# WHO TREATS LIMITED ENGLISH PROFICIENT PATIENTS? IMPLICATIONS FOR LINGUISTIC ACCESS INITIATIVES

Eric E. Seiber, PhD; Christen M. Smith, BS; Sandra J. Tanenbaum, PhD

**Background:** Growing linguistic diversity in the United States brings serious challenges for healthcare providers. Federal civil rights policy requires that physicians participating in Medicaid and State Children's Health Insurance Program (SCHIP) provide meaningful access for their limited English proficient (LEP) patients. Key to compliance is the criterion that the provider's responsibility is proportional to the number of LEP patients likely to be served.

**Objectives:** This article identifies which physicians are most likely to treat LEP patients and the source of payment for these visits in a traditionally low immigration state.

**Procedures:** The study utilizes 2006–2007 survey data from a random sample of 202 South Carolina physicians' practices. Descriptive statistics establish a profile for practitioners who most frequently treat LEP patients, and ordinary least squares models determine the salient characteristics for providers treating LEP patients.

**Main Findings:** This study finds that public and community clinics and, to a lesser degree, OB/GYN practices, in counties with over 6% Hispanic population provide a disproportionate share of care to LEP patients. Furthermore, 54.7% of LEP visits were uninsured or self-pay, with the result that LEP patients concentrate in practices that serve the uninsured.

**Conclusions:** Proposals seeking to increase linguistic access by requiring insurers to cover interpretation services are unlikely to achieve more than a limited impact due to the low insurance coverage rates among LEP patients. The burden of compliance with current linguistic access regulations is heaviest for practices that treat the highest proportion of uninsured and that have the fewest resources to meet regulatory requirements. (*Ethn Dis.* 2009;19:433–438)

**Key Words:** Limited English Proficient, LEP, Physicians

From Division of Health Services Management and Policy, The Ohio State University - College of Public Health

Address correspondence and reprint requests to Eric E. Seiber, PhD; Division of Health Services Management and Policy; Ohio State University - College of Public Health; 468 Cunz Hall - 1841 Neil Ave; Columbus, OH 43210; 614-247-4471; 614-292-3572 (fax); seiber.7@osu.edu

## INTRODUCTION

Growing linguistic diversity in the United States brings serious challenges for healthcare providers. The 2000 Census reports that over 45 million people in the United States speak a language other than English at home and that about 19 million of these are limited English proficient (LEP), representing a 42.3% increase in the LEP population since 1990.[1] Complicating this increase is the geographic dispersion of recent immigrants away from their traditional destinations in large urban centers.[2]

In both historically high-immigration states and the newer destinations, federal civil rights policy requires that health care providers receiving Medicaid, State Children's Health Insurance Program (SCHIP), or other federal funds ensure meaningful access for their LEP patients. Definitions vary, but the Federal Interagency Working Group defines LEP status as, ''Individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English….'' Section 601 of Title VI of the Civil Rights Act of 1964 prohibits discrimination by national origin for any program or activity receiving federal financial assistance,[3] and Executive Order 13166 of 2000 equated linguistic access with nondiscrimination for the purposes of Title VI.[4] As recently as 2003, the US Department of Health and Human Services reissued guidance for health care providers on their responsibilities for ensuring linguistic access.[5] Key to the DHHS guidelines is the criterion that the provider's responsibility is proportional to the number of LEP patients likely to be served.

Although an increasing amount of literature documents health outcomes and utilization disparities for LEP patients,[6–8] very few published studies examine the extent of linguistic access including which physicians treat LEP patients. One study did examine linguistic access in California, but only a single study considers the newer, more rural immigration destinations. Yoon et al found that California, a high immigration state, enjoys a relatively large supply of bilingual physicians, although LEP patients were disproportionately uninsured, and therefore limited in their access to these bilingual physicians.[9] Furthermore, the experience of California is not representative of newer immigration destinations. Torres et al examined how rural hospitals accommodate Spanish-speaking LEP patients. Rural hospitals' methods for accommodating their LEP patients varied, ranging from brochures and language identification posters to telephone language lines.[10] However, many hospitals reported challenges due to a lack of funding for interpreters and few local language training programs. Despite most hospitals having some capacity to accommodate LEP patients, the availability of physicians willing to treat LEP

*Despite most hospitals having some capacity to accommodate LEP patients, the availability of physicians willing to treat LEP patients in these new immigration destinations remains unknown.*

patients in these new immigration destinations remains unknown.

