Strengthening the links between health sciences information users and providers*

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In 1994, the Hospital Library Service Program of the Central New York Library Resources Council conducted a study to evaluate the usefulness, impacts, and potential services of eleven hospital libraries in a four-county area in New York State; determine the degree to which the libraries comply with Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standard IM.9.2; and provide recommendations for improved services in the member libraries. Two research instruments were used: a survey for hospital-based health sciences professionals and a survey for hospital-based information providers. Results from the two surveys were compared to determine if users' needs were being filled, and to develop plans for improved information services and products. Fourteen recommendations are made that, if implemented, will support the creation of user-defined information products, enhance the library's profile within the hospital, and exploit resource sharing to reduce costs and enhance coordination.

INTRODUCTION

Health sciences libraries face conflicting pressures to provide more services but with fewer resources. Demands for service rise with each technological breakthrough, each new user group, and each additional education program. Information sources and formats are multiplying—and colliding with pressures to cut costs. There is increased demand for educational materials but shrinking budgets to purchase them. User groups are expanding in size and type, and they want information whenever and wherever they encounter information problems. Yet librarians generally not only lack the increased resources to meet users' needs but also seldom have a voice in the strategic planning and coordination of hospital-wide information systems.

An example of the dilemma is the set of standards that drive health sciences libraries. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) publishes yearly standards and in past years has required health sciences libraries to employ professional medical librarians. The 1994 and 1995 JCAHO standards, however, omitted any mention of professional librarians. Yet these same documents also set out broader requirements for information provision than before.

In response to these difficult circumstances, the Hospital Library Service Program of the Central New York Library Resources Council (CLRC) conducted a study focusing on eleven health sciences libraries in a four-county area. The goals were:
- to evaluate the usefulness, impacts, benefits, and potential services of the health sciences libraries;
- to determine the degree to which health sciences libraries comply with JCAHO standard IM.9.2; and
- to provide recommendations that will improve information services.

The eleven members of the Hospital Library Committee represent a wide range of health sciences centers: research, non-research, urban, suburban, teaching, non-teaching, small and large, public and private. Seven of the eleven hospitals maintain their own libraries and employ professional librarians, while four hospitals rely on the services of a circuit librarian. There were legitimate concerns about assuring that the interests of all members were included in the study. It was decided that the study would

* This research was supported by the Hospital Library Service Program of the Central New York Library Resources Council. Formerly known as CENTRO, the organization changed its acronym to CLRC, as of November 1994.
focus on the JCAHO standards because, despite their diversity, all of the member health sciences centers had to prepare for JCAHO audits. A decision also was made to concentrate specifically on one JCAHO standard of interest to all members. All members were deeply concerned about the lack of any mention of professional librarians in recent JCAHO requirements.

METHODS

To attain its goals, the CLRC study sought to
$$\bullet$$ investigate and understand the information-seeking behaviors of hospital-based nurses, physicians, and allied health workers;
$$\bullet$$ identify how and from where they get their information—regardless of source; and
$$\bullet$$ identify how the health sciences library currently “fits into” this resource picture, and how it could better serve the target population.

A search of the literature was conducted to identify any similar research efforts. Dimitroff [1] analyzed information seeking by health sciences librarians, and Glitz [2] measured changes in health sciences library holdings over a span of five years. Lundeen [3] assessed information needs of rural practitioners, but the subjects were not necessarily hospital-based, and the sample included administrators. DaRosa [4] studied the information-seeking behaviors of medical students only, while Gruppen [5], Williamson [6], and Marshall [7] addressed only physicians. Forsythe [8] studied physicians and medical students, omitting hospital-based nurses and allied health workers. The King study [9] was the most similar to the CLRC study and included physicians, nurses, and other health care workers. That study, however, considered only information from the health sciences library, omitting other sources of information.

