

Assessment and Evaluation, 2010
Network Member Focus Group Interviews
National Network of Libraries of Medicine,
MidContinental Region

National Network of Libraries of Medicine, MidContinental Region
University of Utah Eccles Health Sciences Library
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TABLE OF CONTENTS

Introduction	1
Methodology.....	1
Findings.....	4
Librarians' Daily Activities	6
Literature Searching.....	6
Teaching	6
Journal Article Retrieval	6
Maintaining Electronic Resources	7
Administration	7
Managing Email	7
Other Activities	7
Trends in the Institutional Environment	7
Workforce Changes	7
Health Care Delivery and Economics.....	8
Technology.....	8
Expansion	8
Library Impacts.....	9
Management	9
Staffing.....	9
Budget	9
Library Marketing and Outreach	10
Services and Resource	11
User Interactions.....	11
User Expectations and Information Seeking Skills.....	12
Health Care Standards and Requirements	12
Space.....	12
Special Services	13
Web Access Issues	13
Electronic Resources Management	13
Service Issues	13
Relations with Publishers.....	14
EMR and Point-of-Care Reference Tools	15
Institutional Relations	15
Relations with Information Technology	15
Involvement within the Institution	16
Library Staff Characteristics and Skills.....	16
Librarian Skills and Abilities	16
Technology Translation.....	17
Educational Preparation.....	17
Generational Differences	17

RML Support	18
Education and Training	18
Exposure to New Technology	18
Interactions with the RML and Networking with Others	19
Advocacy.....	19
Resource Sharing	19
Other Comments on the RML and NLM.....	20
Conclusions	20
Table 1. Themes and Topics Identified in Focus Group Transcripts	5
Table 2. Focus Group Participation.....	6

Introduction

To accomplish the mission of the National Network of Libraries of Medicine (NN/LM) in the MidContinental Region, the Regional Medical Library (RML) works toward the following goals:

- To develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation;
- To promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on contributing to the Healthy People 2010 goal of eliminating health disparities;
- To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public; and
- To develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and National Library of Medicine (NLM) contribute to improved access to health information by health professionals, and the public.

The National Network of Libraries of Medicine MidContinental Region (NN/LM MCR) regularly solicits input from its Network members about their work supporting access to health information and about how the Region can support them with training, advocacy, and resources. Questionnaires, focus groups, polls and informal conversations are all useful means for obtaining feedback from Network members. Questionnaires have been used three times between 2002 and 2008. Focus group interviews have been held previously with members throughout the region, in 2003 and 2006, and this report presents results from the Network member focus group interviews held in early 2010. Participant responses will be used by the NN/LM MCR to review current activities of network members in their daily practice, to better understand changes occurring in the institutional environments of member libraries, to explore the effects of institutional changes on the libraries, and to identify ways in which the RML can support Network members in dealing with anticipated changes.

Methodology

The focus group as a method of qualitative research in the library setting is described in a Medical Library Association (MLA) publication, *Focus Groups for Libraries and Librarians*,¹ and is the topic of an MLA continuing education course, *Focus Group Interviewing: A Qualitative Research Methodology for the Library*.² Typically, groups of 6 to 10 participants come together in a single location and are led by a facilitator, preferably someone outside of the organization sponsoring the focus groups. An observer is also present. The observer's role is to

¹ Glitz, Beryl. *Focus Groups for Libraries and Librarians*. Chicago: Medical Library Association, 1998.

² Hamasu, Claire; Davis, Rebecca. *Focus Group Interviewing: A Qualitative Research Methodology for the Library*. MLA course approval for 8 contact hours. <http://www.cech.mlanet.org/node/101>

both take notes on the conversations and to watch for unanticipated themes that arise during the discussions. The observer shares these with the facilitator who may choose to revisit the additional themes at the end of the session. Sessions are recorded and the anonymized transcripts along with the observer's notes are analyzed and form the foundation for a final report of the sessions.

The NN/LM MCR developed a list of questions designed to solicit feedback from Network members about the anticipated effect that changes in health care might have on NN/LM Network members in the next few years and how the RML can support members as they respond to the changes. NN/LM MCR Associate Director Claire Hamasu and Assessment and Evaluation Liaison Betsy Kelly worked with Rebecca Davis, from the University of California, Davis, Blaisdell Medical Library, to develop the focus group questions. The questions were tested at University of Utah and Washington University with librarians who would not be participating in the focus groups.

The focus group questions, in the order they were asked, are as follows:

1. What do you spend most of your time doing?
2. What kinds of changes do you expect to affect your hospital or university in the next few years?
 - a. Economy
 - b. Electronic record
 - c. Funding sources (research, reimbursement—Medicare, insurance, etc.)
 - d. Bioinformatics
 - e. Publishing/Open Access
 - f. Technology
3. Thinking about all these changes, how will your library be affected?
 - a. Organization
 - b. Staffing
 - c. Skills, training
 - d. Resources
 - e. Services
4. What can the RML do to support you in dealing with these changes?
 - a. Advocacy
 - b. Education
 - c. Technology

Participation in past focus groups has been limited by Network members' proximity to the selected locations. In order to allow broader participation among the membership the NN/LM MCR decided to use Adobe Connect, an online meeting system that is used for synchronous information and education sessions in the region. Adobe Connect supports the use of webcams and a toll free telephone number. Focus group participants were recruited via a SurveyMonkey™ poll, which invited all members in the six states of the NN/LM MCR to sign up to participate in

the Network member focus groups. The poll asked those who responded to provide contact information, identify the type of library where they worked (academic, hospital, other), and to indicate whether or not they could use a webcam from within their institutions. The initial invitation went out on December 18, 2009, as an email to the MCMLA listserv, with a deadline to respond by January 20, 2010. A news item inviting participation in the focus groups appeared on the NN/LM MCR blog on December 24, 2009, and again on January 4, 2010. Six focus group sessions were scheduled, and poll respondents were asked to check off all dates that they were available. The first of the six sessions had to be cancelled due to a conflict with other regional activities. There were two volunteers whose schedules could not be accommodated. Three volunteers were not eligible to participate: one resource library director and two volunteers who are on the listserv but do not work in the MidContinental Region.

As responses to the poll were received it became apparent that quite a few librarians in the region were restricted from using webcams at work. While webcams allow participants to see each other and know who is talking, they are not required for online discussions. In order to include all eligible volunteers, each was assigned to one of five groups based on their type of library and ability to use a webcam:

- Hospital librarians who could not use webcams were assigned to either the first or last session.
- Hospital librarians who could use webcams were assigned to either the second or fourth session.
- Academic librarians who could use webcams were assigned to the third session.
- Four volunteers' availability precluded their assignment to a group based on library type or their ability to use a webcam and were therefore assigned based on their availability.