To address linguistic access, both providers and academics have called for payers to cover interpreting services. The American Medical Association has issued multiple policy positions on interpreting services called for under the DHHS guidelines for linguistic access, recently reaffirming its position that insurers or patients rather than physicians should pay for interpreters.[11] Academic policy papers also call for the coverage of interpreting services by insurers with the goal of improving the quality of care provided to LEP patients.[12,13]

This article presents survey data from physicians in South Carolina identifying which physicians treat LEP patients and who pays for these visits in a state that has become a new immigration destination. Between 1990 and 2000, the Latino population of South Carolina grew 211%.[14] The in-migration of mostly young, foreign-born males was a response to favorable economic conditions, and by 2007, Latinos made up 4% of the state's population and numbered 168,000. The poverty rate for the Latino population was 15% for adults and 23% for children. Only 21% reported that English was spoken in the home.[15]

This study used descriptive statistics to establish a profile of provider types and settings that most frequently treat LEP patients. Ordinary least squares (OLS) models determined the salient characteristics for providers treating LEP patients. The study results raise doubts about the potential impact of proposals seeking to increase linguistic access by requiring insurers to cover interpretation services.

## METHODS

To determine who treats LEP patients in South Carolina, the survey instrument was mailed to a random sample of physicians practicing in South Carolina. The survey instrument was developed from a previously fielded questionnaire used in California.[9] In the survey, physicians were asked to respond to 18 items concerning characteristics of their practices and of their patient populations, including LEP patients. Half of the questions were closed-ended, asking physicians to classify their practices into one of a given number of categories. The other half asked physicians to provide numbers of hours per week and visits per week with various types of patients. Practices were asked about their primary focus and setting, the number of physicians employed, the insurance composition and ethnic and linguistic breakdown of their patients, and the methods of medical interpretation used for LEP patients.

Physicians in the sample were identified from a database of certified South Carolina physicians provided by the South Carolina State Budget and Control Board's Office of Research and Statistics. A 20 percent random sample was drawn from the database to yield 1,850 survey recipients. Table 1 provides the descriptive statistics for the practice characteristics analyzed in the study. All questions asked about the entire practice rather than an individual physician.

Of the 1,850 surveys mailed, 161 were returned as undeliverable by the US Postal Service due to out-of-date addresses, and a small number were returned incomplete with an indication that the physician had retired. With 202 completed surveys returned and incorporating the information on ineligibles, the survey had a final response rate of 19.6%. This response rate falls at the lower end for all published physician studies examining general topics.[16] However, the response rate compares favorably for topics of a sensitive nature. The Association of American Medical Colleges recently found a response rate of 17.1% when they surveyed a more sensitive physician behavior compared to their usual 60% response rate.[17]

**Table 1. Characteristics of surveyed physician practices**

| | Practices Responding *n* | % |
|---|---|---|
| Practice focus | | |
| Primary care | 86 | 42.6 |
| OB/GYN | 18 | 8.9 |
| Other specialty | 97 | 48.0 |
| Practice setting | | |
| Solo-practice | 43 | 22.3 |
| Group practice | 103 | 53.4 |
| Public or community clinic | 17 | 8.8 |
| Hospital outpatient clinic | 11 | 5.7 |
| Hospital | 19 | 9.8 |
| Practice size | | |
| One physician | 46 | 22.9 |
| 2–10 physicians | 110 | 54.7 |
| Over 10 physicians | 45 | 22.4 |
| County has >6% Hispanics | 28 | 13.9 |
| Urban county | 143 | 70.8 |
| Total practices responding | 202 | |

