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Headings:

      Consumer Education

      Information Services – Special Subjects – Spanish Americans

      Web sites – Design

      Web sites – Evaluation

SPANISH HEALTH INFORMATION ON THE INTERNET:
AN EXPLORATORY STUDY

by
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of the School of Information and Library Science
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in partial fulfillment of the requirements
for the degree of Master of Science in
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Introduction

Consumers are increasingly turning to the Internet as their source of health information. One segment of this consumer population, the Hispanic community, is one of the fastest growing minority groups in the United States. This paper will give an overview of issues related to consumer health information and the Hispanic population. Using selected Hispanic health topics, the paper will also examine the accessibility of online Spanish health information using basic and advanced search techniques and the extent to which criteria that indicate the quality of the site can easily be found by the searcher.

Literature Review

The Growing Hispanic Population

The Hispanic population is one of the fastest growing population groups in the United States. US Census reports show that between 1990 and 2000, the Hispanic population increased by 50%, growing from 22.4 million to 35.3 million. (US Census Bureau, 2001, p. 2) This growth has made Hispanics the United States' largest minority group.   In North Carolina alone, the Hispanic population is 4.7%, up from 1.2% in 1990. (US Census Bureau, 2001, p. 4)   The US Census Bureau projects that the Hispanic community will grow from its current

12.5% of the US population to about 20% in 2035. (Centers for Disease Control: Office of Minority Health, 2004, para. 1) The US Census also reports that of those who speak Spanish, 28.3% speak English not well or not at all. (US Census Bureau, 2000, People - Origins and Language - Ability to Speak English section)

Consumer Use of the Internet for Health Information

The Internet is becoming a major source of health information for consumers. Eighty percent of adult Internet users, or about half of all Americans (about 93 million), have searched for at least one of 16 major health topics online. (Pew Internet & American Life Project, 2003, Summary of Findings section, para. 1) This is an increase from the year 2000 when 55% of Internet users looked for health or medical information online. (Pew Internet & American Life Project, 2000, Main Report - Introduction section, para. 2)

Hispanic Use of the Internet

Fifty percent of Hispanics (approximately 11 million) who are 18 or older have used the Internet. (Pew Internet & American Life Project, 2001, Summary of Findings – Half of Hispanic adults are online, para. 1). Fifty-one percent of those users have used the Web to get health and medical information. (Pew Internet & American Life Project, 2001, Summary of Findings - What Hispanics Do Online, para. 4) Due to the growing Hispanic and Spanish-speaking population, as well as the growing presence of Hispanics online and searching for health information, it is important that the health information needs of this group be served online and in the Spanish language.

The Issue of Quality and the Internet

As consumer use of the Internet to find health information is growing, many health and information professionals are concerned about the quality of the information encountered by the public. Unlike journals or books, the Internet does not have one source of quality control or regulations. Information can be posted by anyone, regardless of medical training or background. Poor quality information may lead to poor or harmful healthcare decisions by consumers. (Cline & Haynes, 2001)

Health and information professionals are seeking to understand issues involving online consumer health information by performing accessibility and quality assessment studies of consumer health websites. Health professionals and librarians have taken also taken a variety of steps to address this problem of quality, including the creation of reliable health websites, the creation of standards and codes of quality, and providing evaluation tools for consumers to assess website quality.

Studying the Quality of Online Health Information

A variety of techniques have been used to study the quality of health information on the Internet, from examining readability to using health professionals to rate content quality to examining the content of health related sites resulting from search engine searches. (Slater & Zimmerman, 2002; Slater & Zimmerman, 2003; Eysenbach, Powell, Kuss, & Sa, 2002) These studies have generally found problems with relevancy and accessibility and information being provided at reading levels higher than that of the general public.

While many studies have been undertaken to examine the quality and availability of health information on the Internet in English, few have specifically focused on information for the Hispanic population. One such study, from JAMA in 2001, examined the accessibility, quality of health-related content, and readability of health information from Spanish and English searches. (Berland et al., 2001)

Consumer Access of Online Health Information

Several sites have been created by health and information professionals to provide reliable health information in English and in Spanish, such as the National Library of Medicine's Medlineplus (http://www.medlineplus.gov) and NOAH : New York Online Access to Health (http://www.noah-health.org), and the Centers for Disease Control (http://www.cdc.gov). (Hartel & Mehling, 2002; Voge, 1998)

Despite the availability of health information from quality sources, such as medical and governmental sites, the typical consumer of Internet health information tends to start their search at a search engine or site rather than at a medical site. (Pew Internet & American Life Project, 2000) Therefore, even if quality material exists online, consumers must first be able to locate the material in order to use it. This underscores the importance of the accessibility of information at the point of a search engine search and the relevance or quality of health information resulting from search engine queries.

Consumer Evaluation of Online Health Information

Since there is no one set of standards for publishing health information on the Internet, those working with consumers seeking health information encourage them to use certain criteria to assess and evaluate pages they encounter. Medical librarians and health professionals have encouraged consumers to evaluate health information found on the Internet on the basis of factors such as the sponsorship of the site, currency of information, factual nature of the information, and the audience for which the site is intended. (Medical Library Association, 2003)

Only half of all health consumers search for medical advice and "only sometimes," "hardly ever," or "never" check the source or date of the information they read online. Only about one-quarter of health seekers follow the recommended guidelines on thoroughly checking the source and timeliness of information and are vigilant about verifying a site's information every time they search for health information. (Pew Internet & American Life Project, 2003)

Research Questions

Research Question #1: *What is the difference between the relevancy of results retrieved from basic and advanced searches?* While there are many reputable sites on the Internet offering health information, most consumers do not access health information by going directly to medical sites, but by utilizing search engines. (Pew Internet & American Life Project, 2000) Several search engines offer "advanced" features that may allow users to limit their search by language. Not all consumers may be aware of this function. The difference in

outcomes between search types may affect the relevancy of results, and therefore affect the Spanish-speaking consumer's ability to access relevant consumer health information.

Research Question #2: *What is the visibility of information that consumers can use to assess the quality of websites on pages that consumers do access, especially for Spanish language pages?* Most Internet users do not always check criteria that would allow them to assess the quality of websites. These criteria include the source and date of online health information. (Pew Internet & American Life Project, 2003) Therefore, Internet sources providing health information should have information on source and timeliness that is clear and easy for the consumer to locate. ("JAMA patient page. Health information on the Internet," 2001) Specifically, this study will examine the visibility of source, date, and a complementarity statement. A complementarity statement is a disclaimer stating that the information provided on the site is designed to support, not replace, the relationship that exists between a patient/site visitor and his/her existing physician. The statement points out the limitations of the site and encourages the consumer to seek out physician support. Throughout the paper, this concept will be referred to as a "complementarity statement" or "statement on complementarity".

Methods

This study examined Spanish language consumer health pages on the dimensions of accessibility and visibility of criteria that consumers can use to assess a website's quality. These pages were found by utilizing techniques that

would, as much as possible, mirror what consumers would actually do in their searches. More specifically, these pages were identified by through searches on important health topics to Hispanics using popular search engines.

Spanish language consumer health sites were identified by searching the two most popular search engines, Google and Yahoo, for two important Hispanic health topics – asthma and AIDS. The search included one term for each topic, "asma" for asthma and "SIDA" for AIDS.

The first 10 hits from searches in basic and advanced search modes were examined for this study. Duplicate pages were then identified and removed. The remaining unique pages were examined for relevancy. Accessibility of relevant information was assessed by comparing the results from the basic and advanced searches.

After irrelevant pages were removed, the remaining sites were analyzed for the visibility of three quality criteria: source, date, and a complementarity statement. The first accessed page (FAP) of each relevant search result was analyzed. If the first accessed page did not contain the searched criteria and is a portal page, links from the first accessed page containing CHI content were examined. The first accessed page was examined in this study because it is the first content of a site that users come in contact with. If no date or complementarity statement is available on the first accessed page, it is important that the information is available on a page with consumer health information (CHI). See Appendix E for a summary diagram of the methods used in this study.