Once all participants were assigned to one of the five groups, emails were sent to the group with the date and time and guidelines about how the session would be run. Instructions were provided for web conferencing, including the Adobe® Connect™ URL and how to have the system call them. Susan Roberts, the NN/LM MCR Technology Associate, did tests with each participant to make sure they knew how to connect to the web conference center and to test their connection. In spite of the extensive technical preparations, there were a few problems. The first session was delayed 30 minutes because of a problem with Adobe Connect. That was finally resolved by moving to a different “room” on the system. A couple people lost their video during the session, but the audio was fine.

Reminders were sent to everyone a few days before their assigned event. Only two participants cancelled, and one person who forgot to attend her assigned session participated in a different focus group. Of 32 eligible volunteers enrolled, 31 participated in one of the five focus groups.

In the non-webcam group there were actually a few who could have used a camera, but they were asked not to use their cameras so the groups would be homogenous (either all would use webcams or all would not use them). However, in the webcam groups, some participants chose to post a static picture instead of showing the live video, and the NN/LM MCR technical facilitator had to display a JPG image for some participants who had problems with their

cameras. (After the first two groups everyone was asked to send a JPG head shot to have on hand in the event of a technical problem.)

Rebecca Davis served as the facilitator for each of the five focus group sessions; she joined each session via the web conference connection. To ensure consistency in conducting the various focus groups, the facilitator worked with a script of introductory remarks and questions to prompt discussion. The same questions were asked in each group, except that in some of the later group sessions, instead of asking the third question sequentially, the facilitator asked participants to volunteer keywords to paint a broad picture of anticipated changes in the environment. During all the focus group sessions, follow-up questions were used as needed to elicit additional discussion or clarification of points the participants raised. To encourage frank discussion, participants were assured that there were no right or wrong answers and that comments would be anonymous.

Lauren Yaeger and Susan Fowler, reference librarians at Washington University School of Medicine, and Suzanne Sawyer, MCR Project Coordinator, were recruited to serve as observers. Although none were trained or experienced in this task each was willing and interested in the process and the discussion topics. Because of proximity, both physical and via Skype, the Assessment and Evaluation Coordinator was able to solicit their participation and provide instructions on their responsibilities. Each was present in the session they were observing and was introduced by the facilitator, but they were silent participants. Each took written notes that highlighted the discussions but there was no attempt to capture details. The observers were asked especially to record topics or comments that grew out of the discussion but were not directly related to the formal questions. The observers could then alert the facilitator to address these, time permitting, at the end of the session. However, the discussions were lengthy and rich and tangential topics were not noted by the observers. Observer notes were provided to the analyst along with the session transcripts.

All focus group sessions were recorded using the Adobe Connect recording feature. The audio was extracted from the recordings using Free Sound Recorder from Cool Record Edit® software and then converted the files from MP3 to WAV using Switch Audio File Converter. These were then burned to CD and delivered to the transcriptionist. All identifying personal and institutional names were removed from the transcripts.

Elaine Graham, consulting librarian, analyzed the transcripts to identify the primary themes and related topics revealed in the comments of focus group participants. Each comment was then categorized by theme and any specific topics were noted. Additionally, each comment was coded by the question that prompted the comment and by the group number in which the comment appeared (for later reference, verification, or quotation). Data coding was performed using Microsoft® Excel, which accommodated the storage, categorization, and display of narrative comments. A descriptive summary with highlights from participant comments was prepared.

Findings

Results of the focus group interviews are presented according to the themes and topics reflected in the participants' comments (Table 1). Five focus group sessions were conducted, with a total of 31 participants (Table 2). A total of 595 comments were coded, and while the data generated

by the group sessions is by nature qualitative, the number of comments on a topic is given to convey a general sense of the scope of discussion. The number of comments is not a conclusive measure of the interest or opinion on a topic, as additional participants may have agreed with comments contributed by others, but may not have voiced their thoughts. Data on the occurrence of comments by theme, topic, and group appears in Appendix A. Data on the occurrence of themes by question number appears in Appendix B. The transcribed comments from all discussions, categorized by theme and topic, are provided in Appendix C.

THEMES	TOPICS
Librarians' Daily Activities	<ul style="list-style-type: none"> • Literature searching • Teaching • Journal article retrieval • Maintaining electronic resources • Administration • Managing email • Other activities
Trends in the Institutional Environment	<ul style="list-style-type: none"> • Workforce changes • Health care delivery and economics • Technology • Expansion
Library Impacts	<ul style="list-style-type: none"> • Management (<i>Staffing, Budget, Library marketing and outreach</i>) • Services and Resources (<i>User interactions, User expectations and information seeking skills, Health care standards and requirements, Space, Special services, Web access issues</i>) • Electronic Resources Management (<i>Service issues, Relations with publishers, EMR and point-of-care reference tools</i>) • Institutional relations (<i>Relations with Information Technology, Involvement within the institution</i>) • Library Staff Characteristics and Skills (<i>Librarian skills and abilities, Technology translation, Educational preparation, Generational differences</i>)
RML Support	<ul style="list-style-type: none"> • Education and Training • Exposure to New Technology • Interactions with the RML and Networking with Others • Advocacy • Resource Sharing • Other Comments on the RML and NLM

Table 1. Themes and Topics Identified in Focus Group Transcripts

Focus Group Number	Hospital Library Participants	Academic Library Participants	Other Library Participants	Total Participants
Group 1	6	1	0	7
Group 2	4	2	0	6
Group 3	0	5	1	6
Group 4	4	0	0	4
Group 5	7	0	1	8
	21	8	2	31

Table 2. Focus Group Participation

Librarians' Daily Activities

Literature Searching (17 comments)

Many participants report spending much of the work day performing literature searches for health professionals. Named user groups include nurses, residents, physicians, nursing evidence-based practice teams, clinicians, researchers, and consumers. Some participants identified the purposes of literature search requests as patient care, safety council performance improvement processes, and research. One participant commented that while there are many end-users who do their own searches, a large group of physicians and nurses still request searches from the library.

Teaching (14 comments)

Teaching in the library includes end-user searching of PubMed and other databases, a credit hour class on information literacy, consultations with individuals or small groups, presentations on accessing online library resources (databases, full-text journals and textbooks), and a grand rounds class (students work on cases and then present as if they're in grand rounds). Teaching was identified as a favorite activity—"love teaching people how to use PubMed, especially because it changes all the time, so [teaching is a] learning situation for me too." Students especially need assistance in navigating library resources.

One participant described an extensive teaching role: going on "morning rounds with two teams of medical students, about three residents, and their...physicians...I observe them in their rounding with patients...[follow up with] research...links to articles...tips on searching, and tips on using the library resources. Another participant teaches clinical applications for physicians, such as the electronic medical record, and serves "on a system committee to roll out...a database in which physicians will be looking at their own data before it goes out to HealthGrades."

Journal Article Retrieval (8 comments)

In addition to other library tasks, a number of participants report spending substantial time on processing interlibrary loan requests or retrieving articles from in-house resources.

Maintaining Electronic Resources (8 comments)

Participants reported time spent on maintaining and trouble-shooting electronic resources, including managing the library web site with links to electronic resources, investigating dead links, resolving password or IP range issues onsite, and helping with remote access setup and problems.

