Practice paper

Language and communication services: a cancer centre perspective

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What is known on this subject

- Patients with limited English proficiency experience health disparities that affect their quality of care and health outcomes.
- It is recognised that the use of interpreters helps to reduce health disparities and improve outcomes for patients with limited English proficiency.
- In the USA there are important laws and policies that provide legal protection for healthcare recipients with diverse language and communication needs.

What this paper adds

- It describes how a cancer centre implemented an institutional policy on language and communication services.
- It provides an example of a cancer centre's language services programme designed to reduce health disparities experienced by patients with limited English proficiency.
- It highlights the importance of hospitals having qualified medical translators and the availability of telephone and video interpreting to further assist their patients with limited English proficiency.

ABSTRACT

There is robust and compelling evidence of the pervasiveness of health disparities experienced by groups with limited English proficiency and other diverse communication needs. These disparities have a significant impact on the quality of care and healthcare outcomes. This paper describes the institutional efforts of the H. Lee Moffitt Cancer Center and Research Institute in responding to the diverse language and communication needs of its patients and their families. Information is presented on Moffitt's approach to the development and implementation of comprehensive language and communication services in a hospital-based setting. Moffitt's Language Services Program is designed to improve access to and care of patients with diverse language and communication needs by offering high-quality, culturally competent and professionally delivered interpretation and translation services, in a centralised and consistent manner. The programme includes face-to-face and telephone medical interpreting, video remote interpreting (VRI) (verbal and signed), and translation (written) at no additional cost to the patient. This Language Services Program provides an example to other healthcare institutions, particularly cancer centres, with regard to building the necessary critical struc-

Introduction

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Members of groups with limited English proficiency (LEP) and/or other diverse communication needs experience high levels of health disparities which have a significant and negative impact on quality of care, patient safety, cost of care, risk and liability, patient decision making, and healthcare outcomes (Betancourt et al, 2006; Hawley et al, 2008, 2013; Flores, 2005, 2006; National Health Law Program, 2010; Lindholm et al, 2012; Kagawa-Singer et al, 2010; Nápoles-Springer et al, 2007; Nápoles et al, 2009; Schyve, 2007; Regenstein et al, 2013). LEP populations often have more difficulty communicating with and understanding their healthcare provider, feel treated with disrespect, suffer more medical errors with greater clinical consequences, and are less likely to receive the most effective evidence-based care (Collins et al, 2002; Betancourt et al, 2012).

Factors that increase the effectiveness of language and communication programmes and services include the utilisation of face-to-face qualified medical interpreters, which significantly increases patients' and providers' satisfaction with communication (Bagchi et al, 2011). This can also ensure confidentiality, prevent conflict, increase understanding of medical terminology and reduce medical errors (National Health Law Program and the Access Project, 2004; Betancourt et al, 2006). In addition, the use of interpreter services increases the percentage of recommended preventative services for patients, the number of office visits, and the number of written and filled prescription orders. Interpreter services provide a viable, cost-effective approach to the delivery of care because they help to avoid more costly services and procedures due to the increased use of preventative services (Jacobs et al, 2004). LEP patients tend to experience disadvantages when being treated by English-speaking providers. Misunderstanding, confusion, lack of information and other problems often result in less dialogue and in blatant disregard of patients' efforts to communicate when they do choose to engage in dialogue (Rivadeneyra et al, 2000). This leads to lower adherence, unnecessary use or overuse of services, and poorer medical outcomes.

tures and implementing promising strategies to meet the language and communication needs of all patients and family members.

Keywords: communication, disparities, interpretation, language, limited English proficiency, translation

Legal and policy issues

There are key US federal and state laws, health system accreditation standards and national policies that provide legal protection for healthcare recipients with diverse language and communication needs, as well as guidance for healthcare providers and institutions in delivering language and communication services. In the USA, healthcare providers and institutions that receive any type of federal financial assistance must abide by Title VI of the US Civil Rights Act, which prohibits discrimination based on race, colour or national origin (US Civil Rights Act, 1964). In 1974, the US Supreme Court ruled that language-based discrimination equates with discrimination based on national origin (US Supreme Court, 1974). The US Americans with Disabilities Act (ADA) of 1990 enhances these protections for individuals with physical or mental impairments, including visual, speech and hearing impairments, mental retardation, emotional illness and specific learning disabilities (i.e. dyslexia or dysgraphia), regardless of receipt of federal financial assistance (Americans with Disabilities Act, 1990). In 2000, President Clinton set forth Executive Order 13166, which requires federal agencies to examine the services that they provide, identify service needs for those with LEP, and develop and implement a system to provide those services to ensure meaningful access (Executive Office of the President, 2000). In addition, each US state has its own set of statutes and regulations to enhance and localise the legal requirements for delivering care to individuals with language and communication needs (Perkins and Youdelman, 2008).

