

**Hospital Libraries in the
National Network of Libraries of Medicine,
MidContinental Region
2002**

by

Betsy Kelly, Assessment and Evaluation Liaison
Elaine Graham, Consultant

National Network of Libraries of Medicine, MidContinental Region
University of Utah Spencer S. Eccles Health Sciences Library
Salt Lake City, Utah
February 2004

Hospital Libraries in the National Network of Libraries of Medicine, MidContinental Region

Introduction

The MidContinental Regional Medical Library (RML) aims to “develop, promote and improve access to electronic health information resources by Network member libraries, health professionals and organizations providing health information to the public.” This goal forms part of the core mission in the Regional Services Plan for the National Network of Libraries of Medicine, MidContinental Region (NN/LM-MCR), as proposed to the National Library of Medicine (NLM). Further, the NN/LM-MCR program includes a formal assessment and evaluation component aimed at “identifying and tracking trends in the development or failure of libraries” and the “identification of baseline and emerging services being provided by libraries in the Network.”

To carry out these program goals, the MidContinental RML Assessment and Evaluation Liaison developed a questionnaire to elicit information from regional member libraries about their staffing, the availability of technology, access to educational programs, and their relationship to the RML and the NLM. The data provide a picture of the region early in the 2001-2006 NN/LM-MCR contract, and serve as a baseline against which change in the availability of information resources and services can be measured in the future. The complete data tabulations available on the web include regional summary data, along with breakdowns by state and by type of library.¹ This report presents the survey results with a focus on hospital libraries in the region. A separate report that presents the survey results for the region as a whole is also available from the MidContinental RML; general background and applicable discussion points from that report are reproduced here to provide a context for the hospital library data.

Methodology and Response Rate

The Network Membership Inventory, Fall 2002 (see Appendix) was mailed to 216 regional NN/LM Member libraries identified from NLM DOCLINE records, and the questionnaire was also made available on the NN/LM-MCR web site. Of these 216 member libraries, 130 are hospital libraries. Respondents either mailed in the survey or submitted responses via the web form, although some used both means. In cases where multiple responses were received from an individual library, the responses were compared to eliminate duplication, and the data was entered only once. Some libraries did not answer all the questions, so the total number of responses varies from one question to another. The data were input, tabulated, and mounted on the web by staff at the Bernard Becker Medical Library, Washington University School of Medicine.

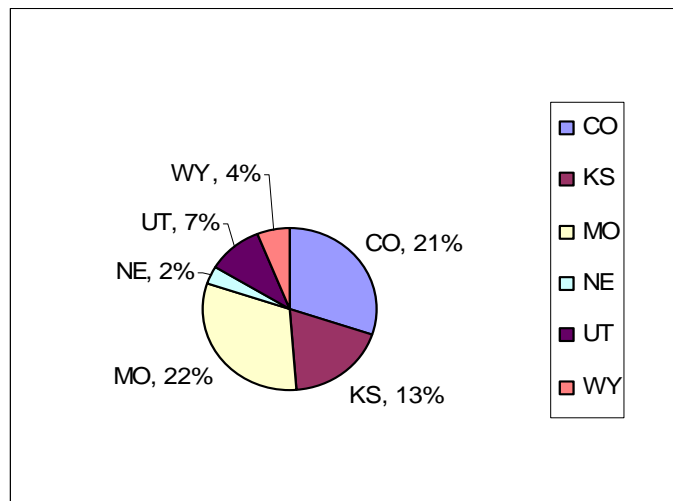
¹ <http://medweb.wustl.edu/backer/rml> or navigate from the NN/LM-MCR web site at <http://nmlm.gov/mcr> > Assessment and Evaluation > Fall 2002 Network Member Survey Results.

The survey response rate for hospital libraries was 66% of 130 hospital libraries in the region (86 responses), somewhat better than the overall regional response rate of 56% (with 122 respondents). The total number of survey responses for the region, responses by state, and responses by type of library, are shown in Table 1. Hospital libraries comprise 70% of all survey respondents; the breakdown of hospital library respondents by state is shown in Figure 1.