1. Identifying Tools and Methods for Research

1.1 Search Engines & Number of Hits

Consumers who seek health information on the Internet initially turn to search engines rather than turning to medical sites. (Pew Internet & American Life Project, 2000) In order to mirror the general population's behavior when seeking health information, this study examined results from searching two of the most popular search engines. According to Searchenginewatch.com and Media Metrix, Google (http://www.google.com) and Yahoo (http://www.yahoo.com) are two of the most frequently used search engines. (SearchEngineWatch.com, 2004)

The first 10 hits (the first page of results) were examined from each search. This number was chosen because consumers who search for online health information are most likely to access sites from the first page of results from a search. (Eysenbach & Kohler, 2002)

1.2 Health Topics Chosen

The health topics searched in this study were chosen from lists of the most prevalent Hispanic health issues from the Center for Disease Control's Office of Minority Health. (Centers for Disease Control: Office of Minority Health, 2004) The two topics that were examined are asthma and acquired immune deficiency syndrome (AIDS).   Asthma and AIDS were chosen because they are among the top three conditions of disproportionately high prevalence in the Hispanic population.

1.3 Search Terms Used

While use of search phrases rather than words may result in more optimal searches, the natural search behaviors of some health information seekers tended not to consist of more than one search term.   (Eysenbach & Kohler, 2002) Therefore, in this study, one search term for each topic was searched. "Asma" (which is Spanish for asthma) and "SIDA" (Spanish for AIDS) were the terms used in the searches.
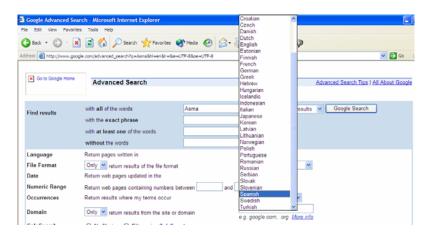
2. Searches

Searches on "asma" and "SIDA" were performed in Google and Yahoo's basic and advanced search modes. The first 10 results from each search were archived into the Internet Researcher program. The results from each search were compiled into tables. (See Appendix A, Table A.1 – Table A.4 and Appendix B, Table A.1 – Table A.4)

2.1 Basic versus Advanced Searching

Some consumers may be unaware of the most optimal search techniques to find information. For example, seekers of health information in languages other than English may not know about the advanced search techniques they could use to find information in their own language. A study by Eysenbach and Kohler (2002) about how consumers search for and appraise online health information showed that one of the non-English speaking participants was unaware of the advanced search techniques and ended up using translation tools to find information in his native language. In order to explore the differences between the results of these techniques, searches for each of the health topics

were performed on Google and Yahoo in both basic and advanced search modes. A basic search involves going to the main page of the respective search engine and searching for the health topic term. An advanced search involves clicking on "advanced" (Yahoo) or "advanced search" (Google) on the main page of the search engine and selecting "Spanish" as the language.

Graphic 1: Limiting the Google search to Spanish only websites in the Advanced Search feature.

2.2 Archiving Web Pages: Internet Researcher

In order to have a static collection of web pages to examine, website archiving software was used to collect pages. The first search "results page" from each search as well as the first 10 result pages from each search, plus one page away from the result page were archived using the program Internet Researcher.   If problems were encountered with the software or further consultation was needed, the archived URL was visited "live" in a web browser. Information about Internet Researcher is available at http://www.zylox.com.

3. Duplicate Pages

Duplicate pages were removed based on the criteria that the URLs were the same, the URLs redirected to a duplicate URL, or that the page content was

the same. A list of unique pages were then compiled into tables for each health topic. (See Appendix A, Table A.5 and Appendix B, Table B.5)

4. Relevant Pages & Accessibility Analysis

The remaining unique pages were examined for relevancy. Pages that were removed from the analysis were considered irrelevant because of a URL error, the pages weren't in Spanish, the pages were not about the consumer health topic, or the page did not contain CHI oriented content or contain links to CHI oriented content. The Web Page Assessment Sheet: Relevancy (see Appendix C) was used to assess relevancy. Accessibility was then determined by examining results from each basic and advanced search on each topic for relevancy.

5. Visibility of Quality Criteria

5.1 Identifying Quality Criteria

Many organizations are developing criteria and guidelines for assessing the quality of health information available on the Internet. Information about the website evaluation guidelines used in this project were chosen from criteria lists from the Medical Library Association and the Health on the Net's HONCode.

The Medical Library Association (MLA), is a non-profit organization for health information professionals with the mission of ensuring that the best health information is available to all. To support consumers searching for health information, the MLA developed "A User's Guide to Finding and Evaluating Health Information on the Web", which suggests sites and includes content

evaluation guidelines. (Medical Library Association, 2003)   Two of the criteria in the MLA's content evaluation guidelines are source and date.

The Health on the Net Foundation is a non-governmental organization with the mission of guiding medical users and practitioners to useful and reliable online health information. The Foundation created a code of conduct for health related websites called the "HONCode". The code does not examine the quality of the health information provided on the site, but provides a set of guidelines for the presentation of the information to make sure that readers always know the source and purpose of the information that they are reading. Sites that adhere to HONCode criteria are allowed to display the HONCode logo on their sites. (Health on the Net Foundation, 2004) One of the suggestions in the HONCode's criteria list is a statement on complementarity.

5.2 Definition of the Criteria to Check Quality

In this study, resulting web pages were examined for the visibility of the following three criteria that consumers can use to check the quality of a website: source, date, and a complementarity statement.   This exploratory study specifically asked the following questions:

(1) Source: Is the name and/or information about the source of the site available on the first accessed page (FAP)? Is information about the source available through a link on the first accessed page?

Knowledge of the sponsorship and source is important because it can help consumers identify whether the site is respected and dependable.

(2) Date: Is "last updated" information available on the first accessed page? If "last updated" information is not available, is copyright information available on the first accessed page? If not, and if the first accessed page is a portal page and does not contain consumer health information, does a page linked to the first accessed page with consumer health information have last updated information?

Health information changes constantly as research appears about diseases and treatments. Websites should reflect the most up-to-date information.

An example of a "last updated" statement in Spanish includes the following: *"Ultima Actualización el 13 de Marzo del 2003" – (from El Círculo de Venus El Círculo de Venus le ofrece una guia de recursos sobre el SIDA http://www.honmex.com/venus/venus.html)*   In English, this literally says: "Last updated the 13th of March 2003".

(3) Complementarity Statement: Is a statement on complementarity available on the first accessed page? If not, is the statement available via a link from the first accessed page?   Or, does a page containing consumer health information linked to the first accessed page have a complementarity statement?

A complementarity statement is a disclaimer that might include the following: "The information provided on this site is designed to support, not replace, the relationship that exists between a patient/site visitor and his/her existing physician." (Health on the Net Foundation, 2003) Complementarity means that the site should complement (accompany), not replace, the advice of a physician.

An example of this type of statement in Spanish includes the following: "El contenido de este folleto es únicamente para fines informativos. No pretende reemplazar la evaluación de un médico. Si Ud. tiene preguntas o inquietudes médicas, por favor póngase en contacto con su especialista en alergias/inmunólogo." *- (from AAAAI - Patients & Consumers Center: Asma ocupacional,*

http://www.aaaai.org/patients/publicedmat/tips/spanishtips/asma_ocupacional.stm) The English translation of this statement states (paraphrase): "The content of this brochure is solely for informational purposes. This doesn't replace the evaluation of a doctor. If you have medical questions or concerns, please contact your allergy specialist."

5.3 Analysis of the Visibility of Criteria to Check Quality

The first accessed page (FAP) of the remaining relevant pages for each health topic were examined for the visibility of source, date, and statement on complementarity. The Web Page Assessment Sheet: Criteria (see Appendix C) was used to assess the visibility of criteria used by consumers check website quality. The data from this assessment was compiled into tables for each health topic. (See Appendix A, Table A.6 and Appendix B, Table B.6)

Results

In total, 29 pages were analyzed for the study. For the searches on asthma, after duplicate sites were removed, 24 unique pages remained out of 40 search results. After the unique pages were examined for relevancy, 13 relevant pages remained and were then examined with the evaluation criteria. For the

search on AIDS, after duplicate sites were removed, 29 unique pages remained out of 40 search results. After the unique pages were examined for relevancy, 16 relevant pages remained and were then examined with the quality criteria.