The Joint Commission, an independent, not-forprofit organisation, accredits and certifies healthcare organisations and programmes in the USA. The Commission accreditation programme is recognised nationally as a symbol of quality and safety in the provision of care; it is widely accepted in developing the standards for the healthcare system. The Commission has included accreditation standards addressing language and communication since 2003, but instituted new and revised standards in 2012. These require more accessible and effective communication

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for patients and their families who have language and communication needs (Joint Commission, 2009, 2010).

In 2004, the US Department of Health and Human Services (US DHHS) published guidelines to clarify the provisions of Title VI affecting LEP persons; these specifically require all recipients of federal financial assistance to provide meaningful access to LEP persons (US Department of Health and Human Services, 2004). It is crucial to note that, in the USA, medical malpractice insurance typically does not cover discrimination or civil rights violations in the provision of healthcare with regard to discrimination based on race, colour or national origin (Hunt, 2010). This is despite the fact that communication problems account for a major number of claims filed by patients whose language and communication preferences differ from those of their healthcare providers (Betancourt et al, 2012).

In 2013, the US DHHS strengthened the *National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care* by providing a blueprint for healthcare providers and institutions to implement the revised standards to improve quality of and access to care, advance health equity and eliminate health disparities and inequities (US Department of Health and Human Services, 2013). Regrettably, it is not well understood in the US healthcare industry that to deny these services to patients with language and communication needs may constitute a violation of their civil rights (Perez, 2001; Smith, 2005; Chen *et al*, 2007).

The purpose of this paper

The H. Lee Moffitt Cancer Center and Research Institute (Moffitt) recognises the effects of health

disparities experienced by members of LEP populations and the legal ramifications of care provision. Therefore Moffitt implemented a comprehensive Language Services Program to respond to the diverse language and communication needs of its patients and their families. The purpose of this paper is to describe this programme as an example of the building of institutional critical structures and implementing promising organisational and patient-level strategies to meet the unique needs of these populations. The paper includes a brief overview of Moffitt, an in-depth description of Moffitt's Language Services Program, and lessons learned during the implementation of the programme.

Addressing language and communication needs at Moffitt

Opened in 1986, Moffitt is the third largest cancer centre by patient volume in the USA, with over 9200 inpatient admissions, 320 000 outpatient visits, 9200 surgical procedures per year, and 206 inpatient beds. Moffitt is designated as a US National Cancer Institute Comprehensive Cancer Center, one of only 41 in the USA, and the only one in the state of Florida. Moffitt serves about 20% of the entire patient population with cancer in Florida. State and local demographic data forecast that populations with higher percentages of LEP individuals will continue to experience a steady increase in their numbers (Motel and Patten, 2013; US Census Bureau, 2013). This will significantly increase Moffitt's already growing diverse patient population (see Table 1). In the USA, about 20% of households report not speaking English well or not speaking it at all (Shin and Kominski, 2010). Across Florida, this ranges from about 25% to over 40% in some areas. Within Moffitt's local service area, about 26% of the

| Race/ethnicity | 2007 | 2011 |
|----------------|----------------|----------------|
| Asian | 100 (0.6%) | 304 (1.8%) |
| Black | 843 (5.3%) | 1119 (6.5%) |
| White | 12 887 (80.8%) | 13 829 (80.7%) |
| Hispanic | 1064 (6.7%) | 1560 (9.1%) |
| Other race | 750 (4.7%) | 583 (3.4%) |
| Unknown race* | 1370 (8.6%) | 1303 (7.6%) |

Table 1 Race/ethnicity trends for new patients at Moffitt Cancer Center in 2007 and 2011

* Unknown includes missing, patient not present, prefer not to answer, refused, and unknown.

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population do not speak English at home (US Census Bureau, undated). One in seven patients at Moffitt speaks a language other than English, primarily Spanish.

