The Internet has provided academic librarians with a variety of opportunities and challenges. Health sciences librarians at universities in the Committee on Institutional Cooperation (CIC), which includes the 11 Big Ten schools plus the University of Chicago, realized an opportunity to work collaboratively to develop Web pages featuring collections of health-related Internet resources. The goal of this collaboration is to provide resources that benefit all of the institutions involved, and, at the same time, reduce the redundant effort of librarians to develop and maintain Web pages on the same health-related subjects that their colleagues were developing at other CIC institutions. With the support of their directors, the librarians began developing a very successful model of collaboration in Health Web (http://healthweb.org). Feedback has been extremely positive from librarians, healthcare professionals, and consumers. As an added benefit of promoting HealthWeb, librarians have a more visible presence on their respective campuses.

HealthWeb model of collaboration
The seed for HealthWeb came from a survey done in 1994 by Patricia Redman at the University of Michigan's Taubman Medical Library. She was interested in finding out whether faculty members who had taken Internet classes were finding information that was relevant to their clinical, research, and instructional needs. In an effort to expand the survey, she assembled an e-mail discussion group, which included representatives from each of the health sciences libraries at the CIC universities.

Discussions quickly focused on two pressing problems for frontline librarians: finding useful Internet resources for a wide variety of classes offered by the libraries and selecting quality sites to include on the libraries' Gopher or Web sites. Work was being duplicated at each of the schools, so the group decided to table the survey project and work on a joint Web site, dividing responsibility for the subject areas among the 12 institutions.

With the exception of the BUBL project in the UK (http://bubl.ac.uk/), HealthWeb participants could find no examples of libraries working together to establish an Internet resource, so the organization and procedures were established as the project evolved. Working groups were set up to tackle standards, policies, and agendas. The five groups—communications, content, design, planning, and technical—meet mostly via e-mail. Meetings of the HealthWeb group are held twice a year, in conjunction with the national and regional meetings of the Medical Library Association.

Certain challenges will be universal to projects of this type, including limited resources, changing levels of participation by individuals and institutions, continuous tech-

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nological advances, and geographical barriers. HealthWeb participants have long hoped that librarians in other subject areas could learn from the HealthWeb experience as they worked to organize the quality Internet resources in their subject areas.

Selection criteria
Along with collaboration, a principle element of HealthWeb has been the notion that the resources presented would be evaluated. Participating libraries choose an area or areas in which they excel, based on campus strengths, and take responsibility for identifying, evaluating, and organizing resources in those subject areas. The content group established a set of collection development guidelines (http://www.ghsl.nwu.edu/cic/content/papers/guidelines.html#intro) to support this process, although each library has some flexibility as to how it will implement these guidelines. Libraries are strongly encouraged to seek faculty subject “experts” or advisory board members on their campuses to participate in the selection process.

The content group divided resources into two types, local and remote, developing a set of criteria for selecting resources of each. Criteria for selecting local resources include: potential usefulness of the information outside the local institution; quality of the presentation of the information; uniqueness of the information presented; reliability of the authority creating the resource; plans for resource maintenance; and licensing or legal considerations.

Criteria for selecting remote resources include: perceived quality of the resource; quality and reliability of the publisher, institution, or author/producer; the quality of the design and user interface of the site; the timeliness of the information presented; the quality of the sites that the resource links to, if any; and the relationship of the resource to other resources in the field.

These guidelines were developed to provide standards for participating institutions to use in selecting Internet resources for their subject areas. Each library has the responsibility of appointing a subject specialist and/or an advisory committee that adjusts these standards to meet the specific needs of their subject area.

Maintenance
Each library is responsible for maintaining and updating its chosen subject areas. The content group developed guidelines for maintenance, which includes maintaining locally mounted information, a regular review of pointers, and frequent re-evaluation of selected sites, initiated by both the responsible libraries and the content group. Additional guidelines for reviewing Web sites and maintaining certain design standards have also been established. The Technical Committee assists by maintaining link checker software that will notify page developers of dead links. Although this maintenance process is time-consuming, all participants consider it to be essential to the integrity of the HealthWeb project.

