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Access to Multilingual Medication Instructions at New York City Pharmacies

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ABSTRACT *An essential component of quality care for limited English proficient (LEP) patients is language access. Linguistically accessible medication instructions are particularly important, given the serious consequences of error and patient responsibility for managing often complex medication regimens on their own. Approximately 21 million people in the U.S. were LEP at the time of the 2000 census, representing a 50% increase since 1990. Little information is available on their access to comprehensible medication instructions. In an effort to address this knowledge gap, we conducted a telephone survey of 200 randomly selected NYC pharmacies. The primary focus of the survey was translation need, capacity, and practice. The majority of pharmacists reported that they had LEP patients daily (88.0%) and had the capacity to translate prescription labels (79.5%). Among pharmacies serving LEP patients on a daily basis, just 38.6% translated labels daily; 22.7% never translated. In multivariate analysis, pharmacy type (OR = 4.08, 95%CI = 1.55–10.74, independent versus chain pharmacies) and proportion of Spanish-speaking LEP persons in the pharmacy's census tract (OR = 1.09, 95%CI = 1.05–1.13 for each 1% increase in Spanish LEP population) were associated with increased label translation. Although 88.5% of the pharmacies had bilingual staff, less than half were pharmacists or pharmacy interns and thus qualified to provide medication counseling. More than 80% of the pharmacies surveyed lacked systematic methods for identifying linguistic needs and for informing patients of translation capabilities. Consistent with efforts to improve language access in other health care settings, the critical gap in language appropriate pharmacy services must be addressed to meet the needs of the nation's large and ever-growing immigrant communities. Pharmacists may require supplemental training on the need and resources for meeting the verbal and written language requirements of their LEP patients. Dispensing software with accurate translation capability and telephonic interpretation services should be utilized in pharmacies serving LEP patients. Pharmacists should post signs and make other efforts to inform patients about the language resources available to them.*

KEYWORDS *LEP patients, Medical instructions, Pharmacists, Label translation, Immigrants, Language access*

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INTRODUCTION

The foreign-born population of the United States exceeds 35 million and is growing rapidly.[1,2] Limited English proficiency, defined as a self-reported ability to speak English "less than very well,"[3] is also increasing. In 2000, approximately 21 million people in the U.S. were limited English proficient (LEP), representing a growth rate over the past decade that exceeded 50%.[4] From 1990 to 2000, immigrant populations grew in 45 states,[1] making it increasingly important that health service providers across the country have the ability to effectively serve diverse patient populations.[4] New York City (NYC) remains a key immigrant destination and is currently home to 2.9 million foreign-born residents;[5] the foreign-born and their children now represent 60% of NYC's population.[6] Nearly half of NYC's residents speak a language other than English at home,[5] and more than one in four adults report that they do not speak English at all or do not speak it well.[7,8]

An essential component of quality health care for foreign-born and other LEP populations is language access,[9] which is mandated for health care organizations that receive federal funding by Title VI of the 1964 Civil Rights Act.[10,11] Language discordance between patients and providers impacts on the providers' ability to offer effective care and the patients' ability to understand, assess, and act appropriately on medical advice.[12] The impact of language barriers on medication use is particularly important, given the complexity of directions patients receive, the serious implications of medication errors,[13,14] the number of medications prescribed,[15] and the patients' responsibility for managing medications on their own. Research suggests that LEP patients have poorer knowledge of medication and dosing instructions[16] and that they have significantly greater problems with medication adherence.[17] The provision of oral and written medication information in the patients' language has been linked to improvements in health outcomes.[18]

Pharmacists have an essential role in the treatment of illness, including legal mandates to provide written information and counseling for prescribed medications.[19–21] Despite these responsibilities, pharmacists have not been a major focus of efforts to ensure effective communication for LEP patients. Research suggests that multilingual written and verbal medication information is not readily accessible from pharmacies.[22–24] Where language services (including bilingual staff and labels incorporating translated instructions) exist, little effort is made to inform pharmacy patients regarding their availability. Consequently, patients that could benefit from such services do not necessarily get them.[17] Available data suggest that informal interpreters are used most often to improve communication between LEP patients and pharmacists.[25] Although the quality of informal interpretation in pharmacy settings has not been studied, research on untrained interpretation in hospitals and clinics has demonstrated high error rates.[9,26]

