

4-1-2015

Health Disclaimers and Website Credibility Markers: Guidance for Consumer Health Reference in the Affordable Care Act Era

Deborah H. Charbonneau
Wayne State University, dcharbon@wayne.edu

Recommended Citation

Charbonneau, D.H. (2015). Health disclaimers and website credibility markers: Guidance for consumer health reference in the Affordable Care Act era. *Reference & User Services Quarterly*, 54(3), 30-36.
Available at: <http://digitalcommons.wayne.edu/slisfrp/130>

This Article is brought to you for free and open access by the School of Library and Information Science at DigitalCommons@WayneState. It has been accepted for inclusion in School of Library and Information Science Faculty Research Publications by an authorized administrator of DigitalCommons@WayneState.

Health Disclaimers and Website Credibility Markers

Guidance for Consumer Health Reference in the Affordable Care Act Era

Deborah H. Charbonneau

Deborah H. Charbonneau, MLS, PhD, (dcharbon@wayne.edu) is Assistant Professor, School of Library and Information Science, Wayne State University, Detroit, Michigan.

This article reports on the current state of health disclaimers, online health resources, and credibility markers provided on public library websites (N = 105) for those seeking health information. In light of the Affordable Care Act (ACA), these findings have implications for consumer health reference services in public libraries. Approximately half of the public library websites in the study sample (n = 52, 49.5%) referred users to the ACA Health Insurance Marketplace website (HealthCare.gov). When referring to online consumer health resources, a small number of public library websites identified the authors of online health content (n = 16, 15.2%) or clearly stated the date of publication (n = 8, 7.6%). Further, only 2.8 percent of public library websites (n = 3) provided important health disclaimers. As a result, more website credibility markers, such as the content sponsorship and currency of health information, are needed on public library websites to better guide users to reliable online health information. Overall, this study offers practical guidance for library and information professionals for enhancing consumer health reference services and connecting users to health information in the Affordable Care Act landscape.

On March 23, 2010, President Obama signed the Affordable Care Act (ACA), ushering in new health care reforms.¹ On June 28, 2012, the Supreme Court made a final decision to uphold the new health care law.² Under the ACA law, US citizens could sign up for a new health plan and coverage during an open enrollment period. American Library Association (ALA) President Barbara Stripling stated, “We expect libraries will receive many inquiries from the public about the Affordable Care Act.”³ As a result, public libraries were propelled into the media spotlight for their role in connecting patrons to information about the Health Insurance Marketplace when open enrollment began on October 1, 2013.

While public libraries in the United States have a long tradition of providing health information to their respective communities,⁴ the ACA brought attention to the important role public libraries serve in linking communities with health care insurance and timely health information. In fact, public libraries are often a first point of access for individuals seeking health information.⁵ Borman and McKenzie further state that libraries are a preferred source for people searching for information related to health issues.⁶

Reference & User Services Quarterly,
vol. 54, no. 3, pp. 30–36
© 2015 American Library Association.
All rights reserved.
Permission granted to reproduce for
nonprofit, educational use.

Indeed, the public library is a “highly trusted source of health information.”⁷

Chobot states that “one of the biggest challenges today’s librarians face is an insatiable consumer demand for health information.”⁸ As online health resources continue to proliferate, librarians are tasked with sorting through the extensive volume of information and selecting reliable online resources for their communities. Gillaspay and Pranica acknowledge that “librarians working in consumer health will rely more and more heavily on Internet- and technology-based applications for their customers.”⁹ Noh adds, “The librarian’s role as an evaluator and provider of reliable consumer health information sources has become more important than ever.”¹⁰ Consequently, many public libraries assist their communities in locating reliable health information by providing lists of evaluated sources on the library’s website.¹¹ To this end, public library websites serve as a gateway facilitating access to an array of online health resources and assist library patrons in “distinguishing between trustworthy and questionable Internet sites.”¹²

HEALTH DISCLAIMERS AND CREDIBILITY MARKERS

ALA President Barbara Stripling comments that libraries “provide the public with balanced, unbiased access to information.”¹³ Goldberg also stresses “the neutral provision of information and resources about ACA to those who need it.”¹⁴ Hence, drawing the line between interpreting health information and connecting users with trustworthy health information is an important principle in the provision of consumer health reference services.