Administration (13 comments)

Administrative tasks include attending management and committee meetings, in addition to planning, budgeting, and personnel management.

Managing Email (17 comments)

There was general agreement that managing email takes up a lot of time, and it is definitely an integral part of work life. Requests for library service frequently arrive by email, which makes managing and tracking requests easier. Email provides convenient documentation, for example for copyright permissions or price quotes, and some organizations are more likely to respond to emails than phone calls. Addressing problems conveyed by email may involve extensive and time-consuming messaging back and forth. Several participants mentioned having attended a helpful workshop that presented techniques for time management and dealing with email.

Other Activities (14 comments)

Participants described involvement in current alerting activities, including notices sent based on logs of previous interests, newsletters, and interests identified through interactions at hospital committee meetings. Several participants identified reference service as part of their daily responsibilities. One participant identified community outreach as a major activity, and several mentioned collection development and collection management activities. One participant reported spending substantial time in support of teleconferencing and videoconferencing for CME (continuing medical education), and another participant assists with presentation development.

Trends in the Institutional Environment

Workforce Changes (16 comments)

Multiple participants reported on physicians becoming employees of the hospital, either through sale of their practices to the hospital or becoming employed by primary care, specialty, or occupational health clinics. Benefits cited for physicians include fewer hours of work (40-hour work week as an employee), relief from paying liability insurance, reduced competition for patients, a guaranteed salary, and less involvement in the business aspects of practice. Along with the benefits come increased challenges, such as productivity and quality standards for professional employees. One community hospital librarian noted that recruitment of good physicians is an ongoing issue, and others mentioned the aging workforce and succession planning as issues for the future of the institution. New job titles mentioned were “hospitalist”, “aligned” physicians, and “intensivists.”

Health Care Delivery and Economics (16 comments)

Focus group participants indicated changes in health care delivery and the economics of health care that are expected to affect their institutions in the coming years: healthcare reform, Medicare, uncompensated care or insufficient reimbursement for care delivered, lack of money, underfunding of healthcare in rural areas, changing demographics, an aging population, and shifts in personnel due to expansions and contractions. Forces that appear to conflict were noted, with one participant identifying a focus on differentiating the organization from the competitors and another finding increased partnerships and collaborations, especially in seeking extramural funding. One participant noted “there’s a really healthy push towards patient engagement” in discussion of health care delivery models, in producing better health outcomes, and in medical decision making.

Technology (26 comments)

A number of participants noted the emergence and increased use of portable technology or mobile devices in health sciences environments. Internet access on mobile devices allows for user searching as well for information delivery and document transfer to phones, iPads, and similar devices. Nurses and office staff are texting physicians via their iPhones, saving time on both sides, and avoiding the need for an actual call to have a conversation with the physician. One participant reported health professionals asking if they could access journals on their Kindle. Participant comments were mixed regarding levels of Internet access from within health care institutions. As some institutions have mounted sites on Twitter and Facebook, they have lifted limitations on accessing social networking sites from within the institution. Some institutions continue to block certain levels of Internet access, less due to concern about wasting work time (e.g., with online shopping, video streaming, or accessing personal Facebook pages) and more due to concern about maintaining adequate capacity (“pipes”) for transferring normal business data.

Several participants reported their institutions are rolling out electronic medical record (EMR) systems, and the use of video conferencing for continuing education and business meetings continues to increase. One participant mentioned voice activated transcription, where the physician’s dictation is transcribed by a computer; this system is expected to save substantial amounts of money, though the amount of human editing that will be needed is unknown.

Expansion (16 comments)

A number of participants described expansion of schools, care facilities and programs at their institution, somewhat surprising during the current time of economic contraction. Some health care institutions are expanding services to new patient populations and geographic service areas (requiring new facilities, new providers, and/or new faculty), offering new levels of care (outpatient in addition to hospital care, mobile clinics), academic institutions are expanding or founding new schools, facilities are planning renovation, new facilities are opening, and restructuring of funding for one national system is expected to bring more equitable funding to local and regional participants.

III. Library Impacts

Management

Staffing (31 comments)

A recurring comment from focus group participants was that positions were not replaced after staff retirements. The importance of succession planning at a one-person library was highlighted, so that when the librarian retires, the hospital library doesn't just "drift away." At several libraries, positions had been eliminated. One participant reported several employees had been shifted between departments to equalize the impact of staff reductions. Participants noted that decreases in staffing have occurred in traditional technical services functions and in paraprofessional and support positions, and as staff have retired or left, "we've repurposed, reorganized." Decreases in support staff positions were attributed mostly to budget problems, but also seen in response to increased technology and electronic resources, with tasks changing over time. Some participants noted more demand for professional librarians to work directly with researchers, clinicians, and nurses.

Decreases in staffing have led to workload issues and reductions in services, for example, ceasing to provide consumer health classes. Some participants noted that the library is expected to serve more people with the same amount of staff; growth in electronic resources has brought a growth in the audience for services, but the staff has not grown—"decreasing revenues, increasing responsibilities." One participant reported that implementation of a strategic plan with an initial promotional component resulted in a much busier library, but the increased workload meant that other outreach and user assessment components of the plan were delayed. Another participant regretted the lack of time to look at the future, plan for the future, or be proactive because "we're so busy doing all the programs that are already in place...being asked to do more...a constant battle to find the time."

Budget (35 comments)

A number of participants reported the impact of decreased budgets on the library. In addition, it was noted that high costs of electronic information resources have put a strain on library budgets, even in institutions that have maintained budget levels. In response to budget decreases and to stretch remaining budget dollars, some participants reported reviewing and modifying processes, for example, binding fewer titles, examining usage data on information resources, and gathering user input to decide how to "allocate the dollars to get what's needed most." One participant noted that they work with several advisory teams to better understand the usage statistics they collect—if a resource is not being used, is it that users "find other resources out there, or is it just a matter of promotion and training...?" Others reported looking for new revenue sources, including the hospital auxiliary, foundations, overhead from contracts and grants, grants for special projects, contract work with outreach programs, alumni support, and endowments.

Not all budget comments revolved around declining budgets. One participant expected an expansion in the budget, and another participant indicated that the state economy had a direct effect, so if the economy was good, the university and library budgets would be good as well. In hospitals, clinical needs such as equipment (new MRI) are usually higher priority for budget preservation than the library. The hospital library is a "cost center...like IT, like business and

finance, like the laundry...don't have clinical income, and we're not pulling in...big dollars." Another participant from a hospital library indicated strong support from administration—"an advocate of libraries and librarians...he believed 100% that the hospital should be responsible for the operational budget of the hospital library." One participant reported a dramatic (28%) budget cut, which was restored the next year, due to having "a good champion as a department director."

Libraries are "trying to keep up with what we've always been doing," an approach to budget (and staffing) declines that some fear may have unintended consequences. "I have a feeling our responses aren't going to be as fast as they currently are...and yet, sometimes I think that we try too hard, and we don't make administrators aware that these cuts really result in cuts in service, because we just work harder and harder, and stay longer, and try to do everything that we've been doing, so we're not giving administration the right signs."