Table 1. Hospital Library Responses by State (deleted column with academic/other libraries)

	All Libraries	Hospital Libraries
Regional	122	86
Colorado	33	26
Kansas	19	16
Missouri	40	27
Nebraska	8	3
Utah	13	9
Wyoming	9	5

Figure 1. Hospital Libraries responding as percent of all respondents



Analysis and Discussion of Survey Results

Network Members

The distribution of health science libraries by state within the region shows Missouri with the largest number, 74 or 34% of the region's 216 Member libraries, and Wyoming with the smallest, 13 libraries or 6% (Table 2). However, on the basis of number of hospital libraries per 100,000 population, Wyoming has twice or more the number of hospital libraries as any state in the region. Wyoming's geographic characteristics of distance and

terrain, more dispersed population with no large urban centers, and overall smaller population may explain the higher proportion of hospital libraries in that state than in other states of the region.

Table 2. Hospital Library Distribution by State and Population.

State	Hospital libraries responding	Total libraries in state receiving questionnaires ²	Population in millions ³	Hospital Libraries per 100,000 population
Colorado	24	49	4.3	1
Kansas	15	30	2.6	1
Missouri	26	74	5.6	1.3
Nebraska	3	25	1.7	1.2
Utah	8	25	2.2	1.1
Wyoming	5	13	0.5	2.6

Staffing and Library Usage

Staffing at hospital libraries in the region varies greatly. Three respondents indicated no staffing (neither librarian nor staff). Presumably, the survey was completed by other departmental staff with no assigned library hours. Hospital libraries report between 0 and 4 full time equivalent (FTE) librarians and between 0 and 4 FTE staff, with slightly more librarians (1.2) than staff (1) per hospital on average. Almost all libraries that had at least one part-time librarian on staff reported a minimum of 0.5 FTE, with the exception of two (2) libraries that reported 0.2 FTE and 0.3 FTE librarians respectively.

Respondents were asked to indicate how many individuals their libraries serve/assist per day, in person, by phone, email, or other means. Individuals served by hospital libraries range from a low of 1 per day to a high of 250 per day (35 per day per library on average), with a total of over 2,500 users served by the 70 regional hospital libraries responding to the question on library usage.

Computers and Connectivity

Overall, computers are widely available for both library staff and users in the region, and almost all of these computers have Internet access. Among hospital libraries, all but one library reports at least one Internet accessible computer available for library staff, with a regional high (among 86 respondents) of 19 staff computers with Internet access; the regional average is two (2) staff computers with Internet access. Of the regional total of

² Libraries receiving questionnaires

³ NOMC 2000 Census Survey

239 hospital library computers, 98% (235) have Internet access. All but five (5) hospital libraries indicate having at least one computer with Internet access for users, up to a high of 16 user computers in one hospital library, with a regional average of 4 user computers per hospital library. Of the total 365 reported user computers in regional hospital libraries, 95% (345) have Internet access.

Internet connection speeds of T-1 or faster are present in 48% of hospital libraries (41 of 85). Another 27% of respondents (23) report high speed (cable, DSL, or ISDN) Internet access. Thus 75% of hospital libraries report high speed connections (cable, DSL, ISDN, T-1, or faster), only slightly below the overall regional average of 80% of libraries with high speed connections. Some respondents do not know the connection speed (17 or 20%) or have dial-up access (2 hospital library respondents have 28.8K and 7 hospital library respondents have 56.6K).

Collections and Collection Management

In the area of collections and collection management, 57% of regional hospital libraries (49 of 86 respondents) report they subscribe to electronic journals. While some libraries report entering electronic journal subscriptions via local and federal consortium agreements or through vendor-packaged purchase plans, a number of hospital libraries comment that they receive electronic journals only if they come free with the print subscriptions, if electronic subscriptions are required along with the print subscriptions, or if the electronic journals come bundled with another agreement for an electronic resource.

Education and Outreach Programs

Education Programs

A great many hospital library respondents (70 of 84, or 88%) provide some type of training. The breadth of training is reflected below (Table 3) where the value indicates the number of libraries providing training on the topic listed. Searching PubMed, searching the Internet, and using the library are the most common training topics. About half of the hospital libraries responding offer training on MEDLINEplus, and a few offer training in PDA's or commonly used office software.

Hospital libraries listed additional training topics such as searching nursing (CINAHL) and pharmaceutical (MICROMEDEX) literature; other online services and products, including electronic journals; evidence-based medicine resources; and consumer health information and patient education resources.

Table 3. Hospital Library Training Topics

Response	PubMed	Other MEDLINE software	MEDLINEplus	Searching the Internet	Using the Library	PDA's	Microsoft or other software
Region	61	27	40	60	55	1	12
Colorado	20	13	13	18	18	1	3
Kansas	10	1	7	10	7	0	2
Missouri	15	10	9	17	17	0	4
Nebraska	3	1	3	3	3	0	0
Utah	9	2	6	7	8	0	1
Wyoming	4	0	2	5	2	0	2

Note: An individual library could select more than one topic.