Health disclaimers are one way that libraries can communicate the scope and limitations of consumer health reference services for their library patrons. While librarians are experts in identifying and providing information, they are “not practicing health professionals who interpret information and give advice.”¹⁵ On the other hand, librarians utilize their expertise to guide, direct, and facilitate access to health information resources.

Gillaspay cautions that librarians should avoid endorsing any treatments or procedures.¹⁶ The Medical Library Association’s Consumer and Patient Health Information Section (CAPHIS) also reinforces the importance of providing health disclaimers to help differentiate the boundaries between interpreting health information and guiding users to reliable health sources.¹⁷ Specifically, health disclaimers serve an essential role in informing patrons that “libraries do not provide medical advice and do not interpret information for patrons.”¹⁸ Yet the extent to which the practice of providing health disclaimers extends into the digital realm and the availability of health disclaimers on public library websites remains unknown.

In addition to providing health disclaimers, website credibility cues are another good practice for strengthening the

provision of consumer health reference services. To help users appraise the quality of online health information, public library websites can regularly incorporate credibility markers, such as the sponsor of the content and the currency of the health information. In fact, research shows that these textual cues are important features that health care consumers use to evaluate the trustworthiness of online health content.¹⁹ In the context of the ACA and recent media attention on public libraries, health disclaimers and website credibility markers have important implications for the provision of consumer health reference services.

CONSUMER HEALTH INFORMATION TRAINING

Despite the growing demand for public libraries to support health information inquiries, numerous studies report that public librarians experience confusion over their role and responsibilities in providing health information.²⁰ Further, a lack of awareness about available consumer health information resources suggests additional training opportunities are needed for public librarians to build skills for identifying reliable health resources.²¹ When public libraries select health materials, the general public expects that “unreliable and ‘poor’ quality sources will have been sifted out.”²² Thus, the training gaps reported in the extant literature raise important questions about the current state of consumer health resources presented on public library websites.

The published literature includes descriptions of various consumer health training efforts for public librarians.²³ A number of consumer health information partnerships between public libraries, academic libraries, hospital libraries, public schools, and health departments are also reported.²⁴ Indeed the role of public librarians in supporting the consumer health needs of library patrons has been discussed; however, limited research has focused on public libraries and consumer health reference services in the digital realm. In a relevant study, Ketchum examined the website design and structural elements of thirty-three consumer health-related websites primarily from academic environments.²⁵ This study found that disclaimers and notices for last updates are important website features for consumer health websites in academic settings.²⁶ Yet website design elements and the range of health information resources provided on public library websites remain under explored. Given the current ACA landscape, an investigation to better understand the practices of providing consumer health information resources on public library websites is both timely and warranted.

RESEARCH QUESTIONS

The goal of this study is to better understand the current state of online health resources provided on public library websites. While previous research has focused on design

elements of consumer health websites in academic settings,²⁷ studies that assess the range of health resources collected and organized on public library websites intended for their library website users are lacking. As library users consult public libraries for assistance in the ACA era, health disclaimers and website credibility markers can be helpful practices for guiding users to reliable online health information resources. To date, no study has examined the presence of health disclaimers and website credibility markers on public library websites. To address this question, the present study examined health resources, disclaimers, and credibility markers provided on public library websites with the goal of informing consumer health reference services.

Therefore, the main research questions are as follows:

1. Which online health resources are most frequently featured on public library websites?
2. How many public library websites provide a health disclaimer?
3. Are any credibility markers present on public library websites? If so, how often are various credibility markers included on the public library websites?

