

Promoting Consumer Health Literacy

Creation of a Health Information Librarian Fellowship

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According to a market survey showing that the public library is the first place many turn when seeking health information, librarians are the front-line workers in consumer health literacy. A consumer health literacy initiative has been undertaken throughout the Pittsburgh public library system to help librarians assure meaningful access to consumers seeking health information. This initiative, the Health Information Fellowship, through which librarians attain their Consumer Health Information Specialist certificate from the Medical Library Association, has had numerous outcomes, including

- the creation of a new consumer health database and related Web information;
- the design of a staff training module;
- the development of a presentation for consumers, including brochures and pathfinders; and
- positive participant ratings regarding improved familiarity and preparedness with consumer health information in multiple dimensions.

The fellowship is replicable and is currently being spread regionally.

Over the past decade, the United States has experienced a move toward greater consumer involvement in health care.¹ Health care consumers have become more interested and involved in understanding their health issues and needs and in making decisions regarding treatment options and services.² At the same time, the growth of technology provides a mechanism through which consumers have unprecedented access to health information. The *British Medical Journal* reported in 1998 that there were a minimum of 100,000 health-related websites available.³ That number has grown exponentially in the ensuing years; a current Internet search for health-related websites with a commonly used search engine provided 268,000,000 sites. While not everyone has access to a computer in the home, it is estimated that between 75 and 85 percent of Internet users have looked online for health information.⁴

The downside to the availability of computers and the accompanying easy access to abundant health information is that not all of the available information is credible, pertinent, or correct. Furthermore, even high-quality information brings with it a need for the consumer to be able to understand and apply the information to their benefit.

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Libraries provide computer access for consumers who do not have home computer access; librarians, with the proper training, present an opportunity for consumers to receive help in locating desired health information and in evaluating website credibility, relevance, and applicability.

The Institute of Medicine (IOM) and the U.S. Department of Health and Human Services (HHS) define health literacy as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.”⁵ As is pointed out in HHS’s “Quick Guide to Health Literacy and Older Adults,” health literacy requires a number of skills beyond reading, including listening, analysis, and the ability to apply the information that has been acquired to health situations—for oneself or for others.⁶ Knowing where and how to locate health information electronically requires a degree of technical savvy and baseline health care knowledge that many people do not have. The IOM estimates that 90 million people in the United States have difficulty understanding and using health information.⁷ According to the American Medical Association, poor health literacy is “a stronger predictor of a person’s health than age, income, employment status, education level, and race.”⁸ Public libraries provide a no-cost, convenient way to access computers and, potentially, personnel to help the consumer navigate both the technology and the health information accessed. Yet too few public librarians have the training necessary to provide optimal help to consumers who would benefit from such help.

LITERATURE REVIEW

There is a considerable amount of literature describing consumer behavior in searching for health information and describing barriers to locating health information, which include access limitations and the inability to evaluate received information. In a 2002 *British Medical Journal* study, participants were observed retrieving health information from the Web in a usability laboratory setting. In this study, “no participants checked any ‘about us’ sections of websites, disclaimers, or disclosure statements. In the post-search interviews, it emerged that very few participants had noticed and remembered which websites they had retrieved information from.” The authors concluded that a focus on “guiding consumers to high quality health information on the web” is needed.⁹

Linnan et al., writing in *Health Promotion Practice* in 2004, found that while two-thirds of adults visit a library yearly, “the interests and training

needs of public librarians for assisting the public in accessing health information have not been addressed.”¹⁰ In this random survey, conducted in a county in North Carolina, 84 percent of librarians that completed a questionnaire indicated that they answer “more than 10 health-related questions per week, feel moderately comfortable answering these questions, and are very interested in receiving additional training for addressing health related questions.”¹¹ Linnan et al. concluded that creating public library–public health partnerships can enhance the ability of consumers to procure health information.

In 2005, Borman and McKenzie looked at barriers in the reference transaction between librarians and consumers.¹² Their literature review found that “between 6 and 20 percent of total reference requests in public libraries were health-related,” and that “librarians report spending significantly more time with consumer health information (CHI) requests than with other types of reference questions.”¹³ Among the barriers specific to consumer health information, they found that some users are unaware of the services the library provides, users may encounter staff members who are uncomfortable providing assistance regarding health information, and librarians may not be confident about making referrals to community agencies.

