

Development of an Instrument to Test the Cultural Adequacy of Health Related Written Material for Latinos in the USA

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This paper was produced under contract with Hablamos Juntos, a program funded by the Robert Wood Johnson Foundation, administered by the Tomás Rivera Policy Institute (TRPI), an affiliated research unit of the University of Southern California, School of Policy, Planning and Development and of the Institute for Social and Economic Research and Policy at Columbia University. The content or opinions expressed herein are strictly those of the authors and do not necessarily reflect the views of the funder or its agents.

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Executive Summary

The following paper is the second part of a two-stage project entitled “Bridging The Communication Gap: Effective Provider-to-Patient Written Communication across Language and Cultural Barriers” developed by IMIFAP- Educación, Salud y Vida for Hablamos Juntos.

Stage One of the project consisted of the development of the paper entitled: “Effective Provider-to-Patient Written Communication across Language and Cultural barriers” (Givaudan, Pick, Venguer and Xolocotzin, 2002). This paper describes the forms and functions of written material and its relevance in promoting healthcare provider – to patient communication and health-oriented decisions within the Latino population in a framework of the following theories of behavior modification: Health Belief Model, Theory of Reasoned Action, Transtheoretical Model, Social Cognitive Theory, and Community Organization Building. Stage One concludes with a discussion of this population’s social and cultural characteristics, plus a description of group differences and needs that should be considered in effective cross-cultural materials and communication.

Based on the theoretical background presented in stage one, IMIFAP has developed this second paper with three key objectives:

1. Development of an evaluation framework based on research and a theoretical foundation.
2. Development of a two-section instrument to assess the cultural adequacy of health related written material, either developed in Spanish or written in English and translated into Spanish, to be used with Latinos in the USA.
3. Recommendations for the use of the instrument.

This two-section instrument intends to be a useful tool for the examination and evaluation of health related written material but, since different types of written materials have different functions, not all of them require the same degree, if at all, of cultural adequacy/adaptation to achieve their objectives. In this sense, documents to gather data, such as registration forms, will probably accomplish their mission through plain translation and no consideration of social factors, while material aimed at communicating with Latino patients, (e.g. to describe a procedure, to provide information about a specific disease) needs to comply with certain parameters. On the other hand, material, which aims at promoting behavior change among the Latino population, must additionally comply with other issues as well.

Thus, the instrument’s sections include items/guidelines that, according to the theoretical background developed in stage one, must be considered depending on their function or use:

- Section I provides guidelines for *General Written Materials* necessary to communicate with the Latino population, and
- Section II includes the parameters needed to assess the cultural adequacy of *Health Promotion Written Materials*.

Both sections are subdivided to include different elements to be considered in cultural adaptation.

Each section evaluates different functions by checking the existence/absence of particular indicators, and a 100% result in both is necessary to assume that the material is most likely to promote health-oriented behavior.

While the checklists can be applied to evaluate various types of written material, (e.g. pamphlets, web sites, posters, leaflets, etc.) that deal with the promotion of health among the Latino population, they could also be useful aids in the development of new material, since they provide the parameters that are necessary for cross-cultural interaction with Latino patients.

Finally, it is important to mention that although there are other aspects to consider in the process of evaluation or adaptation such as personality, socioeconomic background, legal status of patients and/or biculturalism of the healthcare provider in charge of the material, the instrument is a useful tool that provides theory-based approximations to the way in which healthcare provider –to -Latino patient written interaction should occur.

Background

As discussed in stage one, ideally, healthcare providers should attend to patients on a personal basis in every dimension of the health delivery system. However, economic and human limitations of the system make this an impossible task. Such being the case, written materials are the best available option to support and strengthen healthcare delivery. They are not intended to replace personal or oral healthcare provider-to-patient interaction (especially when the latter are familiar with the general health beliefs, attitudes, intentions and behaviors of a determined population, in this case, Latino), but they constitute an effective alternative if and when properly adapted to the population it intends to serve.¹

The American healthcare system has to deal with the specific situation of a large segment of the Latino population in the U.S.A. regarding low attendance to medical consultation,² limited English proficiency (LEP). One-half to three-fourths of access barriers for Hispanics are associated with factors such as LEP rather than with others like income and insurance,³ and poor literacy levels. In addition to these obstacles, many Latinos have a different understanding of health and its implications when compared to most Anglo-American citizens. Considering this situation, the usefulness of written text which has been translated from English or developed in Spanish without considering the previously mentioned factors, is faced with many challenges.

The cultural adaptation (CA) of written materials is a realistic option that allows making the best out of them in terms of communicating and promoting health oriented behavior. By acknowledging theory-based information regarding those elements of written text that draw the attention of Latinos, the elements that satisfy their needs and those factors that health behavior modification theories indicate as being precursors of action, culturally adapted written material can accomplish its function in a broader context. This would imply the use of other media like videos; interactive games and radio broadcasting that would support written messages.

Having said this, the present paper concentrates on the development of a conceptual framework that will provide the guidelines to create the instrument for the evaluation of health related written material, either developed in Spanish or translated from English. The instrument intends to be a useful tool to assess the cultural adequacy of written material regarding communication and promotion of health-oriented behavior with Latinos.

¹ See ADDENDUM A on first paper

² See ADDENDUM A on first paper

³ Source: National Alliance for Hispanic Health. (2002). *Policy Brief : Healthy People 2010 : Hispanic Concerns Go Unanswered*. Retrieved July 22, 2003 from www.hispanichealth.org

Methodology

The first step towards the development of the evaluation tool was to carry out content analysis of a sample of 20 health-related materials written in Spanish for Latino population in the US. The objective of this analysis was to determine the type of message(s) of each text according to their function. Final results divided messages –and consequently, materials- into two categories: informative (communicative) and directive (promoters of action), that is, into those that promote only communication and those that promote health-oriented behavior.

Having separated the material according to these two major functions, and in order to develop the corresponding evaluation indicators, we focused on the theoretical background presented in paper one, regarding three general areas/factors, each including elements that need to be considered to promote communication and/or health behavior changes when working with Latino patients:

- A.** the cultural characteristics and needs of Latino patients regarding healthcare (pages 11-13);
- B.** behavior-change models that make reference to precursors of change (pages 6-10);
- C.** health beliefs, practices and values of Latinos (pages 13-14); and,
- D.** those aspects of the form -text and format- of written material that need to be considered for effective communication purposes in general, with special emphasis on communication with the Latino patient. Parameters for this section consider the fact that many Latinos in the US have limited English proficiency and literacy levels, among others.

After operationalizing the theory, that is, turning conceptual elements into indicators, we carried out another content analysis that led to the redistribution of some of the elements according to their function. The areas/factors were renamed so that, **Cultural Forms of Latinos plus Text and Format** include those factors that need to be present to promote communication, while **Variables that Promote Behavior** and **Specific Needs of Latinos** must be present in written material that aims at promoting health behaviors. (See Paper Two, page 4).

It is important to mention that all indicators in the evaluation tool are sustained by a theoretical background derived from different studies in the field as cited in the documents, and by the extensive experience of IMIFAP in the development, implementation and evaluation of programs that promote healthcare provider-to-patient communication and health-oriented behaviors, in urban and rural-indigenous settings, with high migration to the US.

When the first version of the tool was ready, we carried out the following procedure to assess its reliability: copies of the same document were handed out to two professionals who are fully proficient in English. They were given copies of Papers One and Two, were asked to study them carefully, and received indications to evaluate the documents following the instructions on Paper Two. They were also asked to work separately and to write down comments and observations regarding the items.

When each of the evaluators had graded the material, they were asked to compare their grading for each of the items and the grade for each of the subsections and sections. Comparison of their results indicated an average of 2 to 8 points of difference in the total result of any given section.

An analysis of the items that showed differences in grading was carried out which led to the elimination of some of them and rephrasing of others. Three additional items were eliminated in a meeting with the designated evaluators and the staff who developed the instrument, because, as agreed by all, they were similar to others that remained.

The adapted version of the instrument was then used to evaluate the material sent by Hablamos Juntos. Two members of the staff who developed the instrument and two different designated evaluators revised and graded each of the documents. Results were practically the same for all evaluators and in all documents.