Irrelevancy & Exclusion

After duplicates were removed, irrelevant results were removed because of URL error, non-Spanish language content, non-consumer health topic, or not containing CHI oriented content. Sites were irrelevant in the basic searches because they were either not in Spanish or did not pertain to the consumer health topic. Advanced search irrelevancy stemmed from either a URL error or from not containing CHI oriented content.

Table 1: Reasons for Exclusion from Analysis		
	Asthma	**AIDS**
Google Basic Search	10	10
Google Advanced Search	10	10
Yahoo Basic Search	10	10
Yahoo Advanced Search	10	10
Total pages from search results	**40**	**40**
Duplicates	16	11
Total pages after duplicates removed	**24**	**29**
URL error	1	0
Not in Spanish	9	9
In Spanish, not about health topic	0	1
In Spanish, about health topic, but page did not contain CHI oriented content	1	3
Total number of analyzed pages	**13**	**16**

Examples of sites in non-Spanish languages included an English-language site about the Aerospace Medical Association (ASMA) and sites on AIDS in French only. One example of an irrelevant site in Spanish from the

search on AIDS was the page for *Communitel*, a telecommunications business. An example of a site relevant to the health topic of AIDS but which did not offer consumers health information was the *Acción Ciudadana Contra el SIDA* site, which was about human rights issues related to AIDS rather than health information.

Table 2: Accessibility of Health Information - Irrelevancy Statistics				
	Google		Yahoo	
Health Topic	Basic	Advanced	Basic	Advanced
Asthma	7 of 10	1 of 10	6 of 10	1 of 10
AIDS	8 of 10	2 of 10	4 of 10	1 of 10

From four to eight of the results in each basic search were irrelevant to the health topic searched. Less then two results were irrelevant in the advanced searches. Many of the irrelevant sites in the basic searches for asthma contained non-Spanish language sites which also did not pertain to the topic searched. The term "asma" in the basic search retrieved several organizations with the acronym ASMA.   Many of the irrelevant sites in the basic searches for AIDS contained pages for sites which were about AIDS but in non-Spanish languages. AIDS translates to SIDA in other romance languages such as French.

Quality Criteria Examination

Table 3: Quality Criteria Examination on Relevant Sites		
	Asthma n=13	**AIDS n=16**
Source name on first accessed page (FAP)	12	15
Source information on FAP or available via link	7	10
Source name not on FAP	1	1
Last updated information on FAP	7	6
Copyright information on FAP	5	4
Last updated information on CHI page if not FAP		2
None or in English	1	4
Complementarity statement on FAP	4	4
Complementarity statement available via link from FAP	2	3
Complementarity statement on CHI page if not FAP		1
Complementarity statement via link from CHI page		
None or in English	7	8

Most of the sites listed the name of the source of the website on the first accessed page; however, not all of the pages listed information about the site's author or source. About half of the sites listed last updated information on the first accessed page (FAP), or if they did not list last updated information, many posted a copyright date.   Half of the sites did not have a complementarity statement or had the statement in English only.

Discussion

From this study, several suggestions can be made for Spanish speakers looking for health information online, for those working with Spanish speaking consumers searching for health information, and for those providing health information online in Spanish.

The results of this study provide useful information for Hispanic or Spanish-speaking consumers and the medical or public librarians or health professionals who help consumers find health information.   This study showed a difference between the types of results received when performing searches in a basic search engine mode versus an advanced mode, where the language is limited to only Spanish.   Those working with Hispanic or Spanish-speaking consumers to help them find health information can use search strategies or show their clients search strategies that may optimize the search and result in more relevant hits. Also, adding a link to "Search in Spanish/Buscar en Español" to the front of search engine pages may help Spanish-speaking consumers with their searches.

Health professionals and medical librarians suggest that consumers consider the source and timeliness of health information they encounter on the Internet. It is also suggested that websites offering consumer health information provide a statement on complementarity. Since consumers tend to access CHI pages from Internet search engines rather than known medical sites, the information on source, timeliness and statement on complementarity should be available on any page within a site offering CHI, especially those pages offering consumer health information. This study has shown that this type of information is not always available. Several of the sites might have had information about the source or complementarity, but this information may have been buried within layers of links. For the consumer who rarely seeks this type of information

anyhow, these links and statements should be easily accessible and visible from the page that consumers may see, especially the pages containing the CHI itself.

There are several recommendations for sites who offer information in English and Spanish, or whose primary language is English. Several of the pages had statements on complementarity, timeliness, or source information, but this information was in English only. It is important for sources that offer health information in Spanish to also offer this type of information for assessing quality in Spanish as well.

For example, some sites may have reputable sources, but this will be unknown to Spanish-speaking consumers unless the source name and information about the organization is provided in Spanish. Several organizations offered different levels of translated information for the Spanish-speaking consumer. For example, the National Center for Environmental Health gave a Spanish translation of their name to Spanish and offered a page about the center in Spanish through a direct and clear "Qué es el NCEH?" link from the first accessed page.

While many sites did offer links to information about complementarity or the source, these links were not always clear. Some pages had a complementarity statement directly on the first accessed page or on the page with consumer health information content. Others offered this information through a "terms of use" link, often at the bottom of the page.

It is also important that sites with English as the primary language offer navigational tools in Spanish in addition to English. Some sites offered content in

Spanish, but through isolated pages rather than as a collection of resources geared toward Spanish-speaking consumers.

Limitations & Future Directions

Limitations exist in this study, primarily because of its exploratory nature. In this study, outcomes of the searches are discussed and general recommendations are made for those providing health information in Spanish as well as those assisting Spanish speaking groups with finding health information. In future studies, other statistical methods could be employed to assess the significance of the results. Also, the review of the sites was done by the author, a non-native Spanish speaker. Future site reviews can be implemented with multiple native Spanish speakers. Other suggestions for future research include the expansion of search terms, examination of natural search behaviors and techniques used by Spanish speaking consumers, and use of different quality criteria examining for visibility.

Future studies can be done expanding on the number of search terms used for searches on health topics. In this study, one term was simply searched in the search engines, rather additional searches on alternative variations of the health topics. One term was chosen (ie asma for asthma and SIDA for AIDS) because natural search behaviors of some health information consumers tended not to consist of more than one search term. (Eysenbach & Kohler, 2002) Future studies examining Spanish-speaking consumers' actual search behaviors can discover more terms used about the health topics examined in this study.

The terms used in this study may have had an influence on the relevancy results. As mentioned earlier, "asma" resulted in several non-Spanish or non-CHI sites due to its use as an acronym. "SIDA" resulted in several non-Spanish sites because it also translates to AIDS in other languages. The use of more Spanish-specific terms and especially phrases in searches may reduce the amount of irrelevant hits (specifically due to non-topical relevancy) in the basic search.

The criteria used to assess quality can also be expanded in future studies. In other studies, the quality of the actual content of the health information has been assessed by health professionals; however, since this study takes an information/library science perspective, aspects of quality of how the information is presented are examined rather than the content itself. This mirrors the Health on the Net Foundation's code (HONCode) for examining quality websites. The HONCode does not intend to rate the quality of the information provided by a website, but is designed to "hold Web site developers to basic ethical standards in the presentation of information and help make sure readers always know the source and the purpose of the data they are reading." (Health on the Net Foundation, 2004)

Other dimensions of quality that the Medical Library Association and the Health on the Net Foundation recommend for consumer assessment of websites can be examined for visibility. Also, future studies can perform a quality assessment of the information that the quality criteria on Spanish language websites provide. For example, sites can be examined for the type of source

providing the information and the currency of the information in addition to the visibility of that type of information.

Future research studying the natural use behavior of searches could examine the consumer use of these "terms of use" links and compare their rate of reading and remembering disclaimers on the CHI page itself versus linked pages.

Conclusion

This paper gave an overview of issues related to consumer health information on the Internet and the Hispanic population. The paper also examined the accessibility of online Spanish health information by comparing the reliability of results from basic and Spanish-focused advanced searching of two popular search engines. Visibility of quality criteria was examined by looking for the source, date, and a complementarity statement on the first pages of the sites studied.

Several suggestions can be made from this study for Spanish-speaking consumers seeking health information online, for those working with these consumers to find health information, and for those providing health information in Spanish on the Internet. These suggestions include modification of search techniques and recommendations for visibility of information that consumers can use to assess the quality of websites.