The Language Services Program

Moffitt's Language Services Program works to improve access to and care of patients with diverse language and communication needs by offering highquality, culturally competent and professionally delivered interpretation and translation services, in a centralised and consistent manner. The programme includes face-to-face and telephone medical interpreting, video remote interpreting (verbal and signed), and translation (written), all of which are offered at no additional cost to the patient. These services have been available at Moffitt for over half of its existence.

Moffitt's efforts in language and communication demonstrate its unique and innovative status. Unlike hospitals in the USA with multiple specialties, Moffitt's only focus is cancer treatment, prevention and research. It is one of only a few hospitals in the state of Florida that provide qualified professionals for faceto-face interpretation services (Spanish and American Sign Language [ASL]) and translation services (Spanish) onsite. In the case of data collection, like many US hospitals, Moffitt has mechanisms for identifying patients' language preference and communication needs (Wilson-Stronks and Galvez, 2007). It provides education and training on the appropriate use of interpretation and translation services, and has hosted events at the Cancer Center and in the community on the impact of language and communication services on patient safety, quality of care, and healthcare outcomes. This is significant, because many US hospitals do not provide ongoing training for staff on accessing language services (Wilson-Stronks and Galvez, 2007). With regard to institutional policies on the provision of language and communication services, a recent large cohort study of US hospitals found that few hospitals had policies about the use of family members, minors and/or non-qualified clinical and nonclinical staff as interpreters during medical-related encounters (Wilson-Stronks and Galvez, 2007). Moffitt has policies in place that address these important issues and outline the processes and procedures for accessing and utilising interpretation and translation services.

Development of the language services department

Responding to the diverse language and communication needs of patients has long been a focus at Moffitt (see Table 2). In 1999, appointment requests from international patients rose steadily at the Cancer Center. Leadership and key staff forged an initiative to address this growing need, which resulted in the creation of the International Relations Department and the hiring of a bilingual manager. The continued influx of international patients increased the need for interpretation services, and led to the development of the Interpreter Services Program (ISP). During this period, Moffitt also made Telephone Interpretation Services (TIS) available. Interpretation services over the telephone are provided by an outside company; qualified medical interpreters of over 180 languages are available by phone 24 hours a day. A concerted effort was made to ensure that TIS was available in key locations in which medical-related patient encounters occurred. Training was provided simultaneously to inpatient and outpatient staff to enhance their awareness of and skills in utilising ISP and TIS.

In 2003, Moffitt hired its first certified professional translator to translate consent forms from English into Spanish. The translator's role expanded to coordinating the translation of vital and non-vital documents. Consequently, the Translation Services Program (TSP) was established. A second certified professional translator was later hired in 2006. In 2011, ISP and TSP merged to form the Language Services Program.

Interpretation services

At Moffitt, interpretation is recognised as the process of understanding and analysing a spoken or signed message, and restating that message in another language (National Council on Interpreting in Health Care and the American Translators Association, 2010). In the Language Services Program, a Certified Medical Interpreter (CMI) is a professionally trained interpreter who has undergone specific healthcare interpretation training (see Box 1).

There are currently six Spanish and one trilingual (English/Spanish/American Sign Language [ASL]) CMIs at Moffitt whose services are offered during extended weekday business hours (Monday to Friday from 7.30 a.m. to 8.00 p.m.) and at weekends (Saturday and Sunday from 8.30 a.m. to 1.00 p.m.). To request a CMI, Moffitt employees call an internal dispatcher who then assigns a CMI to the patient. After hours, staff members are directed to use TIS. Staff members document the use of interpretation services in the patient's medical record. This provides a mechanism for monitoring when and where Moffitt CMIs or TIS are utilised. In addition, Moffitt utilises video remote interpreting (VRI) to provide interpretation with CMIs at Moffitt's offsite clinics. VRI is a remote visual telecommunication service that uses technology (e.g. web cameras, tablets) to provide spoken or ASL interpreting with a CMI in real time. The use of

| Table 2 | Language | Services | timeline |
|---------|----------|----------|----------|
|---------|----------|----------|----------|

| Activity/programs | Outcomes | Timeline |
|--|---|-----------|
| International Relations Department | Interpretation services and translation services outsourced; bilingual manager hired | 1999 |
| Telephone Interpretation Services (TIS) Language and Communication advocacy | Contracted with TIS provider Diversity Taskforce Initiative established | 2002 |
| American Sign Language interpretation | Hired American Sign Language interpreter | 2007 |
| Translation Services Institutional priority for diversity and inclusion | Translation Services Program formed; translator hired Office of Institutional Diversity (OID) established | 2003 |
| Translation Services Program | Translation Services Program under OID Second translator hired | 2006 |
| Interpretation Services | Seven interpreters hired | 2000–2008 |
| OID reorganisation | Renamed Moffitt Diversity Department | 2008 |
| Language Services Program | Interpretation and Translation Services merged to form Language Services Program under Moffitt Diversity Department Incorporation of Video Remote Interpreting | 2011 |
| Policy development | Organisational-wide Language and Communication Assistance Policy | 2012 |