For the purposes of this study, several website credibility markers were used to help assess health resources provided on public library websites: authorship/sponsorship of health content, currency of information (i.e., frequency of update), and a health disclaimer. These credibility markers are consistent with existing ratings scales used to evaluate the quality of online health information.²⁸ Such credibility markers play an important role in the online environment, and users regard these markers as a “proxy for information quality.”²⁹

RESEARCH DESIGN AND METHOD

As stated above, this research aims to assess the state of health information resources, disclaimers, and credibility markers provided on public library websites. To accomplish this, a total of 105 public library websites were analyzed. The 105 websites represented public libraries in the state of Michigan. The state of Michigan website was consulted to identify public library websites available for analysis (see table 1). This strategy has been used successfully in previous research to help identify public libraries for possible inclusion in research studies.³⁰ Of the 385 library systems (comprising 660 locations) in the state of Michigan, 105 public libraries had websites available for analysis in March 2014.³¹ These comprised the study sample.

DATA COLLECTION PROCESS

In this study, established website credibility markers from the published literature guided the collection and analysis of data. Specifically, the credibility markers used in the present study

Table 1. Public Libraries in Study Sample (by Class)

Library Class	Number of Public Libraries
Class 1	6
Class 2	10
Class 3	11
Class 4	21
Class 5	19
Class 6	38
Total	105

included identification of ownership/authorship of health content, currency of health information, dead or broken hyperlinks, and a disclaimer. These key credibility markers represent the most frequently used criteria for evaluating web-based health information.³² In addition, the Medical Library Association endorses health disclaimer statements when providing health information to library patrons.³³ These credibility markers were used to develop a coding sheet instrument to collect data from each of the public library websites in the study sample. The collected data were then analyzed in order to help answer the main research questions regarding health information resources provided on public library websites.

FINDINGS

A total of 105 public library websites were included in the analysis. Health resources prominently featured on public library websites varied in their scope and presentation. The ACA Health Insurance Marketplace website (HealthCare.gov) was the most common online health resource featured on the public library websites ($n = 52$, 49.5%). This was followed by healthfinder.gov ($n = 39$, 37.1%) and MedlinePlus.gov ($n = 37$, 35.2%). A list of the ten most common online health resources provided on the public library websites is provided in the appendix. Out of the ten most popular online health resources, five were government-sponsored sites (“.gov” sites), three of the sites consisted of noncommercial organizations (“.org” sites), and the remaining two sites were commercial in nature (“.com” sites). Therefore, one linking pattern was that half of the ten most popular websites for online health content ($n = 5$) were known, trusted government-sponsored sites (“.gov” sites).

In addition, one resource about the ACA was consistently featured, HealthCare.gov. Links to local agencies and community-specific health information were sparse. Only eight public libraries linked to a state or county health department. A few public libraries provided community-specific information, such as African American health information ($n = 1$), Asian American health ($n = 1$), and health information in Spanish ($n = 3$). Hence, there were more referrals to online health content sponsored by the federal government or

Table 2. Frequency of Website Credibility Markers on Public Library Websites

Website Credibility Markers	N (105)	%
Dead or broken hyperlinks	25	23.8
Identity of content provider/sponsor	16	15.2
Date of publication or update	8	7.6
Health disclaimer	3	2.8

national organizations than health information tailored for specific communities.

For the most part, links to online health resources were located under website sections labeled either “Health and Wellness” or “Health.” This logical placement on the public library websites facilitated easy access to health information resources. In contrast, health resources organized under sections entitled “helpful links” or simply “links” in several instances made health information more challenging to locate.

Results from the study also demonstrated a wide range of credibility markers across the public library websites to guide consumers in critically evaluating sources of online health information. As shown in table 2, 23.8 percent ($n = 25$) of library websites had dead or broken hyperlinks. In addition, only 15.2 percent ($n = 16$) of the public library websites clearly identified authors or sponsors of online health content. Further, 7.6 percent ($n = 8$) of the public library websites stated the date of publication or last update for the online health content.