USER SURVEY

Based on insights from these studies, a two-part study was planned. The first part, the user survey, was designed to investigate the information needs of health sciences professionals, or users, defined as hospital-based providers of direct patient care. Although this definition excluded some hospital-based information seekers, it provided for an explicit description of the sample population: nurses, physicians, and allied health workers. An additional category, nurse/practitioner, was designated later. The user survey was designed to identify information resources, formats and attributes important to hospital-based health professionals, particularly as specified by JCAHO IM.9.2.

Surveys were used because they reduce the cost of sampling yet allow examination of large samples. Surveys also provide time for well-considered answers, and a sense of privacy and anonymity. Surveys are especially useful in researching a geographically diverse population.

The IM.9.2 standard was broken down into its basic elements, and each element was represented by a graphic symbol:
$$\bullet$$ ✓ knowledge-based information services, resources, and systems;
$$\bullet$$ ⊗ related to the needs of the medical and nursing staffs;
$$\bullet$$ ⊕ accessibility and timeliness;
$$\bullet$$ ☐ the need to link with the organization’s internal information systems; and
$$\bullet$$ ☐ the need to link with appropriate external databases and information networks.

The elements are located in the standard as follows:
$$\bullet$$ IM.9.2. The extent of knowledge-based information services (✓), resources, and systems (for example, professional library and health information services) is related not only to the organization services provided but also to the needs of the medical and nursing staffs (⊗), administrators and managers, other health professional staff, other staff in the organization, students, patients and their families, and researchers.
$$\bullet$$ IM.9.2.1. The assessment of the organization needs for knowledge-based information considers
• IM.9.2.1.1, the need for accessibility and timeliness (⊗);
• IM.9.2.1.2, the need to link with the organization’s internal information systems (☐); and
• IM.9.2.1.3, the need to link with appropriate external databases and information networks (●).

Based on issues mentioned in the standard, several pages of questions were generated for potential use on the user survey. The questions then were reviewed and assigned graphic symbol(s) when they addressed the element(s). Questions not assigned a graphical representation were discarded. The remaining eleven “meta-questions” constituted the foundation for the user survey.

From each “meta-question” one or more survey questions were developed. Questions concerning profession, age, certification and specialty, training, experience, and access to a computer with modem were added to obtain demographic data.

The user survey was pretested with two physicians, a librarian, an allied health worker, and three nurses. Copies also were sent to the Hospital Library Committee. Several suggestions were made and implemented; they included minor vocabulary changes and the addition of nurse/practitioner as a professional category. The resulting survey comprised fifteen questions on a two-sided sheet of paper and could be filled out in less than five minutes (Appendix A).

Nine health sciences libraries identified respondents for the user study. Great emphasis was placed on procuring a random sample. In order to discover
all sources used—not just library sources—health science librarians generally were not involved in generating lists of employees, selecting samples, distributing or gathering surveys. This approach was intended to control any bias of librarians in selecting participants.

The Hospital Library Committee, in conjunction with the researcher, determined that the minimum acceptable number of responses for a useful analysis would be 100 health professionals. Based on the literature, a conservative estimate of return would be 34%. Therefore, it was determined that a total of at least 300 surveys would have to be sent, to ensure at least 100 responses.

User surveys (376) were sent to the participating member hospitals. Administrators at one hospital decided late in the study not to participate, so the number of surveys delivered to respondents dropped to 316. One hundred forty-six usable responses were returned, for a response rate of 46%. See Table 1 for a list of hospitals, their sizes, number of surveys sent, and response rates.

The data were entered into an SAS database by the researcher and double-checked for accuracy. Each answer in multiple-choice questions was assigned a "field number," for a total of sixty-one fields, or variables. Each question allowed the respondent to check "other" and supply an answer in free-text form. The last two questions were open-ended to encourage qualitative responses.

