# A Survey of North Carolina Safety-Net Dental Clinics' Methods for Communicating with Patients of Limited English Proficiency (LEP)\*

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#### Abstract

**Objective:** Dental providers are increasingly challenged in communicating with patients with limited English proficiency (LEP). Accordingly, the purpose of the study was to examine methods of communicating with patients with LEP in North Carolina (NC) safety-net dental clinics as perceived by dental staff. Methods: An anonymous, 36-item, cross-sectional survey was distributed to representatives of 68 NC safetynet dental clinics. Question domains included: a) a perceived need for language services; b) methods of language services provided; c) perceptions of dental staff about dental care experiences for patients with LEP; and d) perceived legal and financial roles in providing language services. Results: Of the 68 clinics, 55 responded (81 percent). All clinics reported treating patients with LEP, and 93 percent of clinics reported a need for providing language services. Many clinics used multiple methods to provide language services. Some clinics reported differences in treatment recommendations (13 percent), treatment provided (19 percent), and visit length (61 percent) for patients with LEP. All responded that additional costs are incurred to treat patients with LEP, and only 69 percent of responding clinics recognized legal obligations of treating patients with LEP. Conclusions: There is a reported need for language services in NC safety-net dental clinics. These services often resulted in additional costs to the dental clinic. To maintain the quality of care and to comply with legal requirements related to dental patients with LEP, additional funding sources might be required to recruit multilingual staff, support language services in dental clinics, and provide language skills training for practicing dentists. Additionally, studies are suggested to measure the perception of the effectiveness of communication methods of patients with LEP.

Key Words: access to care, language, translating, dental clinics, limited English proficiency, cultural competency, communication barriers, North Carolina, public health

## Introduction

The 2000 census revealed that 18 percent of the US population reported a non-English language as their primary language or preferred means of communication and that the number of Spanish speakers had substantially increased throughout the preceding decade (1). The 2006 North Carolina (NC) Census indicated the Hispanic/Latino population had more than quadrupled since 1990 (2) and was estimated to be 597,382 or almost 7 percent of the state's population (3). Language problems have been cited as the greatest barrier to care for Latino parents seeking health care for their children (4). Yet Title VI of the Civil Rights Act of 1964 mandates that institutions receiving federal funding cannot discriminate based on race, color, or national origin. The Presidential Executive Order 13,166 issued in 2000 guides those institutions in complying with Title VI regulations and in ensuring that patients with limited English proficiency (LEP) receiving federally funded services are provided with an interpreter when language-concordant providers are unavailable (5).

It is widely documented in the medical literature that patients with LEP have different clinical experiences because of a language barrier. Patients with LEP experience longer emergency department visit times and higher rates of resource utilization for diagnostic studies (6). In reviewing the medical literature, Flores found that the quality of care received by patients with LEP is inferior to that received by English speakers (7).

In one study of Spanish-speaking medical patients, telephone interpretation and communication through language-concordant providers resulted in higher patient satisfaction than through family members or ad boc interpreters (e.g., untrained staff, other patients) (8). Other studies have shown that patients using interpreters are more likely to have unasked questions than those using language-concordant providers, indicating that a third-party presence may actually inhibit communication between a patient and a provider (9). Aranguri found that information is

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reduced, revised, and altered in content by interpreters and that the act of building rapport with patients is more difficult for the medical provider when utilizing an interpreter (10). Additionally, it has been found that providers are sometimes reluctant to utilize professional interpreters despite feeling they are not communicating effectively (11). Finally, it has been documented that, in order to provide language services to patients with LEP, physician visits cost more for all patients (12).

Interpreters can help providers understand cultural and behavioral norms and expectations and common concerns among certain ethnic groups (13). A number of authors have suggested that improved use of professional interpreters and availability of language-concordant providers are necessary to enhance quality of care (7,9,10,14), yet formal training for health care staff in using professional interpreters is often ignored until a situation arises and administrators deem such training necessary (13).

#### **Specific Aims**

Dental providers are increasingly faced with the challenge of communicating with patients with LEP. Given the scarcity of information in the dental literature and the large influx of immigrant populations in recent years, there is clearly a need to explore and document communication methods for dental patients with LEP in the United States. Specifically targeting public health dental clinics within NC allowed the authors to focus their research on one state where there has been a drastic increase in the immigrant population. Accordingly, the authors addressed the following research questions: a) What is the need for language services provided in safetynet dental clinics and what are the barriers? b) What types of language services are provided? c) Does dental staff perceive different patient care experiences for patients with LEP (patient education, length of appointment)? d) What are the financial and legal implications of providing these services? Information gathered from this study can lend insights to other clinics regarding the development and provision of language services and may also have policy implications for NC pertaining to language interpretation in dental clinics and allocation of publichealth money and resources.