Finally, very few public libraries ($n = 3$, 2.8%) included a health disclaimer on their website. Table 3 provides examples of health disclaimers found on the public library websites in the study sample. In all three instances, the health disclaimer statements were located at the bottom of the library webpage.

This study found common health resources frequently featured across the public library websites. Interestingly, the public library websites often neglected to incorporate common credibility markers known to assist website users in critically evaluating sources of online health information. Only 2.8 percent ($n = 3$) of public library websites provided a health disclaimer. Given this, several website improvements are recommended for providing referrals to online health information resources. In order to facilitate better access to online health information in the ACA era, a number of areas where improvements could enhance consumer health reference services were identified.

DISCUSSION AND FUTURE RESEARCH

This study was designed to examine the state of health resources provided on public library websites. Given the ACA landscape, the study’s findings have significance for public libraries connecting patrons with health information.

Table 3. Sample Health Disclaimers on Public Library Websites

Sample Health Disclaimers

1. The information provided on this Web site is for general educational purposes only. It is not intended to be used as a substitute for medical advice. Any concerns about your health or the health of your family should be discussed with a qualified health care provider.
2. Health information should always be discussed with your physician. The library and the producers of these web pages are not responsible for the misuse or misapplication of the information provided. These links are for information only, and should in no way be construed as medical advice.
3. These website links provide access to a wide range of consumer health and medical information available on the Internet. They are provided for information purposes only. Advice and opinions on treatment or care of an individual patient should be obtained through consultation with a health professional.

Specifically, several implications arise for consumer health reference services and collection development in public libraries.

In the state of Michigan, the state library association has not issued guidelines to date for public libraries to respond to community questions about the ACA. At the national level, the Reference and User Services Association (RUSA) of the American Library Association (ALA) provides recommendations for answering medical and legal inquiries but the ACA is not specifically addressed.³⁴ Additional materials, such as collectively building an online guide to frequently asked/answered questions (FAQs) about the ACA in public libraries with relevant resources might be a solid first step to help coordinate public library response to the ACA in Michigan and nationally.

Ongoing discussions are also needed about the role of public libraries in the provision of ACA information. Strategies for state library associations to foster more discussion about ACA involvement at local and state levels might include hosting online forums, dedicating programs at the annual state conferences to discussions about the ACA, and soliciting stories similar to the WebJunction initiative at the Online Computer Library Center (OCLC) to better identify how public libraries are responding to ACA-related inquiries.³⁵ From this ongoing dialog, the profession at large can begin to identify the range of public library involvement in the ACA and promising practices in supporting community health information needs.

The present study further highlights the need for health disclaimers to be available and prominently displayed on public library websites. Previous research concluded that health disclaimers are important website features in the provision of consumer health information, yet many public library websites neglected to include a health disclaimer.³⁶ One possible reason for the lack of health disclaimers can

be gleaned from the professional literature. A number of professional guidelines exist to aid librarians with reference interactions and linking users to electronic information resources; however, guidance about online health disclaimers is missing from the discussion.³⁷ Despite the lack of attention to online health disclaimers in these professional guidelines, public librarians report spending significantly more time with health information requests than with other types of reference inquiries.³⁸ Health disclaimers are important for explaining to library website users that referrals to online health sources are provided for informational purposes only, do not imply recommendation or endorsement, and do not substitute for consultation with a health professional. Consulting examples from the Consumer and Patient Health Information Section (CAPHIS) of the Medical Library Association may be helpful for preparing health disclaimers for public library settings.³⁹