Spanish speakers can modify their search techniques to result in more relevant hits, particularly by utilizing "advanced search" features of search engines. Health professionals and librarians can become aware of these

features and instruct their clients about its use. Those providing health information online specifically towards Spanish speaking consumers can do several things to make sure that these consumers are able to assess the quality of the site. Information that consumers can use to assess a site's quality, such as source, date, and a complementarity statement should be available on all pages of the site, particularly on the page offering consumer health information. Because consumers usually seek health information from search engines, they may end up at a variety of places within a site. Providing information about these criteria on each page with clear statements or links will improve the visibility of this type of information for consumers. For providers of sites in English and Spanish, source, date, and complementarity statements should all be offered not only in English but in also in Spanish.

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Appendices

Notes: "Hit number" is the order or rank of the page in the list of search results. The "page name" is taken from the name given on the search engine results page.

Appendix A. Data Collection Tables: Asthma (Asma)

Table A.1 Google Basic Search

Hit Number	Page Name	URL
1	Aerospace Medical Association	www.asma.org
2	Atari SAP Music Archive	asma.dspaudio.com/
3	Tuotromedico: Asma Bronquial	www.tuotromedico.com/temas/asma.htm
4	Australian Software Metrics Association	www.asma.org.au/
5	Atari SAP Music Archive	asma.atari.org/
6	¿Qué es el asma?	www.alergiainfantillafe.org/asma.htm
7	СГМУ / NSMU	www.nsmu.ru/
8	Asma Bronquial	www.ecomedic.com/em/asmabron.htm
9	Asma Bronquica/Bronchial Asthma	www.asmabronquica.com.br/
10	Asma	www.farmaceuticonline.com/familia/familia_asma.html

Table A.2 Google Advanced Search

Hit Number	Page Name	URL
1	Tuotromedico: Asma Bronquial	www.tuotromedico.com/temas/asma.htm
2	¿Qué es el asma?	www.alergiainfantillafe.org/asma.htm
3	Asma Bronquial	www.ecomedic.com/em/asmabron.htm
4	El Colegio Mexicano De Alergia Asma E Inmunologia Pediatrica	www.comaaipe.org.mx/
5	AAAAI - Patients & Consumers Center: Asma infantile	www.aaaai.org/patients/publicedmat/tips/spanishtips/asma_infantil.stm
6	Sociedad Latinoamericana de Alergia, Asma e Inmunología	www.slaai.org.ar/
7	Asma, qué hacer - Centro Nacional de Salud Ambiental	www.cdc.gov/nceh/airpollution/spanish/sp_asthmaag.htm
8	Informacion Acerca Del Asma	www.lungusa.org/diseases/espanol/hhm20.html
9	Asma te venci	www.asmatevenci.com.ar/
10	MSD México - Asma	www.msd.com.mx/content/patients/asma/asma_index.html

Table A.3 Yahoo Basic Search

Hit Number	Page Name	URL
1	Aerospace Medical Association	www.asma.org
2	Atari SAP Music Archive	asma.dspaudio.com/
3	Alam Sekitar Malaysia Sdn Bhd	www.enviromalaysia.com.my/
4	Bogaziçi University - Advanced System for Multi-computer Applications Project	www.baam.boun.edu.tr/asma
5	Australian Software Metrics Association	www.asma.org.au/
6	Asma, qué hacer - Centro Nacional de Salud Ambiental	www.cdc.gov/nceh/airpollution/spanish/sp_asthmaag.htm
7	Informacion Acerca Del Asma	www.lungusa.org/diseases/espanol/hhm20.html
8	Algunas Verdades Sobre El Asma, El Asma Puede Controlarse…Usted Puede Hacerlo	www.lungusa.org/diseases/espanol/hhm7.html
9	ASMA Racing Homepage	www.asmaracing.com/
10	Tuotromedico: Asma Bronquial	www.tuotromedico.com/temas/asma.htm

Table A.4 Yahoo Advanced Search

Hit Number	Page Name	URL
1	Asma, qué hacer - Centro Nacional de Salud Ambiental	www.cdc.gov/nceh/airpollution/spanish/sp_asthmaag.htm
2	Informacion Acerca Del Asma	www.lungusa.org/diseases/espanol/hhm20.html
3	Algunas Verdades Sobre El Asma, El Asma Puede Controlarse…Usted Puede Hacerlo	www.lungusa.org/diseases/espanol/hhm7.html
4	Tuotromedico: Asma Bronquial	www.tuotromedico.com/temas/asma.htm
5	Respirar - To Breathe. El Portal del Asma. The Asthma Gateway	www.infodoctor.org/respirar
6	AAAAI - Patients & Consumers Center: Asma ocupacional	www.aaaai.org/patients/publicedmat/tips/spanishtips/asma_ocupacional.stm
7	El Asma y las alergias: Pregúntale a NOAH	www.noah-health.org/spanish/illness/respiratory/spasthma.html
8	AAAAI - Patients & Consumers Center: Asma infantil	www.aaaai.org/patients/publicedmat/tips/spanishtips/asma_infantil.stm
9	Asma CHOICE For Somerset Medical Center	community.healthgate.com/GetContent.asp?siteid=smc&docid=/dci/asthma_SPA
10	Asma Bronquial	www.geocities.com/amirhali/_fpclass/asma.htm

Table A.5 Asthma – Relevancy & Unique Pages (After Removal of Duplicates)

Page Name	URL	Search Result Location	Relevant?
¿Qué es el asma?	www.alergiainfantillafe.org/asma.htm	GB-6, GA-2	Yes.
AAAAI - Patients & Consumers Center: Asma infantil	www.aaaai.org/patients/publicedmat/tips/spanishtips/asma_infantil.stm	YA-8 GA-5	Yes.
AAAAI - Patients & Consumers Center: Asma ocupacional	www.aaaai.org/patients/publicedmat/tips/spanishtips/asma_ocupacional.stm	YA-6	Yes.
Aerospace Medical Association	www.asma.org	GB-1, YB-1	Not Spanish
Alam Sekitar Malaysia Sdn Bhd	www.enviromalaysia.com.my/	YB-3	Not Spanish
Algunas Verdades Sobre El Asma, El Asma Puede Controlarse…Usted Puede Hacerlo	www.lungusa.org/diseases/espanol/hhm7.html	YA-3, YB-8	Yes.
Asma	www.farmaceuticonline.com/familia/familia_asma.html	GB-10	Not Spanish
Asma Bronquial	www.geocities.com/amirhali/_fpclass/asma.htm	YA-10	URL problem
Asma Bronquica/Bronchial Asthma	www.asmabronquica.com.br/	GB-9	Not Spanish
Asma CHOICE For Somerset Medical Center	community.healthgate.com/GetContent.asp?siteid=smc&docid=/dci/asthma_SPA	YA-9	Yes.
ASMA Racing Homepage	www.asmaracing.com/	YB-9	Not Spanish

Notes: In the "Search Result Location", Y = Yahoo, G = Google, A = advanced, B = basic. "-#" is the number of the hit by rank on the search result page. Not Spanish means that the page is in a language other than Spanish. Not CH topic means that the subject discussed in the page is not related to the health topic searched. Not CHI means that the topic of the health page is related to the health topic searched, but it is not geared toward consumers or containing consumer health information. URL problem means that the URL of the page did not function.