Roma Harris and Nadine Wathen, in the 2007 piece “If My Mother Was Alive I’d Probably Have Called Her,” explored how women living in a rural Canadian county located health information.¹⁴ They found that most of the women interviewed seek information from a wide variety of sources, including the Internet, and that the interviewees place great value on the “quality of the relationship with those to whom they turn for assistance.” For these women, “helpers’ perceived effectiveness seemed to depend largely on how well they express care when information is exchanged.” Harris and Wathen proposed that merely expanding the availability of Internet-based health information would not adequately meet the needs of the health information seekers studied; rather, helping local libraries become a health information resource would be a better strategy because of librarians’ potential to provide “an empathetic, listening ear.” Harris and Wathen, in discussing the considerable barriers to improving health through electronic sources (lack of skills, access, trust in sources, interesting presentation of material, and so on) pointed out that while public libraries could have a role in facilitating consumer access to health information, “not all public libraries have specific health information centers, and some librarians

feel inadequately prepared to respond to health information requests.”¹⁵

BACKGROUND

In 1999–2000, a regional health information technology scan, commissioned and funded by the Jewish Healthcare Foundation (JHF), was conducted by the Graduate School of Public and International Affairs of the University of Pittsburgh (GSPIA) with expert guidance by the National Library of Medicine (NLM). The purpose of the scan was to assess the readiness to use health information technology among the region’s consumers, physicians, researchers, and other health professionals.¹⁶ The scan looked at both the supply of information and the demand by consumers.

GSPIA convened four focus groups for the study and conducted one thousand telephone interviews with Allegheny County, Pennsylvania, residents, with the goal of identifying what precipitates a consumer’s search for health-related information, where consumers prefer to seek and actually find such health information, what barriers they encounter, and what role new information technologies play in providing information. Findings indicated that (1) consumers consult a wide variety of sources for health care information, but none was ranked as “very helpful” by even a third of respondents; (2) half of consumers who look for additional health information than what is provided by their health care provider (HCP) look on the Internet (and 75 percent of this group expressed a desire for help learning how to access the Internet and wished for better-quality information); and (3), as is true nationally, consumers representing vulnerable populations (low income or education level, over age 65, or minority) have lower levels of home computer ownership. The study also concluded that the public library is the first place many people turn when seeking health information because it provides an important point of access to the Internet for consumers who fall into the vulnerable population categories. The results of the scan further contribute to the question of how the public library might be enhanced to improve meaningful access to health information, particularly for those who fall into the vulnerable population category.

In 2001, JHF, through its Pittsburgh Regional Health Initiative (PRHI), introduced a process improvement system, Perfecting Patient Care (PPC). Modeled after the Toyota Process System (TPS) of process improvement, PPC uses TPS process engineering principles to address the need to improve health care in the United States.¹⁷ Although health

care isn’t an assembly line and patients aren’t cars, the foundation and techniques of the TPS industrial model seemed a solid underpinning for the health care workplace. Like TPS, PPC requires a deep knowledge of the way work is done on the front line—knowledge based on observation, not supposition. The system focuses on solving problems at the point of care and giving discretion to the person closest to the work. PRHI has tested the PPC concept in various health care settings, with many successful results, and has instituted a PPC University that, to date, has trained more than two thousand health care professionals from around the region.¹⁸ Since that time, the IOM and the National Academy of Engineering have called for the application of engineering principles to health care. PPC was a national forerunner in this movement.¹⁹

In 2006, inspired by the results of the health information technology scan, the JHF, in collaboration with the Carnegie Library of Pittsburgh (CLP), created a Health Information Fellowship for librarians that is designed around JHF’s PPC model. The fellowship’s goal is giving public librarians the knowledge and skills necessary to productively direct consumers to reliable health information.

METHOD

Branch managers and reference librarians were polled about what health topics the public seemed to have the most interest in and asked about most frequently and were asked to record health and wellness reference questions over a two-week period. Areas of priority in terms of patron need included information regarding a new diagnosis, management of chronic diseases such as diabetes, identification of community resources, impending medical treatment or hospitalization, diet and nutrition, prescription and over-the-counter medications, dental health, exercise and fitness, specific hospitals or physicians, and how to navigate a health system. These needs helped shape the content of the fellowship sessions; course developers incorporated each identified need into at least one session.

The eleven-session Health Information Fellowship was developed and facilitated by two JHF nurses and provided to librarians representing each of the nineteen CLP libraries, which service the city of Pittsburgh. Twenty librarians who expressed an interest in the initiative were selected to participate by the deputy director, consumer health coordinator, and main and branch managers of the CLP, representing both front-line staff and managers. Goals and objectives of the program were

- to train Fellows to become field experts in navigating consumer health information, building the capacity of librarians as frontline health literacy referral sources;
- to develop model networks of consumer health information for decision-making; and
- to document the model for replication by other communities.