Box 1 Situations in which a Moffitt CMI ensures thorough and accurate communication

- Obtaining medical/social histories
- Obtaining informed consent
- Requesting financial and insurance information
- Explaining a diagnosis and treatment plan
- Explaining changes in regimen, environment or condition
- Explaining medical interventions and/or surgical procedures
- Explaining potential side effects
- Explaining discharge plans
- Patient care conferences
- Health education sessions
- Reviews of legal documents

this technology has been demonstrated to be a successful alternative interpretation method with positive outcomes (Gany *et al*, 2007).

Translation services

Translation is widely recognised as the written conversion of text into a second language equivalent in meaning (National Council on Interpreting in Health Care and the American Translators Association, 2010). In the Language Services Program, a Certified Translator (CT) is a professionally trained translator who is qualified to translate with consistency and accuracy, in line with standards of practice and a code of professional ethics. The translation service is currently staffed by two CTs. The need for non-Spanish language translations is determined at the time of inpatient admission or outpatient registration, and communicated to the Language Services Program promptly. To

minimise delays, non-Spanish translations are outsourced to reputable outside companies because they generally take several business days to complete. With regard to the translation of key patient care-related documents, Moffitt differentiates between vital and non-vital documents to ensure that LEP individuals' needs for written materials are met (US Department of Health and Human Services, 2004) (see Table 3).

Policy development

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It was essential to develop a distinct and comprehensive institutional policy to ensure consistency and continuity in language and communication services. A small group was convened by the Language Services Program to research local, state-wide and US population demographics, Moffitt patient demographics, satisfaction scores, and policies, LEP health disparities, and language and communication health services' laws and regulations. Individual interviews were conducted with US legal experts and administrators of effective language services programmes throughout the country. The knowledge gained from these inquiries provided the foundation for the business case for a language services policy at Moffitt. The Moffitt Language and Communication Assistance Policy has several important elements: an organisational policy statement; the science-based rationale for language and communication services; utilisation procedures; important definitions. Implementing this policy and procedures involves the following:

- 1 All patients, family members and others significant to the patient must declare their right to receive medical information, in their preferred language or communication preference, at no additional cost, when the patient registers as an outpatient registration and/or at inpatient admission.
- 2 They must be asked to identify their preferred language for communicating verbal and written medical information.
- 3 If the patient is a minor, is incapacitated or has a designated advocate, the communication needs of the parent or legal guardian, surrogate decision maker or legally authorised representative will be addressed and assistance provided.
- 4 Moffitt CMIs and CTs serve exclusively as interpreters and translators only for Moffitt patients, family members and staff, and not for other individuals and entities, including, but not limited to, law enforcement, governmental administrative personnel and non-Moffitt attorneys.

| Examples of vital documents | Examples of non-vital documents |
|--|---|
| Consent forms | Newsletters |
| Grievance/complaints forms | Informational and promotional materials |
| Other forms scanned into the patient's medical record | Community-based educational materials |
| Procedure or diagnostic testing instructions and results | Third-party documents |
| Discharge instructions | |
| Patient health questionnaires | |
| Patient education materials | |
| Genetic testing and result letters | |
| Eligibility criteria benefits or services | |
| Billing and charity care information | |
| Medication labels and medication profiles | |
| Legal documents | |
| Patient letters | |
| Information about free language assistance | |
| Patient death certificate | |