The means of delivery of training are primarily one-on-one training and classroom sessions, with much less web-based training and pre-recorded/audiovisual training (Table 4). The percentage of web-based training (a fairly new technology application) is lower at hospital libraries than at academic/other libraries, though the actual numbers of libraries of both types are comparable.

Table 4. Delivery Format for Library Training

Responses from	Libraries Responding	One-on-One	Classroom	Web-Based	Recorded (videos, audiotape, etc.)
Region	122	94 (77%)	72 (59%)	15 (12%)	8 (7%)
Hospital Libraries	86	67 (78%)	48 (56%)	7 (8%)	6 (7%)
Academic/ Other Libraries	36	26 (72%)	23 (64%)	8 (22%)	2 (5%)

Note: An individual library could select more than one delivery format.

In answer to the question on the library's audience for training programs, all libraries responding (72) indicate "primary users," as would be expected; 18% (13 of 72 respondents) report "outside individuals," and 15% (11 of 72 respondents) identify "library staff" as an audience for training programs.

Regarding staff enrollment in education programs, libraries responding to this question (79) report classes on health information resources (34 or 43%), software (26 or 33%), or other topics (33 or 42%). However, approximately 27% of respondents (21) responded "none" in response to the question on whether they or their staff had enrolled in classes during the previous 12 months. (Comments on later survey questions highlight the lack of locally available continuing education in some areas and the lack of time for attendance, which may in part explain these responses.) For the libraries that report staff attending training of some type, the most frequently cited sponsors are the Medical Library Association (MLA) and the Midcontinental Chapter of MLA (MCMLA). Other sponsors are the library's parent institution or system; the Bibliographic Center for Research

(BCR); local consortia and federal library networks; information industry organizations; community colleges; and the National Library of Medicine.

Outreach Programs

Outreach generally refers to efforts to raise awareness of health information resources among consumers and health care practitioners. While not every hospital library is positioned to conduct formal outreach programs, many do provide library services to individuals not affiliated with the institution, which contributes greatly to the NN/LM mission of improving access to health information. Indeed, among survey respondents, 70% of hospital libraries (58 of 83) indicate they serve unaffiliated individuals.

When asked about formal outreach programs that target groups or individuals outside their institution, 28% of hospital libraries (18 of 65 respondents) indicate they do provide outreach services. The actual percentage of regional libraries that offer outreach is likely somewhat lower because nearly 25% of respondents left this question blank.. Even so, this is an encouraging level of participation, especially as support for Network member outreach efforts has been a programmatic priority for the NN/LM over the last decade. Less than half of those undertaking outreach evaluate the results or effect of the programs and services they provide. No formal outreach programs are sponsored by hospital libraries in Kansas; the states of Nebraska, Utah, and Wyoming each have one hospital library that conducts a formal outreach program. The numbers of hospital library sponsored outreach programs are greater in Colorado (9) and Missouri (6).

Hospital libraries with formal outreach programs in the region target the general public (14), public libraries (9), unaffiliated health care providers (9), and public health departments and agencies (6). Special populations targeted in formal outreach programs include African Americans (1), immigrants and new Americans (3), inner city health professionals (1), Native Americans (2), rural health professionals (5), Spanish language speakers (5), veterans (1), and people whose primary language is not English (1). A number of outreach activities are focused on various age groups and special health care populations: children (10), teens (7), seniors (10), women (9), expectant mothers (7), the AIDS community (6), the substance abuse community (6), and men (1).

Communication

The RML is particularly interested in Network members' perceptions of the NN/LM and the RML's programs and services. Several survey questions addressed how librarians communicate with each other and with the RML. The survey invited input as well on the value of various NLM and NN/LM programs and services.

Communication within the Region

Survey respondents were asked to rank several methods that might be used in communicating with other Network members (Table 5). E-mail in general is ranked as 4 or 5 (with 5 being “essential”) by 91% of the hospital library respondents who use it. Next in importance are DOCLINE-L (ranked 4 or 5 by 78% of respondents) and meetings of professional associations, consortium meetings, etc. (ranked 4 or 5 by 77% of respondents). Medlib-L is essential to the majority of users responding (68% ranked it 4 or 5). A handful of people haven’t used meetings as a communication method (7) or e-mail (2), quite a few respondents have not used Medlib-L (23), and 16 haven’t used DOCLINE-L. The number of hospital libraries that report not using DOCLINE-L is of some concern, as it is the primary forum for DOCLINE discussion and NLM announcements and was so highly rated by those who do use it.

