

## RESEARCH LETTER

# Improving Communication with Patients with Limited English Proficiency: Non-English Language Proficiency Assessment for Clinicians

Lizzeth N. Alarcon, MD; Alana M. Ewen, MPH; Elida Acuña-Martinez, MS; Christine C. Cheston, MD

### TO THE EDITOR

Patients with limited English proficiency (LEP) continue to face health care disparities.<sup>1</sup> There are legal standards for language assistance services to enhance communication.<sup>2,3</sup> However, underutilization of such services, reliance on ad hoc interpretation, and getting by with providers' non-English language (NEL) skills remain commonplace.<sup>2,3</sup> A review by Taira et al. recommends key steps for large-scale improvement projects related to evidence-based communication with patients with LEP, one of which is assessment of bilingual clinicians.<sup>3</sup>

There is no nationally recognized approach for assessing clinicians' NEL skills. The Clinician Cultural and Linguistic Assessment (CCLA) evaluates NEL fluency within a health care context but involves an administration fee and approximately 40 minutes of clinicians' time.<sup>4</sup> Prior researchers have investigated whether CCLA performance might be predicted by less costly, less time-intensive self-assessment. Diamond et al. studied a narrow population of primary care providers using an adapted, nonvalidated version of a publicly available scale developed by the Interagency Language Roundtable (ILR). Their findings included a strong positive correlation between self-assessment and CCLA performance.<sup>5</sup> Prior to this study, our large safety-net academic medical center achieved low rates of clinician NEL assessment despite 28.4% of patients having LEP. Thus, we aimed to (1) apply a similar process using the original ILR and CCLA assessments to streamline proficiency testing, and (2) determine whether findings from Diamond et al. could be replicated among clinically diverse staff. Specifically, we expanded on the work of Diamond et al. to include all clinicians, including advanced practice providers and trainees in any specialty or clinical setting, with the goal to build a more generalizable, evidence-based, and high-value approach to universal NEL assessment.

### METHODS

Participants were recruited from January to June 2018 and were eligible if they self-identified as medical trainees or independent clinicians who used NEL skills for direct patient care. Participants first self-assessed with the original ILR speaking-skills scale via a Web-based survey that included demographic questions and took approximately 10 to 15 minutes to complete. Participants were excluded if they spoke an NEL that was not available for assessment through the CCLA or if they had previously completed the CCLA. We used the *original* instead of the *adapted* ILR based on recommendations from our expert Interpreter Services leadership due to the original version's comprehensive, behavior-specific yes or no approach. In the original version, individuals need to answer yes to all questions in a specific level to achieve that level, which we hypothesized would improve accuracy of self-assessment by removing subjectivity inherent to the adapted ILR. Of note, neither the original nor the adapted ILR have been validated for clinical settings. The original ILR is composed of five sequential sections with increasing skill levels (SLs) of proficiency: SL-1 to SL-5.<sup>6</sup> Functionally native proficiency corresponds to SL-5. Native speakers were included in this study to capture a broad set of clinicians and help inform our institutional policy on future testing. All eligible participants who completed the ILR self-assessment received instructions on how to take the CCLA by phone on their own time.

A Spearman correlation coefficient was computed using the ILR and CCLA scores. Fisher's exact test was performed to examine associations between demographic characteristics and passing the CCLA.

### RESULTS

Out of 124 eligible providers who completed the ILR, 56 completed the CCLA (45.2%) and 38 passed (67.9%), as shown in [Table 1](#). All 21 providers who self-assessed at an SL-5 (highest proficiency) on the ILR passed the CCLA. Individuals with intermediate ILR results varied in their CCLA pass rate: 2/6 SL-1 (33.3%), 6/17 SL-2 (35.3%), 8/10 SL-3 (80.0%), and 1/2 SL-4 (50.0%). We found a