**PROVIDER SURVEY**

The second component of the study, the information provider survey, polled each participating library concerning the extent to which health sciences libraries work with other hospital departments, other hospitals, and community organizations (Appendix B). Survey questions asked about inter-institution committees, programs, and training. The first section asked for demographic data and background information about staffing, library services, holdings, and user base. The remaining four sections investigated services, collections, institutional relationships and organization structure, technology and information access, and respondents' opinions.

The intent was to compare the results of the provider survey with those obtained in the user survey to determine whether users' needs were being met by member libraries as set forth in JCAHO IM.9.2. Based on the comparison, recommendations would be made that, if implemented, could help position member libraries to deliver services tailored to the needs of users.

**RESULTS OF THE USER SURVEY**

**Demographics**

Responses to the user survey were processed as a single group, comprising physicians, allied health workers, and nurses from nine hospitals, because the goal was to analyze the information-seeking behaviors of and improve services for all hospital-based health professionals. Therefore, most of the following observations refer to the pooled group of respondents, not to hospital- or profession-based subgroups.

Despite the fact that two hospitals declined to participate, the remaining nine hospitals had response rates ranging from 30% to 86%, thus providing a fair representation of the full sample. Professions were represented in the following proportions: 31% of respondents were allied health workers, 50% nurses, 17% physicians, and 2% nurse practitioners. Thirty-five specialties were reported. Over 7% of respon-
dents were specialists in surgery, and 2% in anesthesia. These and other specialties, such as respiratory and physical therapy, are usually practiced only within hospitals. It is important to remember that the information needs of hospital-based health care professionals cannot be generalized automatically to other populations of health care professionals (e.g., independent clinicians and employees of ambulatory clinics).

Findings from previous studies of the information-seeking behavior of physicians are consistent with results for the sub-population of physicians in the CLRC study. The CLRC physicians’ preferred modes of communication (face-to-face), sources (personally owned texts), and patterns of library use were similar to those of physicians in the studies by Marshall and King.

About 19% of respondents were male, 61% were female, and 20% did not answer this question. There was a wide age range: 1% were over 61 years old, 13% were between 51 and 60, 31% were between 41 and 50, 45% were under age forty, and 10% did not say. Over 43% of respondents had access to a computer and modem, 45% had access to a fax, and 11% did not answer.

**Reasons for information seeking**

The reasons health care workers usually sought information were (in descending order) to maintain current awareness, patient care, continuing medical education (CME), patient education, and research. Although current awareness was of the greatest importance to these respondents, few could keep up with new literature easily. Only 9% could keep up easily, while 64% could do so only with effort and 25% not at all (2% fell into “other” category).

**Resources used**

In time-sensitive situations, respondents least often solved information-seeking problems by consulting librarians (Figure 1). Getting to information quickly was important to nurses (59%) and of less concern to physicians (28%) and allied health workers (14%). In non-emergency circumstances, respondents were concerned with (in order of diminishing importance): speed, timeliness, ease of use, cost, and familiarity with information source.

Most respondents networked with other professionals to obtain at least some information: 74% contacted colleague(s) in the same specialty, within the same hospital or community; 48% contacted colleague(s) in the same specialty, but in another hospital or community; 44% contacted a librarian within the same hospital or community; and 17% contacted an off-site librarian. (Respondents could choose more than one category.)

Information is obtainable in many formats. Most respondents (99%) received work-related information in face-to-face conversations. Fifty-eight percent used the phone for occasional access, 42% relied on texts, 25% used video and audio tapes, and 9% used online searching. (Again, more than one category could be selected.)

Of those who had access to electronic mail (5% of the sample), 20% used it daily. More than 95% (60% of physicians) said it is either “somewhat important” or “very important” to be able to access information beyond the immediate medical environment. Fast, easy access to information was crucial for nurses, while easy access to off-site experts was particularly important to physicians. Many respondents felt that audio and video tapes are an important source of information.

**Library use and desire for additional library service**

Few respondents tried the library as a first resort for getting information, but more than 73% had used the library at some time. Of those, only 4% used the library on a weekly basis and only 57% of the sample did so more than once a year (Figure 2).