Framework

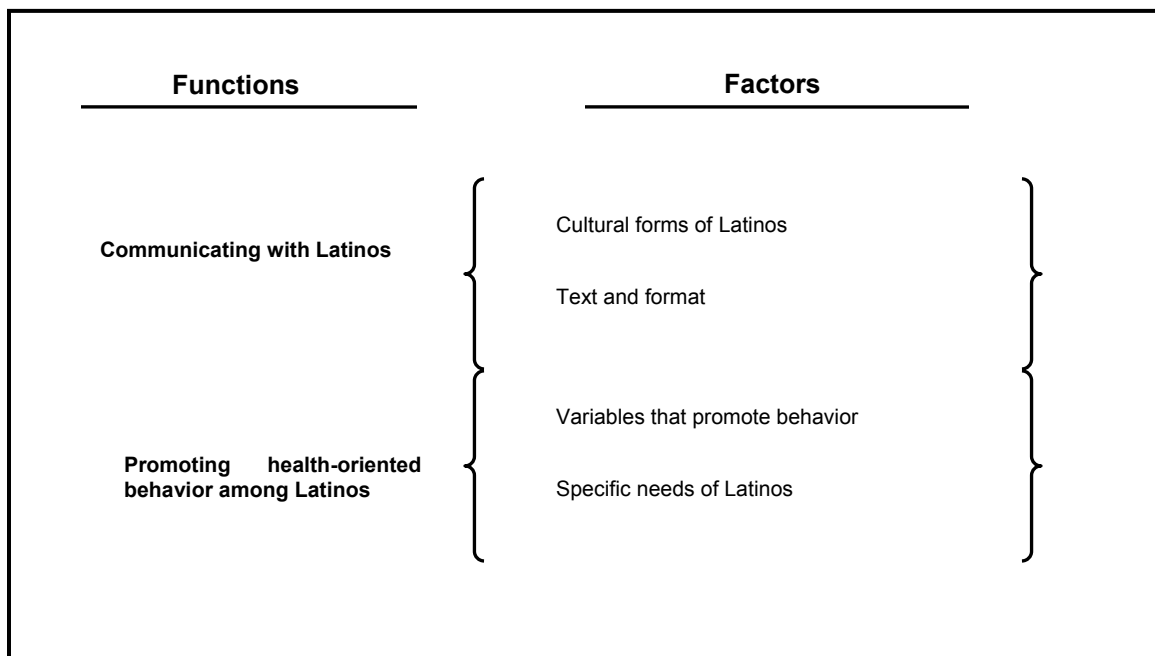
The following framework provides the conceptual background needed to develop the items (indicators) for the examination and evaluation of health related written material, regarding its cultural adequacy/adaptation in terms of form and content. Before going into the analysis of this background, it is important to establish that because different types of written material have different functions, not all of them require the same degree, if at all, of cultural adequacy/adaptation to achieve their objective. In this sense, documents to gather data, such as registration forms, will probably accomplish their mission through plain translation and no consideration of cultural factors, while material aimed at communicating with Latino patients, (e.g. to describe a procedure, to provide information about a specific disease) needs to comply with certain parameters. On the other hand, material that aims at promoting behavior change among the Latino population must comply with even more issues (Darwish, 1999a and b; Banville, Gene-Volet and Desrosiers, 2000).

With these considerations in mind, a two-section instrument has been developed. The instrument includes items that, according to theory, must be considered depending on the function or use of the written material. Section I - for the evaluation of *General Written Material* - includes those indicators that are necessary to communicate with the Latino population, while Section II – for the assessment of *Health Promotion Written Materials* - contains those that have proven to be of specific importance in promoting health-oriented behavior.

General Written Materials (Section I) - Refers to the evaluation of the cultural adequacy of those materials that communicate health related information. Indicators consider the text and format of the information and the cultural forms of the Latino population.

Health Promotion Written Materials (Section II) - Refers to the evaluation of the cultural adequacy of written material that aims at promoting health-oriented behaviors. Indicators consider those variables that encourage behavior change and the specific needs of Latinos regarding healthcare.

Figure1. Functions of health related written material and factors that need to be acknowledged so that these functions can be achieved.



I. Cultural adaptation of General Written Materials

Communicating with Latino patients through written material

The function of communicating with Latino patients through written material deals with the cultural adaptation of texts from English to Spanish and/or the development of written texts in Spanish. This has to be done in such a way that the process prevents the message from being distorted or misunderstood by the Latino population. Evaluation of the communicative function implies determining the adequacy of the form (made up of the text and format) and the consideration of the cultural forms of the Latino population regarding healthcare. Specific guidelines to address these issues follow:

Ia. Text and format (form)

The text (what is written) and the format (the way in which the information is displayed) of any written document must be consistent with the language and culture of the population. In the case of Latinos, written material should facilitate reading and comprehension while drawing attention and promoting identification with the contents. To achieve this, materials should be adapted to the lexis, grammar and style of the Latino population and be simple and clear, while considering the low literacy level of a significant number of Latinos.

I.a.1 Text

The components of the text are lexis and grammar. For the text to be congruent with the characteristics and needs of the Latino culture, the following guidelines are recommended:

- Lexis. Language must be familiar to the target population and used in regular conversation. Medical jargon – technical words like CPR, hysterectomy or cardiac arrest - must be avoided at all costs. If it is essential to use some medical terms, they should be explained as clearly as possible, through simple, daily language. Words with the least possible number of meanings and connotations should be chosen to avoid misunderstandings or misinterpretations. For example, the word “nervios” (nerves) can be interpreted in too many ways: saying something like “Si tiene nervios”, might be understood as “in case you have nerves”; “in case your nerve is hurting”; “are you nervous?”, “do you cry/get upset about everything?”, “are you a nervous person?” and so on. In this case, the word “angustia” (anguish) or “ansiedad” (anxiety) are recommended.
- Grammar. Grammatical structure must correspond to that of the Spanish language. Morphology and syntax must be kept simple, acknowledging that health information can be confusing and hard to understand even for English speakers with college education, so that it will be even harder to grasp by those Latinos who are LEP and have a poor reading level. As research data indicates,⁴ (Murphy, Chesson, Walker, Arnold and Chesson 2002; Youdelman and Perkins, 2002) it is not necessary to give detailed statistics that require the use of complicated language in order to provide information. For example, on the risk of Latinos with regard to infection by HIV, it could be enough to inform them, in simple words, that the population is at risk adding clear and concrete information on preventative behavior.

⁴ See: RAND Health. (2002). Consumers and Health Quality Information: Need, Availability, Utility. Retrieved August 2, 2003 from <http://www.chcf.org/documents/quality/ConsumersAndHealthCareQualityInformation.pdf>

The following guidelines are recommended in order to facilitate communication with Latinos who are not English proficient, have a poor reading level and/or are not familiar with common terms used in the American health system:

- Sentences should be short, with no more than 16 words.
- Only one key concept per sentence should be used, since it is easier to make associations and remember one idea within a sentence, rather than two or three.
- Abbreviations should be limited if at all used.
- Simple and correct punctuation is needed, avoiding the use of parentheses or commas.

The following example illustrates these considerations:

“si usted no usa o no ha usado un condón en cada relación sexual con su pareja (o con alguien más del sexo contrario o de su mismo sexo), usted ha estado en riesgo de infectarse del VIH/SIDA. Por eso es que usted debe usar siempre condón”. (If you don’t use or haven’t used a condom in each sexual intercourse with your partner [or with someone else belonging to your sex or the opposite sex] you have been at risk of being infected by HIV/AIDS and so this is why you must use a condom).

An analysis of the sentence indicates that the message is true, uses common words and lacks medical jargon. Nevertheless, its length, the number of ideas included and the complexity in writing make it difficult to understand.

The sentence, “Usar el condón te protege del virus del SIDA” (Condom use will protect you from the virus that causes AIDS) is easy to read and comprehend. It only includes one idea, making it easier to associate it with self-protection.

This does not mean that written material should include only one idea; it means that for individuals with low literacy levels – enhanced by LEP in the case of Latinos - it is easier to understand concepts when only one idea is included per sentence and when the text is not saturated with information.