Table A.5 Continued: Asthma – Relevancy & Unique Pages (After Removal of Duplicates)

Page Name	URL	Search Result Location	Relevant?
Asma te venci	www.asmatevenci.com.ar/	GA-9	Yes.
Asma, qué hacer - Centro Nacional de Salud Ambiental	www.cdc.gov/nceh/airpollution/ spanish/sp_asthmaag.htm	YA-1, YB-6 GA-7	Yes.
Atari SAP Music Archive (Atari SAP Music Archive)**	asma.dspaudio.com/ (asma.atari.org/)	GB-1, YB-2 (GB-5)	Not Spanish
Australian Software Metrics Association	www.asma.org.au/	GB-4 YB-5	Not Spanish
Bogaziçi University - Advanced System for Multi-computer Applications Project	www.baam.boun.edu.tr/asma	YB-4	Not Spanish
El Asma y las alergias: Pregúntale a NOAH	www.noah-health.org/spanish/illness/respiratory/spasthma.html	YA-7	Yes.
El Colegio Mexicano De Alergia Asma E Inmunologia Pediatrica	www.comaaipe.org.mx/	GA-4	Yes.
Informacion Acerca Del Asma	www.lungusa.org/diseases/espanol/hhm20.html	YA-2, YB-7 GA-8	Yes.
MSD México - Asma	www.msd.com.mx/content/patients/asma/asma_index.html	GA-10	Yes.
Respirar - To Breathe. El Portal del Asma. The Asthma Gateway	www.infodoctor.org/respirar	YA-5	Yes.
Sociedad Latinoamericana de Alergia, Asma e Inmunología	www.slaai.org.ar/	GA-6	Not CHI
Tuotromedico: Asma Bronquial (Asma Bronquial)**	www.tuotromedico.com/temas/asma.htm (www.ecomedic.com/em/asmabron.htm)	YA-4, YB-10 GA-1, GB-3 (GB-8, GA-3)	Yes.
СГМУ / NSMU	www.nsmu.ru/	GB-7	Not Spanish

** This URL redirected to the URL listed above it.

Table A.6 Asthma - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
1	AAAAI - Patients & Consumers Center: Asma infantile	www.aaaai.org/patients/pub licedmat/tips/spanishtips/a sma_infantil.stm	YA-8 GA-5
	Country of origin: United States Primary site language: English FAP = CHI		
Source	American Academy of Allergies, Asthma, and Immunology Name on FAP: At bottom. "Los folletos Consejos para Recordar han sido creados por el Comité de Educación Pública de la Academia Americana de Alergia, Asma e Inmunología."		
Date	Last updated info on FAP: At bottom. "Este folleto se actualizó en 2003"		
Complement	Complementary info on FAP: At bottom. "El contenido de este folleto es únicamente para fines informativos. No pretende reemplazar la evaluación de un médico. Si Ud. tiene preguntas o inquietudes médicas, por favor póngase en contacto con su especialista en alergias/inmunólogo."		

Notes: In the "Search Result Location", Y = Yahoo, G = Google, A = advanced, B = basic. "#" is the number of the hit by rank on the search result page. FAP = first accessed page that users see after clicking on one of the search engine's results. FAP = CHI means that the first page accessed contains consumer health information, such as a topical article. FAP = Portal page means that the first page accessed is the main or portal page to a site.

Table A.6 Continued: Asthma - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
2	AAAAI - Patients & Consumers Center: Asma ocupacional	www.aaaai.org/patients/publicedmat/tips/spanishtips/asma_ocupacional.stm	YA-6
	Country of origin: United States Primary site language: English FAP = CHI No navigational links to other Spanish information.		
Source	Name on FAP: American Academy of Allergies, Asthma, and Immunology "Los folletos Consejos para Recordar han sido creados por el Comité de Educación Pública de la Academia Americana de Alergia, Asma e Inmunología."		
Date	Last updated information on FAP: At bottom of page. "Este folleto se actualizó en 2003"		
Complement	Complementary info on FAP: At bottom of page. "El contenido de este folleto es unicamente para fines informativos. No pretende reemplazar la evaluación de un médico. Si Ud. tiene preguntas o inquietudes médicas, por favor póngase en contacto con su especialista en alergias/inmunólogo."		
3	Algunas Verdades Sobre El Asma, El Asma Puede Controlarse...Usted Puede Hacerlo	www.lungusa.org/diseases/espanol/hhm7.html	YA-3, YB-8
	Country of origin: United States Primary site language: English FAP = CHI		
Source	Name on FAP: American Lung Association. Info on link from FAP: Yes. "Información en Espanol".		
Date	Last updated on FAP: No. Copyright date on FAP. At bottom. "2003"		
Complement	Complementary info on FAP: Not in Spanish, only in English. "The information contained in this American Lung Association® web site is not a substitute for medical advice or treatment, and the American Lung Association recommends consultation with your doctor or health care professional." (bottom of FAP)		

Table A.6 Continued: Asthma - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
4	Asma CHOICE For Somerset Medical Center	community.healthgate.com/ GetContent.asp?siteid=smc &docid=/dci/asthma_SPA	YA-9
	Country of origin: United States Primary site language: English FAP = CHI		
Source	Somerset Medical Center & HealthGate Link to information about source at bottom of FAP. "Editorial Policy" and "Terms & Conditions". However, information only in English.		
Date	Mixed in Spanish and English. On bottom of FAP. "Last reviewed Junio de 2001"		
Complement	At bottom of FAP. "Se provee esta información como complemento a la atención proporcionada por su medico. Dicha información no tiene el propósito o la presunción de substituir el consejo medico profesional. Procure siempre el consejo de su medico o de otro profesional de la salud competente antes de iniciar cualquier tratamiento nuevo o para aclarar cualquier duda que usted pueda tener con relación a un problema de salud."		
5	Asma, qué hacer – Centro Nacional de Salud Ambiental	www.cdc.gov/nceh/airpollut ion/spanish/sp_asthmaag.h tm	YA-1, YB-6 GA-7
	Country of origin: United States Primary site language: English FAP = CHI		
Source	Name on FAP: Yes. CDC/National Center for Environmental Health. Info on link from FAP: Link name, "¿Qué es el NCEH?"		
Date	Last updated date on FAP at bottom: "Esta página fue revisada en 06/23/03"		
Complement	No.		

Table A.6 Continued: Asthma - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
6	Asma te venci	www.asmatevenci.com.ar/	GA-9
	Country of origin: Argentina (from domain) Primary site language: Spanish FAP = CHI A personal story of someone's experience with asthma.		
Source	Name on FAP: No. Personal page. Gives person's contact email. marta-isolina@asmatevenci.com.ar Not sure of who this person is or their medical background. Gives the name of the doctor that influenced the source.		
Date	Last updated date on FAP: At bottom. "Última actualización 23.August. 2003"		
Complement	No.		
7	El Asma y las alergias: Pregúntale a NOAH	www.noah-health.org/spanish/illness/respiratory/spasthma.html	YA-7
	Country of origin: United States Primary site language: English and Spanish FAP = CHI (Page of links)		
Source	NOAH – New York Online Access to Health "Esta página ha sido publicada por el equipo de NOAH." Info on FAP: Link to information in Spanish at bottom of FAP to editor of page. "Redactor de esta página: Kristine Alpi, MLS, MPH, AHIP"		
Date	Last updated information on FAP: At bottom. "Actualizada: 29 de Julio de 2003"		
Complement	Complementary info on FAP: At bottom. "Renuncia: NOAH es tan sólo una guía de información y no puede responder preguntas o hacer investigaciones relacionadas a la salud. La información de NOAH ha sido seleccionada de una variedad de recursos sobre la salud para el consumidor; se le ofrece a usted con el entendimiento de que no se interprete como asesoramiento médico o profesional. Toda información médica deberá ser cuidadosamente revisada con su prestador de atención médica."		

Table A.6 Continued: Asthma - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
8	El Colegio Mexicano De Alergia Asma E Inmunologia Pediatrica	www.comaaipe.org.mx/	GA-4
	Country of origin: Mexico Primary site language: Spanish FAP = Portal		
Source	Name on FAP: Yes. Colegio Mexicano De Alergia Asma E Inmunologia Pediatrica Info on link from FAP: Link - "Historia y Función". Also infomation on main page. Includes CHI related link "Temas de Alergia para Padres"		
Date	Last updated date on FAP: At bottom. "Fecha de la última actualización: 14 de Octubre del 2003"		
Complement	No.		
9	Informacion Acerca Del Asma	www.lungusa.org/diseases/espanol/hhm20.html	YA-2, YB-7 GA-8
	Country of origin: United States Primary site language: English FAP = CHI		
Source	Name on FAP: American Lung Association. Info on link from FAP: Yes. "Informacion en Espanol".		
Date	Copyright date on FAP at bottom: "2003"		
Complement	Complementary info on FAP: Not in Spanish, only in English. "The information contained in this American Lung Association® web site is not a substitute for medical advice or treatment, and the American Lung Association recommends consultation with your doctor or health care professional." (bottom of FAP)		

Table A.6 Continued: Asthma - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
10	MSD México – Asma	www.msd.com.mx/content/patients/asma/asma_index.html	GA-10
	Country of origin: Mexico Primary site language: Spanish FAP = CHI		
Source	Name on FAP: Yes		
Date	Copyright date on FAP at bottom: 1995-2003		
Complement	No.		
11	¿Qué es el asma?	www.alergiainfantillafe.org/asma.htm	GA-2, GB-6
	Country of origin: Spain Primary site language: Spanish. Also available in English. FAP = CHI Information on Asthma geared at kids.		
Source	Name on FAP. "Unidad de Alergia Infantil, HOSPITAL LA FE, VALENCIA, ESPANA"		
Date	Copyright date on FAP. At bottom. 2002.		
Complement	No.		