Library Marketing and Outreach (37 comments)

Focus group participants offered extensive comments on the topics of library marketing and advocacy and outreach to users—"if you're going to be able to survive in all of this, you're going to have to show somehow what you can do, and so you're going to have to market, you're going to have to advocate." One participant noted that "people who make budget decisions are very far removed from what we do, and almost always are not library users." Assumptions that library advocacy must overcome are that "it's not all free on the Internet", that you "just get on Google and you can get everything you need" and that "it's not magic"—it takes a tremendous amount of knowledge, skill, and effort to select resources, negotiate licenses, and provide access to electronic library resources. "What we struggle with...producing a web page with all those electronic links...it looks easy to everyone else.... When you used to have paper...they could see that, but they can't see how much work and time it takes us to get all the electronic [resources] up, running, working.... We're struggling with how to convey that...to administration so they understand why we need so much staff." In addition, "we have to run our libraries like a business" and "they [administrators] need to understand this costs money, and that's our responsibility to explain...."

Outreach to users and communicating with administrators and other influential people on the value of the library are viewed as critical activities—"we get outside the library....we go to other departments...you have to be [ready with] the elevator speech." Participants expressed interest in research on strategies for showing the library's impact on the bottom line and how the library improves the institution's efficient and effective operations. Participants discussed the critical need to demonstrate the library's contribution to the institution's mission and operations. Participants shared several approaches to documenting contributions. One participant described a Wiki structured according to the key points in the Medical Library Association Vital Pathways³ Executive Summary; all the staff add information on activities that fit into the various categories, which gives visibility to services that otherwise could be taken for granted. The Wiki documentation enabled staff to "stop and think about all the amazing things that you do everyday...." One participant discussed using a spreadsheet or database to track substantial

³ Vital Pathways for Hospital Librarians: Addressing the Hospital's Information and Training Needs: White Paper Executive Summary. Chicago: Medical Library Association, http://www.mlanet.org/resources/vital/vitalpathways_execsumm.pdf

(more than 10 minutes in length) consultations or advisory services in addition to literature searches that historically have been tracked, for examples “advising people on public health policy or advising on how to access the resources of the university.” Another participant mentioned a commercial product, Desk Tracker, customized to track reference inquiries. At another library, a survey requesting an assessment of clinical impact and cost savings goes out with materials provided to users, an approach patterned after the Rochester study.⁴ Data collected shows the library is “directly impacting system goals.”

Several participants expressed frustration about situations when the library is not called on when there are research needs the library could meet. Sometimes this is because the library is just overlooked, and other times users indicate “I just don’t want to bother you, I should be able to do this on my own.” In these instances the library needs to be persuasive about roles—“you have a job, and your job is to take care of our patients...this [research support] is what we’re supposed to do...” Reassurance is needed—“just making them feel comfortable with handing it over to you, and trusting that you are the best person at the hospital to do that particular job.” Especially with the widespread use of electronic journals, it’s difficult for libraries to “differentiate what we’re doing for people and what they’re doing for themselves...important that we try and figure that out.”

While library orientations and current awareness services are not new ideas, participants pointed to the need for libraries to be proactive in these areas—“connecting with new managers, supervisors...getting them to set up an appointment for library orientation” and keeping up with individual users’ interests.

Services and Resources

User Interactions (21 comments)

Many participants noted that the primary means of communications with library users has shifted, so that most interactions are by email, rather than in person or even telephone. In addition to the convenience factor for busy health professionals, email offers the advantage of a “paper trail” or a written communication from the requestor, rather than notes taken by the library staff. Literature search requests may be “a little harder to negotiate when you have to trade emails back and forth...how we interact with our users...will evolve.” Text messaging of reference requests is new, with one participant reporting that messages go into the email system. Another participant shows users how to just send in the PMID from a PubMed search in a text message. Some participants regretted that there is less personal contact, but others feel a new sense of connection—“some of my best patrons are folks that I never see because they come in and get things electronically rather than physically.” The advent of Web 2.0 has influenced how people are communicating with the library. Software tools that facilitate group communications are popular (e.g., GroupWise and Lotus Notes).

Email and phone texts can cause a misleading sense of immediacy in communication. Several participants described scenarios where library users sent urgent requests via email rather than making a direct request by phone or in person, which caused a delay in responding. Sometimes users assume “24/7” monitoring of email and immediate response, even when library

⁴ Marshall JG. The impact of the hospital library on clinical decision making: the Rochester study. Bull Med Libr Assoc. 1992 Apr; 80(2):169-78. (Pub Med UI: 92288660)

communications indicate service hours and turnaround times. One participant acknowledged that “work does not occur just in the office 8 to 5, but our patrons need information at all times...”, which calls for “being available a wider variety of times and a wider variety of ways.” However, most library staff do not want to be on call 24/7, and it is not clear what the real need is; a related question is what such extended service would cost.

User Expectations and Information Seeking Skills (13 comments)

Participants identified areas of variation in user expectations and information seeking skills, specifically, transition from academic to clinical settings and end-user searching. As health professional students transition from an academic setting to a hospital or clinical setting, often they do not realize they can expect a greater level of individualized library support in meeting their information needs, both in search assistance and article delivery—“they would never get the article for me, or copy it for me.” On the other hand, depending on their environment, recent graduates going into practice may not have access to the broad range of information resources generally available in the academic setting—“we tell them how important it is in modern medicine to be constantly looking up and finding new information...then we give them a diploma and they’re no longer able to access it.”

With end-user searching, some users are “very keen and quick at learning” while others “don’t really want to do the searching” and some “want to do it and then come back to me because their retrieval is not as fine-tuned as mine. They want to get to meta-analyses, and clinical trials...they don’t really have the know-how to filter that information.” Conversely, one participant worries about the people “who are using UpToDate, or Google, and [are] absolutely satisfied with what they find, and maybe that’s where education would come in.” Participants reported that the end users who are skilled at searching themselves still rely on the library for article (copy) delivery. Library personnel have to be flexible in responding to varying levels of user self-sufficiency and expectations for library service.

Health Care Standards and Requirements (7 comments)

Changes in health care standards, requirements, and practice expectations are affecting libraries, often very positively. Participants indicate that increased emphasis on evidence-based practice has brought new awareness of the role of the library in practice settings, and when institutions undergo review for accreditation or certification by the Joint Commission or seek Magnet status (American Nurses Credentialing Center), there is often a renewed focus on library and information resources. As efforts toward quality improvement in health care advance, such as the 2010 National Patient Safety Goals, “greater and greater demands are made on our physicians, so their need for information becomes greater and greater....”