Users employed the following library/librarian service(s) or information products (in descending order of importance): books and journals, videos and tapes, librarian assistance, interlibrary loan (ILL), electronic databases, and training.

Clinical medical librarian (CML) services were rare: 76% of respondents had not heard the term CML. Literature Attached to Chart (LATCH) was almost unknown. Although several member hospitals provide such services, 92% of the respondents never had heard of LATCH. No physicians in this survey employed LATCH. Respondents used mostly traditional library

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**Figure 1**

**Preferred resources**

<table>
<thead>
<tr>
<th>Resource</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Librarians</td>
<td>2</td>
</tr>
<tr>
<td>Product vendors</td>
<td>2</td>
</tr>
<tr>
<td>On-line databases</td>
<td>2</td>
</tr>
<tr>
<td>Off-site experts</td>
<td>7</td>
</tr>
<tr>
<td>On-site experts</td>
<td>17</td>
</tr>
<tr>
<td>Own texts</td>
<td>26</td>
</tr>
<tr>
<td>Colleagues</td>
<td>40</td>
</tr>
</tbody>
</table>

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resources (books, journals, and librarian assistance). Few used the electronic or computer-based resources available. Respondents seemed enthusiastic about potential new information products and services. They were happy with the quality of the information supplied (only 4% wanted "better quality information") but wanted to increase their access through training and other services (Figure 3).

RESULTS OF THE INFORMATION PROVIDER SURVEY

Information providers’ responses indicated there was a general cut back on resources. Librarians often felt like they were working more unpaid hours and dealing with more responsibilities than ever. Paid staff hours numbered approximately the same as two years before and professional staff appointments had not increased. Results were mixed with respect to changes in the number of ILL requests. The number of requests at some libraries remained the same, four health sciences centers reported slight increases, and two substantial drops. Budget cuts have affected most libraries, but in different ways. Some have cut acquisition of tapes, some have cut journals, and some have cut texts.

Some libraries noted a changing user base as compared to two years before. One noted a 100% increase in allied health users, another noted an increase in use by nurses. Yet another noted a shift from academics and clinicians to corporate users. Phone and fax requests have increased generally.

Services and collections

Services at most libraries included online searching training, mediated searches, and bibliography compilation. Texts holdings generally have grown but there were mixed reports on journal collections. Despite increasing need for multimedia resources, collections of audiovisual tapes generally have shrunk. Materials are chosen based on Brandon/Hill lists and to a lesser extent on recommendations of users and staff.

Institutional relationships and organizational structure

Most librarians were aware of private collections of materials in other (clinical) departments and had some mechanism for accessing these materials. Interaction between the library and these departments took the form of committees, joint education and training programs, and presentations. Three health sciences libraries had set up a cooperative structure, and users were directed to "partner" hospitals if their own library was closed.

Coordination among the other CLRC hospital libraries, and between CLRC libraries and their respective communities, was less structured. Librarians rarely were able to participate in strategic planning for hospital-wide information processing, coordination, and delivery. For example, only one library reported having direct input into strategic planning. Reporting was also an issue for health sciences libraries. Some respondents did not know their reporting structures, many of which are not well defined.

Technology and information access

Most librarians used a fax machine for sending and receiving information requests, abstracts, and articles, and for ordering materials from vendors. Many libraries used computers for searching, word processing, and spreadsheets. Of the three libraries with Internet access, one used file-transfer protocol (FTP), telnet, and e-mail, while two used it for e-mail only.
The availability and nature of knowledge-based information services, resources, and systems were found to be related to the needs of the medical and nursing staffs. Librarians participated in the internal coordination of paper-based journals and offered either on-site electronic searching of external databases or could obtain similar service from the circuit librarian. Customized services (searches, scanning, and monitoring) were provided as requested. Thus, health sciences libraries in this study displayed compliance with JCAHO IM.9.2.† Customized services are labor intensive and expensive to promote and provide. Most libraries were trying to "cover all the bases" for their constituents and having a hard time stretching their resources. There was little routinized cooperation with other health sciences libraries, although the circuit librarian was valuable. Libraries did join in some interdepartmental programs, but seldom participated in strategic planning for hospital-wide information provision. Few libraries were able to take advantage of the Internet.

