National Network of Libraries of Medicine (NN/LM)

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Technical Proposal – Final Proposal Revisions

Offeror's Name: University of Utah
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Part I: Mission, Goals and Regional Services Plan

Mission, Goals and Overall Plan

"The mission of the National Network of Libraries of Medicine (NN/LM) is to advance the progress of medicine and improve the public health by: 1) providing all U.S. health professionals with equal access to biomedical information; and, 2) improving the public's access to information to enable them to make informed decisions about their health."

For the MidContinental Region (MCR), the mission and organization of the NN/LM constitutes the best strategy to assure that there is no information divide for health professional sand the public. The quality of health care delivered and of health care decisions made is absolutely dependent on access to quality health information resources and services.

The goals established by the National Library of Medicine will provide the action plan for the region. To these goals, the National Network of Libraries of Medicine MidContinental Region (NN/LM MCR) has added one. This goal supports the assessment and evaluation activities that establish the effectiveness of the NN/LM. The goals for our regional services plan are:

- 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.
- To develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, and the public

<u>The Region</u>
The MidContinental Region consists of six states – Colorado, Kansas, Missouri, Nebraska, Utah and Wyoming. The scale of the region offers both challenges and opportunities. From its western border to the Mississippi River, the region extends over 1,000 miles and across two time zones.

Geographically, the region is extremely diverse, including the western desert, Rocky Mountains, Great Plains and Mississippi Valley. Population distribution is the among the most extreme in the continental United States with areas that at best are described as remote and major metropolitan areas – St. Louis, Kansas City, Omaha, Denver and Salt Lake City. While the scale of the region poses challenges, it also presents interesting opportunities. The diversity of the region

presents interesting opportunities for testbeds for new resources and services. The numbers of academic health sciences centers are not so overwhelming that the focus is simply on coordination, nor so few that range of possible programs is constrained. The institutions in the region include both public and private universities and institutions with demonstrable records of innovation.

The diverse geography of Region 4 is equaled by the diversity of needs. The Region includes large metropolitan areas that exemplify the traditional inner-city environment like St. Louis and rapidly growing metropolitan areas like Salt Lake City and Denver where the inner-city challenges are only recently appearing. In each of the metropolitan areas of the region, there are academic health sciences centers and Resource Libraries. In addition, there are large hospital systems and associated Primary Access Libraries. Building partnerships in these communities are the best strategies for meeting the needs of health professionals. **Primary Access Libraries can help us achieve our goals in the following ways:**

- **Suggest or write articles for Plains to Peaks Post**
- **Co-sponsor training of Network members, public librarians, health professionals or the public**
- **Promote NN/LM goals to their own constituencies**
- **Participate in health fairs, community health events and other outreach activities sponsored by their own institution**
- **Participate in an ongoing dialogue on how we accomplish our goals**

Extending these partnerships to large public library systems offers a significant opportunity to enhance consumer access to health information. Finally, potential partnerships are also developing with K-12. Public school access to the Internet is making this partnership possible. Beyond providing information services, these partnerships are also essential strategies for addressing the demands and opportunities of a rapidly developing technological environment.

Region 4 also includes the largest rural and truly remote service areas in the continental United States. The fundamental challenge and opportunity for libraries in these areas is to bridge this facet of the digital divide. These areas have traditionally been underserved in healthcare and now they are struggling with access to technology. Again, a partnership strategy offers significant opportunities but this strategy will need to be especially creative, given the limits of local resources. However, even with the modest progress that has occurred to date, the impact of access to electronic information resources and services like MEDLINE and MedlinePlus has been dramatic and appreciated. State efforts to encourage technology-based economic and community development is an emerging trend that will intensify and extend this impact.