Table 5. Communication within the Region (Hospital Library Respondents)

Responses	Libraries Responding with Ranking (1 to 5)	Essential 5	4	3	2	Not Useful 1	Rank 5 or 4 %	Haven't Used
Meetings	37	45	11	11	5	1	77%	7
E-Mail	82	66	9	7	0	0	93%	2
Medlib-L	59	23	17	14	3	2	65%	23
DOCLINE-L	64	36	14	7	7	0	88%	16

Survey respondents were also asked to rank the methods the MidContinental RML (MCRML) uses to communicate with its Network members (Table 6). The RML’s formal means of communicating with members include the MCMLA listserv; the MCRML website; the print *Plains to Peaks Post*, the RML’s newsletter published quarterly; a weekly email newsletter sent to MCMLA listserv subscribers; and personal calls and visits. Librarians were asked to rate the usefulness of these means of informing the regional community about services, health information resources, funding opportunities, and other topics of interest.

While all the communication methods are ranked as essential (ranked 4 or 5) by a majority of respondents, the various methods are each nonetheless indicated as “not used” by a substantial number of hospital Network member respondents. No one communication method is used by all Network members. Four (4) hospital library respondents indicate they don’t use any of the communications methods usually employed by MCRML (though they did receive and reply to the Network Member Inventory). Clearly, the MCRML should continue to communicate with members through a variety of channels, and MCRML must re-double efforts to increase awareness of the various communications options available.

Table 6. MCRML Communications (Hospital Library Respondents)

Responses	Libraries Responding with Ranking (1 to 5)	Essential 5	4	3	2	Not Useful 1	Rank 5 or 4 %	Haven't Used
MCMLA Listserv	64	35	19	8	2	0	84%	19
MCRML Website	53	22	12	17	2	0	64%	26
Plains to Peaks Post	62	18	15	20	6	3	53%	19
RML Weekly News via email	58	27	16	11	1	3	74%	23
Calls/Visits	48	21	18	6	3	0	81%	30

Members and the NN/LM Network

The final portion of the survey asked Network members to identify benefit(s) provided to their library by the NN/LM Network (Table 7). Respondents could simply check any and all selections that they consider benefits of membership; there was also space to list any additional benefits.

Most hospital library respondents view DOCLINE as a member benefit. While some of the programs and services identified by most respondents as member benefits—NLM databases, including MEDLINEplus; continuing education opportunities; and communications such as discussed above—are also available to nonmembers, the availability of training, consultation, and support from state and special projects liaisons increases their value to members. (However, this information was not specifically sought, and several librarians noted that the databases were available regardless of membership status.) Nearly half the respondents identified free promotional materials as a benefit of Network membership. Relatively few respondents identified opportunities for input on Network programming and funding support as NN/LM Member benefits—obviously these are program areas needing increased effort on the part of MCRML to increase member awareness and participation.

Hospital library respondents identified additional benefits not presented on the survey checklist: availability of helpful, friendly people and connection to information experts.

The survey asked members to identify benefits or services they would like to receive from the Regional Medical Library that they are not currently receiving or are not currently available. The examples given on the questionnaire were teleconferences and consortia buying, which generated many comments in favor of cooperative purchase agreements (especially for electronic resources, including more specifically health-oriented journals, and presumably negotiated by the NN/LM, and teleconferences. Other desired benefits cited by hospital library respondents are online training; basic library

skills training for those without a library background; additional course offerings from NN/LM; and some type of discussion list with “threads.”

Table 7. NN/LM Benefits (Hospital Library Respondents)

NN/LM Benefits	Libraries Responding (Total = 86)
DOCLINE	85
NLM databases	71
Consumer health information sources such as MEDLINEplus	69
Enhanced communication with other library professionals	63
Continuing education	59
Free promotional materials	39
Opportunities to provide input on Network programming	28
Funding programs	18

Table 8. Services Use and Assessment (Hospital Library Respondents)

NLM & NN/LM Services	Libraries Responding to the Question	Like	Don't Like	Don't Need	Haven't Used Yet
DOCLINE	85	84	0	1	0
PubMed	85	81	3	1	0
MEDLINEplus	84	81	1	0	2
Funding programs to support your projects	71	8	1	3	59
Courses sponsored by the NN/LM	77	60	0	0	17
Communication with other librarians	77	75	0	0	2
Free promotional materials	78	62	0	7	9