DISCUSSION AND RECOMMENDATIONS

Most health care professionals are unable to keep up with professional literature and seek improved access to more convenient library services. Many are aware that information is available "beyond the four walls" of their organization and are eager to access those resources. Some are ready now with computers and modems and, as the majority are under the age of forty, many more will have access to and use computers. Physicians, nurses, and allied health workers are willing to learn new skills to gain fast and easy access to information. They have expressed a clear desire for training in the use of library materials and computer-based information services. Their willingness to explore electronic delivery will stimulate development of new library services, such as specialty summarizing and around-the-clock access.

The demand for technological services will offer librarians opportunities to use technology to improve accessibility. Although CLRC member libraries may be constrained by their hospital budgets and resources, as members of a consortium, they are in a favorable position to effect many crucial changes. The CLRC members are "specialized" libraries within convenient geographic proximity, have a limited domain, and can rely on the support of other CLRC member libraries.

Specific recommendations follow for new information services designed to meet the needs of library users. The recommendations are directed at librarians and are grouped in four categories: access and availability, services and resources, visibility and public relations, and infrastructure and support systems. Two recommendations—implementation of training and use of the Internet—are related to all four categories. Various aspects of these two concepts are covered in the first three sections.

Access and availability

Recommendation 1. Identify commonly available, often-used modes of information dissemination and augment their use to fill the needs of remotely located and after-hours personnel. Specifically, each member library can

- publicize its fax number;
- employ an answering machine to keep track of queries of second- and third-shift workers;
- establish acceptable turn around time; and
- expand access and capacity by offering online reference services.

Recommendation 2. Become experts at navigating nontraditional resources. Librarians should advise users on how to find the information they need and assist them in learning how to navigate cyberspace and interpret the results [10]. Librarians can

- use the Internet's FTP, telnet, and e-mail;
- assist in downloading satellite broadcasts;
- purchase multimedia education products;
- work with other non-traditional information resources; and
- create and implement training modules using Internet-based materials.

Recommendation 3. Upgrade librarian skills. The role of the librarian has shifted from assisting users in formulating the "right question," to provision of services related to navigating, monitoring, and synthesizing innumerable sources of information. New technologies demand that librarians achieve a degree of technological sophistication. Librarians must educate themselves to install software; use electronic mail, Internet Gophers, World Wide Web clients, and Internet searching engines such as Veronica, Archie, and Jughead; and operate fax machines, laser printers, and scanners.

Recommendation 4. Build on the diversity of CLRC members' resources by creating a guide to all resources (members can identify databases and external resources used by all member health sciences centers and circulate the guide to member libraries); and compiling an electronic mail directory (a list of e-mail addresses for all CLRC users, local and governmental organizations, research groups, and other hospitals).

† Simultaneous to this research study, several CLRC libraries underwent and passed their JCAHO audits.

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This directory can be published both electronically and in hard copy.

**Recommendation 5.** Identify special collections and skills within the member groups and establish effective mechanisms for building on those strengths and coordinating fast information delivery. Most health care professionals use video and audio tapes, yet shrinking resources have led most libraries to reduce or drop tape collections. Member libraries can identify special needs (e.g., nursing education, rural care) and devote their limited resources to specialized tape collections. Distribution of tapes to borrowing members must be rapid and could be facilitated by courier services, the circuit librarian, or hospital delivery services.

Similarly, special collections, journals, and technical skills could be emphasized for development at various sites and then shared with members. These activities would expand the scope of resources and skill development within the pool of libraries while reducing cost and duplication of effort.