The lack of health disclaimers on library websites also suggests public librarians responsible for providing consumer health reference services may benefit from additional training. Previous research has reported that public librarians desire additional training on ethical issues and the availability of quality online health information.⁴⁰ These findings lend further support to the idea that additional training opportunities on selecting online content for consumer health reference collections would be beneficial for public librarians to meet the growing health information needs of library users. Ongoing training opportunities to help maintain awareness and keep up-to-date on current resources for health insurance marketplace information in light of the ACA might be beneficial. Continuing education opportunities to also grow knowledge about the ACA law requirements and key policy updates may prove fruitful. To further assist in the selection of trustworthy online consumer health information, the Medical Library Association's Consumer and Patient Health Information Section (CAPHIS) "Top 100 List: Health Websites You Can Trust" is a valuable source for vetted and annotated health websites.⁴¹

Further, public libraries can incorporate more website credibility markers to guide patrons to reliable online health information. It has been noted that the Internet plays a prominent role in supporting consumer health information requests.⁴² However, the present study revealed there are major inconsistencies with regards to the organization and presentation of online health resources. As public libraries continue to support the health information needs of their communities, those responsible for providing access to reliable and timely health information will increasingly need to address ACA and health-related information inquiries. Whether website development is done internally within the public library or outsourced to third party website developers, these findings may offer practical guidance for consumer health reference services in public libraries.

Many of the public library websites lacked credibility markers to easily guide users to quality online health sources. Even if public libraries refer to health content sponsored by government and noncommercial organizations, the lack of descriptive information about external health resources can

make it challenging for users to evaluate the quality and currency of the online health content. As a result, library website users are not provided with adequate cues or credibility markers to make informed decisions about online health information. As library users continue to seek trustworthy online health resources, public library websites can utilize credibility markers more systematically to better guide consumers to quality online health information.

To help strengthen website cues for users, library websites should specify the author or sponsor of the health content, date of publication or last update, and provide a brief description of the source, such as any unique features as a way to help users critically evaluate online health content. Public libraries can further empower health care consumers by providing information about established evaluation criteria so that patrons can appraise online health information on their own. For example, useful recommendations for evaluating online health information include guidelines from the Medical Library Association, MedlinePlus, and National Center for Complementary and Alternative Medicine.⁴³

Finally, the Reference and User Services Association (RUSA) of the ALA offers specific recommendations for addressing medical and legal inquiries.⁴⁴ The existing "Guidelines for Medical, Legal, and Business Responses" state "libraries should develop written disclaimers stating a policy on providing specialized information service denoting variations in types and levels of service."⁴⁵ While this recommendation is very helpful for the provision of consumer health reference services in general, the RUSA guidelines should be further updated to reflect the digital realities of connecting library users with online health information. More precisely, the guidelines could be further extended to include providing health disclaimers on library websites. A discussion of library involvement in responding to ACA-related reference inquiries would also be a nice enhancement as public libraries are implementing community-based strategies to connect users with relevant health resources.

In addition, establishing criteria for collection development policies for website referrals and linking to online health information resources is also warranted. It is important for libraries to have guidelines, standards, and policies in place for addressing health-related inquiries.⁴⁶ Public libraries can be more responsive to health information demands in the ACA climate by establishing criteria for selecting online health sources, updating collection development policies for linking to external online health content, and providing health disclaimers on library websites. As health information changes rapidly and may be time-sensitive, external sources should be evaluated on a regular basis to determine the currency and usefulness of the health content for target audiences. Public libraries can further explore partnership models with health sciences librarian colleagues in hospital and academic environments, health departments, and other groups to provide consumer health information to their communities.⁴⁷ Such collaborative efforts may be one strategy for sharing expertise and resources to support consumer health information

services, including the identification and selection of quality online health sources.

Although these findings provided insight into the range of health resources, disclaimers, and website credibility markers featured on public library websites, the study sample consisted of public libraries in the state of Michigan. The study's findings begin to illuminate the variety of health resources provided on public library websites, and the findings may have a wider application. Research that continues to examine the range of online health resources being collected and organized on other states' public library websites would be useful. Future research is also needed to examine how library patrons evaluate and use the health information sources provided on public library websites in the health care decision-making process. Finally, research that explores the role of public libraries in the provision of health care insurance information in light of the ACA is likely to emerge. Ongoing research that elucidates the role of public libraries in an era of health care reform will be of great interest to many stakeholders, including those working in public, academic, health, and government library environments.