Space (10 comments)

Participants expressed positive views on the library as a community space, along with some concerns on potential loss of space and aging of facilities. Libraries “are not just books or journals, but we are also where people come together....providing learning spaces, we’re providing the tools they need to learn” and “space for collaboration.” Even with new learning technologies and online resources, “it’s very important to keep a physical presence” and “people still want a place to study...many people going back to school.” One participant was “a little surprised at the library’s physical usage...document delivery is just sky high” but numerous

people are still using the library space. One participant reported loss of square footage, but with redesign of remaining space in a high traffic area. Location in a visible, busy area was identified as a possible help to long-term survival of the library, and decrease in space was seen as moving on from “the old paper warehouse model.”

Special Services (7 comments)

One participant shared the interesting news that while the library was definitely moving to more online resources, some new, small print collections had also been developed in pastoral education, leadership, and ACLS review books—“people are remembering that the library can be a source where many people can use one resource.” Ordering books for units and departments is a service still provided by some libraries, and electronic books are a good solution to the old problem of print books disappearing from the unit and having to be constantly replaced—the electronic books never get lost and are always accessible.

One participant observed that online resources make it possible to fit in service to consumers, even without a specialized collection or space—“physicians will send me their patients, and they find their way to the hospital library...paperless, but printable for anything a patient needs...always use MedlinePlus.” Another hospital library participant mentioned partnerships and collaborations in the community with the aim of creating a family resource center or community resource center “that will guide people through the myriad of services that are available to them, and will support that with literature and health information that they might need.”

Web Access Issues (17 comments)

Web access and technical issues persist, creating difficulties in deployment of electronic resources sponsored by the library and other departments—“when not everyone on the floor can even have access to a computer, you still have people that can’t access the information, so that’s still a big stumbling block for us....” The same participant reported that while the education department wants to distribute educational videos online, some employees “don’t have any computers available, or they don’t have speakers on their computer, or they don’t have headphones....”

Some web sites may be “locked down” even though they are educational for staff and patients (even MedlinePlus), and some institutions still have policies preventing use of Facebook or other social networking sites, even when they are actually used by the institution for marketing purposes.

Electronic Resources Management

Service Issues (26 comments)

Participant comments made clear the tremendous impact on libraries of electronic resources management in the areas of budgets, staffing patterns, and service delivery. With the transition from print to primarily electronic information resources, budgets have shifted so that the majority of resource budgets are allocated to electronic materials. High costs for electronic resources require “creative” budgeting, but there was some sense of gaining “a lot more coverage” for equivalent expenditures on electronic resources as for previous print materials expenditures.

Customers “are asking more and more for the electronic” though there are some drawbacks, such as instances in which the hard copy of color illustrations is needed. Publishing variations between print and electronic versions can cause difficulties—“a lot of publishers are putting up papers or graphics that are for e-publication only, so if you have the print, you cannot get a copy of the e-publications...many requests right now that we can’t fill...and we’ve actually got a fair amount of electronic journal subscriptions.” To avoid confusing users with too many different interfaces, libraries limit the number of vendors from which they purchase products.

Keeping up with changes in availability of titles in print and electronic format presents challenges for staff in collection development—“the most time consuming thing for me is what journals am I getting from where, and how much...overlap, and who has an embargo, and I’m double paying for something every year...that I don’t see until later.” Reviewing resources for potential acquisition is time consuming—“we’re not only going to evaluate the database, we’re going to set up a free trial, we’re going to promote it, we’re trying to gather statistics, and get the support to add that purchase for our budget, then look at other things within our collection that we can do away with to make that database possible....” Other participants noted that aggregators “take a lot of the pressure off” journal collection management and that selecting one vendor for a variety of titles and subscriptions has been a successful strategy. Participants indicated that while electronic journal acquisitions remain challenging, the publishing and distribution arrangements have become familiar, but that “we’re not as knowledgeable about the electronic book environment.” Printed book acquisitions are decreasing, with reference books and general texts increasingly available online. Some participants felt apologetic about small or out-of-date print collections and were attentive to making users aware of the more current electronic books.

Participants acknowledge that providing remote access to electronic resources has enhanced information resource access for users. Remote access entails additional staff time to deal with IP address issues, user passwords, and licensing issues.

Relations with Publishers (12 comments)

Participants contributed several comments regarding adversarial and competitive relations with publishers—“publishers have a great deal of control over what happens to the...library environment.” A few publishers “focus their pricing on the individual physician...what would stop the medical students from getting a huge discount...and saying, this is good enough, we don’t need to go use the library resources.... What’s to stop [other journal publishers] from...a business model...where they market to the students and the individuals, instead of to the library? ...we sit...on top of a volcano....” Consortium purchasing and other group purchasing arrangements (for example, extending access to alumni as well as primary users, and systemwide purchasing for multiple hospitals or multiple campuses within a system) give libraries some leverage on pricing and scale of access. Even when the library pays for publications, some vendors go directly to the IT department to place products in electronic medical records systems. Consolidation of publishers and distributors is leaving less choice for libraries shopping for favorable pricing in the face of increasing costs, particularly for electronic resources.

EMR and Point-of-Care Reference Tools (22 comments)

A number of participants reported they have been involved in planning the integration of point-of-care reference tools into electronic medical record (EMR) systems and indicated familiarity with the HL7 standards for interoperability of health information technology. It was noted that presentations on the topic at regional and national medical association meetings provided insight on EMR systems and point-of-care reference tools. One participant stressed the importance of librarians being knowledgeable about these developments and being able to advance the library role in selection and support for EMR point-of-care information. Others were not familiar with EMR initiatives, and others were aware of the advent of EMR systems but uncertain how they “could fit into this picture.” Some participants indicated that vendors had bypassed the library in marketing point-of-care tools to IT departments, and in other instances, IT departments had left the library out of selection decisions.

Some concern was expressed about the type of knowledge-based information resources being integrated into EMR systems. Participants questioned whether resources marketed as “evidence-based” really are evidence-based and wondered whether medical practice would be diminished by reliance on secondary resources rather than journal articles (primary sources). Concern was expressed that knowledge-based information resources and library services might not be accessible through EMR systems. The high cost of some point-of-care tools was noted. One participant described comments by a vendor that “once their products are ‘perfected’ or working...won’t need hospital librarians because the doctors will get everything at the point of care.” Another participant mentioned hearing that EMR systems would have capabilities to replace the medical transcriptionist, but had not thought this might also apply to the librarian.

Institutional Relations

Relations with Information Technology (11 comments)

Participant comments on relations with the information technology (IT) department were mixed, ranging from a characterization of the relationship as “highly adversarial” to “pretty good.” IT departments may limit the involvement of the library in exploring new technologies or in acquainting others in the institution with new developments such as electronic medical records—“I can learn about all these new fangled things, but I may or may not be able to implement it” and “they don’t invite the librarian to discuss any of that.” One participant described barriers between IT, the health information management system (HIMS) and the library. Another participant expressed understanding of the reluctance of IT to consider new technologies—“it’s because of pipes...if I get this server-based resource, then people have to go out of the hospital to the server...how much bandwidth is that going to take?” Invited or not, several participants thought “librarians need to be involved in the evaluation and design of many of these products [i.e., EMR systems].” One participant noted “it’s important for libraries to also volunteer to be test sites for new devices”, such as mobile devices for clinical applications (e.g., iPhones, T700 phones and Palm Pilots) or virtual desktops. Another participant described long-term efforts to develop communications and involvement—“My involvement with the EMR didn’t happen over night. I volunteered to come to certain committee [meetings]. Some of those were in the evenings. I spent a couple of years just going to medical informatics meetings...letting them know I existed, and eventually I was asked to become involved.”