**Services and resources**

**Recommendation 6.** Because equipment costs are dropping and the Internet is becoming more accessible, librarians have opportunities to design technology-based products and services. They can

- develop customized databases for clinical groups;
- create reports to track external projects related to the hospital's research or clinical goals;
- access remote resources, such as remote medical libraries and biomedical databases;
- create “knowledge profiles” for departments or individuals (i.e., monitor Internet research, government, and medical sources and deliver weekly paper reports or daily e-mail reports);
- perform advanced bibliographic searches on new resources;
- acquire clinical studies, protocols, literature, medical software, statistical data, late-breaking research findings, and morbidity and mortality reports; and
- perform worldwide searches to find out who is involved in applicable research.

**Recommendation 7.** Join and create listservs, which are Internet-based electronic conferences about specific subjects. Listservs disseminate information previously available only at conferences and meetings. In addition, listservs make it easy to obtain expert answers to emergency situations, increase the available knowledge base and reduce delays in reporting new developments.

**Recommendation 8.** Conduct Internet training. The increasing importance of networking for communication and information resource acquisition demands that member librarians devote substantial planning and resources to Internet training. Training in the use of FTP, telnet, and electronic mail should be available to library staff members, health care professionals, students, and administrators.

**Visibility and public relations**

**Recommendation 9.** Cultivate wider use of the Internet throughout the hospital by

- encouraging hospital-wide use of the Internet to enhance coordination and communication;
- identifying potential users, and implementing group and individual training;
- including the library's electronic mail addresses in newsletters and promotional materials;
- cultivating more visibility in the hospital by targeting strategic individuals for customized services; and
- creating “tip sheets”—brief lists of resources about targeted areas (e.g., informatics), and presenting lists of sources available through the Internet, all to publicize the librarians' expertise and the library's resources.

**Recommendation 10.** Participate in community networks to create electronic partnerships with other health professionals and members of the community. Provide support for civic networking projects to promote library services and to contribute to the public good (thereby promoting positive developments in public health and library policies).

**Recommendation 11.** Target rural practitioners for information delivery and create new market opportunities for the library.

**Infrastructure and support systems**

**Recommendation 12.** Improve the infrastructure for wider use of electronic services by identifying potential users who have the authority to commit resources for equipment and using technology to connect CLRC members to each other and to external resources.

**Recommendation 13.** Monitor the progress of other library consortiums in order to select and integrate “best use” applications.

**Recommendation 14.** Create and present a technology plan that includes one- to five-year scenarios for CLRC as an organization, and for each member library.
CONCLUSION

Information professionals currently face a turbulent scenario—constantly changing modes of access, shifting user populations, and shrinking budgets. Within this larger perspective, the CLRC study investigated the information-seeking behaviors of hospital-based health care workers at nine hospitals and identified ways that health sciences libraries can better serve the target population. The recommendations presented address the limitations of—and gaps in—existing configurations of library resources in terms of their capability to meet users’ information needs. The recommendations exploit CLRC’s key advantages: that members share geographic proximity, homogeneous domains, and membership in a cooperative consortium. CLRC Hospital Library Committee members can use all these assets in building on their strengths, cultivating new skills and services, and staking claim to new territories in the hospital organizational structure.

Committee members might consider implementation of the recommendations within the framework of a new strategic plan. A strategic plan can enable changes that will transform health sciences libraries—and librarians—into the linchpins of health care organizations.