The former considerations could also apply to individuals, other than Latinos, with poor literacy levels. If they are included in this evaluation framework, it is because they are relevant to the cultural adaptation of written materials for the Latino population living in the US. This is also indicated in other documents regarding communication with low literacy persons.⁵

⁵ Canadian Public Health Association and National Literacy and Health Program. (2001) The Captain’s Log First Canadian Conference on Literacy and Health: Charting the Course for Literacy and Health in the New Millennium Final Report. Retrieved September 30, 2003 from www.nlhp.cpha.ca

Minnesota Department of Health. (November, 2000). Translation Protocol: A Guide to Translating Materials for Limited English-Speaking Communities. Retrieved July 16, 2003 from <http://www.health.state.mn.us/communityeng/multicultural/translation.pdf>

Doak, C., Doak, L. and Root J. (1996). Teaching Patients With Low Literacy Skills. 2d ed. Philadelphia: Lippincott.

Lywodraeth Cynulliad Cymru Welsh Assembly Government. (2002). Framework for best practice. The production and use of health information for the public. Retrieved January 10, 2003 from http://www.hpw.wales.gov.uk/English/resources/reportsandpapers/framework_bestpractice_e.pdf

1a2. Format

Considering the low literacy level (in Spanish and in English) of many of the Latinos living in the US, an effective format to encourage attention and understanding of the message takes the following into consideration:

- Illustrations must include concrete images that refer to very specific situations or behaviors. For example, in the case of condom use promotion, drawings should include all the steps (situations) involved.⁶
- Drawings should have bright colors to attract the readers' attention and promote communication.⁷
- The size and font of letters should be easy to read and adequate to the type and size of the material.
- Letters should contrast with background. E.g. use black letters on white or light surface.
- Given that a densely packed text is much more difficult to read, margins must not to be justified and there should be enough space between letters.⁸
- Sufficient space must be left between paragraphs and columns.
- The use of vignettes is recommended when describing important matters.
- A bilingual format is recommended for two reasons: first of all, individuals who mostly speak Spanish will have the opportunity to become familiar with English terms used in the healthcare system. Second, materials can be helpful to promote discussion of contents between Spanish-speaking/reading individuals and others who feel more at ease speaking/reading English. It is recommended that key words – in English and Spanish – be written in bold, so that there is an association between the two words in the corresponding languages.
- When using a bilingual format it is necessary to:
 - First write the titles and subtitles (headings) in the target language (Spanish) and their equivalent in English in a smaller size.
 - Clearly identify each language version with the name of the language, both in Spanish and in English; do it in every page. E.g. Español/Spanish. This makes it easier for the reader to identify the material.
 - Determine which words will be written only in the original language (English). E.g. titles of health staff, community health centers and addresses. This will allow the reader to know how to refer to places or persons when asking for information.
 - Written material should encourage the process of English language learning by including acronyms or English terms when speaking about specific processes or places. It is very important to mention that the inclusion of these acronyms or terms should be done only when strictly necessary and along with a brief explanation of their importance. E.g. "... en los hospitales y centros de salud

⁶ Figure 3 on Addendum D shows a graphic example of an illustration that is concrete and includes all steps for a specific situation (condom use).

⁷ Jameson, A.(2002) *Culture and Cognition: What is universal about the Representation of Color experience?*. Retrieved August 13, 2002, from <http://aris.ss.uci.edu/cogsci/personnel/kjameson/CultCog8.pdf>

⁸ Source: *What makes a good leaflet?* Retrieved October 10, 2002 from <http://www.hpe.org.uk/leaflettest.htm>

usted puede identificar la sala de emergencias por las letras E. R.” (“At hospitals and healthcare centers the Emergency Room is identified as E.R.”)

- Date of production, information on copyrights and individuals/institutions responsible for the publication need to be included so that Latinos know that individuals who are sensitive to their culture have developed the materials. As research indicates,⁹ Latinos tend to misuse/disregard material that does not provide information about responsible institutions or persons because of their perception that it has not been developed considering their needs.

Ib. Cultural forms related to the Latino population.

- The second set of factors influencing the efficacy of cross-cultural healthcare provider – to –patient written communication relates to the cultural forms of Latinos. Cultural differences can be expected at all levels of human behavior. External differences, such as habits and dialects are easier to detect, while internal differences, including beliefs, ideas or social rules (for example to address doctors) may be more difficult to identify. According to Grindt (2000), differences are classified with respect to how easy/hard it is to detect them. The specific characteristics of the Latino culture regarding health-promotion material have been defined following this approach. Accordingly, health promotion material for the Latino population should be evaluated considering the guidelines stated in figure 2.

Figure 2. Characteristics of written material designed to promote cross-cultural healthcare provider-to-patient communication, according to the cultural forms of Latinos.

Cultural Form	Refers to:	Material should include:
<p><i>Body language codes and gestures llc.</i></p>	<p>E.g.1. The fact that Latin cultures use their hands more than Anglo cultures to underline speech- eg. A woman will put both hands on her cheeks to express concern.</p> <p>*E.g.2. The fact that Mexicans tend to nod to doctors even if they have not understood what is being said.</p> <p>*E.g.3. The fact that it is frequent for Latinos, especially those from lower social levels, to avoid eye contact with healthcare providers.</p>	<p>1. Illustrations of individuals using their hands according to what needs to be expressed.</p> <p>2. Recommendation to avoid nodding when disagreeing with healthcare provider(s).</p> <p>3. Recommendation to make eye contact when talking with healthcare provider(s).</p> <p>** 2 & 3 are factors to be considered when the material is made to be shared with healthcare providers, so as to encourage communication. When a specific message leads the patient to</p>

⁹ Source: RAND Health. (2001). *Consumers and Health Quality Information: Need, Availability, Utility*. Retrieved August 2, 2003 from <http://www.chcf.org/documents/quality/ConsumersAndHealthCareQualityInformation.pdf>

		interact with the healthcare provider, it should promote awareness of the patient's body language.
<i>Language and vocabulary</i>	<p>Those health-related words that are used regularly by Latinos.</p> <p>Words generally used by Latinos to describe specific diseases and/or symptoms.</p> <p>The need to achieve equilibrium between the narrative and direct styles.</p> <p>The fact that many Latinos are scared or distrustful of healthcare services.</p> <p>The fact that many Latinos do not assume responsibility for their healthcare.</p> <p>The fact that Latinos in the US differ from each other in many aspects.</p>	<p>Words and expressions that are relevant to a specific Latino subpopulation. E.g. "Estar malito (a)" (being bad) as opposed to "Estar enfermo" (being sick) that is a common way of expressing sickness among Mexicans.</p> <p>Medical jargon only when words cannot be substituted, or should not include it at all.</p> <p>Commonly used terms to describe diseases or symptoms, like "Tener calentura" (being hot), instead of "Tener fiebre" (having fever).</p> <p>*Folk classification of diseases when material is directed at individuals with indigenous background. E.g. words like "aliviarse" (have relief) instead of "parir" or "dar a luz" (give birth) when referring to birth should be used.</p> <p>Both English and Metrical systems when referring to size, distances, weight or height.</p> <p>Sentences/messages that are directive and those that are narrative.</p> <p>Messages that do not generate fear.</p> <p>Direct or personalized messages.</p> <p>Contents that avoid generalizations or stereotypes. E.g. "debido a sus costumbres alimenticias los Latinos sufren de ..." (Because of their eating habits Latinos suffer from...)</p>

	The fact that especially those Latinos that are resistant to healthcare services might have poor reading levels.	A reading level between 4 and 6. ¹⁰
<i>Behavior standards:</i>	<p>Those parameters of behavior for specific environments that include expectations, norms and roles of individuals.</p> <p>E.g.1. The fact that Latino patients in general are passive when visiting a doctor.</p> <p>E.g. 2. The fact that Latino patients in the US are distrustful of the healthcare system and healthcare providers.</p>	<p>1. Messages to encourage readers to express disagreement with and/or misunderstanding of healthcare providers. Use phrases like: “Usted tiene derecho a expresar su opinión, sobre todo cuando no está de acuerdo” (You have the right to express your opinion, especially when you don’t agree). IIc.</p> <p>2a. Messages to encourage readers to trust their doctor/healthcare provider. Use phrases like: “Los médicos están para servirle... para ayudarlo” (doctors are there to serve you... to help you).</p> <p>2b. Messages indicating that contents are based on research and/or data obtained with the Latino population.</p>

¹⁰ Contreras, A., García-Alonso, R., Echenique, M. and Daye-Contreras, F. (1999). The Sol formulas for converting SMOG readability scores between Health Education materials written in Spanish, English and French. *Journal of Health Communication*, 4 (1), 21-29

Crawford, A.N. (1984) *A Spanish language Fry type readability procedure: Elementary level*. Los Angeles: Bilingual Education Paper Series, Evaluation, Dissemination and Assessment Center, California State University, Los Angeles.