The eleven course modules (see table 1) were designed around the core values of PPC: customer-centeredness (focusing on what the library consumer needs), engagement of front-line staff (librarians are the front-line workers in the consumer health information system), real-time problem solving (maintaining flexibility to design coursework around changing needs), direct observation (taking librarians on site during coursework), and teamwork (creating an in-person and electronic

team of librarians from throughout the CLP system to discuss, brainstorm, and support each other in this work). The modules were tailored to the experienced librarian who has firm grounding in general consumer information-seeking behaviors. The modules included classroom-style presentations on topics that focused on patron need, online sessions presented by the NLM staff on evaluating and providing consumer health information, and site visits to health care institutions to see and hear first-hand information from health professionals.

Each weekly session, which occurred from March 15 through May 31, 2008, was four hours long. Participating librarians also spent time outside of the weekly sessions on journal assignments, reading session-related material, and developing a final project. The journal assignments consisted of weekly journal entries that reflected on the previous session, documenting how information

Table 1. Health Information Fellowship Curriculum

Format	Topic
Group	Healthy People 2010 Library Initiative Consumer to Library Pathway Pew Research Findings on Consumer Need
Group	Information Professionals: Relationship-Building (communication, conflict, generations, team-building, patron interview)
Online—presented by National Library of Medicine	“Beyond an Apple a Day”—Providing Consumer Health Information in the Public Library
Site visit—Hillman Cancer Center, UPMC Shadyside Hospital	Taking the Fear Out of a Cancer Diagnosis
Online—presented by National Library of Medicine	“From Snake Oil to Penicillin”—Evaluating Consumer Health Information on the Internet
Online—presented by National Library of Medicine	“Prescription for Success”—Consumer Health on the Web
Online—presented by National Library of Medicine	“No Comprendo”—Spanish Health Information Resources for English Speaking Librarians
Site visit—Homewood Library	Tweens, Teens & Adolescent Patrons—“Not Just Little Adults”—Information for Parents and the Younger Patron; Patrons Seeking Information about Sports Medicine
Site visit—Allegheny General Hospital Medical Library	Healthcare Providers as Patrons—“In the Pursuit of Best Practices Exploring Careers in Health Care
Site visit—Jewish Association on Aging	Patrons Seeking Information on Life Transition—“Aging Gracefully; Dying with Dignity” Information for the Aging Adult, their Children and Families
Site visit—Homewood Library	Quality and Patient Safety Next Steps Final Fellow Presentations Closing Ceremony

learned in previous sessions helped in the librarians' work and identifying new information that they wanted to cover. The reading assignments accounted for roughly one hour per week of reading time; topics included oncological issues, death and dying, Medicare, community resources, senior issues, pharmacological issues, health careers, MedLine+, arthritis, and so on. The final project was the development of an algorithm for a consumer health information interview, which was completed as a group.

Learning outcomes for the fellowship included examining patron needs, analyzing research data, networking to increase the capacity of health information in public libraries, understanding quality and safety processes, and obtaining the Medical Library Association's (MLA) Consumer Health Information Specialist (CHIS) certification, which requires twelve contact hours for application for Level I Non-Health Sciences Librarian specialization.

FUNDING

In addition to funding the 1999–2000 health information technology scan, JHF provided funding for JHF staff to develop and facilitate the fellowship as well as \$20,000 in grant funding for staff from the CLP to attend the fellowship (\$1,000 per library). The fellowship obtained additional in-kind resources from the NLM, which had developed certifications for medical librarians but not yet for community librarians.

OUTCOMES

Initial Certification and Procedural Outcomes

Twenty librarians received certification as CHISs, and each of the nineteen libraries has at least one staff person who has been certified. In addition, all participants are now members of the MLA. MLA membership indicates specialized consumer health information training and provides credibility to libraries with an MLA member on staff.

A reference interview procedure was developed as a group project of the fellowship, with teams being responsible for specific aspects of the document (see Appendix). The procedure takes into account common staff challenges in helping consumers who seek health information, such as not being familiar with resources, not understanding medical terms, not knowing how much to ask, not being aware of body language (both their own and the customer's), and not offering

personal opinions or experiences. It also provides suggested methods for handling these challenges and addresses ethical issues, such as confidentiality and knowing the librarian's limits in terms of interpretation and recommendations regarding health information.