## Methods

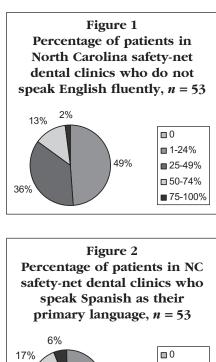
Overview of Study Design. An anonymous, 36-item, cross-sectional survey of NC safety-net dental clinics was used to answer the research questions. "Safety-net dental clinic" is an official term used by the NC Division of Health and Human Services Oral Health Section to describe a public or private nonprofit facility "providing ongoing, comprehensive dental care to low-income patients" (15). A review board approved the survey instrument (UNC IRB#: 07-0865), which was pilot-tested with the local health department dental staff prior to distribution.

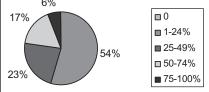
Data Collection and Analysis. The survey was distributed to and completed by the dental directors, chief dentists, or staff representatives of 68 safety-net dental clinics within NC. A list of safety-net clinics was procured from the NC Oral Health Section, and clinics operating 2 or more days per week with paid staff were included. Approximately 17 clinics were not contacted because of unavailability of current contact information. Respondents were mailed a \$5 Wal-Mart gift card with the survey, and 55 of the 68 (81 percent) surveys were returned. Descriptive statistics reporting percent frequency distributions were run by using SAS statistical software (SAS Corporation, Cary, NC, USA).

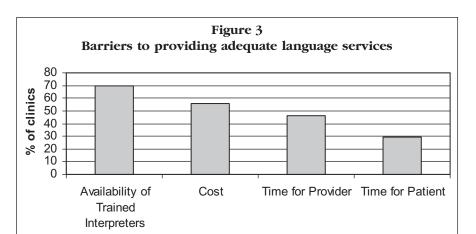
#### Results

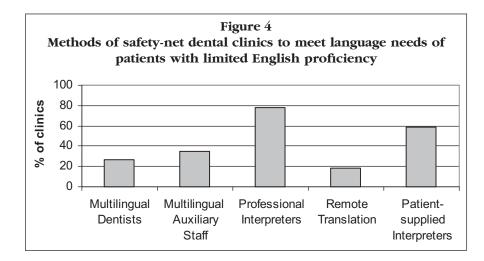
**Clinic Demographics.** The 55 survey respondents comprised dental directors (43 percent), dentists (24 percent), office managers/dental coordinators (20 percent), and dental auxiliaries (13 percent). Most clinics were part of county health departments (65 percent), and 23 percent were classified as "community/rural health center" or Federally Qualified Health Center. Responding clinics were located evenly around the state: 31 percent in Western NC, 33 percent in Central NC, and 35 percent in Eastern NC, with 55, 34, and 9 percent in rural, urban, and suburban settings, respectively.

Need for Language Services. When asked what percentage of the clinic's total patient population does not speak English fluently (Figure 1), about half (49 percent) of the clinics reported 1 to 24 percent, 36 percent of clinics reported 25 to 49 percent, and 15 percent reported >50 percent. All clinics reported having some Spanish-speaking patients; 23 percent indicated over half of their patients were Spanish speakers (Figure 2). Other frequently reported languages were Hmong, Chinese, Vietnamese, and Russian. Of the clinics, 93 percent perceived a need to provide language services, and 91 percent reported providing such services. Barriers to providing adequate language services were indicated to be availability of trained interpreters (70 percent), cost (56 percent), time









for provider (46 percent), and time for patient (29 percent) (Figure 3).

Implementation of Language Services. Respondents reported multiple language interpretation methods provided or used in their clinics. The majority (78 percent) of the clinics used interpreters. Patient-supplied interpreters including friends or family members (59 percent of clinics), multilingual auxiliary staff (35 percent), multilingual dentists (27 percent), and remote translation (18 percent) were also utilized (Figure 4). Respondents commented that employing bilingual staff was ideal for communicating with patients with LEP.

Survey respondents indicated that multilingual staff were largely (46 percent) paid no more than other staff members in the same position. Of the clinics, 29 percent reported that such staff were compensated more (additional \$1 to \$2 per hour in some clinics and \$3,000 per year in one), and 24 percent could not report about staff compensation.

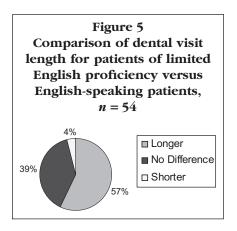
Most professional interpreters (59 percent) were reported to be affiliated with the clinics as full-time employees of either the clinic or the affiliated health department, 16 percent were part-time employees, and 14 percent were called on a case-by-case basis. Respondents commented on the frustrations with sharing interpreters among other health department divisions.

Only 17 percent of clinics reported that the dentists had ever been trained, formally or informally, in using an interpreter; 67 percent of clinics said their dentists had not been trained. Some reported access to in-house basic Spanishskills classes, web-based training at nearby hospitals, and in-house training provided by interpreter services. Differences in Experiences between English-speaking Patients and Patients with LEP. Treatment plans, caries prevention, and postoperative instructions were largely reported to be communicated, both verbally and with printed material in English or Spanish, to all patients. Even for patients with LEP, English-language printed materials were often used, and only 7 percent of clinics had printed materials in a non-Spanish foreign language.