REFERENCES


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APPENDIX A

User survey

Medical Information Impact Study, Spring 1994

Profession: Allied Health Worker ____ Nurse ____
Physician ____
Female □ Male □
Age: □ Under 40 □ 41–50 □ 51–60 □ over 61
Certification/Specialist in __________________________
I have now or plan to have within one year, computer and modem in my office/home: Yes □ No □

For questions 1 through 14, please select one answer unless otherwise directed.*

1. * Under what circumstances do you seek additional work-related information?
   (Please rank answers: 6 = most often, 0 = least often)
   ( ) solve patient care problems
   ( ) obtain general care information/current awareness
   ( ) seek information appropriate for patient education
   ( ) research
   ( ) Continuing Medical Education
   ( ) other __________________________

2. Are you able to “keep up” with current journal and articles necessary to your responsibilities?
   ( ) easily ( ) with some effort ( ) no
   ( ) other __________________________

3. Is it important for you to be able to access information beyond your immediate medical environment?
   ( ) very ( ) somewhat ( ) not very

4. * In what format do you generally receive work-related information?
   (Please rank answers: 7 = most important, 0 = least often)
   ( ) face-to-face conversations
   ( ) phone conversations
   ( ) online searches
   ( ) texts
   ( ) tapes (video/audio/tv)
   ( ) electronic mail
   ( ) fax
   ( ) other __________________________

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5. * From what sources do you usually get work-related information?

<table>
<thead>
<tr>
<th>Source</th>
<th>Never</th>
<th>Some Times</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>colleague/expert/researcher (on-site)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>colleague/expert/researcher (off-site)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>online databases</td>
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<tr>
<td>librarian</td>
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<tr>
<td>pharmaceutical companies/representatives</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>personally owned texts and journals</td>
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<tr>
<td>other</td>
<td></td>
<td></td>
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</tbody>
</table>

6. * Have you created an informal network by contacting the same individuals for repeated consultation? (Check any that apply.)

( ) colleague(s), same specialty, same hospital/community
( ) colleague(s), same specialty, other hospital/community
( ) librarian, same hospital/community
( ) librarian, other hospital/community
( ) I don’t usually contact the same individuals for repeated consultations
( ) other ________________________________

7. * You usually select an information source based on (Rank answers: 5 = most often, 0 = least often)

( ) quickness of response
( ) currency of information
( ) ease of access
( ) least expense
( ) familiarity
( ) other ________________________________

8. If you need information immediately, which source would you try first?

( ) colleague
( ) librarian
( ) expert/researcher (on-site)
( ) expert/researcher (off-site)
( ) personally owned texts and journals
( ) online databases
( ) vendors
( ) other ________________________________

9. The frequency with which you use the hospital library/circuit librarian is best described as

( ) less than once a year  ( ) several times a year
( ) at least once a month  ( ) at least weekly

10. Which library/circuit librarian service or information product do you use most often?

( ) Interlibrary loan
( ) books and journals
( ) training
( ) assistance from librarian
( ) electronic databases
( ) video or other media
( ) other ________________________________

11. You would use the library/circuit librarian more often if (select only the most important choice)

( ) if I could get access at any hour
( ) if I could get access without physically going to meeting with the library/circuit librarian
( ) if the library/circuit librarian had better/more information specific to my needs
( ) if I had more training in using the materials and information systems
( ) if I could get the information faster
( ) other ________________________________

12. * Which library/circuit librarian services would you use if offered? (Select “yes” or “no” for each item.)

Yes  No

( ) ( ) personal or departmental training for library services and/or computer-based information services
( ) ( ) electronic mail delivery of library/circuit librarian services
( ) ( ) regular summaries of current data based on my specialty/information needs
( ) other ________________________________

13. Clinical Medical Librarians (CMLs) attend rounds and research information to assist clinicians.

( ) I have heard of CMLs and they are employed here.
( ) I have not heard of CMLs. To my knowledge, they are not used here.
( ) CMLs are not employed here, but I think they would make my job easier.
( ) other ________________________________

14. Literature Attached to Chart (LATCH) is an information service using literature to assist clinicians.

( ) I have heard of LATCH but we do not use it.
( ) I use LATCH.
( ) I have not previously heard of LATCH.
( ) other ________________________________

15. Do you have suggestions, concerns or comments about getting information for your job, which have not been addressed in this questionnaire?
APPENDIX B

