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## Communication methods between outpatients with limited-English proficiency and ancillary staff: LASI study results

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### Abstract

**Objective**—Describe communication methods between primary care ancillary staff, including front desk administrative staff and medical assistants (MAs), and patients with limited-English proficiency (LEP).

**Methods**—Patients with LEP completed a telephone survey after a primary care visit including questions about communication with ancillary staff (n=1,029).

To inform practice improvements and lend qualitative perspective to these quantitative data, we subsequently conducted semi-structured interviews with ancillary staff and physicians.

**Results**—Professional interpreter use was minimal with ancillary staff (<4%). Among patients who did not use their preferred language with bilingual staff, about one-third reported using English to communicate, despite most (80%) speaking English ‘not well’ or ‘not at all.’ In semi-structured interviews, ancillary staff felt basic English sufficient for most patient communication. However, physicians reported taking on extra visit tasks to compensate for the communication barriers between ancillary staff and patients with LEP.

**Conclusions**—Use of professional interpretation by front desk staff and MAs was minimal. This led many patients with LEP to ‘get by’ with limited English when communicating with ancillary staff, in turn increasing burden on the physician visit.

**Practice implications**—Future interventions should focus on increasing use of professional interpretation by outpatient ancillary staff when communicating with LEP patients.

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Conflicts of interest

The authors have no conflict of interest pertaining to this manuscript beyond the acknowledged funding sources.

## Keywords

ancillary staff; limited English proficiency; primary care; language barriers

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## 1. Introduction

Outpatient medical visits involve patient communication with multiple team members. Numerous studies have investigated communication between clinicians and patients with limited English proficiency (LEP).<sup>1,2,3</sup> However, little is known about communication between ancillary staff and patients with LEP.

Increasingly, outpatient practices are adopting team-based care models that augment and elevate the care delivery roles of ancillary staff, so having clear communication with these team members is a critical part of the care experience.<sup>4</sup> Team-based care is a cornerstone of innovative outpatient care delivery models, including the Patient-Centered Medical Home (PCMH), a designation under which at least 18% of primary care physicians in the United States currently work.<sup>5,6</sup>

During the outpatient visit, team-based care includes expanded rooming and discharge protocols where administrative staff and medical assistants (MAs) take on additional communication roles including agenda-setting for the visit, performing health screening, medication reconciliation, and coordinating next steps.<sup>7</sup> These tasks require detailed communication with the patient and can present a challenge for patients with LEP if the staff do not speak their preferred language or a professional interpreter is not used. While it is tempting to extrapolate what is known about physician-patient communication to these interactions, ancillary staff have significantly different backgrounds, training and roles from physicians, and understanding their communication practices merits study. Our descriptive research question in this study is: how do patients with LEP communicate with front desk staff and MAs in an academic, outpatient primary care practice?

## 2. Methods

### 2.1. Design and participants

This is a sequential explanatory mixed-methods study,<sup>8,9</sup> leveraging quantitative patient survey data from a larger study on communication at our urban, academic, primary care practice (the Language Access System Improvement study; LASI<sup>10</sup>). While the primary focus of the LASI study was on the physician visit itself, participants with LEP were also asked about their communication with ancillary staff, which is the focus of this study. Telephone interviews were conducted in two waves (2014 and 2016–2017). Telephone and in-person professional interpreters were available at the practice during both LASI waves; additionally, video interpreters were available during the second wave, with an emphasis on their use by physicians. Subsequently (2018), qualitative interviews were conducted with practice staff and physicians for practice improvement purposes to help explain the quantitative results from patients.

## 2.2. Data collection

Recruitment to participate in a telephone survey within one-week of a primary care visit began with mailed multilingual study information flyers to potentially eligible participants: age >40 (age cut-off for LASI study<sup>11</sup>), upcoming primary care appointment, Asian or Latino race/ethnicity, and preferred language in the electronic medical record of Cantonese, Mandarin, or Spanish. Patients were then called by a language and culturally concordant research assistant within one week of their primary care visit and verbally consented for participation in this survey about communication. This analysis only includes those participants considered to have LEP. Eligibility as an LEP participant was confirmed by asking their preferred language for discussing healthcare and their self-reported English proficiency (“How well do you speak English?”) using our published algorithm.<sup>12</sup> In brief, patients who reported speaking English ‘not at all’, ‘not well’, or ‘well’ but preferred to receive medical care in a non-English language were considered LEP.