The final sample closely resembled the original sampling frame lowering the concern of non-response bias. Among respondents, 42.6% of practices were primary care, 8.9% OB/GYN, and 48.0% other specialty practices. This distribution of practice type in the sample did not differ significantly from the full population of 41.4% primary care, 6.8% OB/GYN and 51.9% in other specialties. Similarly, the geographic distribution of respondents did not differ significantly from the original sampling frame. In the original population, 12.3% of the physicians practiced in counties with over 6% Hispanic population compared to 13.8% of the respondents. The similarities between the sample estimates and the population values do not indicate any clear response biases, but the lower response rate indicates that the results should be extrapolated with some caution.

**Table 2. Percent of total weekly visits reported as LEP patients***

| | 0%–4% *n* (%) | 4%–8% *n* (%) | 8%–12% *n* (%) | >12% *n* (%) | median |
|---|---|---|---|---|---|
| Practice focus | | | | | |
| Primary care | 35 (46.0) | 19 (25.0) | 8 (10.5) | 14 (18.4) | 4.5% |
| OB/GYN | 5 (29.4) | 5 (29.4) | 0 (0.0) | 7 (41.2) | 6.7% |
| Other specialty | 47 (57.3) | 9 (11.0) | 14 (17.1) | 12 (14.6) | 3.3% |
| Practice setting | | | | | |
| Solo practice | 24 (64.9) | 5 (13.5) | 2 (5.4) | 6 (16.2) | 2.1% |
| Group practice | 45 (47.9) | 19 (20.2) | 15 (16.0) | 15 (16.0) | 4.3% |
| Public or community clinic | 5 (35.7) | 2 (14.3) | 1 (7.1) | 6 (42.9) | 7.0% |
| Hospital outpatient clinic | 2 (25.0) | 3 (37.5) | 2 (25.0) | 1 (12.5) | 5.4% |
| Hospital | 5 (35.7) | 3 (21.4) | 2 (14.3) | 4 (28.6) | 5.0% |
| Practice size | | | | | |
| One physician | 24 (61.5) | 5 (12.8) | 3 (7.7) | 7 (18.0) | 2.8% |
| 2–10 physicians | 53 (52.5) | 22 (21.8) | 12 (11.9) | 14 (13.9) | 4.0% |
| >10 physicians | 10 (28.6) | 6 (17.1) | 7 (20.0) | 12 (34.3) | 9.1% |
| All practices | 87 (49.4) | 34 (19.3) | 22 (12.5) | 33 (18.8) | 4.2% |

* Calculated as (LEP patient visits in typical week)/(total number of patient visits in typical week) as reported and classified by the responding practice.

## RESULTS

To identify which types of practices care for LEP patients in South Carolina, the survey instrument collected data on the total number of hours per week that a representative physician in the practice would spend performing patient care activities and the total number patient visits per week. The survey also collected parallel values for hours per week of patient care activities dedicated to LEP patients and number of LEP visits per week. From these questions, two measures of care for LEP patients were calculated: percent of patient care hours dedicated to LEP patients; and the percentage of total visits dedicated to LEP patients. The two measures produced similar results, and only visits are discussed below.

Table 2 presents the percent of total weekly visits reported by the respondent as LEP visits by practice characteristics. This table show a very skewed distribution of visits across responding physician practices. Across all practices, 18.8% of respondents reported over 12% of their visits in a week as LEP patients (ten percent of respondents reported between 25% and 100% of their weekly visits as LEP patients), the median respondent provided 4.2% of their total patient visits to LEP patients. The median visits per week spent with LEP patients varied little across practice type, from a high of 6.7% of OB/GYNs to 3.3% for Other Specialties. Physicians at larger practices did report more visits per week with LEP patients. The median large practice (>10 physicians) treated LEP patients in 9.1% of visits compared to 2.8% in solo practices. Similarly, physicians practicing at public or community clinics treated the highest percentage of LEP patients at 7.0% of all visits followed by hospital-based clinicians, group practices, and solo practices.