Garcia, W.F. (1976). *Assessing readability for Spanish as a second language: The Fry graph and cloze procedure*. Unpublished doctoral dissertation, Teachers College, Columbia University.

Nurss JR, Baker DW, Davis TC, Parker RM, Williams MV, (1995). Difficulties in functional health literacy screening in Spanish-speaking adults. *Journal of Reading*, 38, 632-637.

Parker, R.I., Hasbrouck, J.E., and Weaver, L. (2001). Spanish Readability Formulas for Elementary-Level Texts: A Validation Study. *Reading and Writing Quarterly*, 17 (4), 307-322.

Giles, T.D. (1990). The Readability Controversy: A Technical Writing Review. *Journal of Technical Writing and Communication*, 20 (2), 131-138.

Chall, J.S. and Dale, E. (1995). *Readability Revisited: The New Dale-Chall Readability Formula*. Cambridge, MA: Brookline Books.

Chall, J.S. (1996). *Qualitative Assessment of Text Difficulty: A Practical Guide for Teachers and Writers*. Cambridge, MA: Brookline Books.

Weitzel, D. (2003). *Who's Reading Your Writing?* Retrieved September 24, 2003 from www.ext.colstate.edu/pubs/octnews/oc030602.html

	<p>E.g.3. The fact that Latino patients will be more drawn to material that additionally mentions health benefits for the family.</p> <p>E.g.4. The fact that Latinos tend to share and talk about information with relatives and friends.</p> <p>E.g.5. The fact that Latinos will not visit healthcare providers to seek medical information, but will rather learn through friends.</p> <p>E.g.6. The fact that Latino patients tend to wait until they are seriously ill before going to the doctor.</p> <p>E.g.7. The fact that Latinos are drawn to healthcare information that has proven beneficial for other Latinos.</p>	<p>2c. Messages indicating that information provided is updated (published or generated during the last three years)</p> <p>3. Messages stating that taking care of themselves is taking care of their family. Use phrases like: “La prevención del cáncer cérvico uterino la beneficia a usted y a su familia”. (Preventing cervical cancer will benefit you and your family).</p> <p>4. Messages to encourage sharing and talking about contents of written material with relatives and friends. Use phrases like: “Platica con tu familia y amigos...” (talk with your family and friends..) or “habla con tu pareja...” (talk with your partner....)</p> <p>5. Messages to encourage readers to seek healthcare information through personal contact with healthcare providers. Use phrases like: “Los servicios médicos están para informarte, anímate a consultarlos” (healthcare services are there to inform you, go for it).</p> <p>6. Messages to encourage readers to attend healthcare services before they are too sick. Use phrases like: “Recuerda, si te sientes mal y no vas al doctor, corres el riesgo de ponerte grave y acabar en la sala de emergencias” (Remember this, if you don’t go to the doctor when you are feeling sick, you run the risk of becoming seriously ill, and ending up in the Emergency Room/E.R.).</p> <p>7. Examples of individual experiences of other Latino members of the population. Use phrases like: “Cuando las mujeres de origen cubano de... decidieron participar en la campaña contra el cáncer cérvico uterino...” (when women of Cuban origin from ... decided to participate in the campaign to fight cervical cancer, they...).</p>
<p><i>Beliefs and ideas:</i></p>	<p>Worldview, religious beliefs, theoretical ideas, ideals and values of Latinos in general.</p> <p>E.g.1. The belief that doctors are important and studious people who must be obeyed unconditionally.</p>	<p>1. Information that promotes individual decision-making.</p> <p>2. Information based on scientific facts in order to do away with myths. This does not imply the</p>

	<p>E.g.2. The belief that illness is of a supernatural influence. E.g. a punishment from God.</p> <p>E.g.3. The belief that doctors are distant individuals who are always in a hurry and use confusing words when talking.</p>	<p>use of technical words or numbers, but refers to truthful information put in common words.</p> <p>2a. Contents that avoid religious themes.</p> <p>2b. Messages that do not contradict beliefs and perceptions of sickness. E.g. "I am sick because of a heat imbalance in my body or because it is a punishment from God".</p> <p>2c. Emphatic statements regarding the relationship between personal health habits and health, using phrases like: "Tu salud depende de las acciones que realices para cuidarla" (your health depends on the actions you carry out to take care of yourself).</p> <p>3. Phrases like: "Los doctores son personas como cualquier otra que estudiaron para ayudar a las personas como usted" (Doctors are ordinary people who studied to help people like you).</p>
<p><i>External attributes</i> lc.</p>	<p>The fact that images of individuals and illustrations in general must share characteristics with the reader to promote identification. E.g. It is easier for most Cubans to identify with an image of someone with Latino traits than with images of people with slanted eyes or blonde hair.</p> <p>The fact that identification of/with physical environment encourages acceptance of material.</p>	<p>Images of people with similar skin color, height or constitution; even with similar body language. E.g. facial expressions and movement of arms and hands.</p> <p>Images of places similar to those within the area where the reader lives or moves- familiar places –monuments, plazas, medical centers.</p>

II. Health Promotion Written Materials

Promoting health-oriented behavior in Latinos through written material

As stated before, the function of promoting health-oriented behaviors is determined to a greater extent by cultural factors than factors relating to communication. As such, the evaluation of this function implies giving more weight to those variables that theory has proven to be decisive for behavior modification and to the satisfaction of the specific needs of the Latino population.

Ila. Health promotion amongst Latino population

The model of health promotion for Latinos (Mexican immigrants) developed by Poss (2001), synthesizes the Health Belief Model and the Theory of Reasoned Action. The justification for using this model is the inclusion of a culturally based perspective on behavior. According to this model, intention (a precursor of behavior) to take part in a tuberculosis-screening program was best explained through a model containing four variables:

- Subjective norm: Consists of a person's perception of the social pressure to act, where important referents – such as influential people- believe he/she should or should not perform the behavior in question. Intention to perform a certain behavior depends on what the person "believes" significant others want him/ her to do. It depends on normative influences. E.g. if a man believes that his family wants him to lose weight to prevent cardiac arrest, he will probably have the intention to do it.
- Attitude is a person's general feeling of favorableness or unfavorableness to a concept. E.g. the man in question has a feeling of favorableness towards losing weight.
- Susceptibility relates to the individual's feelings of vulnerability. E.g. In this case, the man may feel that he is at risk of having a heart attack because he has been told repeatedly that individuals who are overweight are more prone to cardiovascular problems.
- Cues to action refer to internal or external stimuli that trigger an individual's health behavior. E.g., the man has an episode of chest pain, and decides to start dieting.

According to Poss's model, these variables predict intention to perform a behavior – operationalized here as attendance to an educational program – while prediction of the behavior (actual participation on the tuberculosis screening) requires two variables, intention and susceptibility. It is very important to mention that the predictive capacity of the attitude and subjective norms' variables depends on the strength of the relationship between intention and behavior.

As an approximation, assessment of these variables in written material can be carried out through the use of language/ words and/or situations in the message. Considering the previous information, written materials for Latinos should have the following characteristics in order to operationalize these variables through the message:

Subjective Norm

Contents need to:

- Use “debe/debería” (you must/should) or “no debe/no debería” (you must not/should not) when talking about a specific action; “Tu deberías/Usted debería...” (you should) or “tú no deberías/usted no debería” (you should not...)
- Refer to members of the family with phrases like: “Tu familia te necesita sano... (Your family needs you to be healthy...)
- Refer to the norms of community leaders, neighbors, friends, etc., using phrases like: “La mayoría de las personas en esta comunidad...” (Most of the people in this community...)