Subsequent to the LASI study, the first author conducted semi-structured interviews in-person with six front desk staff, six MAs, and three physicians in the same practice. The interview guide was informed by the results of the quantitative data analyses with the goal of informing practice improvement for LEP patient clinical flow. While the interviews were not recorded, the interviewer took extensive notes, recording quotes where possible.

## 2.3. Analysis

As there was little difference in communication methods between the two quantitative study waves, this analysis combines both waves of patient survey data. Descriptive statistics summarized participant characteristics and responses to communication with front desk staff and MAs. Chi-squared and t-tests examined differences by language group and accounted for clustering by participant as 16.5% participated in both interview waves.

For the qualitative portion of this study, the first author took detailed notes during semi-structured interviews with ancillary staff and physicians, reviewing notes and writing memos after each interview.<sup>13</sup> She then performed thematic coding and, through author team discussion, reviewed/revised codes and themes.<sup>14</sup>

## 3. Results

Among the 1,326 eligible participants with LEP reached by telephone, 1,029 (77.6%) participated in the survey. Table 1 describes participant characteristics overall and by language group. On average, participants were mean age 70, predominantly women, had been a patient in the practice for more than two years, and had multiple comorbidities.

Overall, 49.2% reported speaking directly in their preferred non-English language with bilingual front desk staff; fewer (38.6%) did so with MAs. Language concordance with front desk staff was higher for Cantonese (59.4%) and Mandarin (50.7%) speakers than for Spanish speakers (29.0%) ( $p < 0.001$ ). Professional interpreter use with ancillary staff was minimal (2.5% front desk; 3.5% MAs). More participants reported using non-verbal communication than reported using professional interpretation (5.0% front desk; 8.3% MAs) (Table 2).

Among those who reported that they did not use their preferred language to communicate with ancillary staff, about one-third reported using English with front desk staff and MAs. Use of English was substantial among all levels of self-reported English proficiency, even those who reported no English proficiency (well: 17.1%; not well 73.8%; not at all 9.1%).

In semi-structured interviews, both front desk staff and MAs reported that often patients' limited English was sufficient for basic tasks, although they acknowledged that more complex tasks required professional interpretation (e.g. referral details, medication review). However, they rarely accessed professional interpretation due to perceived time constraints: "*Usually English works fine for most people... I'm too rushed to use the phone interpreter on most days.*" (Table 3)

Physicians commented that they took on extra tasks during visits for patients with LEP because ancillary staff were not using interpreters and so not completing the tasks they normally would with English-speakers: "*I always do the med review for my patients with LEP.*" (Table 3)

## 4. Discussion and conclusion

### 4.1. Discussion

Our results highlight a substantial communication challenge in ambulatory care: minimal professional interpreter use by front desk staff and MAs leading to many patients with LEP getting by with very limited ability to communicate in English. As a result, physicians feel the burden of extra tasks during already complex visits. This is corroborated by previous documentation of language concordant physicians taking on extra tasks for their patients with LEP to help them navigate the health system.<sup>15</sup> Our findings extend to extra tasks for language discordant physicians working with interpreters as well.

Ancillary staff report similar reasons for not using professional interpreters as resident physicians have in prior research: specifically, managing to 'get by' with patients' limited English and time constraints.<sup>3</sup> In our practice, a substantial number of patients were able to communicate with bilingual ancillary staff directly in their preferred non-English language. In particular, a majority of Cantonese and Mandarin speakers were able to speak with front desk staff in their preferred language which reflects the fact that this practice has a number of Cantonese/Mandarin-fluent front desk staff. However, hiring multilingual staff cannot be the sole solution to communication barriers in diverse, urban medical facilities where numerous languages are spoken.