Table 3 Examples of vital and non-vital documents for Translation Services

- 5 Patients are encouraged not to rely on family members, *especially minors*, to serve as interpreters or translators.
- 6 The Moffitt workforce is not permitted to request or require a patient's family member or other nonqualified individuals to interpret during medical encounters.
- 7 It is recognised that being bilingual does not make one qualified to function as an interpreter or a translator, or to provide care in the patient's preferred language and/or communication preference.
- 8 If the patient, the patient's authorised representative, or others significant to the patient refuse the services of an interpreter, they must be notified by the provider that it is the policy of the Cancer Center that the interpreter remains to assist the provider with the delivery of accurate communication for the patient's safety and to ensure the highest quality of care, and that the interpreter will remain present and intervene as needed to ensure accurate and faithful interpretation of information.
- 9 In emergency situations, where an immediate response is required, or during certain non-medical communication, the use of non-qualified interpreters is acceptable, but reverting back to using CMIs should take place as soon as is practicable.
- 10 Automatic translation tools must not be used to translate healthcare documentation given to patients, including, but not limited to, medication lists, discharge instructions, patient education materials, consent forms or legal documentation of any type. The policy also outlines the procedures for accessing and utilising interpretation and translation services.

The impact of Language Services

Interpretation and translation

The Language Services Program's sphere of impact reverberates throughout Moffitt. From 2011 to 2013, Language Services completed a total of 18 318 face-toface medical interpreter encounters (primarily in Spanish and ASL), with a monthly average of 508. Each encounter typically lasted for about 38 minutes. In addition, 6318 telephone interpreter encounters were completed, with a monthly average of 175; each encounter typically lasted for about 30 minutes. Lastly, during this same period, a total of 1462 translation projects were completed, with an average of 40 projects per month, and an overall total of 8752 pages and 1 889 357 words translated.

Patient satisfaction

Language discordance between patients and their providers is associated with less health education, poorer interpersonal care and lower patient satisfaction (Ngo-Metzger *et al*, 2007). Conversely, the use of trained interpreters commonly results in better health processes, outcomes and service utilisation (Flores, 2005). In addition, the use of professional interpreter services greatly increases satisfaction with patient–provider communication for both patients and providers of various disciplines (Bagchi *et al*, 2010).

From 2000 to 2012, Moffitt used an internal process for conducting patient satisfaction surveys. As part of this internal process, patients were contacted within 1 to 2 days of a clinic visit or discharge from the hospital, and a survey was administered by telephone. For Spanish-speaking patients the survey was administered in Spanish by a bilingual staff member, but only if the patient preferred this. The goal was to survey every patient admitted to the hospital, but at the onset the sample sizes were smaller than desired. For outpatient settings, surveying was conducted in every Moffitt clinic once every 6 months until 100 patients per clinic were reached, and a total of 200 patients per clinic per year.

Moffitt's internal patient satisfaction survey asked patients to rate a question regarding the quality of service provided by a medical interpreter using a scale of 1 to 5 (where 5 = most satisfied). The average inpatient satisfaction score was 4.8 from 2008 to 2009. In response to the same question for outpatients during the period from 2007 to 2010, the average satisfaction score was also 4.8.

Moffitt now currently collects patient satisfaction data using an external provider, Press Ganey and Associates Inc. Press Ganey specialises in healthcare patient satisfaction, and is a nationally recognised provider of customer satisfaction surveys. Participating in this external survey allows Moffitt to establish benchmarks against all US hospitals that are Press Ganey clients, as well as a consortium of similar cancer centres. There are both inpatient and outpatient versions of the survey. For both surveys, Moffitt sends Press Ganey a secure electronic file every week for inpatients, and daily for outpatients. This file includes codes that identify the patient's preferred language for receiving the survey. The survey is only available in English or Spanish. There is no comparable question measuring interpreter satisfaction in this current survey process. An interpreter quality satisfaction question is being developed for both the inpatient and outpatient Press Ganey surveys, and Moffitt will be able to compare these future results in a more consistent manner.

Lessons learned

Implications for interpretation services

Challenges arise when non-qualified interpreters are used during medical encounters. As was noted earlier, bilingualism does not make one qualified to function as a medical interpreter or to provide care in the patient's preferred language or communication preference. This may result in poor interpretation, potentially creating a climate in which errors and miscommunication can become commonplace (Huang et al, 2009). Moffitt staff members are not permitted to request a non-qualified individual to interpret during medical-related encounters, especially in the case of minors. In cases where a self-identified LEP patient refuses CMI or TIS services, staff must inform them of Moffitt's policy to provide these services to ensure their understanding, safety, and receipt of the highest standard of care. Ultimately, Moffitt will develop a process for accurately assessing the linguistic proficiency of bilingual staff.