<b>Table 1. Demographics of Participants and Performance on CCLA Reported as "n" and Prevalence (%)</b>				
	All Participants (N = 124)	Participants Completing CCLA* (n = 56)		
		Pass (n = 38)	Fail (n = 18)	p Value*
<b>Training Level</b>				0.59
Student (4th year only)	13 (10.5)	5 (13.2)	1 (5.6)	
Resident	65 (52.4)	18 (47.4)	9 (50.0)	
Fellow	8 (6.5)	3 (7.9)	0 (0)	
Independent clinician	38 (30.6)	12 (31.6)	8 (44.4)	
<b>Profession</b>				0.24
MD (medical doctor)	116 (93.5)	37 (97.4)	16 (88.9)	
DO (doctor of osteopathic medicine)	3 (2.4)	0 (0)	0 (0)	
NP (nurse practitioner)	4 (3.2)	1 (2.6)	1 (5.6)	
PA (physician assistant)	1 (0.8)	0 (0)	1 (5.6)	
<b>Language</b>				1.00
Spanish	89 (71.8)	28 (73.7)	14 (77.8)	
Other†	35 (28.2)	10 (26.3)	4 (22.2)	
<b>Department</b>				0.98
Medical School	10 (8.1)	3 (7.9)	1 (5.6)	
Family Medicine	20 (16.1)	8 (21.1)	3 (16.7)	
General Internal Medicine	20 (16.1)	6 (15.8)	3 (16.7)	
Pediatrics	39 (31.5)	13 (34.2)	6 (33.3)	
Other‡	35 (28.2)	8 (21.1)	5 (27.8)	
<b>Duration of Clinical Experience at Current Institution</b>				0.86
<5 years	100 (80.6)	31 (81.6)	14 (77.8)	
5–10 years	10 (8.1)	3 (7.9)	1 (5.6)	
>10 years	14 (11.3)	4 (10.5)	3 (16.7)	
<b>Language Acquisition Method§</b>				
Native speaker	28 (22.6)	18 (47.4)	1 (5.6)	0.002
Personal experiences	36 (29.0)	13 (34.2)	2 (11.1)	0.11
Formal coursework through high school or less	53 (42.7)	12 (31.6)	11 (61.1)	0.05
Formal coursework through undergraduate studies	56 (45.2)	17 (44.7)	11 (61.1)	0.39
Formal coursework through graduate studies and beyond	9 (7.3)	5 (13.2)	1 (5.6)	0.65
Immersion experiences (for example, working or studying abroad)	62 (50.0)	17 (44.7)	11 (61.1)	0.39
Self-taught/informal education	32 (25.8)	11 (28.9)	3 (16.7)	0.51
Employment as a medical interpreter	2 (1.6)	2 (5.3)	0 (0)	1.00
Other	8 (6.5)	1 (2.6)	2 (11.1)	0.24
<b>Clinical Setting§</b>				
Inpatient	109 (87.9)	36 (94.7)	13 (72.2)	0.03
Outpatient	115 (92.7)	36 (94.7)	17 (94.4)	1.00
Emergency department	82 (66.1)	23 (60.5)	8 (44.4)	0.39
<b>Clinical Time</b>				1.00
Full-time (> 40 hours/week)	91 (73.4)	26 (68.4)	13 (72.2)	
Part-time (20–40 hours/week)	20 (16.1)	8 (21.1)	3 (16.7)	
Part-time (< 20 hours/week)	13 (10.5)	4 (10.5)	2 (11.1)	
<b>Proportion of LEP patient Panel Who Speaks Same Language as Tested</b>				0.60
Few (< 10%)	27 (21.8)	7 (18.4)	4 (22.2)	
Some (10%–40%)	73 (58.9)	20 (52.6)	12 (66.7)	
About half (41%–60%)	18 (14.5)	8 (21.1)	2 (11.1)	
Most (61%–90%)	5 (4.0)	3 (7.9)	0 (0)	
Almost all (> 90%)	1 (0.8)	0 (0)	0 (0)	

\* Fisher's exact test was used to determine statistical significance.

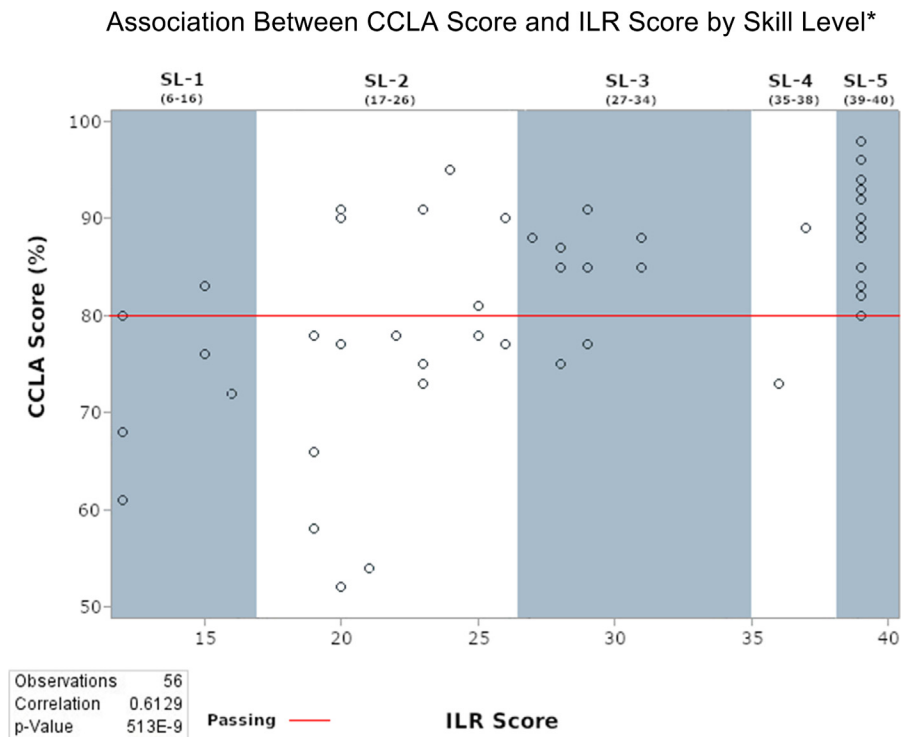
† Other includes Arabic (n = 2), Chinese (Mandarin) (n = 3), French (n = 12), Haitian Creole (n = 4), Hindi (n = 1), Japanese (n = 1), Korean (n = 2), Portuguese (n = 2), Russian (n = 5), Tagalog (n = 1), and Vietnamese (n = 2).