As practices increasingly move towards team-based models of care, multifaceted solutions are necessary to ensure equity, including easy access to professional interpreters for all care team members. Expanded roles for administrative staff and MAs can create a smooth visit for patients while unburdening the physician visit, but detailed and clear communication is necessary to achieve this. Suboptimal communication between ancillary staff and patients with LEP makes true team-based care inadequate, and must be addressed in order to provide high quality, equitable care for LEP populations.

This study took place in a single site, which limits its generalizability. However, access to professional interpreters was high in the study practice throughout data collection, making it unlikely that the lack of interpreter use by ancillary staff is unique to this practice. Additionally, the qualitative interview data was initially collected for practice-improvement purposes and not research, and so was not recorded, double-coded, or member-checked, perhaps making our qualitative findings less robust. However, the findings do point to potential reasons for, and impact of, ancillary staff non-use of interpreters that fits with prior literature for other studied groups.<sup>3</sup>

## 4.2. Conclusion

Professional interpretation was rarely used by ancillary staff to communicate with LEP patients in this outpatient, academic primary care practice. A significant portion of patients speaking Spanish, Cantonese, and Mandarin were able to communicate in those languages directly with bilingual staff. However, when no bilingual staff member was available, most patients got by with limited English. In order to ensure equitable care for this vulnerable population, we need to optimize communication throughout the outpatient encounter, and this includes communication with ancillary staff.

## 4.3. Practical implications

Future improvement interventions should focus on easily accessible, high quality interpretation for all members of the care team, including front desk staff and MAs.

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**Table 1.**

Characteristics for participants with limited English proficiency (LEP) interviewed after a primary care visit (N=1,029)\*

Patient characteristics*	Total N=1,029 N (%)	Spanish N=280 N (%)	Cantonese N=518 N (%)	Mandarin N=231 N (%)	P-value
<b>Age, years (mean ± SE)</b>	70.5 ± 0.4	69.0 ± 0.8	70.2 ± 0.6	72.7 ± 0.7	0.003
<b>Gender</b>					0.02
Female	691 (67.1)	205 (73.2)	348 (67.2)	138 (59.7)	
Male	338 (32.9)	75 (26.8)	170 (32.8)	93 (40.3)	
<b>Education</b>					<0.001
Less than high school	508 (49.4)	145 (51.8)	295 (57.0)	68 (29.4)	
High school diploma	192 (18.7)	55 (19.6)	95 (18.3)	42 (18.2)	
AA or some college	118 (11.5)	39 (13.9)	52 (10.0)	27 (11.7)	
College degree or higher	193 (18.8)	32 (11.4)	69 (13.3)	92 (39.8)	
Refused/Don't know/Missing	18 (1.7)	9 (3.2)	7 (1.4)	2 (0.9)	
<b>Health literacy<sup>16</sup></b>					<0.001
Inadequate	305 (29.9)	87 (31.1)	173 (33.9)	45 (19.6)	
Adequate	695 (68.1)	182 (65.0)	331 (64.8)	182 (79.1)	
Not applicable – do not fill out medical forms	21 (2.1)	11 (3.9)	7 (1.4)	3 (1.3)	
<b>Self-reported English proficiency</b>					<0.001
Not at all	340 (33.0)	57 (20.4)	220 (42.5)	63 (27.3)	
Not well	594 (57.7)	174 (62.1)	269 (51.9)	151 (65.4)	
Well**	95 (9.2)	49 (17.5)	29 (5.6)	17 (7.4)	
<b>Insurance status</b>					0.006
Private	140 (13.6)	57 (20.4)	58 (11.2)	25 (10.8)	
Medicare	694 (67.4)	174 (62.1)	351 (67.8)	169 (73.2)	
Medicaid	195 (19.0)	49 (17.5)	109 (21.0)	37 (16.0)	
<b>Frequency of clinic visits in last 12 months (mean ±SE)</b>	3.7 ± 0.1	4.4 ± 0.2	3.4 ± 0.1	3.4 ± 0.2	<0.001
<b>Length of time as a patient in the practice (in months) (mean ± SE)</b>	30.0 ± 0.3	30.6 ± 0.6	29.6 ± 0.5	30.0 ± 0.7	0.37
<b>Visit means of communication for physician visit</b>					<0.001
Discordant (needs interpretation)	536 (52.1)	96 (34.3)	305 (58.9)	135 (58.4)	
Partially Language Concordant	162 (15.7)	67 (23.9)	48 (9.2)	47 (20.4)	
Fully Language Concordant	331 (32.2)	117 (41.8)	165 (31.9)	49 (21.2)	

\* Recruitment for this study took place in two waves (2014; 2016–2017); 170 participants were interviewed during both waves. Due to minimal differences in communication methods between the waves, all data has been combined here; p-values are adjusted for clustering by participant.