Involvement within the Institution (18 comments)

Participants described strategies for increasing involvement within the institution, with the aim of contributing to the institutional mission, increasing the visibility of the library, and learning about plans in which the library would want to be included. “We find out about things going on in the hospital and ... offer to provide information.... Here in the library...[each] one of us adopted [one of the CEO’s] goals...got in touch with committee members and just started giving them information.” Speaking up is advised--“If you’re not on the committee, ask to be on it.” Some activities the library would like to take responsibility for may be subject to competition from other departments, so being aware and involved may give the library an advantage. Where there is a corporate structure removed from the local institution, involvement can be more difficult, but one participant reported success in getting on the corporate steering committee agenda for discussion of clinical effectiveness (evidence-based practice), though another participant reported finding out about a new product after it was already live, following a procurement decision at the corporate level. At smaller institutions, involvement may be easier—“hospital not affiliated with any other.... If they want something, they’ll ask my input before they subscribe to it, even if the library is not subscribing to it.” Another participant described coordinating a technology fair that involved other departments—“what it demonstrates is the relationship that the library has with all of these other departments, so it’s a subtle thing...shows that you’re part of the game.” For a one-person library, working with other departments can be essential to survival—“they’ve been cooperative and helpful”, for example, in setting up equipment for library presentations.

Library Staff Characteristics and Skills

Librarian Skills and Abilities (23 comments)

Several participants observed that recruiting new librarians has become difficult. Recruitment issues may be due to smaller numbers entering the profession or remote location of the open positions--“drawing people to the profession is something that’s getting increasingly difficult” or “a lot of people don’t want to move to a town that’s pretty secluded.”

One participant remarked that the overall pace of change will require library staff with the ability “to change quickly and learn, learn, learn.” Another participant added that new skills are not necessarily needed, “because we are learning as we go” and “what’s really important, especially for new staff, is that you don’t forget about the old skills...how to work a meeting, how to deal with the public...remember...the civility...work as a person with other people, and not just use the technology to get a job done.” A participant who has given presentations on characteristics they seek in hiring librarians indicated “they need to know how to teach...especially those working with the public...be able to explain...how to use certain materials....be a good communicator, be it on texting, or emailing, or on the phone, or in front of a group...comfortable in that kind of environment.” Another participant mentioned the importance of being “a problem-solver...things change...you have to figure out how to fix it and make it work...look for enthusiasm, willing to learn, self starters.”

Additional comments highlighted the importance of interview skills for librarians—“more course work on references questions, interviewing...ability to discern what people are really asking for....” and “asking the right questions so you can do the right searching...the people skills....”

Other comments called for “a much greater need for knowledge in the subject discipline...[so] the reference librarian can intelligently apply appropriate filtering of the information, as opposed to just providing a list of articles and letting the patron choose what they want out of that.” Participants mentioned bioinformatics as a more predominant field in the future that librarians would need to know, along with knowledge of the research process--“be a good researcher” and “need to understand the research process because so much of medical practice comes from what’s published in the research, and if you can’t discuss that with the students and faculty you serve, you are at a great disadvantage.”

Several participants commented on the importance of ongoing professional development activities, even if funding levels vary. The impressive range of skills required for a one-person library was noted.

Technology Translation (10 comments)

Participant comments reflected that comfort with and skills in technology are a given for library staff, along with the ability to teach or demonstrate new technologies—“ability to translate that technology into terms that someone...can understand...systems [personnel] aren’t able to explain it in a way that anyone who isn’t one of them can understand...need to have someone who can still talk to people.” Keeping up with social networking and new technology tools is important—“Skype...not just to see your grandchildren, but to interact with people on meetings and to save [on] phone calls.”

Educational Preparation (4 comments)

Some participants were critical of the educational preparation of recent library school graduates—“surprised at the lack of course work that’s required in what I would consider classic disciplines—subject analysis and even cataloging...not even a basic class in cataloging.” Speaking about experiences with a student in a distance education program, one participant worried about loss of “the connections you make when you are in a classroom as opposed to an online setting.” The same participant related comments from a university faculty member who teaches cataloging—“running into students who just don’t take the time to really look at what they’re doing...errors in the records...a different environment than when we went to school, and what we learned about quality librarianship.” Another participant described early career experiences—“we were given a lot of good training on how to search the databases, how the databases were created, how you could refine searches...new librarians coming into the field...don’t know how to search very well...don’t know how to ask the questions, they don’t have the knowledge base...” Another participant commented that education has changed to “emphasize collaborative learning” and wondered if this has resulted in decreased interest in leadership roles as well as a work style of generating fast results that can be fixed later.

Generational Differences (9 comments)

Participant comments on generational differences were interwoven with discussions of capabilities in technology, interpersonal communications skills, and leadership. Technology skills were seen to be fairly universal across age categories--“I work with some old codgers who are more connected than some of the young folks, and vice versa, so it’s less age specific.” Some participants viewed younger staff as being less willing to step up to leadership roles and less able to communicate person-to-person—“they’re so much online, and they’re so much on the

computer, or their phone...they forget how to [inter]act with other people.” However, it was also recognized that younger staff could be “frustrated by the older generations...they don’t think we want to be quite as innovative...” All ages need to “learn to work in a multigenerational situation.”

RML Support

Education and Training (38 comments)

Participants commented on the excellent quality and value of recent RML education and training offerings on DOCLINE, statistics, Web 2.0 and management. Participants also identified areas for continued or new emphasis, including copyright, consumer health information, and new technologies. Of particular interest in the new technologies area is gaining an understanding of what the institutional environment will look like with the advent of electronic medical records, and how library services can integrate with that new world. One participant hoped “NLM would come back to providing better training [for]...accessing medical information”, most likely referring to the intensive NLM updates for health sciences librarians previously delivered through the RML training programs. Participants in general encouraged the RML to offer more education and training, conveying a sense of trust that whatever the topic areas, the classes would be beneficial.

Participants described the value of having free and low-cost RML educational and training opportunities in a variety of formats and venues, from online to regional and national meetings. Electronic courses and presentations were especially welcomed by those who do not have budget support or time for travel. For topics that might be specific to only a few people, it was suggested that NN/LM negotiation of reduced-price access to distance learning programs would be helpful. Participants appreciated the training provided by RML liaisons and recognized the value of opportunities provided through cross-regional collaborations.

Participants commended the RML for the webinar offerings (Breezing Along with the RML) and online classes. It was noted that “most people were comfortable sharing and talking.” There was some indication that late afternoon times are best, as staff are busy in the mornings organizing the work day and lunch time is the busiest time of day for many libraries (when users have a break in their schedule).