The implementation of the TIS and VRI has brought its own challenges. First, training employees in the use of the technologies has been difficult, due to individuals' schedules and time constraints. Secondly, the accessibility of the technologies has created challenges because not all areas are equipped. Therefore one consideration for increasing the use of TIS and VRI is to incorporate mobile technology capacity (Locatis *et al*, 2010; Wofford *et al*, 2012). For example, iPads and tablet computers can provide tremendous flexibility for CMIs, and make it possible for them to deliver interpretation services from almost any location.

Implications for translation services

Key lessons learned about the translation of documents include the following:

- 1 using translation services at the outset of all initiatives/projects so that they are integrated into the overall process
- 2 avoiding the use of poorly written original documents for translation, as they will translate poorly
- 3 eliminating ambiguities in original documents
- 3 avoiding culturally specific expressions, euphemisms, puns, etc., as they translate poorly and do not maintain cultural meaning
- 5 avoiding the use of automatic translation tools, programs or software, as they are often inaccurate and are not recommended.

Implications for the overall Language Services Program

There is a lot of inconsistency between US hospitals in the methods used for collecting data about patients' preferred language and evaluating the effectiveness of language and communication services (Wilson-Stronks *et al*, 2008). Although Moffitt has a good system in place for collecting data on patients' preferred language, the ability to measure the effectiveness of the Language Services Program will be a critical step moving forward. Comparing differences in access, quality and health and healthcare outcomes will be essential in order to measure for potential disparities, and to ensure continuous quality improvement (Ramos *et al*, 2012).

Language Services is implementing more ongoing institutional training to increase awareness and utilisation of interpretation and translation services. Since 2011, the programme has delivered 31 training sessions to clinical and non-clinical staff representing a variety of departments and clinics. However, developing an institutional training programme will increase awareness throughout Moffitt about the availability of interpreter and translation services, appropriate utilisation of these services, and the processes and procedures for accessing them.

Conclusion

The delivery of high-quality and culturally appropriate interpretation and translation services for populations with diverse language and communication needs most often results in good patient-provider communication (Flores, 2005). Moffitt strives to prevent and eliminate health disparities experienced by these populations by implementing comprehensive language and communication services through its Language Services Program. From making CMIs available at the bedside to having CTs translating vital and non-vital documents, Moffitt is working to break down the language and communication barriers that may contribute to cancer disparities. Moffitt's responsiveness to the needs of these populations can serve as an example to other healthcare institutions, particularly cancer centres, in building critical structures and strategies that are responsive to the language and communication needs of patients and their families.

ACKNOWLEDGEMENTS

The authors wish to thank Nancy Newman, Director of Patient Support and Advocacy, and Terry Payton, Supervisor of Lodging and Patient Satisfaction within the Department of Patient and Family Services at

Moffitt Cancer Center, for their efforts with the patient satisfaction data.

REFERENCES

- Americans with Disabilities Act of 1990 (1990) Title 42 Chapter 126 Sections 12101–213.
- Bagchi AD, Dale S, Verbitsky-Savitz N et al (2010) Using Professionally Trained Interpreters to Increase Patient/Provider Satisfaction: does it work? Princeton, NJ: Mathematica Policy Research, Inc. www.mathematicampr.com/publications/pdfs/health/ trained_interpreters_IB.pdf (accessed 25 March 2013).
- Bagchi AD, Dale S, Verbitsky-Savitz N et al (2011) Examining effectiveness of medical interpreters in emergency departments for Spanish-speaking patients with limited English proficiency: results of a randomized controlled trial. Annals of Emergency Medicine 57:248–56.
- Betancourt JR, Green AR, King RR et al (2006) Improving Quality and Achieving Equity: a guide for hospital leaders. Boston, MA: The Disparities Solutions Center, Massachusetts General Hospital. <u>http://www2.mass</u> general.org/disparitiessolutions/z_files/disparities%20 leadership%20guide_final.pdf (accessed 4 April 2013)
- Betancourt JR, Renfrew MR, Green AR et al (2012) Improving Patient Safety Systems for Patients with Limited English Proficiency: a guide for hospitals. Rockville, MD: Agency for Healthcare Research and Quality. www.ahrq.gov/ professionals/systems/hospital/lepguide/lepguide.pdf (accessed 23 March 2013)
- Chen AH, Youdelman MK and Brooks J (2007) The legal framework for language access in healthcare settings: Title VI and beyond. *Journal of General Internal Medicine* 22(Suppl. 2):362–7.
- Collins KS, Hughes DL, Doty MM et al (2002) Diverse Communities, Common Concerns: assessing health care quality for minority Americans. Washington, DC: The Commonwealth Fund. www.commonwealthfund.org/Publications/Fund-Reports/2002/Mar/Diverse-Communities-Common-Concerns-Assessing-Health-Care-Quality-for-Minority-Americans.aspx (accessed 23 March 2013).
- Executive Office of the President (2000) Executive Order 13166: Improving access to services for persons with limited English proficiency. *Federal Register* 65:50121–5.
- Flores G (2005) The impact of medical interpreter services on the quality of health care: a systematic review. *Medical Care Research and Review* 62:255–99.
- Flores G (2006) Language barriers to health care in the United States. *New England Journal of Medicine* 355:229–31.
- Gany F, Leng J, Shapiro E *et al* (2007) Patient satisfaction with different interpreting methods: a randomized controlled trial. *Journal of General Internal Medicine* 22(Suppl. 2):312–18.
- Hawley ST, Hamilton A, Janz NK *et al* (2008) Latina patient perspectives about informed treatment decision making for breast cancer. *Patient Education and Counseling* 73:363–70.
- Hawley ST, Lillie SE, Morris A et al (2013) Surgeon-level variation in patients' appraisals of their breast cancer