\*\* Patients who reported speaking English well are considered LEP if they report a preference to receive medical care in a non-English language.<sup>12</sup>



**Table 2.**

Communication methods with ancillary staff by language for patients with limited English proficiency (LEP) interviewed after a primary care visit

Communication methods with ancillary staff	Total N=1,029 N (%)	Spanish N=280 N (%)	Cantonese N=518 N (%)	Mandarin N=231 N (%)	P-value*
<b>Front Desk Staff</b>					
Spoke directly in preferred non-English language	503 (49.2)	81 (29.0)	306 (59.4)	116 (50.7)	<0.001
Brought an English speaker with them	119 (11.6)	35 (12.5)	60 (11.7)	24 (10.5)	0.79
Professional interpretation*	26 (2.5)	5 (1.8)	16 (3.1)	5 (2.2)	0.49
Communicated well enough in English	319 (31.2)	147 (52.7)	101 (19.6)	71 (31.0)	<0.001
Communicated non-verbally	51 (5.0)	8 (2.9)	30 (5.8)	13 (5.7)	0.18
Other***	5 (0.5)	3 (1.1)	2 (0.4)	0 (0.0)	0.20
<b>Medical Assistants</b>					
Spoke directly in preferred non-English language	393 (38.6)	99 (35.7)	217 (42.2)	77 (33.8)	0.05
Brought an English speaker with them	109 (10.7)	20 (7.2)	65 (12.7)	24 (10.5)	0.08
Professional interpretation*	36 (3.5)	6 (2.2)	22 (4.3)	8 (3.5)	0.31
Communicated well enough in English	395 (38.8)	145 (52.4)	151 (29.4)	99 (43.4)	<0.001
Communicated non-verbally	85 (8.3)	7 (2.5)	58 (11.2)	20 (8.8)	<0.001
Other***	1 (0.1)	0 (0.0)	1 (0.2)	0 (0.0)	0.65

\* p-values are adjusted for clustering by participant

\*\* Professional interpretation available on demand via telephone or video-conferencing, or scheduled in-person

\*\*\* Other includes checking in with automated kiosk, primary care provider assisting, or another patient interpreting

**Table 3.**

## Semi-structured interview themes and exemplary quotations

<b>Ancillary staff themes (n=12)</b>
<p><b>Convenience of leveraging bilingual staff</b>  Front desk staff member: <i>It's more convenient to find someone who speaks their [the patient's] language [i.e. another staff member] than to call the phone interpreter. It's faster.</i>  MA: <i>If there is somebody [another staff member] who speaks their language, I will go grab them instead of using the interpreter.</i></p>
<p><b>Time pressure</b>  Front desk staff member: <i>Wait times for the phone interpreters are sometimes too long.</i>  MA: <i>Usually English works fine for most people... I'm too rushed to use the phone interpreter on most days. I usually only use the interpreter if the patient speaks "zero" English.</i></p>
<p><b>Basic tasks can be completed in limited English</b>  Front desk member: <i>Most of check-in doesn't need much talking, so a little English is okay.</i>  MA: <i>If the patient speaks a little English, I don't use the interpreter. If there is something we can't do in English, I know the doctor will have an interpreter and can ask the patient.</i></p>
<b>Physician themes (n=3)</b>
<p><b>Extra time needed for LEP patient visits</b>  <i>I try to take care of extra concerns during the visit because I know it will be harder for the patient to follow-up later with questions. I always do the med review for my patients with LEP [task normally performed by MAs.]</i>  <i>I do more teach-back for my patients with LEP; I make less assumptions.</i>  <i>Explanations take longer because there are cultural differences in the understanding of disease. For example, some patients don't understand that you have to keep taking chronic medications.</i></p>

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