Use of HealthWeb
HealthWeb fulfills many roles for librarians, health-care professionals, and consumers. As noted, the notion of HealthWeb initially rose out of a need to have Web pages that link quality sites for teaching classes on health-related Internet resources. Librarians at participating institutions now rely quite heavily on HealthWeb pages when designing and teaching their classes. An important benefit of having established pages is that librar-
Design Guideline Documents for HealthWeb Collaboration

HealthWeb
CIC Health Sciences Libraries Internet Working Group

Design Papers


“Design Guideline Documents for HealthWeb Collaboration”

ians have more time to design well-planned classes rather than spending time browsing the Web to locate and evaluate resources before each session. Since HealthWeb provides access only to selected resources, the subject pages serve as an excellent starting point for educating users on the need for critical assessment of information available on the Internet.

Classes can be tailored to specific user groups by teaching from one or more of the subject pages. Entire sessions have been developed around the nursing and pharmacy and dentistry pages to support the needs of faculty and students in these disciplines. The pharmacy page has also been demonstrated as a new collaboration project to major donors of the College of Pharmacy at one university. During orientation sessions, many institutions take this opportunity to introduce HealthWeb to incoming students. Comments from other librarians around the country indicate that they are integrating HealthWeb pages into their educational programs, as well.

Additionally, HealthWeb serves as a vital information tool at information desks, in academic departments, for library users, and for consumer health information needs. With the new reference page and clear organization of the subject pages, information desk staff have quick access to facts, associations, and definitions. Many schools and academic departments within the participating institutions include links on their Web pages that guide users to HealthWeb as a starting point for browsing the Internet. Consumers find HealthWeb very useful in locating information about particular diseases and links to association and discussion groups, which may provide them with further information.

New HealthWeb partners

Although there were well over 50 librarians and computer professionals from the original 12 schools involved in HealthWeb, it was difficult to find a home institution for each of the more than 70 subject areas. During 1996, the Greater Midwest Region (GMR) of the National Networks of Libraries of Medicine, which is funded through the National Library of Medicine, became a cosponsor of HealthWeb.

In the spring of 1997, participation in the project was opened up to other libraries in the GMR, and the following institutions joined the HealthWeb team: Mayo Clinic, Medical College of Ohio, Medical College of Wisconsin, Southern Illinois University, University of Kentucky, University of Minnesota–Duluth, University of North Dakota, Wayne State University, Wright State University.

Future of HealthWeb

The initial goal of HealthWeb, to complete a site that lists annotated, evaluated Internet sites in the health sciences, is nearly accomplished. Throughout the process, members of the HealthWeb group have discussed the next phase of the project. It may be moving to a database for generation of the pages, which could allow a common workspace for those working jointly on subject areas. Putting classes on the Web that provide users with an introduction to the Internet and to health resources may be another option for collaboration. Moving into the realm of electronic publishing has also been mentioned, as well as facilitating the creation of more original Web-based material by faculty at the HealthWeb institutions.
Recommended New Reference Titles

**A-Z Encyclopedia of Garden Plants**
- The American Horticultural Society
- More than 5000 plants
- 600 photographs
- Common name index
- Glossary
- $79.95

**The Encyclopedia of the Cat**
- From a publisher known for richly illustrated educational titles comes another stunning, high-quality work.
- Library Journal starred review
- 1998 RUSA/ALA Outstanding Reference Sources
- Illustrations, photographs
- $34.95

**Encyclopedia of Healing Therapies**
- "Extensively illustrated...gives readers an overview of therapies and treatments that are considered alternative and complementary to traditional medical practice."
- Reference Books Bulletin starred review
- Illustrations, photographs
- $39.95

**World Atlas**
- "The maps are well designed with an attractive, physical relief color scheme...plus brief text, small color photographs, diagrams, and smaller thematic maps of some areas."
- Choice starred review
- Illustrations, maps, photographs
- $60.00

**Pregnancy and Birth**
- "This well-illustrated book addresses many reproductive choices, with accompanying questions and answers."
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