treatment experiences. Annals of Surgical Oncology 20:7–14.

- Huang J, Ramos C, Jones K et al (2009) Talking with Patients: how hospitals use bilingual clinicians and staff to care for patients with language needs. Washington, DC: George Washington University. www.calendow.org/uploaded Files/Publications/By_Topic/Culturally_Competent_ Health_Systems/Language_Access/Talking%20with %20Patients.pdf (accessed 15 March 2013).
- Hunt D (2010) Language access and the law in healthcare from evidence to action. Session at Seventh National Conference on Quality Health Care for Culturally Diverse Populations, 18–21 October 2010, Baltimore, MD.
- Jacobs EA, Shepard DS, Suaya JA *et al* (2004) Overcoming language barriers in health care: costs and benefits of interpreter services. *American Journal of Public Health* 294:866–9.
- Joint Commission (2009) The Joint Commission 2009 Requirements Related to the Provision of Culturally Competent Patient-Centered Care Hospital Accreditation Program (HAP). www.jointcommission.org/assets/1/6/2009_ CLASRelatedStandardsHAP.pdf (accessed 15 March 2013).
- Joint Commission (2010) Advancing Effective Communication, Cultural Competence, and Patient- and Family-Centered Care: a roadmap for hospitals. www.joint commission.org/assets/1/6/aroadmapforhospitalsfinal version727.pdf(accessed 15 March 2013).
- Kagawa-Singer M, Dadia AV, Yu MC *et al* (2010) Cancer, culture, and health disparities: time to chart a new course? *CA: Cancer Journal for Clinicians* 60:12–39.
- Lindholm M, Hargraves JL, Ferguson WJ et al (2012) Professional language interpretation and inpatient length of stay and readmission rates. *Journal of General Internal Medicine* 27:1294–9.
- Locatis C, Williamson D, Gould-Kabler C *et al* (2010) Comparing in-person, video, and telephonic medical interpretation. *Journal of General Internal Medicine* 25: 345–50.
- Motel S and Patten E (2013) *Statistical Portrait of Hispanics in the United States*, 2011. Washington, DC: Pew Research Hispanic Center. <u>www.pewhispanic.org/2013/02/15/</u> <u>statistical-portrait-of-hispanics-in-the-united-states-</u> 2011 (accessed 17 June 2013).
- Nápoles AM, Gregorich SE, Santoyo-Olsson J *et al* (2009) Interpersonal processes of care and patient satisfaction: do associations differ by race, ethnicity, and language? *Health Services Research* 44:1326–44.
- Nápoles-Springer AM, Livaudais JC, Bloom J *et al* (2007) Information exchange and decision making in the treatment of Latina and white women with ductal carcinoma in situ. *Journal of Psychosocial Oncology* 25:19–36.
- National Council on Interpreting in Health Care and the American Translators Association (2010) What's in a Word? A guide to understanding, interpreting, and translation in health care. Washington, DC: National Health Law Program. www.ncihc.org/assets/documents/publications/Whats_in_a_Word_Guide.pdf (accessed 5 June 2013).
- National Health Law Program (2010) The High Costs of Language Barriers in Medical Malpractice. Washington,

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DC: National Health Law Program. <u>www.healthlaw.org/</u> images/stories/High_Costs_of_Language_Barriers_in_ Malpractice.pdf (accessed 4 June 2013).