There is a small, but significant, minority population in the MidContinental Region that faces health disparities. About 8% of the region categorizes

itself as Hispanic or Latino. Almost 5% of the community is "Black or African American." The other main minority groups are "American Indian or Alaska Native," "Asian," and "Native Hawaiian or Other Pacific Islander." Just over 4% of the community categorizes themselves as some other type of minority. Spanish, at 6.8%, is the most prominent foreign language spoken in households after English. (2000 US Census Data)

Statistical Information for States in the MidContinental Region

Colorado

Square Miles[1]: 104,094
Population[2]: 4,550,668
Population in Metropolitan Areas[3]: 84%
Population 65 and older[2]: 416,073 - 12.4%
Native American Tribes[4]: Ute Mountain Ute Tribe, Southern Ute Tribe, Navajo
Total Physicians[5]: 7,010
Total Nurses[5]: 36,600 (RN & LPN)
Total all Health Occupations[5]: 79,280
Community Hospitals[6]: 89
Public Health Departments[7]: 1 state, 17 county, 1 tri-county

Medical Schools[8]: 1
Dental Schools[9]: 1
Nursing Schools[10, 11]:
- Graduate: 4
- Baccalaureate: 6
- Associate: 11
- LPN: 12

Pharmacy Schools[12]: 1 (BS & PhD)
Health Administration Programs[13]: 4
Public Health Programs[14]: 3
Veterinary Medicine[15]: 1
Allied Health Programs[13]: 18
Public Libraries[16]: 242
Medical Libraries[17]: 71

Kansas

Square Miles[1]: 82,277
Population[2]: 2,688,000
Population in Metropolitan Areas[3]: 56.8%
Population 65 or older[2]: 356,229 – 13.3%
Native American Tribes[4]: Kickapoo of Kansas Tribe, Prairie Band Potawatomi Tribe, Sac & Fox of Missouri Tribe, Iowa of Kansas Tribe
Total Physicians[5]: 4,410
Total Nurses[5]: 32,660 (RN & LPN)
Total all Health Occupations[5]: 65,960
Community Hospitals[18]: 226
Public Health Departments[19]: 107 county

Medical Schools[20]: 1
Dental Schools[20]: 0
Nursing Schools[20]:
- Graduate: 4
- Baccalaureate: 4
- Associate: 13
- LPN: 14

Pharmacy Schools[20]: 1
Public Health Programs[20]: 1
Health Administration[20]: 4
Veterinary Medicine[20]: 1
Allied Health Programs[20]: 13
Public Libraries[21]: 369 – 7 systems
Medical Libraries[17]: 57

Missouri

Square Miles[1]: 68,886
Population[2]: 5,559,211
Population in Metropolitan Areas[3]: 68%
Population 65 or older[2]: 755,379 – 13.5%
Native American Tribes[4]: Eastern Shawnee Tribe of Oklahoma
Total Physicians[5]: 6,670
Total Nurses[5]: 70,070 (RN & LPN)
Total all Health Occupations[5]: 146,430
Community Hospitals[22]: 149
Public Health Departments[23]: 1 state, 114 local

Medical Schools[24]: 4
Osteopathic Medical School[24]: 1
Dental Schools[9]: 1
Nursing Schools[25, 26]:
- Graduate: 10
- Baccalaureate: 21
- Associate: 21
- LPN: 8

Pharmacy Schools[12]: 2
Health Administration programs[13]: 1
Public Health School[27]: 1
Veterinary Medicine[15]: 1
Allied Health Programs[13]: 33
Public Libraries[28]: 538 -147 library systems
Medical Libraries[17]: 139

Nebraska

Square Miles[1]: 76,872
Population[2]: 1,711,263
Population in Metropolitan Areas[3]: 52.2%
Population 65 or older[2]: 232,195 – 13.6%
Native American Tribes[4]: Ponca Tribe of Nebraska, Omaha Tribe, Santee Sioux Tribe, Winnebago Tribe
Total Physicians[5]: 1,590
Total Nurses[5]: 23,250 (RN & LPN)
Total all Health Occupations[5]: 46,790
Community Hospitals[29]: 87
Public Health Departments[30]: 25

Medical Schools[24]: 2
Dental Schools[9]: 2
Nursing Schools[31]:
- Graduate: 5
- Baccalaureate: 11
- Associate: 6
- LPN: 14

Pharmacy Schools[12]: 2
Health Administration[13]: 0
Public Health Programs[27]: 1
Veterinary Medicine[15]: 0
Allied Health Programs[13]: 5
Public Libraries[32,33]: 296 – Six library systems
Medical Libraries[17]: 67

