small group format in which each resident cohort group is assigned specific safety tasks. Chief residents and faculty members facilitate small group activities. The postgraduate year 1 (PGY-1) group conducts an error analysis by defining the medical error and adverse event, and determining whether the medical error caused the adverse event. The PGY-2 group is given a blank Ishikawa fishbone diagram, and residents conduct a root cause analysis with both systems and individual contributors. The PGY-3 group is expected to generate an action plan based on the case, and present a SMART (Specific, Measurable, Attainable, Relevant, Time bound) aim proposal to resident members of the Patient Safety Quality Council (PSQC). The residency program formed the PSQC in 2014 to provide a forum for discussion of patient safety issues and to promote engagement in quality

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