Finally, the survey asked which NLM services are used and requested positive or negative feedback on each service listed (Table 8). Most of the services listed are used by a high number of respondents, with the exception of funding programs for project support. Winning NN/LM funding support entails rigorous effort on the part of the Network member throughout the application and implementation phases of a project, so it

is not surprising that a large proportion of respondents have not yet participated. Furthermore, only three (3) respondents indicate they “don’t need” funding programs for project support, and 59 reply positively that they “haven’t used [them] yet.” Although no one responded that courses are “Not Needed”, 17 respondents have not yet taken advantage of courses sponsored by the NN/LM.

Conclusion

The responses of the 86 hospital libraries that participated in the NN/LM MidContinental Region Fall 2002 Network Member Inventory yield the following:

Staffing patterns at regional hospital libraries vary, with a regional average of 1.2 librarians and 1 staff for hospital libraries and a staffing range of 0 to 4 FTE for both librarians and staff.

Computers are widely available for both hospital library staff and users, almost all of these computers have Internet access, and 78% of hospital library computers with Internet access are connected via a high speed (cable, DSL, ISDN, T-1, or faster) connection.

A little more than half of the hospital libraries (57%) receive at least some electronic journals, though they would like improved acquisition mechanisms and better selection of resources.

Most hospital libraries (82%) provide training for library users and staff on a wide variety of topics, including NLM databases, other online services and products, library use, evidence-based medicine resources, and consumer health information; most libraries offer one-on-one training and classroom training and a few offer web-based training and use audiovisual formats.

Librarians and/or staff at most hospital libraries (73%) enrolled in educational programs, most often those offered by the Medical Library Association (MLA) and the Midcontinental Chapter of MLA.

Over one-fourth of hospital library respondents offer some type of formal outreach to raise awareness of health information resources among consumers and health care practitioners; 70% of hospital libraries indicate they serve unaffiliated users.

Most regional hospital libraries find their e-mail systems essential for communication within the region; DOCLINE-L, professional meetings and Medlib-L are essential to many as well.

Most hospital libraries consider the following as Network member benefits—DOCLINE; NLM databases and consumer health information services; continuing education; and enhanced communication with other library professionals.

Hospital library respondents identified benefits and services they would like to receive—more educational opportunities via teleconference; improved cooperative purchase agreements, especially for electronic health science journals; and additional course offerings from NN/LM.

Most NLM and NN/LM programs and services are used extensively by hospital Network members, and all are valued highly as needed within the region.

Appendix



National Network of
Libraries of Medicine
MidContinental Region

MidContinental Regional Medical Library Network

Membership Survey

Fall 2002

I) Network Member Information

A) *Institution/Library Name (Please correct if necessary)*

B) *DOCLINE LIBID (Please correct if necessary)*

C) *Name and Title of Person completing Survey*

D) *How many full time equivalent (FTE) librarians/library staff are employed in your library? Use your institution's definition of librarian and of staff.*

_____ FTE Librarians _____ FTE Staff

E) *Please estimate, on average, how many individuals your library serves/assists per day – both in person and by phone/email/or other means? _____*

II) Computers and Connectivity

A) Computers

- 1) HOW many computers are in your library? _____ for Librarian(s)/staff _____ for Users
- 2) If there are no computers in your library, do you have access to a computer outside the library but within your building? _____ Yes _____ No
- 3) Is the computer you use most often:
 - _____ Dedicated to your work only
 - _____ Shared with other library staff
 - _____ Shared with other non-library staff (physicians, nurses, secretaries, etc.)

B) Connectivity

- 1) How many computers in your library have Internet access? _____ Librarian(s)/staff _____ Users
- 2) What is the speed of your Internet connection?
 - Dial-up at _____ 28.8K _____ 56.6K
 - Network _____ High speed (cablemodem, DSL, or ISDN) _____ T-1 or faster
 - _____ Don't Know

III) Collections, Education and Outreach

A) Collections and Collection Management

- 1) Does your library subscribe to electronic journals?
 - _____ Yes _____ No
- 2) If Yes, do you purchase e-journals through a consortium or some group purchase plan?
 - _____ Yes _____ No
- 3) If Yes, what consortium or group plan? _____