Utah

Square Miles[1]: 82,144
Population[2]: 2,233,169
Population in Metropolitan Areas[3]: 76.4%
Population 65 or older[2]: 190,222 – 8.5%
Native American Tribes[4]: Skull Valley Ute Tribe, Uintah & Ouray Tribe, Goshute Tribe, Navajo
Total Physicians[5]: 1,750
Total Nurses[5]: 16,540 (RN & LPN)
Total all Health Occupations[5]: 45,530
Community Hospitals[22]: 50
Public Health Departments[34]: 1 state, 13 local

Medical Schools[8]: 1
Dental Schools[9]: 0
Nursing Schools[35]:
- Graduate: 3
- Baccalaureate: 8
- Associate: 5
- LPN: 9

Pharmacy Schools[12]: 1
Health Adminstration[13]: 4
Public Health Programs[14]: 1
Veterinary Medicine[15]: 0
Allied Health Programs[13]: 19
Public Libraries[36]: 56 public library jurisdictions
Medical Libraries[17]: 44

Wyoming

Square Miles[1]: 97,100
Population[2]: 493,782
Population in Metropolitan Areas[3]: 29.6%
Population 65 or older[2]: 57,316 – 11.7%
Native American Tribes[4]: Arapahoe Tribe, Shoshone Tribe
Total Physicians[5]: 420
Total Nurses[5]: 4,610 (RN & LPN)
Total all Health Occupations[5]: 10,580
Community Hospitals[37]: 26
Public Health Departments[38]: 7 county

Medical Schools[8]: 0
Dental Schools[9]: 0
Nursing Schools[39]:
- Graduate: 1
- Baccalaureate: 1
- Associate: 7
- LPN: 4

Pharmacy Schools[12]: 1
Health Administration programs or schools[13]: 0
Public Health Programs[14]: 0
Veterinary Medicine[15]: 0
Allied Health Programs[13]: 7
Public Libraries[40]: 59 libraries, 23 systems
Medical Libraries[17]: 31

Overall Plan

There are three pillars that build the foundation to our regional services plan: application of technology, collaboration, and assessment and evaluation.

The advancement of computing and networking technologies has had an extraordinary impact on library resources and services. Resources and services

once confined to academic health sciences centers and large, tertiary hospitals are, through the Internet, now accessible in hospitals, clinics and homes throughout the nation. The National Library of Medicine, through its leadership in the development of powerful resources like PubMed, MedlinePlus and PubMed Central, is truly transforming healthcare and the public's access to health information. However, looking forward to the period of the next contract the development of these technologies will surely accelerate, providing new and unexpected opportunities and challenges.

The MCR staff has experimented with technology and has used it to facilitate our operations. In this next contract we will continue to track the advances in technology and identify those advances that can best be used to improve access to health information and the services of our Network members. Through our training, consultations, and publications we seek to integrate the applications even more into the operations of our Network members and our partners to facilitate operations throughout the region. We work toward:

- an increase in Internet based one-to-one communication, meetings, and trainings
- an increase in videobroadcasts to share experiences from projects, member expertise, and local events
- an increase in the Access Grid nodes in the region to support interactions of groups from around the country
- an increase in the number of mini self-learning modules for just-in-time training to support Network member operations and services
- an increase in the number of DOCLINE libraries offering electronic document delivery
- participation in the regional digital depository

The model for the MidContinental Region reflects the power of the distributed, networked computing environment where the power of the technology resides in the hands of the end-user. The resources and services of the RML are brought as close to the end-user as possible recognizing the success of the end-user and of Network members will surely result in success for the RML. At its core, the RML strategy will be collaboration, collaboration that is increasingly facilitated by rapid developments in technology. **This does not mean that personal relationship building is abandoned. On the contrary, with liaisons in every state, there is a considerable amount of personal interaction that takes place. One example is the liaisons' attendance and participation in local health sciences library groups in the region. The RML staff personnel are members of ICON in Nebraska, the Health Sciences Library Network in Kansas City (HSLNKC) in Kansas/Missouri, the St. Louis Medical Librarians in Missouri, the Utah Health Sciences Library Consortium in Utah and the Colorado Council of Medical Librarians in Colorado. Network members have commented that they feel that they have "their own liaison."**

Another example of our personal relationship building is our collaboration in the Tribal Connections Four Corners project. The project required RML staff and participants from libraries outside of the region to work closely in order to successfully carry out project activities. One of the barriers that librarians identified when they first started working together was not being able to see each other in meetings. All planning was carried out by teleconferences. This slowed the development of relations among the librarians. Because videoconferencing allows all members to see each other's expressions, participants can "read" each other as they interact. If videoconferencing had been used at the beginning of the project, we believe that it would have facilitated establishing relationships among all participants. The use of technology does not replace personal relationship building, but rather improves the opportunities for personal relationship building with others.