- National Health Law Program and the Access Project (2004) Language Services Action Kit: interpreter services in health care settings for people with limited English proficiency. www.commonwealthfund.org/usr_doc/LEP_actionkit_ 0204.pdf?section=4057 (accessed 4 April 2013).
- Ngo-Metzger Q, Sorkin DH, Phillips RS *et al* (2007) Providing high-quality care for limited English proficient patients: the importance of language concordance and interpreter use. *Journal of General Internal Medicine* 22(Suppl. 2):324–30.
- Perez TE (2001) The civil rights dimension of racial and ethnic disparities in health status. In: Smedley BD, Stith AY and Nelson AR (eds) *Unequal Treatment: confronting racial and ethnic disparities in health care.* Washington, DC: The National Academies Press.
- Perkins J and Youdelman M (2008) Summary of State Law Requirements: addressing language needs in health care. Washington, DC: National Health Law Program. <u>http://</u> <u>sites.lawhelp.org/documents/383231nhelp.lep.state.law.</u> chart.final.pdf (accessed 1 April 2013).
- Ramos R, Davis JL, Ross T *et al* (2012) Measuring health disparities and health inequities: do you have REGAL data? *Quality Management in Health Care* 21:176–87.
- Regenstein M, Andres E and Wynia MK (2013) Promoting Appropriate Use of Physicians' Non-English Language Skills in Clinical Care: recommendations for policymakers, organizations and clinicians. Chicago: American Medical Association. www.ama-assn.org/ama1/pub/upload/mm/ 433/cehcd-lep-white-paper.pdf (accessed 2 April 2013).
- Rivadeneyra R, Elderkin-Thompson V, Silver RC *et al* (2000) Patient centeredness in medical encounters requiring an interpreter. *American Journal of Medicine* 108:470–74.
- Schyve P (2007) Language differences as a barrier to quality and safety in health care: the Joint Commission perspective. *Journal of General Internal Medicine* 22(Suppl. 2):360–61.
- Shin HB and Kominski RA (2010) Language Use in the United States: 2007. American Community Survey Reports. Washington, DC: US Census Bureau. <u>www.census.gov/</u> prod/2010pubs/acs-12.pdf (accessed 4 April 2013).
- Smith DB (2005) Racial and ethnic health disparities and the unfinished civil rights agenda. *Health Affairs* 24:317–24.
- US Census Bureau (2013) Asians fastest-growing race or ethnic group in 2012, Census Bureau reports. www.

census.gov/newsroom/releases/archives/population/ cb13–112.html (accessed 4 April 2013).

- US Census Bureau (undated) *State and County Quickfacts: Florida*. <u>http://quickfacts.census.gov/qfd/states</u> (accessed 15 March 2013).
- US Civil Rights Act (1964) Public Law No. 88–352, 78 Stat. 241.
- US Department of Health and Human Services (2004) Guidance to federal financial assistance recipients regarding Title VI prohibition against national origin discrimination affecting limited English proficient persons. *Federal Register* 69:1763–8.
- US Department of Health and Human Services (2013) National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care: a blueprint for advancing and sustaining CLAS Policy and Practice. Office of Minority Health. www.dbhds.virginia.gov/ 2008CLC/documents (accessed 15 April 2013).
- US Supreme Court (1974) Lau v. Nichols 414 U.S. 563, 94 S.Ct. 786, 39 L.Ed.2d 1.
- Wilson-Stronks A and Galvez E (2007) Hospitals, Language, and Culture: a snapshot of the nation. Oakbrook Terrace, IL: The Joint Commission. www.jointcommission.org/ assets/1/6/hlc_paper.pdf (accessed 14 March 2013).
- Wilson-Stronks A, Lee KK, Cordero CL et al (2008) One Size Does Not Fit All: meeting the health care needs of diverse populations. Oakbrook Terrace, IL: The Joint Commission. www.jointcommission.org/assets/1/6/HLCOne SizeFinal.pdf (accessed 15 March 2013).
- Wofford JL, Campos CL, Johnson DA *et al* (2012) Providing a Spanish interpreter using low-cost videoconferencing in a community health centre: a pilot study using tablet computers. *Informatics in Primary Care* 20:141–6.

CONFLICTS OF INTEREST

None.

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Received 4 September 2013 Accepted 24 November 2013