A compendium of useful websites for the librarian and the consumer was also developed by a small committee which was comprised of participants from the fellowship (see table 2). This committee was charged with the task of compiling a list of the best websites, which were chosen from the many that we had worked with in the training sessions and workshops and had used ourselves, and which would best meet the needs of our customers. The list was then presented to the entire group, who discussed the choices, made suggestions, and finally approved the list. In addition to the databases available online through eiNetwork (the electronic information network and online collection of more than eighty libraries in Allegheny County), the websites in table 2 are recommended as good starting places when searching for health information. Most of these websites have Spanish translations.

Subsequent Procedural Outcomes

Since July 2007, fellowship participants have continued to meet at least quarterly and have identified and implemented four additional goals that resulted from the fellowship training. The four actions below were identified by the entire group of fellows. We identified four work groups, and some individuals were asked to work on certain activities because of their expertise in that area. However, for the most part individuals chose which activity they would like to work on. Each work group was responsible for completing the actions necessary to complete the project. We also worked with the CLP IT, Communications, and Creative Services departments.

1. *Creation of a new consumer health resource page and related Web information.* There is a direct link to the consumer health page from the CLP homepage. The consumer health page includes databases, Internet and book links, library catalog links, and RSS feeds. Health-related topics, identified by library staff, are highlighted each month. The links are checked monthly, and broken links are corrected; webpages are evaluated and updated every three months; and the websites listed on the consumer health page are included in handouts provided at staff training and community presentations.

Table 2. Useful Consumer Health Information Websites

Website	Web address	Description
Medline Plus	www.medlineplus.gov	Created by the NLM, this information is current, reviewed by professionals, reliable, and accurate. It includes a health encyclopedia, dictionary, drug database, directories, and current health-related news stories. There is an associated easy-to-read option.
NIH Senior Health	www.nihseniorhealth.gov	National Institute of Health created this website specifically for older adults and their caregivers. Users have the option of changing text size and color contrast, as well as an audio option. Videos are included.
Familydoctor.org	www.familydoctor.org	Created by the American Academy of Family Physicians, this site provides information written by physicians and patient education professionals. There is also a child-friendly section.
Ask Me 3	www.npsf.org/askme3	Attempts to promote clear communication between patients and physicians. Tips are provided for questions to ask your physicians, helping to prepare questions before the visit.
Drug Digest	www.drugdigest.org	Provides information on drugs, interactions, and herbal medications and supplements. Includes photographs.
Drugs.com	www.drugs.com	Provides information on drug interactions and includes a pill identifier.
DIRLINE (Director of Information Resources Online)	http://dirline.nlm.nih.gov	Part of NLM, this is a directory of health organizations, research resources, and agencies specializing in health.
Lab Tests Online	www.labtestsonline.org	Provides information on lab testing. Consumers can search by name of test, age groups, diseases, the purpose of the test what is involved, and test result explanations. Tests that are not widely used are included.
Aetna Intellihealth	www.intelihealth.com	Interactive tool for health assessment
Family History	www.familyhistory.hhs.gov/fhh-web/home.action	Provides consumers with forms to use for personal health record keeping. For personal use only; not a professional health record.
Household Products Database	http://hpd.nlm.nih.gov	Provides information about brand name household products and their potential health effects.
National Cancer Institute	www.cancer.gov	One of the best sites for cancer information for both professionals and consumers. Topics include news, statistics, research, and clinical trials.
American Heart Association	www.americanheart.org	Advocacy site covering all aspects of heart disease and stroke.
Tox Town	http://toxtown.nlm.nih.gov	Interactive site on toxic substances and environmental health, geared toward children.
Genetics Home Reference	http://ghr.nlm.nih.gov	Provides information about genetic conditions, diseases, and syndromes.
Dictionary English Spanish from the Oregon Occupational Safety and Health Division	www.healthcarefreeware.com/med_dict.htm	Provides health and safety phrases and related vocabulary in PDFs to help translation between English and Spanish.