Attitude

Contents need to:

- Clearly express whether a specific action is favorable or not for the reader, using phrases like: “Hacerse la prueba del colesterol beneficia tu salud porque...(to test your cholesterol level is good for your health because...)
- Clear up myths. The inclusion of scientifically based concrete and clear information could promote changes towards a more favourable attitude regarding specific health issues. Although it is convenient to do research about the most common myths in a determined population, there are as many myths as different Latino populations. In the case of communities with diverse groups of Latinos, recommendations include research through focus groups and/or interviews with samples of individuals from the different subpopulations; and/or documentation through articles and books. All of these lead to an approximation of the cultural characteristics of population.
- Emphasize that a determined action is favorable for the family. E.g., “Su familia mejorará su salud sí usted...” (your family will improve its health if you...)

Susceptibility

Contents need to:

- Mention all direct consequences and benefits of carrying out/not carrying out a specific action.
- Refer/talk directly to the reader by using the word “you”. This is also a cultural form.
- Clearly specify that the reader is vulnerable to...
- Use examples of specific situations where the reader can identify him/herself with characters or feel that she/he is the main character.

Cues to Action

Contents need to:

- Motivate individuals to act by explaining personal benefits.
- Invite readers to perform specific behaviors with phrases like: “go to a health center and ask for information on...”
- Motivate to action through explaining benefits for the family.

IIb. Specific needs of Latino populations in the United States of America

Latinos in the US are immersed in a continuous process of adaptation to their environment. This process implies becoming familiar with and adopting new signs and symbols, new words and new expressions, and even inventing some of the latter, as in the case of expressions like “Te llamo pa’ tras”, a derivation of the English language phrase “I’ll call you back” or the adoption of trademarks.¹¹

Amidst the challenges of their “new life”, an important aspect is becoming familiar with and making use of healthcare services. Although many of the factors that follow can also be applied to the general population, it is important to acknowledge that they are fundamental to promote health-oriented behaviors in Latinos and should be considered in all written material:

- **Accuracy.** Contents must be based on research and/or data obtained with the Latino population. This is also a cultural form related to the fact that Latino patients in the US are distrustful of the healthcare system and healthcare providers.
- **Novelty.** Information must be current and up-dated with respect to the latest discoveries, having been generated / published during the last three years. This is also a cultural form related to the fact that Latinos are distrustful of the US healthcare system.
- **Integration.** It is highly recommended that written material be part of a health-promotion program or set of materials and be presented in context with other sources, including materials, institutions or programs directed towards the Latino population.
- **Exemplification.** Contents need to include examples of main ideas to reinforce the concepts.
- **Consideration of socioeconomic level.** Material should give orientation about options in case of lack of economic resources, when referring to processes that imply large expenses.
- **Consideration of accessibility to health services.** Material should include information about rights and responsibilities, health insurance and general healthcare. Special

¹¹ For more information about this topic:

Goldstein, A. and Suro, R. (2000). Generational differences Among American Latinos. Retrieved September 30, 2003 from http://www.innecity.org/columbiaheights/newspaper/01_16_00_latino_journey.html

Orozco, G. (1996). Español, Segunda Lengua en Estados Unidos. Retrieved January 10, 2003 from <http://www.fsma.com.mx/1096.htm>

Wiltz, T. (2003). Spanglish: Pop Culture's Lengua Franca. Retrieved February 5, 2003 from <http://www.puertorico-herald.org/issues/2003/vol7n07/Spanglish-en.shtml>

efforts should be made to provide information on these aspects to Latinos who have an illegal status.¹²

- **Information on institutional services.** It is highly recommended that contents include names of organizations and/or healthcare programs for Latinos, or refer to materials that do so.
- **Consideration of need for personal attention.** Texts must include a toll free number and/or names of places in the area where personal attention in Spanish is available. This is needed due to the fact that most Latinos will not visit a healthcare provider with whom they cannot communicate.¹³
- **Identification of source.** Information about persons and/or institutions responsible for the material and date of publication should be included in case additional information is needed/wanted. This is also a cultural form related to the fact that Latinos are distrustful of the US healthcare system
- **Consideration of the needs of the population.** Material should refer to the population's main needs regarding healthcare based on current available information. In-depth interviews and focus groups with significant and representative members of the target population are recommended.
- **Specificity.** Ideally, material should be clearly directed to the Latino population -the more specific the better- and include specific messages for men, women, older citizens, etc. Additionally, the material should be delimited to a geographic area. As previously mentioned, when the Latino community is diverse, a formative research through focus groups and/or interviews with representative samples of each subpopulation is recommended.
- **Reinforcement of contents.** Material should include a list of frequently asked questions and answers (Q & A) related to the main topics, in order to reinforce them.

The theoretical information on *General Written Materials and Health Promotion Written Materials* (sections I and II) presented so far, provides the conceptual background to support the items (indicators) of the proposed evaluation instrument as described in section III. This section also includes general considerations for the evaluation of the cultural adequacy of written material, a description of the characteristics of the evaluation instrument, as well as instructions and recommendations for its use.

¹² The National Women's Health Information Center. (2003). *Health Problems in Hispanic American/Latina Women*. Retrieved September 30, 2003 from <http://www.4woman.gov/faq/latina.htm>

¹³ RAND Health. (2001). *Consumers and Health Quality Information: Need, Availability, Utility*. Retrieved August 2, 2003 from <http://www.chcf.org/documents/quality/ConsumersAndHealthCareQualityInformation.pdf>

III. Evaluation of the cultural adequacy of health related written material

Important considerations on the instrument

Both sections of the instrument have been developed keeping in mind important factors that influence the processes of evaluation/development of Spanish-language health related written material. Examples of such factors include cultural forms, socioeconomic background, and legal status of patients and biculturalism of the healthcare provider(s) in charge of the material.

Participation and direction of bilingual (proficient in English and Spanish) and bicultural (familiar with both the Latino and Anglo-American culture and sensitive to cultural differences) staff – preferably teams- is most desirable to guarantee good results in the evaluation/development of the material. Healthcare providers are part of the healthcare system, and it is the system that needs to adapt itself to the patients and not the other way around. As The National Alliance for Hispanic Health states:

“It is simple. If providers cannot communicate with their patients, they are not meeting clinical and ethical practice standards. They put their patient's health at risk and their practice at risk from subsequent liability.”¹⁴

Healthcare staff may include sociologists, psychologists, social workers and other professionals who work in the social sciences. If bicultural health staff is not available, the participation of bicultural medical students or bicultural community members with college education is recommended. An additional recommendation includes the creation of and/ or participation in networks that share this kind of work.

It must also be said that the development of strategies to evaluate the cultural appropriateness of written material is a continuous process and will constantly be work in progress. Although the instrument has been developed with theory-based indicators, some of these are very general or too specific for individuals of a certain country of origin. Latinos along the US differ in many aspects: country of origin, immigration status, number of years in the US, education and economic conditions, to mention a few, together with factors such as individual personalities, experiences, health problems, etc. Because of this background, the instrument will always be an approximation of reality, a tool to be complemented with a situational diagnosis (market research) of the target population¹⁵ and improved through feedback provided by those bilingual and bicultural healthcare providers that use it.

In any case, it is a useful step, an innovative theory-based approximation to assess the adequacy of written texts regarding cultural aspects. It has been pilot-tested with different materials –with respect to types and functions-, through a process of Inter-Rater Reliability that clearly indicates that scores are basically the same for documents that have been evaluated by two or more individuals, provided they are familiar with the theoretical contents that back the indicators.