The quality and comprehensibility of English language prescription medication information has been subject to increasing regulation, evaluation, and innovation.[19,20,27–32] In contrast, the availability and content of medication information for people who do not speak or read English has received little attention. In this study, we sought to address this knowledge gap through an examination of pharmacist access to, provision of, and perceptions regarding multilingual written and verbal prescription medication information for LEP patients. We focus primarily on translated instructions as part of the main medication label, while also reporting on the availability of other written and verbal medication information in the patients' language and barriers and facilitators to linguistically

accessible information. We hypothesized that there would be inadequate access to prescription medication information in languages other than English overall. In addition, we sought to identify factors associated with differential access, including language (e.g., Spanish compared to Russian); proportion of LEP in the surrounding community; and specific pharmacy characteristics.

METHODS

We conducted a cross-sectional, random sample telephone survey of New York City pharmacists, part of a wider initiative focused on ensuring the availability of multilingual prescription medication information. In addition to the pharmacists' survey, the wider initiative included brief interviews and focus group discussions with LEP New Yorkers. Implementation of the initiative was guided by an advisory board with representation from diverse NYC-based institutions, including a college of pharmacy, a community health center, three academic medical centers, the public hospital system, the Poison Control Center, and two community-based organizations focused on immigrant advocacy and adult literacy. Advisory board members participated in the development of the survey protocol, including sampling, instrument design, and survey methods. The study was approved by the Institutional Review Board of the New York Academy of Medicine.

Pharmacy sample To identify a random sample of pharmacies, an alphabetized list of all licensed New York City pharmacies ($n = 2{,}186$) was obtained from the Office of Professions, New York State Education Department. Computer-generated random numbers were assigned to each pharmacy on the list using Microsoft Excel's RAND function. Pharmacies were contacted in the order of their random number assignment. Pharmacies initially randomized for participation were considered ineligible if no telephone number could be found in either http://www.yellowpages.com or http://www.mapquest.com ($n = 24$), the telephone number identified was nonfunctional ($n = 20$), or if they provided medications solely to resident patients (e.g., hospital inpatient, nursing home, and correctional facility pharmacies) ($n = 20$). Two hundred sixty-two eligible pharmacies were contacted to reach a preset goal of 200, for a response rate of 76.3%. Reasons for nonparticipation included: refusal to begin ($n = 27$) or to fully complete ($n = 6$) the interview; five attempts yielded only requests to call back at another time ($n = 17$); and the pharmacist offered to contact the interviewer to complete the survey but did not follow through ($n = 12$). Once a pharmacy was excluded, the interviewer contacted the next pharmacy on the randomized list. Compared to those participating in the survey, pharmacists that refused were more likely to work in an independent pharmacy (77.5% of refusers) and more likely to work in pharmacies located in the boroughs of Brooklyn or Queens.

Survey instrument The survey instrument was developed through a process that included a review of questions and methodology used in prior pharmacist telephone surveys[33] and discussion and input from the initiative's Community Advisory Board members. Anticipating that characteristics at multiple levels would be associated with the provision of multilingual medication information, the survey included questions on *pharmacy characteristics* (e.g., pharmacy type, language competencies of pharmacy staff, ability to print translated medication labels and instructions, access to telephone interpretation services); *pharmacist characteristics* (e.g.,

birthplace, pharmacist license date, gender); and *patient characteristics* (e.g., language and frequency of LEP patients). The availability of multilingual medication information was assessed through questions regarding frequency of translation; procedures for identifying patients needing translated materials; use of telephone interpretation services; and other policies, attitudes and practices regarding the provision of multilingual medication information to LEP patients. Response categories used for all questions probing frequency were "daily," "weekly," "less than once a week," and "never." Data from the 2000 census were downloaded from the New York State Data Center so that survey responses could be geocoded and merged with the proportion of LEP within the pharmacy census tract.