Table A.6 Continued: Asthma - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
12	Respirar - To Breathe. El Portal del Asma. The Asthma Gateway	www.infodoctor.org/respirar	YA-5
	Country of origin: Spain Primary site language: Bilingual – Spanish and English Note: HONCode FAP = Portal		
Source	Name on FAP: Carlos A. Díaz Vázquez. / Merck, Sharp Dohme, España Info on link from FAP: Link - "términos de uso" Information about principal author and the authoring team is available		
Date	Copyright date on FAP at bottom: "© 2000-2004"		
Complement	Complementary info on link from FAP at bottom: Link - "términos de uso" "La sección dirigida a los padres no pretende en ningún modo sustituir la tarea de su pediatra."		
13	Tuotromedico: Asma Bronquial	www.tuotromedico.com/temas/asma.htm	YA-4, YB-10 GA-1, GB-3 GB-8, GA-3
	Country of origin: Spain Primary site language: Spanish FAP = CHI Note: HONCode		
Source	Name on FAP: Tuotromedico/Pulsomed Info on link from FAP at bottom: Information maintained by Pulsomed (http://www.pulsomed.com/), "una empresa dedicada a la información sobre temas de salud, formada por profesionales de reconocido prestigio y experiencia en la asistencia sanitaria."		
Date	Last updated on FAP at bottom: "Ultima actualización: Marzo 2004"		
Complement	Complementary info on link from FAP: Link at bottom of FAP - "Asegúrese de conocer las limitaciones de este servicio antes de utilizarlo" "TUOTROMEDICO® no contiene información exhaustiva sobre los temas tratados, ni puede, en modo alguno, sustituir a un servicio de atención médica directa."		

Appendix B. Data Collection Tables: AIDS (SIDA)

Table B.1 Google Basic Search

Hit Number	Page Name	URL
1	Sida Info Service	www.sida-info-service.org/
2	Sida Info Service	www.sida-info-service.org/default.php3
3	Sida - Styrelsen för Internationellt Utvecklingssamarbete	www.sida.se/
4	Sida - Start Page	www.sida.se/Sida/jsp/polopoly.jsp?d=107
5	Solidarité SIDA	www.solidarite-sida.org/
6	VIH y SIDA	www.ctv.es/USERS/fpardo/home.html
7	VIH SIDA - Sidaweb.com	www.sidaweb.com/
8	SIDAnet	www.sidanet.asso.fr/
9	Multisexualités et sida	www.multisexualites-et-sida.org/
10	Amigos Contra el SIDA en Internet	www.aids-sida.org/

Table B.2 Google Advanced Search

Hit Number	Page Name	URL
1	VIH y SIDA	http://www.ctv.es/USERS/fpardo/home.html
2	Comunitel	http://www.intercom.es/folch/poesia/
3	Amigos Contra el SIDA en Internet	http://www.aids-sida.org/
4	FASE - Fundación Anti-Sida España - BIENVENIDO	http://www.fase.es/
5	Un Rincón de Esperanza - Primer Sitio Argentino sobre VIH y SIDA	www.fundamind.org.ar/sida/
6	Prevención de VIH/SIDA - CDC En Español	www.cdc.gov/spanish/enfermedades/vih-sida.htm
7	Acción Ciudadana Contra el SIDA	www.internet.ve/accsi/
8	vihsida en Chile	www.vihsida.cl/
9	La Fundacion anti-SIDA de San Francisco – Sitio Web	www.sfaf.org/espanol.html
10	SF AIDS Fdn: BETA en espanol/Spanish BETA	www.sfaf.org/betaespanol/

Table B.3 Yahoo Basic Search

Hit Number	Page Name	URL
1	Sida - Styrelsen för Internationellt Utvecklingssamarbete	www.sida.se/
2	Joint United Nations Programme on HIV/AIDS (UNAIDS)	www.unaids.org/
3	Prevención de VIH/SIDA - CDC En Español - Centros Para el Control y la Prevención de Enfermedades	www.cdc.gov/spanish/enfermedades/vih-sida.htm
4	El SIDA/VIH: Pregúntale a NOAH	www.noah-health.org/spanish/illness/aids/spaids.html
5	EL SIDA	www.aciprensa.com/sida
6	AIDS.org	http://www.aids.org/
7	MedlinePlus: SIDA	www.nlm.nih.gov/medlineplus/spanish/aids.html
8	Project Inform Información en español [VIH / SIDA Tratamientos Informacion]	http://www.projinf.org/spanish/
9	MEDtour-sida	http://sanatate.vreau.com/toti/sida.htm
10	El Círculo de Venus El Círculo de Venus le ofrece una guia de recursos sobre el SIDA	http://www.honmex.com/venus/venus.html

Table B.4 Yahoo Advanced Search

Hit Number	Page Name	URL
1	Prevención de VIH/SIDA - CDC En Español - Centros Para el Control y la Prevención de Enfermedades	www.cdc.gov/spanish/enfermedades/vih-sida.htm
2	El SIDA/VIH: Pregúntale a NOAH	www.noah-health.org/spanish/illness/aids/spaids.html
3	EL SIDA	www.aciprensa.com/sida
4	MedlinePlus: SIDA	www.nlm.nih.gov/medlineplus/spanish/aids.html
5	Project Inform Información en español [VIH / SIDA Tratamientos Informacion]	http://www.projinf.org/spanish/
6	El Círculo de Venus El Círculo de Venus le ofrece una guia de recursos sobre el SIDA	http://www.honmex.com/venus/venus.html
7	SIDA y VIH	www.ieanet.com/general/sida.htm
8	SIDA	http://www.geocities.com/WestHollywood/5144/sida.htm
9	Espa?ol	hivinsite.ucsf.edu/InSite.jsp?page=li-10-01
10	Línea Nacional del SIDA	http://www.ashastd.org/nah/sida/

Table B.5 AIDS – Relevancy & Unique Pages (After Removal of Duplicates)

Page Name	URL	Search Result Location	Relevant?
Acción Ciudadana Contra el SIDA	www.internet.ve/accsi/	GA-7	Not CHI
AIDS.org	http://www.aids.org/	YB-6	Not Spanish
Amigos Contra el SIDA en Internet	www.aids-sida.org/	GB-10, GA-3	Yes.
Comunitel	http://www.intercom.es/folch/poesia/	GA-2	Not CH topic
El Círculo de Venus El Círculo de Venus le ofrece una guia de recursos sobre el SIDA	http://www.honmex.com/venus/venus.html	YB-10, YA-6	Yes.
EL SIDA	www.aciprensa.com/sida	YB-5, YA-3	Yes.
El SIDA/VIH: Pregúntale a NOAH	www.noah-health.org/spanish/illness/aids/spaids.html	YB-4, YA-2	Yes.
Espa?ol	hivinsite.ucsf.edu/InSite.jsp?page=li-10-01	YA-9	Yes.
FASE - Fundación Anti-Sida España - BIENVENIDO	http://www.fase.es/	GA-4	Yes.
Joint United Nations Programme on HIV/AIDS (UNAIDS)	www.unaids.org/	YB-2	Not Spanish
La Fundacion anti-SIDA de San Francisco – Sitio Web	www.sfaf.org/espanol.html	GA-9	Yes.
Línea Nacional del SIDA	http://www.ashastd.org/nah/sida/	YA-10	Yes.
MedlinePlus: SIDA	www.nlm.nih.gov/medlineplus/spanish/aids.html	YB-7, YA-4	Yes.
MEDtour-sida	http://sanatate.vreau.com/toti/sida.htm	YB-9	Not Spanish

Notes: In the "Search Result Location", Y = Yahoo, G = Google, A = advanced, B = basic. "-#" is the number of the hit by rank on the search result page. Not Spanish means that the page is in a language other than Spanish. Not CH topic means that the subject discussed in the page is not related to the health topic searched. Not CHI means that the topic of the health page is related to the health topic searched, but it is not geared toward consumers or containing consumer health information. URL problem means that the URL of the page did not function.