Finally, it is very important to state that developing culturally compatible material for the Latino population living in the US is not sufficient for the satisfaction of their needs regarding communication with the healthcare system. Material by itself is not enough to promote quality

¹⁴ The National Alliance for Hispanic Health. (2002). Policy Brief : Healthy People 2010 : Hispanic Concerns Go Unanswered. Retrieved July 22, 2003 from www.hispanichealth.org

¹⁵ See Kass-Bartelmes, A.. AHRQ Tools and Resources for Better Health Care. Retrieved February 12, 2003 from <http://www.ahrq.gov/qual/tools/toolsria.htm>; and, Department of Health and Human Services, State of North Carolina. (2000). Developing, translating and reviewing Spanish materials. Retrieved February 12, 2003 from <http://www.dhhs.state.nc.us/dph/DEVSPAN-web.pdf>

healthcare (see first paper). The impact of messages through written text can be optimized through the use of complementary media -web sites, radio transmissions, etc.- but the sensitization and training of healthcare providers regarding general health beliefs, attitudes, intentions and behaviors of Latinos is absolutely necessary to achieve positive interactions that will encourage this specific population to make more health-oriented decisions.

With these issues in mind, the proposed instrument should be seen within a health promotion context, which in turn is part of a broader and integral working strategy aiming at improving the health of Latinos who live in the US.

Figure 3. Advantages and opportunities of the proposed evaluation instrument.

Advantages	Opportunities
It is possible to use it without the participation of the target population, although information from consumer research provides a higher degree of certainty regarding the cultural adequacy of the material.	Evaluation with direct participation of the population allows for an opportunity to find out if the material is actually used, accepted and useful for this population.
It is sensitive to the form and content of any kind of written material.	Inclusion of criteria for evaluation of specific types of written communication allows for opportunities to improve accuracy when determining the adequacy of this type of material for the Latino population.
It can be used to assess the cultural adequacy of written material for Latino population in general, regardless of country of origin.	Evaluation with different Latino populations may be useful in developing a set of criteria for the assessment of the adequacy of materials directed to specific populations (e. g. Cubans, Puerto Ricans, Mexicans).
Although the framework is useful as a general strategy, it can also be used to assess the weight of specific indicators.	Participation of the population will be useful in determining the importance of each indicator in the total score.

IV. Evaluation Instrument- User's manual

The following manual is a step-by-step guide. It intends to facilitate the use of the instrument in order to achieve an effective cultural evaluation of health related written material for Latinos. Two phases must be considered in the evaluation process: 1) thorough reading of "Aspects to remember" (following section) and 2) Application of the instrument.

- **Aspects to remember**

- Every member of the evaluation team **must** carry out a complete and comprehensive reading of Paper 1, Effective Provider-to-Patient Written Communication across Language and Cultural Barriers. (Givaudan, M., Pick, S., Venguer, T. and Xolocotzin, U., 2002) and the present document –Paper 2-, Development of an Instrument to Test the Cultural Adequacy of Health Written Material for Latinos in the USA. (Givaudan, M., Pick, S., Venguer, T. and Xolocotzin, U. 2003).
- Reading of Addendum E, "Recommendations for in-depth evaluation" is **highly suggested**.
- Participation and direction of bilingual (proficient in English and Spanish) and bicultural (familiar with Latino and Anglo-American culture and sensitive to cultural differences) staff is **most desirable** to guarantee good results.
- Apart from physicians, staff may include sociologists, psychologists, social workers and other professionals who work in the social sciences. If bicultural health staff is not available, the participation of bicultural medical students or bicultural community members with college education is **recommended**.
- The instrument is divided in two sections, each evaluating a different function (General Written Materials/function equals communication and Health Promotion Written Material/function equals promotion of behaviors). Depending on the objective/function of the material, either section might be used although Health Promotion Written Material **must** be evaluated through both.
- During evaluation, **always** refer to the "Items interpretation guide" (Addendum B) that leads to those pages in Paper 2 that contain the theoretical background for the indicators.

- **Application of the instrument**

General information

The instrument is divided in two sections: 1) Section I (General Written Materials) provides guidelines to evaluate the cultural adequacy of health related material that aims at communicating/ providing information; Section II (Health Promotion Written Materials) consists of indicators to assess the cultural adequacy of materials that aim at promoting health oriented behaviors.

In turn, each section is divided into sub-sections made up of checklists (Addendum A) that evaluate specific functions by checking the existence/absence of specific indicators related to health promotion with Latinos. When evaluating, one point (1) is given for every present condition (existence), while no points (0) are given for absent conditions.

Checklists must be used according to the following instructions:

Section 2.1. Evaluation of *General Written Materials*

This section consists of 27 items divided into three sub-sections that evaluate the cultural adequacy of: **la**) text and format (11 items); **lb**) cultural forms of Latinos (13 items); and **lc**) adequacy of images (3 items- to be used ONLY when material includes images). The total evaluation score will be the result of the sum of la and lb (plus the total of lc when due).

A result of 75% or higher has been set as the parameter to determine minimum efficacy. Compliance with 75% of conditions for effective cultural adaptation with respect to an ideal total of 100%, is based on the regular parameters of most grading systems that consider 75 out of 100 as acceptable.

Section I must be used to evaluate all types of material, including documents that aim at promoting health-oriented behaviors. The rationale for this is that all materials, regardless of their orientation (sender oriented or reader oriented) or function (e.g. data gathering, mass communication, persuasion) must comply with a communicative function.

Use of this section must be carried out according to the following instructions:

If material does not include images:

- 1) Carefully read each indicator in sub-section la and assign one point for each present condition. Add the points and write down the result on the space labeled **la total**.
- 2) Carefully read each indicator in sub-section lb and assign one point for each present condition. Add the points and write down the result on the space labeled **lb total**.
- 3) Write down "3" on the space labeled **lc total** (3 points are given in this sub-section in case the material being evaluated contains no images).
- 4) Add the totals for the three sub-sections and write down the result on the space labeled **Section I total**.
- 5) Check the corresponding percentage of adequacy on Table 1 (Addendum C).

If material includes images

- 1) Carefully read each indicator in sub-section la and assign one point for each present condition. Add the points and write down the result on the space labeled **la total**.
- 2) Carefully read each indicator in sub-section lb and assign one point for each present condition. Add the points and write down the result on the space labeled **lb total**.
- 3) Carefully read each indicator in sub-section lc. and assign one point for each present condition. Write down the result on the space labeled **lc total**.
- 4) Add the totals for the three sections and write down the result on the space labeled **Section I total**.
- 5) Check the corresponding percentage of adequacy on Table 1 (Addendum C).

Section 2.2 - Evaluation of Health Promotion Written Materials

Section II includes 17 items to determine the cultural adequacy of health promotion material with respect to: IIa) variables that predict intention and behavior (6 items); IIb) specific needs of Latinos (7 items); and IIc) conditions that favor direct interaction with healthcare promoters (4 items). Evaluation of this section includes the sum of sub-sections IIa and IIb (plus IIc when due).

A result of 75% or higher determines the minimum expected efficacy, although a score of 100% would indicate that the material is most likely to promote health-oriented behavior.

With respect to direct interaction with healthcare provider/s, sub-section IIc must be used according to the following instructions:

If messages do not attempt to favor direct interaction

1. Carefully read each indicator in sub-section IIa and assign one point for each present condition. Add the points and write down the result on the space labeled **IIa total**.
2. Carefully read each indicator in sub-section IIb and assign one point for each present condition. Add the points and write down the result on the space labeled **IIb total**.
3. Write down a "4" on the space labeled **IIc total** (a score of 4 is given when the material does not imply direct interaction).
4. Add the totals for the three sub-sections and write down the result on the space labeled **Section II total**.
5. Check the corresponding percentage of adequacy on Table 2 (Addendum C).

If messages attempt to favor direct interaction

1. Carefully read each indicator in sub-section IIa and assign one point for each present condition. Add the points and write down the result on the space labeled **IIa total**.
2. Carefully read each indicator in sub-section IIb and assign one point for each present condition. Write down the result on the space labeled **IIb total**.
3. Carefully read each indicator in sub-section IIc and assign one point for each present condition. Add the points and write down the result on the space labeled **IIc total**.
4. Add the totals for the three sub-sections and write down the result on the space labeled **Section II total**.
5. Check the corresponding percentage of adequacy on table 2 (Addendum C).