Data collection To ensure consistency in study procedures, a single interviewer conducted all 200 surveys and recorded responses on hard copy survey forms. Interviews were conducted by telephone between February and August 2006. The survey generally took 5 min or less to complete. Many pharmacists reported that they were very busy with little time to complete an interview. Consequently, the interviewer made a conscious effort to keep the pace of the interview rapid and to initiate contact on days (Tuesday through Thursday) and times (early morning) that generally seemed calmer. Follow-up calls, if necessary, were made at the time requested by the pharmacist, including evenings and weekends. Four pharmacists asked to complete a hard copy of the survey, which they returned by mail or fax. Survey responses were entered into SPSS 11.0 for cleaning and statistical analysis. Geocoded responses and downloaded census data were exported to ArcGis to create maps for a visual display of study findings. Lengthy comments made by respondents were maintained in a Microsoft Word document.

Data analysis The main outcome of interest was self-reported provision of prescription medication labels in languages other than English on a daily basis. Secondary outcome measures included verbal and written translation capabilities and barriers to the provision of linguistically accessible medication information. Correlates of daily translation were examined with bivariate and multivariate logistic regression, which were used to calculate the odds ratios (OR) and 95% confidence intervals (CI). Variables used in regression models include basic pharmacist characteristics (gender, year pharmacist license received, position within the pharmacy, and birthplace), as well as pharmacy and patient characteristics expected to affect translation practice (type of pharmacy, bilingual pharmacy staff, and proportion of LEP in pharmacy census tract). With the exception of the census data, all data used in the analysis were derived from survey responses. All variables associated at the $p < 0.1$ with translated labels in bivariate analyses were included in the multivariate model.

RESULTS

Sample Characteristics

The 200 pharmacists participating in the survey were primarily male (59.5%) and licensed in 1990 or later (61.5%) (Table 1). Of the participants, 38% were born in the US (including Puerto Rico) or Canada; 37.5% were born in Asia or the Pacific Islands. Approximately one-third (35.5%) of the participants worked in a chain (including supermarket) pharmacy, 59.5% worked in an independent pharmacy,

TABLE 1 Sample characteristics ($n = 200$)

Characteristics	
Pharmacist gender, *n* (%)	
Male	119 (59.5%)
Female	77 (38.5%)
Missing	4 (2.0%)
Pharmacist license date, *n* (%)	
2000–present	51 (25.5%)
1990–1999	72 (36.0%)
1980–1989	31 (15.5%)
<1980	37 (18.5%)
Missing	9 (4.5%)
Pharmacist birthplace, *n* (%)	
USA/Canada	76 (38.0%)
Africa/Middle East	10 (5.0%)
Asia/Pacific Islands	75 (37.5%)
Europe	20 (10.0%)
South America/Caribbean	11 (5.5%)
Missing	8 (4.0%)
Pharmacist position, *n* (%)	
Owner	31 (15.5%)
Manager	93 (46.5%)
Staff	70 (35.0%)
Other	3 (1.5%)
Missing	3 (1.5%)
Pharmacy type, *n* (%)	
Chain	71 (35.5%)
Independent	119 (59.5%)
Hospital outpatient/clinic	10 (5.0%)
Daily LEP patients at pharmacy[a], *n* (%)	
Any language	176 (88.0%)
Spanish language	155 (77.5%)
Chinese language	31 (15.5%)
Russian language	27 (13.5%)
LEP in census tract, mean % (range)	
Any language	24.4% (3.2–62.9%)
Spanish language	12.6% (0.0–49.8%)
Other European language	5.3% (0.0–28.5%)
Asian language	5.8% (0.0–56.0%)
Frequency of label translation, *n* (%)	
Daily	68 (34.0%)
Weekly	22 (11.0%)
Less than once a week	48 (24.0%)
Never	51 (25.5%)
Do not know/missing	11 (5.5%)

[a]Percents do not equal 100 because multiple languages were reported by individual pharmacies.

and 5.0% worked either in a hospital outpatient or clinic pharmacy. The majority (88.0%) of pharmacists reported that they had LEP patients on a daily basis; just 5.0% reported that they never had LEP patients. The most common patient languages were Spanish (77.5% pharmacies reported Spanish-speaking patients on a daily basis), Chinese languages (15.5%), and Russian (13.5%). According to data

from the 2000 census, the mean proportion of LEP in respondent census tracts was 24.4% with a range from 3.2% to 62.9%.