CONCLUSION

Public libraries support the health information needs of their communities by connecting patrons with online information regarding the Affordable Care Act (ACA) and other health-related issues. This study was designed to assess the current landscape of resources, credibility markers, and health disclaimers provided on public library websites for those seeking health information. The current ACA landscape offers tremendous opportunities for public libraries to further demonstrate the important role they play in supporting the health information needs of their communities. Yet, the lack of credibility cues and health disclaimers found in the study sample suggests that a number of enhancements could strengthen the provision of consumer health reference services. As public libraries continue to select, organize, and provide access to online health resources for their respective communities, library websites can utilize credibility markers to better guide consumers to quality online health information. Finally, health disclaimers and collection development policies addressing how libraries are evaluating and linking to externally-developed online health resources are critical considerations for the provision of consumer health reference services.

References

1. "Key Features of the Affordable Care Act," United States Department of Health and Human Services, accessed June 15, 2014, www.hhs.gov/healthcare/facts/timeline.
2. "Affordable Care Act," American Library Association, accessed June 15, 2014, www.ala.org/tools/affordable-care-act.
3. Barbara Stripling, "ALA, IMLS Detail Affordable Care Act Resources for Library Staff," press release, September 2013, accessed June 15, 2014, www.ala.org/news/press-releases/2013/07/ala-impls-detail-affordable-care-act-resources-library-staff.
4. Mary C. Chobot, "The Challenge of Providing Consumer Health Information Services in Public Libraries," American Association for the Advancement of Science, accessed June 16, 2014, www.healthlit.org/pdfs/AAASFINAL.pdf; Jenny S. Bossaller, "Evidence, Not Authority: Reconsidering Presentations of Science for Difficult Decisions," *Reference & User Services Quarterly* 53, no. 3 (Spring 2014): 232–41.
5. Susan Murray, "Consumer Health Information Services in Public Libraries in Canada and the US," *Journal of the Canadian Health Libraries Association* 29, no. 4 (2008): 141–43.
6. C. Brandi Borman and Pamela J. McKenzie, "Trying to Help Without Getting in Their Faces Public Library Staff Descriptions of Providing Consumer Health Information," *Reference & User Services Quarterly* 45, no. 2 (Winter 2005): 133–46.
7. Roma Harris et al., "I'm Not Sure if That's What Their Job Is': Consumer Health Information and Emerging 'Healthwork' Roles in the Public Library," *Reference & User Services Quarterly* 49, no. 3 (Spring 2010): 239–52.
8. Chobot, "The Challenge of Providing Consumer Health Information Services in Public Libraries," 1.
9. Mary L. Gillaspay and Mary O'Connor Pranic, "Consumer Health Sources" in *Introduction to Reference Sources in the Health Sciences*, ed. Jeffrey Huber and Susan Swogger (Chicago: Medical Library Association, Neal-Schuman, 2014), 259.
10. Younghee Noh, "The Development and Performance Measurements of Educational Programs to Improve Consumer Health Information (CHI) Literacy," *Reference & User Services Quarterly* 53, no. 2 (Winter 2013): 140–51.
11. Chobot, "The Challenge of Providing Consumer Health Information Services in Public Libraries," 9.
12. Jana C. Allcock, "Helping Public Library Patrons Find Medical Information—The Reference Interview," *Public Library Quarterly* 18, no. 3/4 (2000): 21–27.
13. Stripling, "ALA, IMLS Detail Affordable Care Act Resources for Library Staff."
14. Beverly Goldberg, "Libraries Stress Neutrality as They Prep for Queries on Health Care Law," *American Libraries* 44, no. 9/10 (Sep 2013): 13.
15. "The Librarian's Role in the Provision of Consumer Health Information and Patient Education," Medical Library Association Consumer and Patient Health Information Section, accessed June 15, 2014, <http://caphis.mlanet.org/chis/librarian.html>.
16. Mary L. Gillaspay, "Factors Affecting the Provision of Consumer Health Information in Public Libraries: The Last Five Years," *Library Trends* 53, no. 3 (Winter 2005): 480–95.
17. "Disclaimers," Medical Library Association Consumer and Patient Health Information Section, accessed June 15, 2014, <http://caphis.mlanet.org/chis/disclaimers.html>.
18. Ibid.
19. Traci Hong, "The Influence of Structural and Message Features on Web Site Credibility," *Journal of the American Society for Information Science & Technology* 57 (2006): 114–27.
20. Gail Kouame, Margo Harris, and Susan Murray, "Consumer Health Information from Both Sides of the Reference Desk," *Library Trends* 53, no. 3 (Winter 2005): 464–79.
21. Charles B. Wessel, Jody A. Wozar, and Barbara A. Epstein, "The Role of the Academic Medical Center Library in Training Public Librarians," *Journal of the Medical Library Association* 91, no. 3 (2003): 352–60.
22. Harris, et al., "I'm Not Sure if That's What Their Job Is," 250.
23. Fred B. Wood et al., "Public Library Consumer Health Information Pilot Project: Results of a National Library of Medicine Evaluation," *Bulletin of the Medical Library Association* 88, no. 4 (October 2000): 314–22.
24. Angela B. Ruffin et al., "Access to Electronic Health Information