V. Recommendations for Use of Instruments

Since the objective is to come up with material that is **well translated and culturally adapted** – so that it will be of use to the Latino community in the US – we do not think anything can substitute for having bilingual/bicultural reviewers who are trained in the use of the instrument. Simply using a manual will not do. As stated in page 19 of Paper Two, even bilingual/bicultural community members who do not work in the social sciences' sector may be trained to do the job, provided medical information is revised a priori by healthcare professionals in charge. Proper training (in the use of the instrument) of non-physicians who are bilingual and bicultural will guarantee better results than working with trained healthcare providers who are not familiar with the Latino culture and are not proficient in Spanish.

By proper training, we mean training of a group of bicultural and bilingual individuals by someone who is familiar with the instrument and who is also bilingual and bicultural. The process considers that all candidates read Paper One and Paper Two before attending the training. It consists of:

- A concrete and simple presentation that includes a) the need to adapt written material so that it provides information and/or promotes health oriented behaviors among the Latino population; b) the objective of the instrument.
- Delivery of a copy of the instrument to all participants.
- Explanation about how the instrument works.
- Reading of the instrument out loud, from beginning to end. All attendants should read some part of it.
- Distribution to all participants of a copy of the same two documents: a) material intended for communication; b) material intended to promote behavior change.
- Group rehearsal regarding the application of the instrument, in which the group and the instructor grade both materials. At this stage, the proficiency of the instructor in terms of understanding what each indicator stands for is determinant. He/she should always refer to those pages in Paper 2 where the indicator is explained. An agreement should be reached within the group regarding the grade for each indicator, sub section, section and total, after group discussion.
- Distribution to half of the participants of a new text that only promotes communication, while the other half receive a new document that promotes health oriented behavior.
- Individual grading of material by all participants and general discussion of results.

According to IMIFAP's experience working with translators in indigenous communities, scanning for possible evaluators should contemplate recommendations made by the community or community council. In this case, Latino associations, clubs, etc. could be an efficient source of information. Candidates should be interviewed in order to find out about their bicultural up-bringing and/or experience, and then tested for Spanish and English proficiency. Regarding the latter, we recommend the following procedure that consists of comparing the answers given to a document written in English by English speaking American citizens – previously validated by a group of bicultural and bilingual health care professionals – to the answers given by the prospective candidates to a version of the same document written in Spanish:

- Chose a health oriented document that is fairly simple – such as a pamphlet- that has been developed in English and Spanish separately (one version in English and one in Spanish) and has been validated in terms of the use of culturally appropriate words, grammar, and meaning in both languages by a staff of bilingual and bicultural experts.
- Ask all candidates to carefully read the Spanish version of the pamphlet.
- Ask previously determined questions such as: what is the main message of the pamphlet?; mention one preventative measure for... that is mentioned in the text; what is the purpose of the pamphlet?; or the pamphlet encourages you to ...It is important that the same questions that were asked to the English speaking sample be asked to the Spanish speaking candidates because what needs to be established is that the latter extract the same meaning/messages when reading the Spanish written text, than those English speaking individuals who read the English version of the document.
- Compare the answers given to the Spanish version of the pamphlet by each of the prospective candidates, to the answers given by the previous sample of English speaking individuals.
- Chose among those candidates whose answers are equal or similar to those given by English speaking individuals for the English version of the material.
- Once a sample of possible candidates has been selected, always choose those with the highest level of education.
- If finding adequate reviewers is not possible, materials will have to be sent out to experienced groups both from within the community and outside of it.

Addendum A

Section I. General Written Materials

Evaluating communication with Latino population

1a. Text and Format	
<i>Lexis and grammar (text)</i>	
1. A maximum of 2 sentences in a contiguous set of 10 sentences includes more than 16 words	
2. Includes only one key concept per sentence	
3. Abbreviations are limited or not used at all	
4. Punctuation is simple and correct	
<i>Format</i>	
5. Colors draw attention	
6. The size and font of letters are easy to read and adequate to the type and size of material	
7. Letters contrast with surface	
8. Margins are not justified	
9. There is enough space between paragraphs and columns	
10. Key words are written in Spanish and in English.	
11. The name of the institution(s) responsible for the material and contact information is included	
12. Bullets are used to describe important matters on the content	
	1a total
1b. Cultural forms of Latino population	
13. A balance must exist between the narrative and direct styles. Texts must not generate fear, must be personalized (directed at the patient) and avoid generalizations or stereotypes. A reading level between 4 and 6 is recommended	
14. Vocabulary is common to most Latinos in the US, words used in regular conversation. English and Metrical systems are included when referring to size, distances, weight or height	
15. Medical jargon is used only when words cannot be substituted, or is not used at all. When medical terms are used, they are followed by an explanation using common language	
16. The active voice is used to encourage reader to perform specific behaviors. E. g. "vaya al centro de salud y pida información sobre..." (go to the healthcare center and ask for information on...) It is also recommended to use "debe/debería" (you must/should) or "no debe/debería" (you must not/shouldn't) when talking about a specific action; "Tú debes/Usted debería ..." (you must/ should) or "Tú no deberías/usted no debería" (you must not/should not)...	
17. Examples of symptoms, causes and consequences are given	
18. Examples of experiences of other Latinos with the subject under discussion are provided	
19. Common or 'folk terms' are used to refer to health related issues like diseases, remedies and symptoms	
20. Information avoids religious themes	
21. Contradiction of beliefs and perceptions of sickness is avoided. E.g. disease is caused by a heat imbalance inside the body.	
Information:	

22. Is updated (published or generated during the last three years)	
23. Clears up myths by including information that is based on scientific data	
24. Indicates that contents are based on research and/or data obtained with Latino populations	
	Ib total
Ic. If material includes images:	
25. Some images of individuals are identifiable with target population. E.g. skin color, height, and body language. This does not mean that stereotyped images are used. It is also recommended to use Illustrations of individuals using their hands according to what needs to be expressed	
26. Includes concrete images that refer to very specific situations or behaviors	
27. Images of places are easy to identify - monuments, plazas, medical centers-places that are familiar to Latinos	
	Ic
Section I total	

Section II. Health Promotion Written Materials

Evaluating promotion of health oriented behaviors amongst Latino population

Ila. Health promotion amongst Latino population	
28. Clear specifications of the readers' susceptibility to sickness are included, using phrases like "Usted puede contagiarse.." o "tú estas en riesgo de.." (you can suffer an infection...) (you are at risk of..)	
29. Examples of specific situations -related to predetermined actions- that promote identification are given	
30. Direct effects and benefits of carrying/ not carrying out a specific action are included through phrases like: "...hacerte el Papanicolaou es bueno para tu salud porque..." (Having your Pap smear test done is good for your health because...)	
31. References to family members are made through phrases like. "A tu familia le gustaría que tú.." (Your family would like you to...) or "Tu familia te necesita sana..." (Your family needs you healthy...)	
32. Direct consequences and/or benefits for the family, regarding the reader's performance/lack of performance of a specific action are specified. Phrases like: " tu familia se beneficia si tú..." (your family will be benefited if you...)	
33. Recommendations to encourage talk with significant others about specific actions are included, using phrases like: "Tu familia y amigos recomiendan que..." (Your family and friends recommend that you.) or "Dí a tus seres queridos que ..." (tell your loved ones that...) Culturally adequate material should ideally refer to the norms of community leaders, neighbors, friends, etc., using phrases like: "La mayoría de las personas en esta comunidad..." (Most of the people in this community...).	
	Ila
Ilb. Specific needs of Latino populations in the United States of America	
34. The material is part of a program or set of materials, which are also mentioned	
35. Socioeconomic level of Latino population is acknowledged by giving orientation	

about options in case of lack of economic resources	
36. Information about rights and/or possibilities of health insurance and general healthcare for illegal immigrants is provided	
37. Names of organizations and/or programs specifically directed to Latinos are included or reference is made of those that do. Toll- free numbers where attention is provided by Spanish-speaking individuals are provided	
38. Names of places in the area where personal attention is available are included	
39. Population's main needs regarding healthcare are acknowledged	
40. Most frequent Q & A related to the topic/s in question are included	
	IIb total
<i>IIc. If message/s imply/s interaction with healthcare providers:</i>	
41. Recommendations for readers to make eye contact with healthcare providers are given	
42. Recommendations to avoid nodding when disagreeing or not understanding healthcare providers is included	
43. Expressions of disagreement with healthcare providers are encouraged	
44. Expressions that reflect lack of understanding of healthcare providers are promoted	
	IIc total
Section II Total	

Addendum B: Items interpretation guide

The guide consists of a table that indicates the corresponding page within the document that provides the theoretical background and examples related to each item included in the instrument. It should be used as a reference tool when evaluating material adequacy.