Translation Practice

Of the respondents, 34% reported translating medication labels on a daily basis, 11.0% translated on a weekly basis, 24% translated less than once a week, and 25.5% never translated medication labels. Of pharmacies reporting daily LEP patients ($n = 176$), 38.6% translated labels on a daily basis, 12.5% translated labels on a weekly basis, 22.2% translated less than once a week, and 22.7% never translated.

Bivariate analysis In the bivariate analysis, pharmacist birthplace, pharmacy type, and proportion of LEP in census tract (overall, Spanish-speaking, and other European languages) were significantly associated ($p < .05$) with daily translation of medication labels (Table 2). Figure 1 provides a visual representation of the positive association between translation and higher proportions of LEP residents, whereas also revealing apparent limitations in access to translated labels in certain areas of NYC with high numbers of LEP residents.

Mutlivariate analysis In the multivariate analysis, pharmacy type (OR = 4.08 for independent pharmacy and OR = 6.43 for clinic/outpatient hospital pharmacy, $p < 0.05$) and proportion of Spanish-speaking LEP in the census tract (OR = 1.09 for 1% increase in Spanish LEP population, $p < 0.01$) were significantly associated with translation (Table 3). The proportion speaking other European or Asian languages was not associated with daily translation in multivariate analyses.

Language Capacity

Print capacity In an effort to understand translation frequencies, respondents were asked about capability and established procedures for language access services. Most pharmacists reported that they were able to provide translated labels (79.5%) in at least one language (Table 4). Fewer had access to translated patient information sheets (51.5%) and warnings (44.0%). Spanish was the most common language for translated labels (71.5%) and for patient information sheets (51.5%). Of the pharmacists, 12% reported that they could translate labels into Chinese and 9.5% could translate labels into another language. Less than 5% reported that they could translate patient information sheets into languages other than Spanish. Of the pharmacists, 75% were able to translate using a feature of their dispensing software; nine pharmacists manually translated labels into Chinese, Spanish, Russian, or Korean; and two developed their own computerized translation systems.

Verbal capacity Although most of the sample pharmacies (88.5%) had at least one bilingual staff, less than half (43.0%) were pharmacists or pharmacy interns and thus qualified to provide medication counseling, as required for all new and changed prescriptions by New York State regulations. Of the pharmacies, 22% had a pharmacist on staff that spoke Spanish. Telephone interpreting services were available for medication counseling at 13.5% of the pharmacies in the sample.

Barriers, Facilitators, and Processes for Language Access in Pharmacies

All survey respondents were asked about processes that would lead to a translated label for a particular patient. Most respondents (54.0%) reported that the need was

TABLE 2 Bivariate associations with daily translation pharmacies with daily LEP patients ($n = 176$)

	Pharmacies with daily LEP patients
Characteristics	Odds of daily translation
Pharmacist gender	
Male	1.00
Female	0.62 (0.32, 1.19)
Missing	
Pharmacist license date	
2000–present	1.00
1990–1999	0.91 (0.40, 2.03)
1980–1989	1.13 (0.41, 3.09)
<1980	1.59 (0.63, 3.99)
Missing	
Pharmacist birthplace	
USA/Canada	1.00
Africa/Middle East	0.71 (0.13, 3.84)
Asia/Pacific Islands	2.70 (1.31, 5.56)**
Europe	1.25 (0.43, 3.63)
South America/Caribbean	0.36 (0.04, 3.16)
Missing	
Pharmacist position	
Owner	1.00
Manager	0.56 (0.24, 1.32)
Staff	0.52 (0.21, 1.29)
Other	–
Missing	
Pharmacy type	
Chain	1.00
Independent	7.06 (2.92, 17.05)**
Hospital outpatient/clinic	6.43 (1.47, 28.05)*
Daily LEP patients at pharmacy[a]	
Spanish language	0.64 (0.25, 1.63)
Chinese language	1.76 (0.81, 3.86)
Russian language	0.39 (0.15, 1.03)
Percent LEP in census tract[b]	
Any language	1.05 (1.03, 1.08)**
Spanish language	1.08 (1.05, 1.11)**
Other European language	0.93 (0.88, 0.99)*
Asian language	1.01 (0.99, 1.04)