Although the descriptive statistics in Table 2 are suggestive, no salient profile emerges for which providers treat LEP patients. Table 3 presents OLS regression estimates for the determinants of the percent of total weekly visits reported by the respondent as LEP patients. The regression results indicate that only three determinants distinguish practices treating LEP patients. Not surprisingly, practices in counties with Hispanics accounting for over six percent of the population report a higher percentage of their total weekly visits as LEP patients. Interestingly, practices in urban and rural counties showed no significant difference in their percent of LEP visits per week. OB/GYN practices provided more visits compared to primary care practices while other specialists showed no difference from their primary care counterparts. Practice setting proved the largest determinant of the percent of total weekly visits reported as LEP patients. Practices describing themselves as public and community clinics provided 19% more visits per week to LEP patients than the comparison category of single provider practices. No other practice setting showed a significant difference from single provider practices.

From these regression coefficients, a practice profile can be created for practices with the highest percentage of their total weekly visits reported as LEP patients. In this sample, a practice with a single primary care physician in a county with less than 6% Hispanics reports an average of 1.3% of their total weekly visits as LEP patients. In contrast, a similar practice that specializes in OB/GYN averages 11.3% LEP visits. More importantly, a primary care

**Table 3. Ordinary least squares model estimates of the determinants of the percent of total weekly visits reported as LEP patients§**

| | coefficient | robust std. err. |
|---|---|---|
| OB/GYN | 9.15 | 4.85* |
| Other specialty | 0.05 | 2.43 |
| Group practice | 1.33 | 4.47 |
| Public or community clinic | 19.2 | 7.90† |
| Hospital outpatient clinic | 0.60 | 5.10 |
| Hospital | 3.17 | 5.64 |
| Number of physicians in practice | | |
| 2 to 10 physicians | −3.64 | 5.29 |
| More than 10 physicians | 7.17 | 5.78 |
| Fluent Spanish speaker in practice | 3.16 | 3.22 |
| Over 6% Hispanic in county | 17.0 | 4.64‡ |
| Urban county | 3.01 | 2.72 |
| Constant | 1.28 | 3.17 |

* Significant at the 10% confidence level.
† Significant at the 5% confidence level.
‡ Significant at the 1% confidence level.
§ Calculated as (LEP patient visits in typical week)/(Total number of patient visits in typical week) as reported and classified by the responding practice.

public or community clinic in a county with over 6% Hispanics averages 37.4% of their visits reported as LEP patients. Therefore, the practices most likely to see a high percentage of LEP patients are OB/GYN and public or community clinics in counties with over 6% Hispanic populations.

Across all responding practices, 44.9% of LEP visits are uninsured (Table 4). Considering that self-pay visits account for another 10.8% of LEP visits (not shown), less than half of LEP visits involve an insurer, whether it be public or private. Not surprisingly, practices dedicating few visits to the uninsured also treat the fewest uninsured LEP patients. Practices with fewer than 3% of visits uninsured report 17.2% of their LEP visits as uninsured. The percent of uninsured LEP patients increases with the percent of total uninsured visits, with 31% of LEP patients uninsured in the second quartile, 55.7% in the third quartile, and 71.5% of LEP patients uninsured in the quartile of practices providing the most uninsured visits (>20% of all visits uninsured).

**Table 4. Percent of LEP visits that are uninsured, by share of uninsured treated by the practice**

| | uninsured LEP visits* (% of all LEP visits) mean | LEP visits† (% of all visits) mean |
|---|---|---|
| All practices | 44.9% | 9.3% |
| Percent uninsured in practice (by quartile) | | |
| Less than 3% of visits are uninsured | 17.2% | 6.0% |
| 3%–7% of visits are uninsured | 31.0% | 4.9% |
| 7%–20% of visits are uninsured | 55.7% | 5.6% |
| More than 20% of visits are uninsured | 71.5% | 19.7% |

* Calculated as (uninsured LEP patient visits in typical week)/(total number of LEP patient visits in typical week) as reported and classified by the responding practice.
† Calculated as (LEP patient visits in typical week)/(total number of patient visits in typical week) as reported and classified by the responding practice.