Table B.5 Continued: AIDS – Relevancy & Unique Pages (After Removal of Duplicates)

Page Name	URL	Search Result Location	Relevant?
Multisexualités et sida	www.multisexualites-et-sida.org/	GB-9	Not Spanish
Prevención de VIH/SIDA - CDC En EspañoI	www.cdc.gov/spanish/enfermedades/vih-sida.htm	GA-6 YB-3, YA-1	Yes.
Project Inform Información en español [VIH / SIDA Tratamientos Informacion]	http://www.projinf.org/spanish/	YB-8, YA-5	Yes.
SF AIDS Fdn: BETA en espanol/Spanish BETA	www.sfaf.org/betaespanol/	GA-10	Yes.
SIDA	http://www.geocities.com/West Hollywood/5144/sida.htm	YA-8	Yes.
Sida - Start Page	www.sida.se/Sida/jsp/polopoly.jsp?d=107	GB-4	Not Spanish
Sida - Styrelsen för Internationellt Utvecklingssamarbete	www.sida.se/	GB-3 YB-1	Not Spanish
Sida Info Service (Sida Info Service)**	www.sida-info-service.org/ (www.sida-info-service.org/default.php3)	GB-1 (GB-2)	Not Spanish
SIDA y VIH	www.ieanet.com/general/sida.htm	YA-7	Not CHI
SIDAnet	www.sidanet.asso.fr/	GB-8	Not CHI
Solidarité SIDA	www.solidarite-sida.org/	GB-5	Not Spanish
Un Rincón de Esperanza - Primer Sitio Argentino sobre VIH y SIDA	www.fundamind.org.ar/sida/	GA-5	Yes.
VIH SIDA - Sidaweb.com	www.sidaweb.com/	GB-7	Not Spanish
VIH y SIDA	www.ctv.es/USERS/fpardo/home.html	GB-6, GA-1	Yes.
vihsida en Chile	www.vihsida.cl/	GA-8	Yes.

Table B.6 AIDS - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
1	Amigos Contra el SIDA en Internet	www.aids-sida.org/	GB-10, GA-3
	Country of origin: Mexico Primary site language: Spanish. English section under construction. FAP = Portal		
Source	Amigos Contra el SIDA.		
Date	No.		
Complement	No.		
2	El Círculo de Venus El Círculo de Venus le ofrece una guía de recursos sobre el SIDA	http://www.honmex.com/venus/venus.html	YA-6, YB-10
	Country of origin: Unknown Primary site language: Spanish FAP = Portal Information about AIDS in Spanish, particularly targeted towards women.		
Source	Name on FAP – "Esta página es mantenida por la Dra.Ma. Auxiliadora Molina de Serna y es patrocinada por Honmex Group" (webhosting)		
Date	Last updated date on FAP. At bottom. "Ultima Actualización el 13 de Marzo del 2003."		
Complement	No.		

Notes: In the "Search Result Location", Y = Yahoo, G = Google, A = advanced, B = basic. "#" is the number of the hit by rank on the search result page. FAP = first accessed page that users see after clicking on one of the search engine's results. FAP = CHI means that the first page accessed contains consumer health information, such as a topical article. FAP = Portal page means that the first page accessed is the main or portal page to a site.

Table B.6 Continued: AIDS - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
3	EL SIDA	www.aciprensa.com/sida	YA-3, YB-5
	Country of origin: Peru Primary site language: Spanish FAP = Portal		
Source	Name on FAP: ACI Prensa		
Date	No.		
Complement	No.		
4	El SIDA/VIH: Pregúntale a NOAH	www.noah-health.org/spanish/illness/aids/spaids.html	YA-2, YB-4
	Country of origin: United States Primary site language: English and Spanish Offers bilingual consumer health information.		
Source	Name on FAP: New York Online Access to Health. Info on FAP: Link to information in Spanish at bottom of FAP to editor of page. "Redactor de esta página: Kristine Alpi, MLS, MPH, AHIP"		
Date	Last updated on FAP. At bottom. "Actualizada: 10 de Diciembre de 2003"		
Complement	Complementary info on FAP. At bottom. "Renuncia: NOAH es tan sólo una guía de información y no puede responder preguntas o hacer investigaciones relacionadas a la salud. La información de NOAH ha sido seleccionada de una variedad de recursos sobre la salud para el consumidor; se le ofrece a usted con el entendimiento de que no se interprete como asesoramiento médico o profesional. Toda información médica deberá ser cuidadosamente revisada con su prestador de atención médica."		

Table B.6 Continued: AIDS - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
5	Espa?ol	hivinsite.ucsf.edu/InSite.jsp? page=li-10-01	YA-9
	Country of origin: United States Primary site language: English FAP = CHI links		
Source	HIV InSite is developed by the Center for HIV Information (CHI) at the University of California San Francisco (UCSF). "About" link on the bottom of FAP, but only available in English.		
Date	Copyright 2004.		
Complement	No. Available from FAP disclaimer link, but in English.		
6	FASE - Fundación Anti-Sida España – BIENVENIDO	http://www.fase.es/	GA-4
	Country of origin: Spain Primary site language: Spanish FAP = Portal page		
Source	Name on FAP: FASE - Fundación Anti-Sida España Info on link from FAP: "FASE"		
Date	Last updated info on CHI page if not FAP. At bottom. (VIH Información y Tratamientos link) – "actualizado en Septiembre de 1999"		
Complement	No.		

Table B.6 Continued: AIDS - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
7	La Fundacion anti-SIDA de San Francisco -- Sitio Web	www.sfaf.org/espanol.html	GA-9
	Country of origin: United States Primary site language: English. Site also in Spanish FAP = Portal		
Source	Name on FAP: AIDS Foundation of San Francisco Info on link from FAP.		
Date	Last updated on CHI page: At bottom. ("BETA®") "Revisado el 4 de febrero 2004"		
Complement	Available on bottom of CHI page ("BETA®") "Atencion: Las declaraciones y opiniones vertidas en BETA son publicadas únicamente como material educativo, y no implican recomendación o patrocinio por parte de BETA o del San Francisco AIDS Foundation. Siempre consulte con su médico antes de tomar cualquier medicamento o decision sobre su tratamiento."		
8	Línea Nacional del SIDA	http://www.ashastd.org/nah/sida/	YA-10
	Country of origin: United States Primary site language: English and Spanish FAP=Portal page		
Source	American Social Health Association / National AIDS Hotline Info on FAP: About National AIDS Hotline.		
Date	No.		
Complement	No.		

Table B.6 Continued: AIDS - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
9	MedlinePlus: SIDA	www.nlm.nih.gov/medlineplus/spanish/aids.html	YA-4, YB-7
	Country of origin: United States Primary site language: English and Spanish FAP = CHI		
Source	MedlinePlus, National Library of Medicine Link to infomation at top of FAP.		
Date	Bottom of FAP: "Tema actualizado: 05 noviembre 2003"		
Complement	Link at bottom of FAP - "Derechos Reservados". "No es la intención de NLM proporcionar asesoramiento médico específico, sino facilitar a los usuarios la información necesaria para comprender mejor su salud y los trastornos diagnosticados. No se suministrará asesoramiento médico específico, y NLM le recomienda que consulte con un médico capacitado para obtener un diagnóstico y para responder sus preguntas personales."		
10	Prevención de VIH/SIDA – CDC En Español - Centros Para el Control y la Prevención de Enfermedades	www.cdc.gov/spanish/enfermedades/vih-sida.htm	YA-1, YB-3 GA-6
	Country of origin: United States Primary site language: English and Spanish FAP = CHI		
Source	Centers for Disease Control - Information available via link at bottom of page.		
Date	At bottom of FAP: "Esta página fue revisada el 18 de diciembre de 2003"		
Complement	Link at bottom FAP: "Oprima aquí para más infomación" "Cualquier preocupación sobre una condición médica, ya sea suya o de un familiar, siempre debe ser atendida por su médico personal quien le ofrecerá consejos y el cuidado apropiado para sus necesidades médicas."		