[a]Reference category for each language: < daily LEP patients speaking that language
[b]Odds of translation for each percent increase in LEP population
*$p < 0.05$ in logistic regression
**$p < 0.01$ in logistic regression

identified during interactions with the patient that occurred before filling the prescription (e.g., when asking for name, insurance coverage, etc.) and/or through patient request (33.0%). Less often, language need was noted in the patient's pharmacy record (10.0%) or in the patient's prescription (7.0%). Four pharmacists reported that all patients get translated information except those specifically

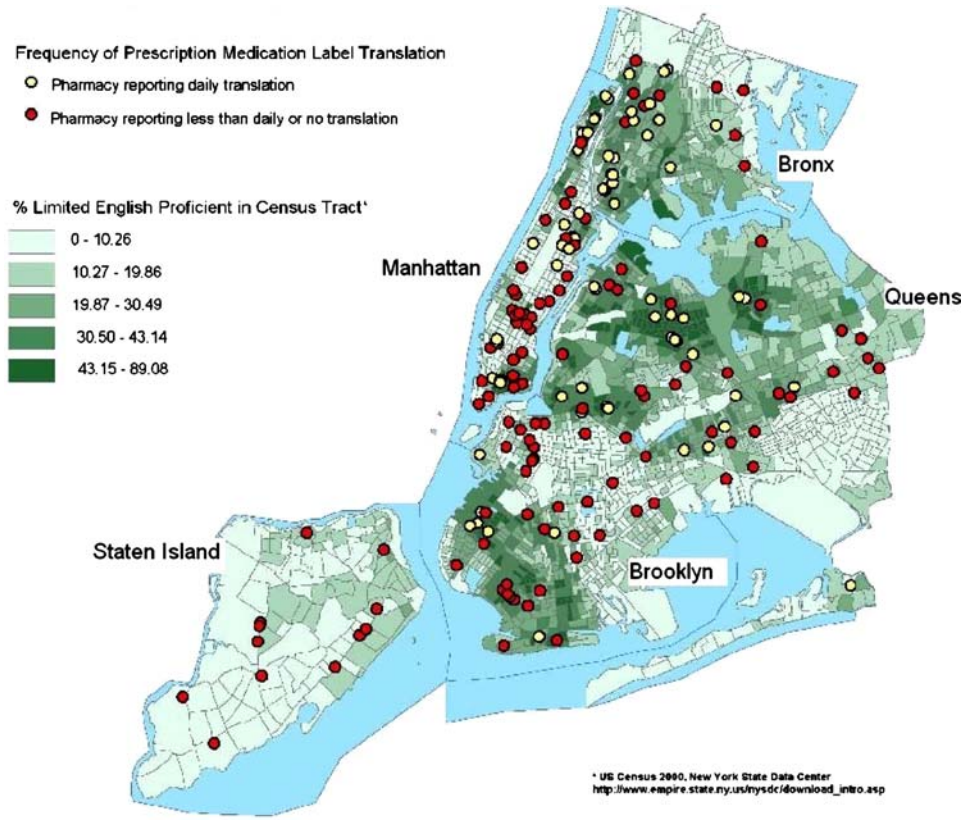

FIGURE 1. Frequency of medication label translation at New York City pharmacies.

requesting English only. Just 7.5% had a sign in the pharmacy informing patients that translations were available.