- for the Public: Analysis of Fifty-Three Funded Projects," *Library Trends* 53, no. 3 (Winter 2005): 434–52.
25. Andrea M. Ketchum, "Consumer Health Information Websites: A Survey of Design Elements Found in Sites Developed in Academic Environments," *Journal of the Medical Library Association* 93, no. 4 (2005): 496–501.
 26. Ibid.
 27. Ibid.
 28. "Assessing the Quality of Internet Health Information," Agency for Healthcare Research and Quality, accessed June 15, 2014, www.ahrq.gov/research/data/infoqual.html; "HONcode Principles," Health on the Net, accessed June 15, 2014, www.hon.ch/HONcode/Patients/Visitor/visitor.html.
 29. C. Nadine Wathen and Jacquelyn Burkell, "Believe It or Not: Factors Influencing Credibility on the Web," *Journal of the American Society for Information Science and Technology* 53, no. 2 (2002): 134–44.
 30. Deborah H. Charbonneau, "Public Library Websites and Adherence to Senior-Friendly Guidelines," *Public Library Quarterly* 33, no. 2 (2014): 121–30; John H. Heinrichs, "Required Software Productivity Tool Skills: Public Library Directors' Perceptions," *Public Library Quarterly* 27, no. 4 (2008): 316–34.
 31. Joseph D. Hamlin, "Michigan Public Libraries Data Digest," accessed June 16, 2014, www.michigan.gov/documents/libraryofmichigan/2013_LM_SDC_FY2012_Data_Digest_408234_7.pdf.
 32. "Assessing the Quality of Internet Health Information," Agency for Healthcare Research and Quality, accessed June 15, 2014, www.ahrq.gov/research/data/infoqual.html; "HONcode Principles," Health on the Net; Wathen and Burkell, "Believe It or Not: Factors Influencing Credibility on the Web," 139.
 33. "The Librarian's Role in the Provision of Consumer Health Information and Patient Education."
 34. Reference and User Services Association (RUSA) Reference and Adult Services Division (RASD) Standards and Guideline Committee, "Guidelines for Medical, Legal and Business Responses at General Reference Desks," American Library Association, accessed June 15, 2014, http://archive.ala.org/rusa/stdn_general_ref_desk.html.
 35. "Share Your Story," Online Computer Library Center (OCLC) WebJunction, accessed August 29, 2014, <http://webjunction.org/share-your-story/news.html>.
 36. Ketchum, "Consumer Health Information Websites."
 37. Reference and User Services Association (RUSA), Reference Services Section (RSS) Management of Reference Committee, "Guidelines for Behavioral Performance of Reference and Information Service Providers," American Library Association, accessed August 30, 2014, www.ala.org/rusa/resources/guidelines/guidelinesbehavioral; Reference and User Services Association (RUSA), Machine-Assisted Reference Section (MARS) Management Committee, "Guidelines for the Introduction of Electronic Information Resources to Users," American Library Association, accessed August 30, 2014, www.ala.org/rusa/resources/guidelines/guidelinesintroduction.