Table B.6 Continued: AIDS - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
11	Project Inform Información en español [VIH / SIDA Tratamientos Informacion]	http://www.projinf.org/spanis h/	YA-5, YB-8
	Country of origin: United States Primary site language: English and Spanish FAP = Portal/ list of links		
Source	Project Inform. Link to information at bottom of FAP – "Qué es Project Inform"		
Date	No.		
Complement	At bottom of FAP. "Esperamos que la información en Español sobre tratamientos contra el VIH ofrecida por Project Inform, sea de utilidad para usted. Nuestra meta es entregar información actualizada a las personas que están viviendo con el VIH y también a sus médicos, para que juntos puedan tomar las decisiones con respecto al tratamiento de una manera mejor informada."		
12	SF AIDS Fdn: BETA en espanol/Spanish BETA	www.sfaf.org/betaespanol/	GA-10
	Country of origin: United States Primary site language: English. Site complimentary in Spanish FAP = Portal		
Source	Name on FAP: AIDS Foundation of San Francisco Info on link from FAP.		
Date	Last updated on FAP: At bottom. ("BETA") "Revisado el 4 de febrero 2004"		
Complement	Available on bottom of FAP: Las declaraciones y opiniones vertidas en BETA son publicadas únicamente como material educativo, y no implican recomendación o patrocinio por parte de BETA o del San Francisco AIDS Foundation. Siempre consulte con su médico antes de tomar cualquier medicamento o decisión sobre su tratamiento.		

Table B.6 Continued: AIDS - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
13	SIDA	http://www.geocities.com/WestHollywood/5144/sida.htm	YA-8
	Country of origin: Mexico Primary site language: Spanish (and some English) FAP = CHI		
Source	Gay Mexico.		
Date	Copyright info on FAP: 1996-1999		
Complement	No.		
14	Un Rincón de Esperanza – Primer Sitio Argentino sobre VIH y SIDA	www.fundamind.org.ar/sida/	GA-5
	Country of origin: Argentina Primary site language: Spanish, some English Note: HONCode FAP = Portal		
Source	Fundamind. "Sobre Fundamind" link on FAP.		
Date	Copyright on bottom of FAP 1996-2002		
Complement	No.		

Table B.6 Continued: AIDS - List of Relevant Sites Examined & Compiled Information

	Page Name	URL	Search Result Location
15	VIH y SIDA	www.ctv.es/USERS/fpardo/home.html	GB-4, GA-1
	Country of origin: Spain Primary site language: Spanish FAP=Portal page		
Source	Author name on FAP: Francisco Javier Pardo Info on link from FAP: "Correo" link (computer graphic) at top.		
Date	Copyright at bottom of FAP. 1.996 – 2.000		
Complement	Info on link from FAP: "Correo" link (computer graphic) at top of FAP contains about information "La infección por el VIH requiere cuidados precisos que sólo un equipo multidisciplinario puede prestar. La información que se da sobre medicamentos tiene sólo carácter informativo, de ningún modo debe servir como guía para 'automedicarse', tampoco se debe tomar la sintomatología como guía para 'autodiagnosticarse'. En la medida de lo posible se citan sólo los nombres genéricos de los medicamentos; intencionadamente se citan los nombres comerciales de los principales antirretrovirales disponibles en la actualidad."		
16	vihsida en Chile	www.vihsida.cl/	GA-8
	Country of origin: Chile Primary site language: Spanish FAP = Portal		
Source	Vihsida en Chile. Author name not available on main page. "ver nota" link at top of FAP incidentally shows that the producer of the site is Eduardo Valenzuela, a composer.		
Date	At bottom of FAP. "Junio 2003"		
Complement	At bottom of FAP. "Esta información puede ayudarte a responder algunas inquietudes básicas NO debe reemplazar el lugar de tu médico. Cualquier duda que te surja luego de leer el contenido de este sitio, debes consultarla con tu médico."		

Appendix C.   WEB PAGE ASSESSMENT SHEET: RELEVANCY

Health Topic:

1. Name of page (as written on search engine results)

2. URL of page (as available on search engine results)

3. Is the page in Spanish?

   3a. If it is not in Spanish, what is the language (if known)?

4. Is the page about the health topic searched?

   4a. If not, what is the topic of the page (if known)?

5. Does the page contain health information geared toward the consumer?

   5a. If not, what is the purpose of the site (if known)?

6. Notes:

Which hit # is the URL in the following searches?

Google
    Basic:
    Advanced:

Yahoo
    Basic:
    Advanced:

Appendix D. WEB PAGE ASSESSMENT SHEET: CRITERIA

Health Topic:

1. **Name of page (as written on search engine results)**

2. **URL of page (as available on search engine results)**

3. **Country of origin (if known).**

4. **Is the site available in other languages than Spanish?**

5. **Does the first accessed page (FAP) offer consumer health information (CHI) content, is it the main page/portal of a site, or is it a collection of links about a topic?**

> **Which hit # is the URL in the following searches?**
>
> Google
>   Basic:
>   Advanced:
>
> Yahoo
>   Basic:
>   Advanced:

6. **What or who is the source of the site?**

   6a. Is more in-depth information about the source available on the FAP?

   6b. If not, is a link to information about the source available on the FAP?

   6c. Where is the information or link located?

7.   **Is there a "last updated" date available on the FAP?**

   7a. Is a copyright date available on the FAP?

   7b. If not, is a last updated date available on a CHI page from FAP?

   7c. Where is the last updated or copyright date located?

8. **Is information about complementarity available on the FAP?**

   8a. If not, is a link to the complementarity statement available on the FAP?

   8b. If not, is the statement available on a CHI page from FAP?

   8c. Where is the complementarity statement located?

9. **Notes:**

Appendix E. Outline of Methods and Results

Research Question: What is the accessibility of relevant online Spanish health information and the visibility of quality criteria on pages?

Identify Tools and Methods for Research

Two Most Popularly Used Search Engines

Google and Yahoo

Number of Hits to Examine

First 10 hits

Two Important Hispanic Health Topics

Asthma and AIDS

Health Topic Search Terms

Asma and SIDA

Perform Searches on Asma and SIDA
in Google and Yahoo Basic and Advanced Search Modes
Archive Results in Internet Researcher program
Compile Results into Tables

Asthma (Asma)

Google — Basic n=10 — Advanced n=10

Yahoo — Basic n=10 — Advanced n=10

AIDS (SIDA)

Google — Basic n=10 — Advanced n=10

Yahoo — Basic n=10 — Advanced n=10

Identify and Remove Duplicate Pages
Compile Unique Results into Tables

Same URL or page information

Remaining unique pages n=24

Remaining unique pages n=29

n=7 — n=1 — Irrelevant Results — n=6 — n=1

n=8 — n=2 — Irrelevant Results — n=4 — n=1

Identify and Remove Irrelevant Pages
Use Web Page Assessment Sheet: Relevancy

*URL error
Not in Spanish
Not about consumer health topic
No CHI oriented content*

Remaining relevant unique pages n=13

Remaining relevant unique pages n=16

Analyze Accessibility:
Examine results of basic versus advanced searches for relevancy

Analyze Visibility of Quality Criteria:
Examination of remaining pages for source, date, and complementarity criteria on the first accessed page (FAP) or consumer health information page (CHI) link
Use Web Page Assessment Sheet: Criteria
Compile Results into Tables

Source

The author of the site hosting the page.

	Asthma	AIDS
1. Source name on FAP	n=12	n=15
2. Source information on FAP or via link	n=7	n=10
3. Source name not on FAP	n=1	n=1

Date

Information about when the page was last updated.

	Asthma	AIDS
1. Last updated information on FAP	n=7	n=6
2. Copyright information on FAP	n=5	n=4
3. If not, last updated information on CHI		n=2
4. None or in English	n=1	n=4

Complementarity

A statement suggesting that the consumer use the site's information in conjunction with, not to replace, the advice of a medical professional.

	Asthma	AIDS
1. Complementarity statement on FAP	n=4	n=4
2. Statement via link from FAP	n=2	n=3
3. If not, statement on CHI page		n=1
4. None or in English	n=7	n=8