Pharmacists were also asked their perception of factors that served as barriers or facilitators to improved language services for LEP patients: 55.5% reported that improved services were unnecessary. They either felt there was no particular need among their patient population or that they were providing sufficient services, even if those services included interpretation by untrained cashiers, family members, customers, or employees of a neighboring store. Of the remaining pharmacists, the most commonly reported factors were access to multilingual resources, including translation software, electronic dictionaries, and telephone interpretation (23.5%); language capabilities of personnel (19.5%); cost (7.0%); time (7.0%); and concerns regarding the accuracy of translated information (5.0%). Six pharmacists (3.0%) reported that patients, rather than pharmacists, should take responsibility for addressing language barriers.

DISCUSSION

Among surveyed New York City pharmacists who report limited English proficient patients on a daily basis, less than 40% provide daily translation of medication labels and 22.7% never provide translated labels. The significant size of the immigrant population in the US, coupled with the substantial and expanding use of prescription medications,[14,34] provokes concern regarding this limited availability of medication information in multiple languages. Services in New York City, with

TABLE 3 Adjusted odds ratios for translation of medication labels on a daily basis (with 95% confidence interval)

Characteristic	Adjusted odds ratio (confidence interval)
Pharmacist birthplace	
USA/Canada/Puerto Rico	1.00
Asia/Pacific Islands	1.50 (0.64, 3.52)
South America/Caribbean	0.15 (0.01, 1.97)
Africa/Middle East	0.22 (0.03, 1.49)
Europe	1.20 (0.32, 4.39)
Pharmacy type	
Chain	1.00
Independent	4.08 (1.55, 10.74)**
Clinic/Outpatient hospital	6.43 (1.27, 32.48)*
Percent LEP in census tract[a]	
Spanish language	1.09 (1.05, 1.13)**
Other European language	0.99 (0.92, 1.06)
Asian language	1.03 (0.99, 1.06)

[a]Odds of translation for each percent increase in LEP population
*$p < 0.05$ in multivariate logistic regression
**$p < 0.01$ in multivariate logistic regression

its large and longstanding immigrant communities, are in fact likely to be better than elsewhere. The results reported here may, therefore, underestimate the limitations on language appropriate medication information.

Gaps in the availability of multilingual medication information may result from a combination of factors, including insufficient capacity (both human and technological), lack of trust in translations, and lack of awareness regarding the significance of, and optimal processes for, meeting the linguistic needs of LEP patients. Approximately 10% of the survey respondents reported that they did not have the capability to translate medication labels into any language; close to 50% could not translate patient information sheets. Almost 90% of the respondents reported that they could not translate labels or patient information sheets into languages other than Spanish.

TABLE 4 Pharmacy capacity to provide medication information in languages other than English

	Spanish, *n* (%)	Chinese, *n* (%)	Russian, *n* (%)	Any language, *n* (%)
Translated labels and patient information sheets				
Main label	143 (71.5)	24 (12.0)	19 (9.5)	159 (79.5)
Patient information sheet	103 (51.5)	9 (4.5)	8 (4.0)	103 (51.5)
Warning label				88 (44.0)
Verbal information in languages other than English				
Yes	149 (74.5)	28 (14.0)	24 (12.0)	177 (88.5)
By pharmacist	44 (22.0)	23 (11.5)	17 (8.5)	86 (43.0)
By other staff	117 (58.5)	6 (3.0)	10 (5.0)	133 (66.5)
Telephone interpretation				
Yes				27 (13.5)
No				172 (86.0)

Pharmacists having access to translation software expressed concerns regarding accuracy and practicality. A number of existing systems utilize simple machine translation, which may in fact be awkward or erroneous. Some lack dual-language capabilities; if translations are requested within such systems, the full label will be translated, limiting its utility to an English-speaking pharmacist, provider, or family member. Although the effort required to upgrade the software and to expand and verify automated translations should not be underestimated, once completed, translated materials could be made freely available on a national level—making the effort involved commensurate with the expected benefits.