<i>Section I</i>		
Item		<i>Page</i>
1-4	la1.	<i>5- 7</i>
5 – 12	la2.	<i>7-8</i>
13- 24	lb.	<i>8-12</i>
25-27	lc.	<i>12</i>
<i>Section II</i>		
28-33	IIa.	<i>13-14</i>
34-40	IIb.	<i>15-16</i>
41-44	IIc. (Fig.2)	<i>9-10</i>

Addendum C: Percentages of Adequacy

A grade of 74% or below indicates material that is poorly adapted/developed in terms of its cultural adequacy, while a grade of over 75% indicates that the material is effective in achieving the functions of communicating or promoting health oriented behavior amongst Latinos.

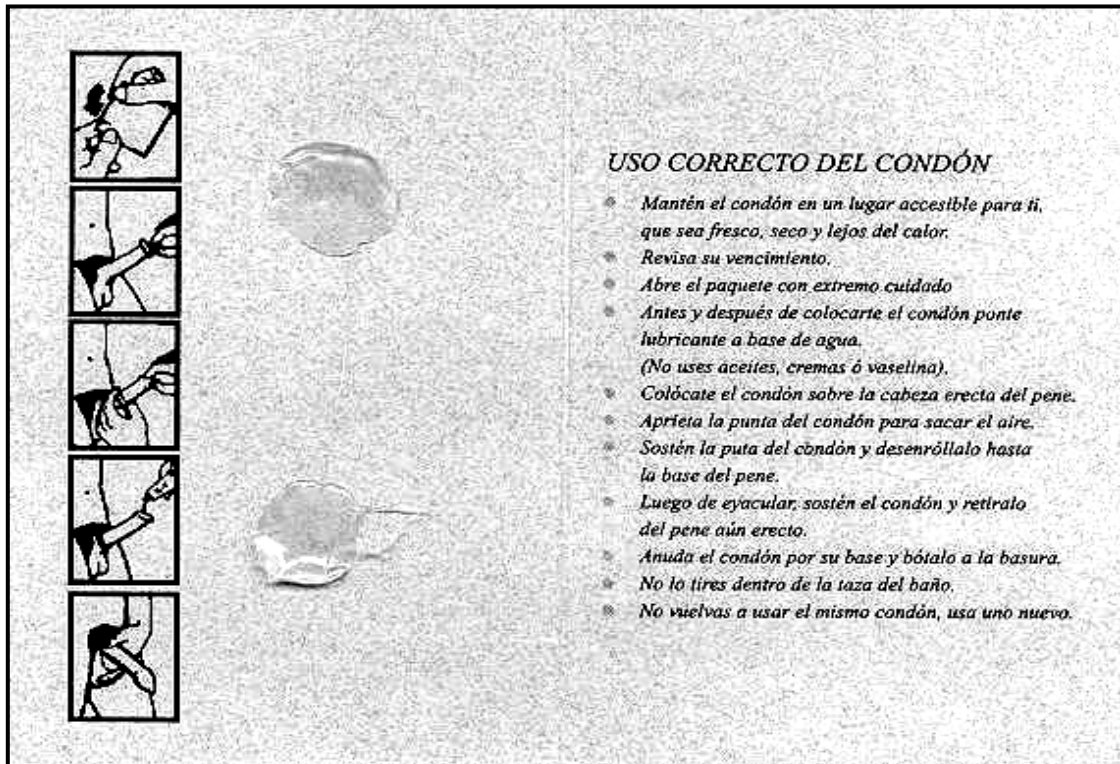
Percentages of adequacy of material according to score:

Table 1. Section I	
Section I score	Percentage of adequacy
27	100%
26	96.29%
25	92.59%
24	88.88%
23	85.18%
22	81.48%
21	77.77%
20	74.07%
19	70.37%
18	66.66%
17	62.96%
16	59.25%
15	55.55%
14	51.85%
13	48.14%
12	44.44%
11	40.74%
10	37.03%
9	33.33%
8	29.62%
7	25.92%
6	22.22%
5	18.51%
4	14.81%
3	11.11%
2	7.40%
1	3.70%

Table 2. Section II	
Section II score	Percentage of adequacy
17	100%
16	94.11%
15	88.23%
14	82.35%
13	76.47%
12	70.58%
11	64.70%
10	58.82%
9	52.94%
8	47.05%
7	41.17%
6	35.29%
5	29.41%
4	23.52%
3	17.64%
2	11.76%
1	5.88%

Addendum D: Graphic example of an illustration that refers to the specific behavior of condom use. It includes all the necessary steps to do so.

Fig. 3
Uso correcto del condón (proper condom use)



Source: Centro para gente de habla hispana, Programa de prevención del VIH/SIDA. Toronto, Canada.

Addendum E: Recommendations for in-depth evaluation

Type of material	Recommendations for in-depth evaluation of the cultural adequacy of different materials
Books	<p>Chapters and even sections within a chapter should be evaluated separately since they might have different functions. According to the different functions/objectives of these, format and contents may vary. E.g. a book on cervical cancer might include sensitizing information –that is, information to communicate cancer related prevalence and its impact on women- in its first chapters, while the last chapters might contain information regarding actions that women should carry out to prevent the disease, thus intending to promote health oriented behaviors.</p>
Web sites	<p>Websites have very specific characteristics that might influence the comprehension and adoption of messages and, as such, cannot be evaluated as most written material. Formats and contents constantly change, individuals have the possibility of interacting with the contents and choosing the links they prefer, while sounds and visual animations are part of the experience.</p> <p>In order to concentrate in the evaluation of contents, it is highly recommended to print those documents available as downloadable archives (e.g. .pdf, .doc) or printer friendly versions.</p> <p>Specific models for the evaluation/development of health-related web sites have been developed. Nevertheless, an evaluation framework to test the cultural adequacy of web-based material for Latino population is due.</p> <p>Useful information related to the evaluation and/or development of information on the Internet can be found in the following documents:</p> <p>Berland, G. Et al. (2001). <u>Evaluation of English and Spanish Health Information on the Internet</u>. Downloadable from: http://www.rand.org/publications/documents/interneteval/interneteval/pdf/</p> <p>U.S. Department of Health. (2000). <u>Health-Related Web Site Evaluation Form</u>. Available at: http://www.sph.emory.edu/WELLNESS/instrument.html</p> <p>MLA: Professionals Providing Quality Information for Improved Health. (2003). <u>A User's Guide to Finding and Evaluating Health Information on the Web</u>. Available at: http://www.mlanet.org/resources/userguide.html</p> <p>MEDLine. (2002). <u>A list of resources for evaluating medical information on</u></p>

	<p><u>the web</u>. Provided by the U.S. National Library of Medicine and the National Institutes of Health. Available at: http://www.nlm.nih.gov/medlineplus/evaluatinghealthinformation.html</p> <p>Schlomon, B.F. (1999). Whom do you trust? Evaluating internet health resources. <u>Online Journal of Issues in Nursing</u>. Available at: http://www.nursingworld.org/ojin/infocol/info_1.htm</p> <p>Health Summit Working Group. (1999). <u>Criteria for Assessing the Quality of Health Information on the Internet - Policy Paper</u>. Available at: http://hitiweb.mitretek.org/docs/policy.html</p> <p>Kellogg Health Sciences Library. (2001). <u>Evaluation of Health Information on the Internet</u>. Available at: http://www.library.dal.ca/kellogg/internet/evaluate.htm</p>
Posters	<p>When evaluating a poster, it is necessary to consider that generally, this type of material uses little text and that images are determinant in transmitting the message. Regarding images/illustration, recommendations center on those aspects that have been considered for the use of images and illustrations, while texts have to be short and promote actions.</p>

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