Based on our experience we have found that colleagues will work as effectively with colleagues 1,000 miles away as they do with colleagues in the same building. This strategy is essential in an environment of rapid change and increasing complexity that is beyond the ability of a single individual or institution to effectively address. The strategy of collaboration will extend to services, where the end-user is far more concerned with the service than s/he is with the sources of the service. Finally the rapid advance of the technology offers extraordinary opportunities for innovation, which are best exploited through collaboration. Clearly for this model to succeed, the RML must provide leadership and act as the catalyst for collaboration.

Central to the Regional Services Plan are the RML liaisons located in each state in the MidContinental Region. This model brings the services of the RML closer to the communities the RML serves and enhances the development, assessment and coordination of RML services. The RML liaisons are located at each of the seven Resource Libraries. Liaisons will lead RML special projects--Education, Technology, Community Outreach, Library Advocacy, Consumer Health Information Outreach, Network Member, and Evaluation and Assessment. In each state, a liaison will be identified as a statewide coordinator and will be responsible implementing the special projects in their state and for core programs—primary access library support, DOCLINE coordination, services to unaffiliated health professionals. In addition, Resource Libraries are involved in varying degrees in these programs and the objective is to foster collaboration and to enhance these activities. The RML liaisons will also be contribute to activities such as the communications program, reports, evaluation and exhibits/presentations.

The collaboration in the MidContinental region begins with the partnership established between the Resource Libraries and the Regional Medical Library to implement the regional services plan. It extends to the workgroups created by each of the special project liaisons to involve Network members and key

individuals in the region to assist in the implementation of the projects. The collaboration continues in the involvement of our Regional Advisory Board members who are selected because they have exhibited leadership among their constituency and an interest in health information. In this contract our initial work on relationship building with public libraries, community based organizations, and community health clinics will grow and strengthen. This will result in a better understanding of their health information needs and appropriate responses on the part of the Network to address them. We want to encourage others to incorporate collaboration in implementation of their services. For example, working with communities so that all health information producers and distributors are partnering together to provide the community with an efficient way to access the information. In the next contract the Regional Medical Libraries decided to increase our collaboration. To this end we have developed a shared approach to the emergency plan, identifying unique and historical documents, Native American outreach, multi-lingual resources, use of the Access Grid, and electronic licensing.

Assessment and evaluation is integrated into the MidContinental RML from the first brainstorming session until we write our annual report. Behind all of our plans is our logic model. The Activity Reporting System, (ARS) is based on the logic model. Liaisons add their activities into the ARS and select the goals and outcomes that the activities address. The status reports that are produced from this data provide the staff with an update of where we are in approaching our outcomes. The logic model is also a tool in many of our activities. It is taught in our proposal writing class, in our library advocacy workshop, and is incorporated when we work with other groups in project planning. We will use the Network Member Inventory and focus groups in the proposed contract to assess needs, provide us with baseline data on our members, and help us determine the impact of our services. In this next contract we will encourage principle investigators to share the results of their outreach efforts by contributing to the Effective Practices Resource established by the National Services Resource Center. Assessment and evaluation makes us accountable to our region and to the National Library of Medicine.

Challenges

Technology

The MCR staff has experimented with different technologies and has encountered challenges as we learn appropriate uses for what works and as we encourage their adoption by others in the region. The hype of new communication and information technologies excites and attracts us. But it's not unusual to find that implementation is complex, the application is unreliable or does not fulfill our requirements. We have learned that the development of new technologies may be incomplete and they may not be ready for use in a production environment. However, persistence and continued monitoring has resulted in the identification of tools that have been used to facilitate our operations. In this next contract we will continue

to track the advances in technology and identify those advances that can best be used to improve access to health information and the services of our Network members.