Concerning the dental team presenting patients with LEP with more or less explanation compared with English-speaking patients, 70 percent of 54 responding clinics reported no perceived difference by staff. On the whole, these respondents commented that translation through interpreters ensured equal explanation. On the other hand, 19 percent reported that patients with LEP were given less explanation, blaming the lack of interpreter availability. The 11 percent who responded that patients with LEP were given more explanation remarked that multiple attempts were required to explain the treatment plan.

The majority (87 percent, n = 54) perceived that a patient's lack of English language skills had no impact on the dentist's treatment recommendations. Yet 13 percent of the clinics perceived the dentist's treatment recommendations were impacted, and 19 percent felt that poor English language skills impacted actual treatment provided, citing difficulties with the "tell-showdo" technique and tendencies to provide one-visit treatments like extractions rather than more complicated, multivisit procedures to save teeth.

More than half (57 percent) of the 54 clinics reported that dental visits were longer for patients with LEP. Additional appointment length varied and ranged from "less than 5 minutes" to "30-60 minutes longer" and "1.5 times the appointment length of English speakers," with the majority blaming time needed for translation. Thirty-nine percent of clinics reported no difference in visit



length; some commented that the extra time needed for translation was counterbalanced with less instruction during treatment. Only 4 percent reported that visits of patient with LEP were shorter because of less social interaction (Figure 5).

**Financial and Legal Aspects of Language Services.** Although all respondents reported that additional costs were incurred by dental clinics per appointment and per year for language services, the majority of the respondents were unsure of exact amounts (direct or indirect). The clinics reported a desire to recoup the costs of language services without violating federal law prohibiting them from so doing.

The majority (69 percent of 48 responding clinics) realized the legal obligation to provide language services, especially when obtaining informed consent and accurate medical histories. However, 31 percent of respondents reported not feeling legally obliged to provide language services; some commented that patients need to understand their treatment and should learn English to facilitate that understanding.

# Discussion

The high response rate suggests that these results are representative of NC safety-net dental clinics. It is clear from the survey results that there is a large population of patients with LEP presenting to NC safety-net dental clinics, and the staff of responding clinics feel challenged in providing dental care to these patients. While this study was limited to safety-net clinics within one state, the conclusions may be applicable to clinics in others.

The majority of survey respondents perceived that multilingual staff was the most effective method of interpreting; when the patient can communicate directly with dental providers, the need for translation is eliminated and appointment length is reduced. It has been documented that direct communication establishes better provider-patient rapport, renders patients more at ease, and ensures that information is conveyed accurately and without bias (10). Despite the effectiveness of multilingual staff, less than one-third of clinics pay such staff members more because of this skill. Increasing compensation for linguistic abilities may increase the supply of personnel able to provide in-person language services.

Scheduling patients and obtaining information including health histories and consents were also challenging for clinics relying on interpreters. Interpreter availability is likely decreased, and wait time for both patient and provider is likely increased when dental clinics must share interpreters with other health department divisions. While some clinics schedule Spanishspeaking patients for days when an interpreter is assigned to their clinic, this does not provide designated interpreter services for emergency visits on other days or appointments for non-Spanish-speaking patients with LEP. Although the majority of clinics utilized professional interpreters, few dentists were reported to have been trained in using an interpreter.

The majority of clinics perceived no difference in the explanation given to patients with LEP versus English-speaking patients, and reported that poor English skills also had no impact on the dentist's treatment recommendations. However, these questions measured staff perception, and one must note that no quantitative data were collected to determine actual differences. When English-language forms are used for

patients with LEP because other forms are not available, accuracy of information for both patient and provider is likely compromised. Respondents also reported less social interaction between dental staff and patients with LEP, demonstrating that language skills do impact the dental experience. The 20 percent of clinics that perceived that actual treatment provided was impacted emphasize the need for more language services. Because this study measured staff perceptions only, a similar study of perceptions of dental patients with LEP is warranted for the current literature.

Language services come at a price for dental clinics. Purchasing education materials for patients with LEP, partially or wholly subsidizing the salary of interpreters, and paying for remote translation at \$60/hour certainly increase the operating costs of a dental clinic, and these costs cannot legally be recouped from the patient. Longer visits undoubtedly are more costly for the clinic and, if unplanned, can disturb the entire clinic schedule and inconvenience other patients. A previous study found that "presessions" with both patient and provider, although necessitating longer appointment times, may help in preparing the provider for cultural differences and in explaining to both parties the interpreter's role and how communication will ensue (13).

While over two-thirds of clinics recognized legal obligations in providing language services to patients with LEP, Title VI of the Civil Rights Act of 1964 mandates such for federally funded programs (5). Some clinics that did not perceive legal obligations might be providing such services regardless, but not all may be complying with government orders.

There is no easy solution to NC's growing population of people with LEP and demand for language services in dental clinics. More financial incentives may recruit multilingual staff into dental clinics. New grants or funding sources could be created or sought to support language services in NC safety-net dental clinics and language training for practicing dentists. Additionally, dental schools could facilitate improved communication efficiency in safety-net clinics by offering language courses to prepare graduates interested in working within the public health sector or with patients with LEP.

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