 38. Borman and McKenzie, "Trying to Help Without Getting in Their Faces Public Library Staff Descriptions of Providing Consumer Health Information," 133.
 39. "Disclaimers."
 40. Catherine Arnott Smith, "The Easier-To-Use Version: Public Librarian Awareness of Consumer Health Resources from the National Library of Medicine," *Journal of Consumer Health on the Internet* 15, no. 2 (Apr 2011): 149–63; Laura A. Linnan et al., "Public Libraries as a Resource for Promoting Health: Results from the Health for Everyone in Libraries Project (HELP) Librarian Survey," *Health Promotion Practice* 5, no. 2 (2004): 182–90; Kouame, Harris, and Murray, "Consumer Health Information from Both Sides of the Reference Desk"; Wessel, Wozar, and Epstein, "The Role of the Academic Medical Center Library in Training Public Librarians."
 41. "Top 100 List: Health Websites You Can Trust," Medical Library Association Consumer and Patient Health Information Section, accessed June 15, 2014, <http://caphis.mlanet.org/consumer/index.html>.
 42. Linnan et al., "Public Libraries as a Resource for Promoting Health."
 43. "Find and Evaluate Health Information on the Web," Medical Library Association, accessed June 15, 2014, www.mlanet.org/resources/userguide.html; "Evaluating Health Information," MedlinePlus, accessed June 15, 2014, www.nlm.nih.gov/medlineplus/evaluatinghealthinformation.html; "Finding and Evaluating Online Resources on Complementary Health Approaches," National Center for Complementary and Alternative Medicine, accessed June 15, 2014, <http://nccam.nih.gov/health/webresources>.
 44. RUSA RASD Standards and Guideline Committee, "Guidelines for Medical, Legal and Business Responses at General Reference Desks."
 45. Ibid.
 46. Allcock, "Helping Public Library Patrons Find Medical Information."
 47. Wood et al., "Public Library Consumer Health Information Pilot Project"; Ruffin et al., "Access to Electronic Health Information for the Public."

APPENDIX. TEN MOST POPULAR HEALTH RESOURCES ON PUBLIC LIBRARY WEBSITES (N = 105)

Online Health Resource (URL)	Frequency (n/%)
1. Affordable Care Act Health Insurance Marketplace (HealthCare.gov)	52 (49.5)
2. Health Finder (healthfinder.gov)	39 (37.1)
3. MedlinePlus (www.nlm.nih.gov/medlineplus)	37 (35.2)
4. Centers for Disease Control and Prevention (www.cdc.gov)	26 (24.7)
5. Mayo Clinic (www.mayoclinic.org)	25 (23.8)
6. Medicare (www.medicare.gov)	21 (20.0)
7. WebMD (www.webmd.com)	20 (19.0)
8. TeensHealth (Nemours Foundation) (kidshealth.org/teen)	19 (18.1)
9. Merck Manuals (www.merckmanuals.com)	17 (16.2)
10. DoctorFinder (American Medical Association) (apps.ama-assn.org/doctorfinder/recaptcha.jsp)	14 (13.3)