B) *Education Programs*

- 1) Does your library provide training?
 Yes No (If no, go to B5)
- 2) If yes, on what topics?
 PubMed
 Other Medline software
 MEDLINEplus
 Searching the Internet
 Using the library
 PDAs
 Microsoft or other commercial software

Other (please provide details) _____

- 3) If you provide training, what means of delivery are used? (Check all that apply)
 One-on-One
 Classroom instruction
 Web-based instruction
 Recorded (videos, audiotape, etc)
- 4) Who is your audience for training?
 Primary Users
 Individuals outside my institution
 Library staff
- 5) During the last 12 months, have you or your staff enrolled in classes on (Check all that apply)
 Health Information Resources
 General software (i.e., MS Word, Photoshop, etc)
 Other (management topics, hardware troubleshooting, supervising, etc)
 No classes taken (Go to Question C1)
- 6) If classes were taken, please tell us who sponsored the classes.
 MLA MCMLA Other (please specify) _____

C) *Outreach – providing services to groups and/or individuals outside your institution*

- 1) Do you provide services to individuals not affiliated your institution?
 Yes No (If No, go to Part IV Question A1)
- 2) Do you have formal outreach programs that target groups or individuals outside your institution? Outreach generally refers to efforts to raise awareness of health information resources among consumers and health care practitioners.
 Yes No (If No, go to Part IV Question A1)
- 3) If you have a formal outreach program what communities are targeted?
 General Public
 Health Care Providers unaffiliated with your institution
 Public Health Departments and Agencies
 Public Libraries

Other (specify) _____

- 4) What, if any, special populations are targeted in your current outreach activities?
 African Americans
 Immigrants & New Americans
 Inner City Health professionals
 Native Americans
 Rural Health Professionals
 Spanish language speakers
Other (Please specify: _____)
- 5) What age groups or special health care populations are included or targeted in your current outreach activities?
 Children

- _____ Teens
- _____ Seniors
- _____ Women
- _____ Expectant Mothers
- _____ AIDS Community (both health professionals and affected populations)
- _____ Substance Abuse Community (both health professionals and affected populations)

Other (please specify)

- 6) Do you evaluate the results or effect of outreach programs and services you provide?
 _____ Yes _____ No

IV) Communication

A) Communication within the Region

- 1) Please rank the usefulness of ways you and your staff communicate with other Network members from Essential to Not Useful. If you haven't used one or more please mark it "Haven't used":

	Essential				Not Useful	Haven't Used
Meetings (Professional associations, consortia meetings, etc.)						
Email						
Medlib-L						
Docline-L						
Other (specify)						
Other (specify)						
Other (specify)						

- 2) There are a number of means the MCRML uses to communicate with its Network members. Please rank the usefulness of these from Essential to Not Useful. If you haven't used one or more please mark it "Haven't used":

	Essential				Not Useful	Haven't Used
MCMLA Listserv						
MCRML Website						
Plains to Peaks Post, the MCRML Newsletter						
RML Weekly News via email						
RML News Archive						
Personal calls/visits from RML liaison						
Other (Specify)						

B) You and the NN/LM Network

- 1) In your view, what are the benefits of membership in the NN/LM MCR? (Check all that apply)

- Docline
- NLM Databases
- Consumer Health Information Sources such as MEDLINE^{plus}
- Funding Programs
- Continuing Education
- Enhanced communication with other library professionals
- Opportunities to provide input on Network programming
- Free promotional materials (pens, posters, bookmarks,

Other _____

- 2) Are there other benefits or services you would like to receive from the Regional Medical Library that you are not currently receiving or are not currently available? For example, teleconferences, consortia buying, etc.

- 3) Please indicate which NLM services you use and how you feel about them:

	Like	Don't Like	Don't Need	Haven't Used Yet
Docline				
PubMed				
MEDLINEplus				
Funding programs to support your projects				
Courses sponsored by the NN/LM				
Communication with other librarians				
Free Promotional materials				

The information you have provided will be used to improve programs and services and to evaluate the work of the MidContinental Regional Medical Library. Please call your liaison at 1-800-338-7657 with any questions about this survey or about the Regional Medical Library's programs and services.

Return completed survey by December 20, 2002 to

Network Members Survey
National Network of Libraries of Medicine/MidContinental Region
(NN/LM-MCR)
University of Utah
Spencer S. Eccles Health Sciences Library
10 North 1900 East
Salt Lake City, UT 84112-5890

Toll Free 1-800-338-7657
FAX: (801) 581-3632
Web: <http://nlnm.gov/mcr/>