2. *Design of a staff training module.* Fifty-six members of the CLP staff, including both clerical and professional staff, attended a training session in late 2007 that discussed use of the consumer health page. A subsequent training session for substitute staff (part-time clerks, library assistants, and branch librarians) took place in computer labs so that participants received hands-on experience. Supporting handouts were created for participants, as was a survey to determine the effectiveness of the training. The training incorporates questions posed by CLP customers.
3. *Development of a presentation for consumers.* An in-person presentation has been developed and is provided throughout the year at select libraries. Topics include preparing for office visits, tests, and exams. Learning aids include online resources and tools that tell consumers where to get information and how to identify credible websites. Fellowship participants also prepared and use a survey to determine the degree to which the presentation meets audience needs; presentations are modified as required.
4. *Preparation of brochures and pathfinders.* Brochures have been developed on a variety of health topics. They are available to be printed on demand from the CLP website, and hard copies are available at all CLPs. Topics are changed or added as need and interest dictate. Brochures include sources such as books, databases, and websites, along with standard-

ized information about how to evaluate databases and websites, what types of questions to ask caregivers, etc. Brochures are available in English and Spanish, as well as in large type.

Pre- and Post-Fellowship Participant Survey Outcome

A survey of Fellowship participants was conducted prior to the start of the fellowship and again directly after the fellowship. In the comment section of the pre-fellowship survey, participants indicated worry about providing inaccurate or even harmful health information to consumers. Results (see table 3) showed significant increases from pre- to post-assessment in participants' familiarity and preparedness with consumer health information in all of the measured dimensions. The percentage of participants that rated their familiarity with the Healthy People 2010 library initiative as "very good" or "excellent" increased from 5.6 to 40.0 percent while the percentage of participants rating their familiarity as "poor" decreased from 67.0 to 6.7 percent (from twelve to one). The percentage of participants that rated their ability to identify valid consumer health information sites as "very good" or "excellent" increased from 33.0 to 87.0 percent. The percentage of participants rating their familiarity with current valid information on health careers as "very good" or "excellent" increased from 0.0 to 67.0 percent. The percentage of participants who rated as "very good" or "excellent" their preparedness to direct different age groups to the information specific to them increased from 5.6 to 93.0 percent. Finally, the

Table 3. Comparison of Library Fellowship Participant Pre- and Post-Assessment Survey Response Self-Ratings of Very Good and Excellent

Dimension	Pre-Fellowship Ratings of Very Good and Excellent (n = 18)	Post-Fellowship Ratings of Very Good and Excellent (n = 15)
Familiarity with Healthy People 2010 Library Initiative	5.6% (n = 1)	40.0% (n = 6)
Ability to identify valid consumer health information sites	33.3% (n = 6)	86.7% (n = 13)
Familiarity with current valid information on health careers	0.0% (n = 0)	66.7% (n = 10)
Preparedness to direct different age groups to the information specific to them	5.6% (n = 1)	93.3% (n = 14)
Ability to direct patrons inquiring about cancer to various community or Internet resources	16.7% (n = 3)	93.3% (n = 14)

percentage of participants rating as “very good” or “excellent” their ability to direct patrons inquiring about cancer to various community or Internet resources increased from 16.7 to 93.0 percent. In the “comment” section of the post–fellowship survey, participants were asked “what else could we have done to further enhance your knowledge of consumer health information?” Responses included focusing more time on pediatrics, spending time role-playing in a CLP, and providing additional practice exercises to reinforce the learning. Participants were also asked what other topics they would be interested in learning about. Suggestions included HIV/AIDS/STDs, adolescent and teen issues, patient safety, more about Medicare (particularly Part D), and women’s health.

NEXT STEPS

Fellowship participants continue to communicate with each other and engage other library staff and outside organizations. Library staffs attend community health fairs and continue to learn about new health information resources and opportunities.

While refinement and modification are ongoing with regard to training and materials, the current focus of the initiative is to replicate the fellowship for other public libraries in the community, in the region, and nationally. To this end, a second phase of the fellowship is currently underway for the Allegheny County library system, in which many of the suggestions made by CLP participants have been incorporated. MLA is once again involved in course presentation, which is part of their mission and is provided free of charge. In this second phase of the fellowship, funding from JHF for library staff to attend the fellowship sessions is not being provided, yet eleven librarians are participating.

CONCLUSION

A 2008 Kaiser Family Foundation poll found that “nearly half of the public reports someone in their family skipping pills, postponing or cutting back on medical care they said they needed in the past year due to the cost of care.”²⁰ At the same time, “typically, most doctor visits last 15–20 minutes, with perhaps 30 minutes for a checkup.”²¹ These facts contribute to the millions of health-related information inquiries made daily at book stores, pharmacies, clinics, and libraries. Clearly there is a need for librarians to acquire the skills to help consumers navigate the myriad health-information resources so that the information obtained is credible, understandable, and actionable when necessary.