In addition to pharmacy capacity, knowledge and motivation must be addressed, in part through outreach and education of pharmacists. Although recent studies show increases in counseling and in the distribution of written medication information,[35] several survey respondents noted that time and cost constraints limit the individualized patient services they provide. Given the multiple demands and restricted resources, some pharmacies have not seen language issues as a high priority. In our sample, translation practice was significantly better among independent and hospital or clinic-based pharmacies as opposed to chain pharmacies, which is consistent with other research showing independent pharmacies to be more responsive to patient need.[36] Although some chains are increasing their efforts in this area,[37,38] given their numbers and influence, it is particularly important that language services become more consistently available at chain pharmacies.[36] Pharmacies in neighborhoods with very high concentrations of LEP residents were also more likely to provide translation, suggesting that increased demand can motivate changes in practice.

A number of respondents felt that access to verbal interpretation was sufficient for their needs, even if interpretation was done by an untrained cashier, a family member, an employee of a neighboring store, or another customer. Others felt their admittedly partial foreign language skills or their hand signals were adequate. The importance of utilizing trained interpreters—as well as the need to provide translated written information, irrespective of the verbal counseling offered—appeared to be underappreciated. In addition, a small number of respondents expressed the opinion that patients should learn English rather than relying on translations. The continuing flow of new arrivals and the documented shortage of English language classes[39] belie the practicality of such assumptions. The benefits to the individual and society of proper medication administration, including enhanced therapeutic effect, reduced adverse events, and lower costs, should drive the health care system to counter such attitudes.

Pharmacies require, but often lack, a systematic methodology for the identification and documentation of patient need. Only 10.0% of the respondents reported that language preference was included in the patient record and just 7.5% indicated that a sign was posted informing customers of language services. Need for language services was identified primarily through the patient–staff interaction occurring before medication dispensing. Because patients often communicate only with the assistant before the dispensing and labeling of the medicine, the assistant would be the one to identify and act on patient language needs. For prescriptions phoned in by physicians or dropped off by family members, there is no opportunity to assess (even informally) the patient's linguistic skills and need.

It should be noted that a number of pharmacies, including national chains, are making promising efforts to provide language access services to their LEP patients. These services include Spanish language web sites, telephone interpretation, and

print translation, which are promoted with signs, media advertisements, and linkages to community organizations.[37] One national chain provides translated labels in 11 languages. Another provides translation and telephone interpretation in 14 languages, as well as translated patient information sheets in Spanish.[37,38] Whether pharmacists employed by these chains opt to use these services, or are well informed of them, is still to be determined. Data from our survey suggest a significant disconnection between that which is available and that which is utilized.

There are possible limitations to the data that should be noted. In a city like New York with much diversity in commercial establishments and population, the size of the sample may have been too small to thoroughly examine all relevant factors and associations. It is difficult to determine if our sample was biased by refusals, the majority of which were explained by workload and lack of available time. In addition, the constraints on respondents' time necessitated that we use a relatively brief survey instrument. The brevity of the instrument did facilitate a relatively high response rate; however, it was impossible to explore any particular domain in depth. It should also be noted that data were self-reported and, in part, based on recall and estimation capabilities. Anticipating that recall and estimations would be imperfect, particularly in the context of a brief telephone survey, we utilized response categories that lacked optimal precision (e.g., "daily," "weekly," etc. to assess frequency). Even with these broad categories, respondents may have erred in their estimation of patient language competencies or the frequency with which they provide translations. Study findings should, therefore, be verified using a more precise methodology, such as a review of medication labels and other instructions received by LEP patients. Finally, translation practice is likely to vary according to patient language, but we were unable to carefully examine this within the current analysis. In a subsequent paper, we will conduct spatial analyses to better examine the relationships between language, concentration of LEP population in census tracts surrounding each pharmacy, and other relevant covariates.

Language access in inpatient and outpatient clinical settings, with its demonstrated impact on health care quality, has been the focus of a significant body of research, programs, and policy initiatives.[9–11] Language access at pharmacies has not received similar attention, despite the fact that patients are increasingly responsible for the management of complex medication regimens.[34] There is significant evidence confirming the association between patient comprehension of instructions, medication errors, and health outcomes.[13,40] Consistent with efforts to improve language access in other health care settings, the critical gap in language appropriate pharmacy services must be addressed to meet the needs of the nation's large and ever-growing immigrant communities.

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