‡ Other includes Anesthesiology (n = 1), Cardiovascular Medicine (n = 3), Dermatology (n = 1), Emergency Medicine (n = 4), Endocrinology (n = 1), Hematology/Oncology (n = 1), Infectious Disease (n = 1), Nephrology (n = 1), Neurology (n = 2), Obstetrics/Gynecology (n = 5), Occupational Medicine (n = 1), Ophthalmology (n = 1), Oral and Maxillofacial Surgery (n = 1), Orthopedic Surgery (n = 1), Psychiatry (n = 5), Sports Medicine (n = 1), Surgery (n = 4), and Unspecified (n = 1).

§ Not limited to one category. A p value was computed for each stratum.

|| p < 0.05.

CCLA, Clinician Cultural and Linguistic Assessment; LEP, limited English proficiency.



**Figure 1:** This chart shows the association between Clinician Cultural and Linguistic Assessment (CCLA) score and Intera-gency Language Roundtable (ILR) score by skill level among participants ( $n = 56$ ).  
 \* Skill Level (SL): SL-1 corresponded to the lowest level of proficiency; SL-5 corresponded to the highest level of proficiency. A CCLA score of  $\geq 80$  was considered a passing score.

strong positive correlation between the original ILR and CCLA ( $\rho = 0.61, p < 0.0001$ ) as depicted in Figure 1.

**DISCUSSION**

In our study, we found a strong, positive correlation between the original ILR and CCLA among providers with NEL skills in our academic center, including trainees and clinicians working in outpatient and acute care settings. Despite using the original ILR, our study confirmed this significant correlation first documented by Diamond et al. in a primary care clinician population. Self-assessing in the top level was most predictive of passing the CCLA; for these NEL speakers, self-assessment may obviate the need for formal testing. Interestingly, being a native speaker was significantly associated with passing the CCLA. This suggests that describing oneself as a native speaker could on its own be a form of self-assessment and predictor of passing a proficiency exam. Institutions could consider native speaker status as an exemption to formal proficiency testing. Our findings can thus inform and streamline institutional processes for NEL skill assessment of providers. Self-assessment alone was not as predictive in ILR levels 1 to 4, and our sample size limited determining if demographics or experience could predict CCLA performance at these lower skill levels. Respondent bias and self-confidence likely also influenced the rates of CCLA completion. Our study did not

assess participants’ self-confidence, which could have informed CCLA performance. Future study should evaluate predictors of proficiency and impact of proficiency testing on provider experience, behaviors, and patient care.

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**Lizzeth N. Alarcon, MD,** Formerly Assistant Professor, Department of Family Medicine, Boston University School of Medicine/Boston Medical Center, is Assistant Professor, Department of Medical Education, Herbert Wertheim College of Medicine, Florida International University.  
**Alana M. Ewen, MPH,** Formerly Graduate Medical Education Data Analyst and Project Management Specialist, Office of Graduate Medical Education, Boston Medical Center, is Pre-Doctoral Fellow, Curtis Center for Health Equity Research and Training, University of Michigan, PhD student, University of Maryland School of Public Health.  
**Elida Acuña-Martínez, MS,** Formerly Director of Interpreter Services, Boston Medical Center, is Senior Director of Interpreter Services and Office of the Patient Advocate, East Boston Neighborhood Health Center.  
**Christine C. Cheston, MD,** is Assistant Professor, Department of Pediatrics, Boston University Chobanian and Avedisian School of Medicine/Boston Medical Center., [llalarcon@fiu.edu](mailto:llalarcon@fiu.edu).

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