Through a unique partnership, the Carnegie Library of Pittsburgh and the Jewish Healthcare Foundation have developed the Consumer Health Information Fellowship to support the concept of librarians as health-information navigators. The fellowship sessions exposed librarians to experts in the health care field, facilitated relationship-building between medical and nonmedical librarians both locally and nationally, and helped expand librarians’ knowledge of the types and sources of reliable information on health care providers, health conditions, and health care quality. Participants were also able to update their library systems’ consumer health resource list and create a series of community presentations related to accessing health information.

The initiative that has been successfully developed and undertaken in Pittsburgh, and that is spreading regionally, can be replicated in any community. The first step others should take to develop a similar program would be to conduct a needs assessment to determine the level and type of interest in the community. Subsequent steps would include exploring funding opportunities (if necessary), securing space, identifying health care experts to provide course content, and setting up the MLA portion of the programming.

Today’s health care environment requires people to be active information-seekers and to participate in their own health care decisions. Enhancing a librarian’s ability to support consumers in this regard will increase consumers’ health literacy, which is a critical need at a time when the availability of health information is unprecedented and potentially overwhelming.

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APPENDIX. CLP REFERENCE INTERVIEW PROCEDURE

Basic steps in a good interview:

- Assure that you fully understand the question being asked
 - Provide the customer with privacy to ask a question that may be sensitive
 - Assure the customer that his/her question will be kept confidential

Customer barriers of which to be aware:

- Technical (such as little or no computer skills)
 - Physical
 - Cultural (such as language)
 - Organization of material and facility

Five components of an effective reference interview:

- Be approachable
 - Greet customer and make him or her feel welcome and at ease
 - Be identifiable as someone who can help
 - Approach customer and ask if you can be of assistance
 - Stop all activity when customer approaches you and focus on his or her needs
 - Use a relaxed tone of voice and body posture
 - Speak slowly and clearly
 - Be aware of personal space
 - Be aware of cultural differences
 - Be aware of verbal and nonverbal signals you may be giving

- Make eye contact (when appropriate)
- Be on the same “level” as the customer
- Show interest
 - Face the customer
 - Focus on what the customer is saying
 - Maintain eye contact (when appropriate)
 - Show interest and understanding by cues, such as nodding your head and asking questions
- Listen and ask questions
 - Be encouraging, receptive, and pleasant
 - Be aware of your tone of voice
 - Be cognizant of how e-mails you write may “sound” to customer
 - Allow customer to tell you his or her information needs before answering
 - Ascertain whether customer is looking for specific or general information
 - Rephrase the question and ask for confirmation
 - Verify spelling of condition or other necessary information in medical dictionary, if necessary
 - Avoid jargon and clarify confusing terminology
 - Use open-ended questions to encourage the customer to provide more information
 - Use closed or clarifying questions to refine or narrow the search
 - Remain objective and do not interject value judgments
 - Be empathetic but do not give advice or opinions
- Search for information
 - Find out what the customer has already looked at or tried
 - Do a complete search, verifying facts and spelling
 - Work with customer to narrow or broaden the topic, as needed
 - Know when to refer the customer to another resource
 - Look it up (don’t give answers without sources or citations)
 - Don’t tell the customer that nothing is available before conducting a search
 - Don’t be afraid to say “I don’t know” or “I can’t find the information for you,” but always refer the customer to another resource
- Follow up with customer
 - Give the customer time to look over the information provided
 - Encourage the customer to let you know if there are any additional questions
 - Approach the customer after a short time and ask if the information provided was adequate
 - Work with other librarians when additional expertise is required
 - Offer to continue researching the question for the customer
 - Don’t rush to end the reference interview
 - Remind the consumer to consult with their physician prior to undergoing any treatment

E-mail requests

- Respond to e-mail requests in a timely manner
- Be aware of how the content and tone of your e-mail response may be interpreted
- Procedures and policies should be clearly stated on your website

Ethical guidelines to keep in mind

- Confidentiality
- Knowing the limits of your collection
- Never interpreting medical information or making recommendations
- Using the disclaimer when giving health-related or medical information to customers. The following disclaimer is used on the CLP website (www.carnegie.library.org/research/health):

“Health-related resources are provided by the Carnegie Library of Pittsburgh for information purposes only and are not intended to replace consultation with a health professional. The library does not endorse specific opinions, advice, products or services.”