Provider survey

Health Sciences Library Survey

Demographics
Hospital name:
Respondent’s name:
How many staff hours per week were devoted to your library 2 years ago?
How many now?
How many librarians with MLS degrees were employed by your library 2 years ago?
How many now?
How many ILL requests were submitted to your library by other libraries in the first 6 months of 1994?
How many in the first 6 months of 1993?
How has the nature of your holdings changed over the past two years? (e.g., more or fewer titles, texts, a/v tapes, computer resources. Please describe.)
How has the distribution of library users changed in the past two years (% of: physician, nurses, administrators, allied health workers and other users)?

Services
Does the library provide any of the following? (Please describe for whom, and how often?)
Training in online searching techniques:
Librarian-provided, online, mediated searchers for user?
Microcomputer search stations:
A/V production:
Manual bibliography compilation:
Computerized bibliography compilation:
LATCH (Literature Attached to Chart) or similar service:
“Information Filtering” (synopses, summaries, etc.):
 Routinely providing Clinical Medical Librarian (CML) (or similar services, attending rounds and providing research information to assist clinicians)?
Other (please describe):

Collections
How many journal titles did the library hold two years ago? Now?
How many AV titles did the library hold two years ago? Now?
How many texts did the library hold two years ago? Now?
Please list the inventory of media types you hold, in order of popularity (frequency of use).
How are books/journal titles/other media chosen?

Institutional relationships and organization structure
Does the library know which journals “private collections” each department has? Yes ☐ No ☐
Does the library have a mechanism for accessing such resources which might be located external to the library? Yes ☐ No ☐ Please describe:
Does your library have a formal (written) long-term plan? Yes ☐ No ☐
Please paraphrase your library’s goal/mission statement.
Do any library staff members participate in hospital-wide, or interdepartmental committees (e.g., Information Management Task Force)? Please list the committees and their purpose(s).
Do opportunities exist for your library to work with other departments in the hospital to coordinate information delivery? Please describe.
Do you share costs/resources/systems with other groups (e.g., Records, Patient Ed., Info Systems)?
Does the library provide training to groups or departments in the hospital? (Please describe.)
Do you work with other hospital libraries (not ILL and CENTRO)? Please describe.
Does the library provide information about, or work with other community information resources (academic or public libraries, or health-related agencies, for example)?
Does the library have the opportunity to participate in high-level strategic planning for hospital-wide information processing? Please describe.
Does your library use or recommend to users the services of information brokers?
List the names of any library programs not already identified in this survey.
Where in the organizational structure is your library (i.e., to whom does the library report)?

Technology and information access
Does the library use a fax machine? Yes ☐ No ☐
If Yes, for what purposes (e.g., providing citations to personnel, ordering texts)?
In the past two years have any library staff attended conferences or formal training for online searching, for using Internet, for other topics? Please describe.
Do you have one or more computers in the library? Yes ☐ No ☐
If no, do you have a computer available in the hospital for library use? Yes ☐ No ☐
If yes, please describe the equipment, use additional paper if necessary.

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Briefly describe how the computer(s) are used and what resources they access (e.g. online catalog, database searching, Interlibrary loan, CD-ROM). Include specific databases/vendors.
Are the computers you use part of a local area network (LAN)? Yes ☐ No ☐
If yes, which library applications are available on the LAN?
Does the library have access to the Internet? Yes ☐ No ☐
If yes, describe the connection (e.g. hospital direct connection, dial access Transit).
If no, are there plans for access in the future? When?
Date: ___________________ No plans _______
Do library staff use electronic mail (e.g., within the hospital, outside the hospital)? Yes ☐ No ☐ Please describe.
Your opinions

In the new JCAHO standard I.M. 9.2, the wide availability of information is considered. What other potential sources of information exist in your community? How do you visualize improving information services to health care professionals? Please use the rest of this form to share concerns, issues, suggestions and strategies not already discussed in this survey.