Exposure to New Technology (20 comments)

In addition to knowledge and skills development available through RML webinars, participants identified the technology support (Adobe Connect and webcams) for the RML focus groups as a positive and effective means of being exposed to new technology. Based on the positive comments offered by participants, the process of setting up the webcams for the focus group discussions appears to have proceeded smoothly in most cases. A number of participants indicated the combination of webinar with webcam might be an approach they could use in their own environments. Some participants indicated it was difficult to sit still and maintain focus (though this can be difficult in an in-person meeting or class as well). Exposure to new technology content, such as the RML sessions on Web 2.0, as well as using new technology to deliver training was widely recognized as valuable to future development of library services—

with “so many young residents at the hospital...we’re going to need to know how to put together Wikis, and blogs, and podcasts....”

Interactions with the RML and Networking with Others (18 comments)

In addition to exposing Network members to new technology, the webinar approach was seen as allowing everyone “to have a voice, and participate in the way we all want to....” Participants valued the connection with RML staff, as well as the connections with other librarians who tune in—“don’t always have the opportunity to talk to other librarians, and it’s really interesting for me to hear what others are doing, and what they’re thinking...stimulating.” Participants welcomed additional use of Web 2.0 technologies to enhance networking and communications. Focus group participants gave positive feedback about the RML organizational structure and services—“really appreciate this particular model” with RML staff “...not just all in an office” but out in the states, and “this group that’s been in command...they’ve done an excellent job.” A number of participants also expressed their overall feeling of connection to the RML, “not only because we have somebody in our state, but because I feel like they’re so available to us, and in so many ways.” In addition, focus group participants identified the specialty roles of the liaisons in different states, and they felt confident referring colleagues to the RML staff member who could best help with the question at hand. For one-person libraries, networking opportunities were viewed as “extremely important because I have no colleagues here who know what I do...nice to know there are other(s)...I can talk to about problems I’m encountering....” The role of the RML in motivating member library service advances and improvements was recognized—“I...feel fortunate...they seem to push us...professionally.... I faithfully read those bulletins...somebody is seeing things that I haven’t seen....” The RML’s RSS feed makes it easier for busy library staff to keep up with new resources and trends.

Advocacy (16 comments)

Participants identified a need for the RML to advocate for the role of health sciences libraries with other groups that have a similar interest in information, such as information technology associations (involved in electronic medical records), public health, nursing and medical associations. In addition, the RML was viewed as a spokesperson “to communicate to hospital administrators the value of libraries” and as a resource for continuing education on tools to document value, such as the course that incorporated a return-on-investment calculator. It was suggested that the RML could advocate for the hospital library within the RML Network by working with medical school and other academic libraries to increase awareness among students of the importance of asking about library resources when they are choosing a place to work or continue their education. One participant expressed appreciation for website guidance on doing advocacy for the hospital library—“ideas how to do it, make my library more valuable so that when there’s a budget cut, they don’t automatically close the library.”

Resource Sharing (16 comments)

In the area of library resource sharing, one participant noted that academic libraries are moving back runs of journals to off-site storage facilities, and suggested that the RML might consider facilitating establishment of and even financial subsidies for a regional repository for such materials. This would save resources that multiple institutions are devoting to this activity, and access could be provided to newer institutions that do not have the older materials and to institutions that have not been able to maintain older back files. One participant indicated that the

majority of lending is from the print collection for materials older than 1986, since these materials tend not to be available online. It was suggested interlibrary loan and document delivery have become a substantial burden, especially for smaller libraries, and consideration be given to establishing the National Library of Medicine as a document delivery resource for everyone, similar to the British Lending Library. Within this scenario, the library across town would become the lender of last resort, rather than the preferred lender. One participant called for a new national impetus, similar to that of the 1960s (Medical Library Assistance Act), which brought about improved access to health information, in order to advance access to information in new electronic formats.

Some participants indicated that the true costs of reciprocal lending and borrowing, through arrangements such as FreeShare, are unknown. Additionally, some participants noted a “moral imperative” to offer reciprocal lending, but expressed concern that it does not help the cause of garnering institutional support for the cost of library services, especially the high-cost of electronic resources. With more and more information resources online, it’s likely that the focus of document delivery will be more on older materials and more esoteric, less-readily available materials and that these materials won’t be as available from free sources. Other participants indicated a resource sharing role for the RML in advancing consortium purchase agreements.

Other Comments on the RML and NLM (9 comments)

In addition to educational resources on new technologies, funding support such as subcontracts were seen as an important vehicle for introducing new technologies, particularly in hospital libraries. Compiling guidance on vendors, pricing models, and other options for acquiring electronic resources was noted as a potential helpful service.

Participants expressed gratitude for the availability of National Library of Medicine resources and databases, especially PubMed and DOCLINE, and free materials for training. Retention of citation matcher was lauded, and participants expressed understanding of the inevitability of interface changes, and willingness to devote time to learning to take advantage of new features. One participant referred to the desirability of more freely accessible information resources, such as the Cochrane Library.

Conclusions

Focus group participants offered many thoughtful and informative responses to the questions posed by the NN/LM MCR. RML staff reviewed this report and developed action items to address areas where programs and services can support Network members. Highlights of participants’ responses and RML action items are presented below.

1. What do you spend most of your time doing?

- Network members commonly reported spending much of the work day performing literature searches for a variety of users and purposes. Participants were enthusiastic about teaching end-user searching and information resources, as well as clinical applications, and they gave examples of formats ranging from individual and small group

presentations to grand-rounds-style classes. Journal article retrieval, maintenance of electronic resources, and administrative responsibilities occupy substantial time for many. There was general agreement that managing email takes a lot of time, but is a necessary part of work life.

- Other library activities less frequently reported include reference service, current alerting, collection management, outreach, and support of education and media services. Several participants identified areas in which they would like to expand activities, including education, outreach and promotion, and collection maintenance.
 - **ACTION:**
 - **Look into MLA Expert Searcher policies and determine whether the RML can assure that librarians have the skills and proficiencies to provide the best search results possible**
 - **Use quarterly questionnaire to understand:**
 - **How Network members define “reference service.” What do they count?**
 - **Do Network members categorize their email management in line with the services these relate to?**
 - **How is reference service different (if it is) from literature searching?**
 - **Does outreach and promotion refer to marketing and advocating for the library?**

2. What kinds of changes do you expect to affect your hospital or university in the next few years?

- New job titles (hospitalists and intensivists), productivity and quality standards for professional employees, physician recruitment, and succession planning for retirements are among the workforce changes expected. Healthcare reform, uncompensated care, and aging of the population are expected to affect health care delivery and economics. Partnerships and collaborations will be even more important in the health environment, along with increased emphasis on patient engagement to produce better health outcomes. In spite of the generally unfavorable economic times, a number of participants described plans for expansion of schools, care facilities and programs at their institutions.
- Many participants noted the emergence and increasing use of portable technologies and mobile devices in health sciences environments, which is changing the way health professionals work and communicate. Internet access from within health care institutions continues to be challenging. While some institutions have lifted limitations on accessing social networking sites, others continue to block certain levels of Internet access to maintain adequate capacity for business data flow. Institutions are rolling out electronic medical record (EMR) systems, and the use of video conferencing for continuing education and business meetings continues to increase.