Across the lowest three quartiles, the average practice provides less than 5.5% of their visits to LEP patients. Practices with over 20% of their total patients uninsured, however, average 19.7% (median of 10.0%) of their visits to LEP patients. This pattern of practices treating both the highest number of uninsured and the highest number of LEP patients is consistent with the finding shown in Table 3 that high LEP practices are more likely to be public clinics and, to a lesser degree, practices specializing in OB/GYN care.

## DISCUSSION

This study found public and community clinics and, to a lesser degree, OB/GYN practices, in counties with >6% Hispanic population, provide a disproportionate share of care to LEP patients. Furthermore, only 45.3% of LEP visits involved any type of insurance, whether public or private. The high uninsurance and self-pay rate among LEP patients tends to concentrate them at practices already providing a disproportionate share of care for the uninsured. Additionally, the pilot test of the survey instrument suggests that practices treating few LEP patients may be underrepresented, so LEP patients may be concentrated in ever fewer practices than this sample suggests. The prime limitation of this study remains the limited response rate. The results section focuses on respondents in the sample, and care should be taken in generalizing to the original population of physician practices in South Carolina. However, these respondents remain the only source of data on practices caring for LEP patients in states with little historical experience with immigration.

This study raises questions about current policy proposals addressing LEP patients. Proposals seeking to increase

*Only 45.3% of LEP (patients with limited English proficiency) visits involved any type of insurance, whether public or private.*

linguistic access by requiring insurers to cover interpretation services are unlikely to achieve more than a limited impact due to the low insurance coverage rates (less than half) in these populations. More importantly, for these proposals, is the fact that access for LEP patients closely parallels access for the uninsured. Given the concentration of LEP patients at practices already treating the uninsured, initiatives designed to reduce linguistic barriers should focus on safety net providers in counties with high percentages of Hispanics.

Finally, as they are written, the burden of compliance with linguistic access regulations is highest for the settings with the fewest resources. Since the provider's responsibility under the DHHS compliance guidelines is proportional to the number of LEP patients likely to be served, well-funded providers treating few uninsured and subsequently few LEP patients have minimal new responsibilities. In contrast, public and community clinics treating the largest number of uninsured must identify new resources to achieve linguistic access compliance.

The consequences of not achieving linguistic access are serious for both patients and providers. Although linguistic access standards are difficult to enforce,[18] the effects of language barriers on health and health care are well documented. Language barriers compromise access to and quality of care and predict adverse health outcomes;[19,20] the use of professional interpreters, in contrast, creates a near-equivalent or equivalent level of quality for patients with LEP and English-speaking patients.[21] Moreover, providers treating patients with LEP utilize resources—more diagnostic studies and longer visit times—to compensate for communication difficulties.[22] This is an expenditure that the LEP providers described in this study can hardly afford and an additional reason for them to seek support for linguistic access activities.