3. Thinking about all these changes, how will your library be affected?

- Economics and aging workforce issues are affecting health sciences libraries, as reflected in reports of positions not being replaced after staff retirements. At one-person hospital libraries, succession planning is especially important, so the library doesn't disappear upon the librarian's retirement. High costs of technology-based information resources have put a strain on library budgets overall, though increased budgets and new revenue sources were reported by some. Budget problems and changes in library functions—increased technology applications and growth in electronic resources—both have resulted in decreased staffing, especially in support positions, and changes in library services. Increased demand was reported for professional librarians to work directly with researchers and clinicians.
 - **ACTION:**
 - **Work with MCMLA on a succession planning project. How many librarians will be retiring in the next X years and what is/can be done to ensure the library and its services are continued?**
 - **Develop a calculator for determining the ROI of specific services much like the calculator for the value of book and journal collections; help librarians evaluate and prioritize services and develop skills that will let them gracefully stop providing some services while retaining others and introducing new ones.**

- Participants reported that most communications with library users is by email, rather than in person or telephone. Relaying reference and article requests by text message is new. Some participants noted they regret the lack of personal contact, but others feel a new sense of connection. While emailing and text messaging are efficient, they can cause a misleading sense of immediacy in communication—misleading when the recipient does not actually read the message right away. Software tools that facilitate group communications are increasingly popular. Web access and technical issues persist, creating difficulties in deployment of electronic resources sponsored by the library and other departments.

- Institutional changes reinforce awareness of the need for library marketing, advocacy, and outreach to users. Effectively conveying the knowledge, skill and effort required to provide access to library resources (selecting resources, negotiating licenses, and producing web pages) is critical to illustrate the library's role in the changing technology environment. Focus group participants were interested in research on strategies for showing how the library improves the institution's efficient and effective operations. Library services vary from one institution to another, and between hospital libraries and academic libraries. Students and professionals moving from one environment to another may especially benefit from library orientation and awareness services to inform them of the level of library services available, which may differ substantially from the student's or professional's previous experience. Library staff found they also need to be increasingly flexible in responding to varying levels of user self-sufficiency and expectations for library service, especially with literature searching.
 - **ACTION**

strategies included serving on committees, offering information to support activities of key individuals and programs, and involving other departments in new projects.

- **ACTION:**

- **Advocacy efforts will continue to emphasize getting out of the library, being involved and really getting to know the user and potential user communities; encourage librarians to see themselves and the library as part of the system and not as an island within the bigger institution.**

- Space allocation is an issue in most institutions, and focus group participants expressed positive views on the library as a community space, along with some concerns about potential loss of space and aging of facilities. Even with new learning technologies and online resources, people are still using the physical library space in both academic and clinical institutions.
- The overall pace of change requires library staff that can change and learn quickly, while retaining solid skills in working with people, teaching, communicating, and problem-solving. Focus group participants identified additional important requirements for librarians: subject knowledge, understanding of the research process, and being comfortable with technology.
 - **ACTION:**
 - **Continue to provide programming related to new technologies and add programming on the research process.**
- While only a few participants addressed formal librarian education, those who commented were critical of the preparation of recent library school graduates. These participants indicated that newer librarians seemed to lack knowledge of subject analysis (cataloging), database creation, reference interviewing, and search refinement—areas that more experienced librarians felt they had developed through traditional education programs and early career training.
- Generational differences in technological abilities, interpersonal communications skills, and leadership interests were mentioned, but participants concluded it is most important that all ages develop skills to work together successfully in a multigenerational workplace

4. What can the RML do to support you in dealing with these changes?

- Many participants commented on the excellent quality and value of RML education and training on a variety of topics and in multiple formats and venues.
 - **The RML acknowledges these comments with pleasure.**
- Specific topics of interest suggested for future education and training included copyright, consumer health information, and new technologies. For the area of new technologies, particular aims are to gain an understanding of what the institutional environment will look like with the advent of electronic medical records, and how library services can integrate with that new world. Participants indicated that whatever education and training was offered by the RML, they were confident of the benefits, based on the relevance and

usefulness of previous offerings.

- **ACTION**
 - **We will continue to offer either classes or online sessions addressing consumer health information, new technologies, professional skills.**
- Funding support for new technology applications and first-hand exposure to new technology through innovative RML education and training formats were recognized as valuable to subsequent development of services at the participating libraries.
 - **ACTION**
 - **Significant funding is not likely to be available in the foreseeable future as national budget issues affect the NLM. The RML will continue to offer education opportunities. Online sessions may see more prominence than in person depending on funding.**
- Participants welcomed additional use of new technologies to enhance networking and communications. Positive feedback was offered on the RML model implemented in the MidContinental Region, including the state liaisons with specialty roles.
- Participants identified a need for the RML to advocate for the role of health sciences libraries with other groups interested in information organization and access and with hospital administrators.
 - **ACTION**
 - **Advocacy continues to be a central theme of this RML. We will both communicate with administrators and assist librarians to develop skills to advocate on their own behalf. As noted above librarians can begin to address succession planning. The RML will investigate offering programming on this topic. The RML will work with MCMLA, and in particular its Advocacy and Membership committees, to develop succession planning programming.**
 - **Help librarians “think outside the box” in a number of areas. The Exhibit Toolkit, to be developed during years 1 and 2, will include a section on what a medical librarian is and does. This information can be used by RML staff members when they work at RML sponsored exhibits and when promoting medical libraries and librarianship within their institutions.**
 - **Continue to share information and examples of non traditional librarian involvement in areas such as patient safety, institutional committees, EMR implementation, leading the application of new technologies to access to information.**
 - **Investigate forming journal clubs and/or discussion groups (with MLA CE credit) to provide opportunities for small groups of librarians to discuss, brainstorm and design responses to current issues in medical libraries. The RML will consider facilitating the groups to ensure that already over committed librarians will be able to participate without taking on additional leadership responsibilities. It is often a richer experience when one examines new options with a**

small group of colleagues.

- Ideas for resource sharing were advanced, including a shared repository for older materials and consideration of establishing the National Library of Medicine as a central document delivery resource. With information resources increasingly available online in full text, it is thought likely that the focus of document delivery will be on older and specialized, less-readily-available materials.
 - **ACTION**
 - **The National Library of Medicine has stated that it will not be a central document delivery resource.**
 - **The NLM preservation program is addressing the issue of retention. The RML will investigate regional shared Repositories with Resource Libraries. The RML will encourage Network members within close geographic distances to consider consortial agreements for older materials retention.**
- Finally, participants expressed gratitude for the availability of National Library of Medicine resources and databases.
 - **Thank you.**