## REFERENCES


1. US Census Bureau. *Census 2000*. Washington, DC: US Census Bureau; 2002.
2. Zuñiga V, Hernandez-Leon R, eds. *New Destinations: Mexican Immigrants in the United States*. New York: Russell Sage; 2005.
3. Office for Civil Rights Department of Health and Human Services. *Title VI Prohibition against National Origin Discrimination as It Affects Persons with Limited-English Proficiency*. Office of Civil Rights policy guidance memorandum. 2002; Available at http://www.hhs.gov/ocr/lep/preamble.html. Last accessed February 12, 2008.
4. US Department of Justice Civil Rights Division. *Executive Order 13166. Improving Access to Services for Persons with Limited English Proficiency.* Fed Regist. 2000;65(159): 50121–50122.
5. Department of Health and Human Services. Guidance to Federal Financial Assistance Recipients Regarding Title VI Prohibition against National Origin Discrimination Affecting Limited English Proficiency Persons. Fed Regist. 2003;68(153):47311–47323.
6. Jacobs EA, Karavolos K, Rathouz PJ, Ferris TG, Powell LH. Limited English proficiency and breast and cervical cancer screening in a multiethnic population. *Am J of Public Health*. 2005;95(8):1410–1416.
7. John-Baptiste A, Naglie G, Tomlinson G, et al. The effect of English language proficiency of length of stay and in-hospital mortality. *J Gen Intern Med*. 2004;19(3):221–228.
8. Wilson E, Chen AH, Grumbach K, Wang F, Fernandez A. Effects of limited English proficiency and physician language on health care comprehension. *J Gen Intern Med*. 2005; 20(9):800–806.
9. Yoon J, Grumbach K, Bindman AB. Access to Spanish-speaking physicians in California: supply, insurance, or both. *J Am Board Fam Pract*. 2004;17(3):165–172.
10. Torres ME, Parra-Medina D, Bellinger J, Johnson AO, Probst JC. Rural hospitals and Spanish speaking patients with limited English proficiency. *J Healthc Manag*. 2008;53(2): 107–19.
11. American Medical Association. H-160.924 *Use of Language Interpreters in the Context of the Patient-Physician Relationship*. Available at: http://www.amaassn.org/apps/pf_new/pf_online?f_n=resultLink&doc=policyfiles/HnE/H-160.924.HTM&s_t=LEP&catg=AMA/HnE&catg=AMA/BnGnC&catg=AMA/DIR&&nth=1&&st_p=0&nth=1&. Last accessed February 12, 2008.
12. Ku L, Flores G. Pay now or pay later: providing interpreter services in health care. *Health Aff (Millwood)*. 2005;24(2):435–444.
13. Derose KP, Escarce JJ, Lurie N. Immigrants and health care: sources of vulnerability. *Health Aff (Millwood)*. 2007;26(5):1258–1268.
14. Pew Hispanic Center. *The New Latino South: The Context and Consequences of Rapid Population Growth;* 2005. Available at: http://www.pewtrusts.org/uploadedFiles/www.pewtrustsorg/Reports/Hispanics_inAmerica/pew_hispanic_LatinoSouth_Full_072605.pdf. Last accessed July 31, 2009.
15. Pew Hispanic Center. *Demographic Profile of Hispanics in South Carolina 2007*. Available at: http://pewhispanic.org/states/?stateid=SC. Last accessed July 31, 2009.
16. Cummings SM, Savitz LA, Konrad TR. Reported response rates to mailed physician questionnaires. *Health Serv Res*. 2001;35(6): 1347–1355.
17. Association of American Medical Colleges. *Physician Behavior and Practice Patterns Related to Smoking Cessation*. American Legacy Foundation; 2007.
18. Putsch R, SenGupta I, Sampson A, Tervalon M. *Reflections on the CLAS Standards: Best Practices, Innovations, and Horizons*. Available at http://www.xculture.org/files/CLAS.Standards.Report.pdf.pdf. Last accessed August 1, 2009.
19. Timmins CL. The impact of language barriers on the health care of Latinos in the United States: a review of the literature and guidelines for practice. *J Midwifery Women's Health*. 2002;47(2):80–96.
20. Pippins JR, Alegria M, Haas JS. Association between language proficiency and the quality of primary care among a national sample of insured Latinos. *Med Care*. 2007;45(11): 1009–11.
21. Karliner LS, Jacobs EA, Chen AH, Mutha S. Do professional interpreters improve clinical care for patients with limited English proficiency? A systematic review of the literature. *Health Serv Res*. 2007;42(2):727–54.

22. Hampers LC, McNulty JE. Professional interpreters and bilingual physicians in a pediatric emergency department: effect on resource utilization. *Arch Pediatr Adolesc Med*. 2002;156(11):1108–13.

**AUTHOR CONTRIBUTIONS**

*Design concept of study:* Seiber, Smith
*Acquisition of data:* Seiber, Smith
*Data analysis and interpretation:* Seiber, Smith, Tanenbaum
*Manuscript draft:* Seiber, Smith, Tanenbaum
*Statistical expertise:* Seiber, Smith
*Acquisition of funding:* Smith
*Administrative, technical, or material assistance:* Seiber, Tanenbaum