We understand that moving the technology from the RML to the health sciences library is not always an easy step. Librarians and their institutions must first be convinced that these applications are better than the status quo. We will start this process by increasing awareness through our publications and training sessions and by stressing that librarians can increase their value by assuming the role of technology leader for their institution. Political and financial barriers within institutions may prevent improving connectivity of our Network members and other health organizations in the region. For example the IT department may manage the library's computer network and may have firewalls in place to protect the institution from outside intrusion. Our strategy to overcome these internal barriers is to involve all appropriate staff in a discussion with the RML to review the environment and come up with a solution that satisfies all parties. Resources such as the final report of the Hospital Internet Access Task Force and advice from Regional Advisory Board members will help us in these discussions. Even with all the human constraints resolved, funding can be a problem that prohibits improving the technologies and connectivity of our Network members. Our regional plan includes assistance in locating funding that can be applied to improve connectivity. Through our training, consultations, and funding assistance we seek to successfully integrate the applications into the operations of our Network members and our partners to facilitate operations and improve information access throughout the region.

Collaboration

The collaboration in the MidContinental region begins with the partnership established between the Resource Libraries and the Regional Medical Library to implement the Regional Services Plan. To support that collaboration, the Director and Associate Director meet with the Resource Library Directors bi-monthly to update them on major events and to discuss issues that the RML is facing or that the directors have added to the agenda. Collaboration extends to the workgroups created by each of the special project liaisons to involve Network members and key individuals in the region to assist in the implementation of their projects. This allows liaisons to establish relationships with health sciences librarians, public librarians, and health professionals from around the region. The collaboration continues with the involvement of our Regional Advisory Board members who are selected because they have exhibited leadership among their constituency and an interest in health information. Each of the Regional Advisory Board members is also a member of a workgroup.

In this contract our initial work on relationship building with public libraries, community based organizations, and community health clinics will grow and strengthen. This will result in a better understanding of their health information needs and appropriate responses on the part of the Network to address them. Working within communities in order to establish partnerships is a relatively recent undertaking for the NN/LM. Outreach and collaboration are survival strategies for Network members to increase their value to their institutions. It is therefore important for the RML to learn how to do both successfully in order to transmit this knowledge to others in the region.

There are hurdles to be overcome for successful collaboration to take place--identifying community leaders, convincing them of the benefits of collaboration, educating them on the basics of collaborating, and providing support to maintain collaborations. We address these hurdles through our attendance at health professional meetings and by using the human network of our Regional Advisory Board members to meet key people. We have found that persistence in outreach to targeted organizations, getting to know people in the organization and selling the benefits of collaboration is a strategy that often works. To increase the number of partnerships in the region, we plan to bring groups together and use resources available (e.g., Public Libraries and Community Partners web site) to introduce them to the fundamentals of collaboration and to review funding sources that may help support new collaborations.

Assessment and Evaluation

Assessment and evaluation is integrated into the MidContinental RML from the first brainstorming session until we write our annual report. The foundation for our Regional Services Plan is our logic model. It has proven its value in our complex, decentralized RML as a way to coordinate our activities, guide interactions among special projects and build in accountability for staff. During our annual planning sessions we examine the status of health science and public libraries, community based organizations, access to health information in the region and the work we have done to that point. Our goals are consistent throughout the contract, compatible with the goals of the NLM and will meet the needs of our communities. Our outcomes change from year to year, evolving to reflect the state of information access in the Region and the challenges that our members, partners, and staff face in trying to ensure access for all. During the three years of applying this logic model approach we have found that it clearly points out the strengths and weaknesses of our program implementation strategy. We recognize that we may not be able to carryout all the activities we plan or fully realize our desired outcomes. Budgets, time, resources and unforeseen additional needs may require modification of our activities. But we believe that if we are flexible, examine our work and assess our successes we can be responsive and effective.

We developed the Activity Reporting System (ARS), which is based on the logic model. Liaisons record their activities in the ARS and select the goals and outcomes that the activities address. The quarterly status reports that are produced from this data provide the staff with an update of where we are in approaching our outcomes. This regular review of the logic model that reflects the reality of the work being done and the annual development of the logic model for the next year, insures that evaluation is used to effectively change programming to meet the region's health information needs. We are fully aware that our plan, as reflected in our logic model, may require adjustments. We view our logic models as fluid and a reflection of our intentions articulated during our planning work.

The logic model is also a tool in many of our activities. It is taught in our proposal writing class, in our library advocacy workshop, and is incorporated when we work with other groups in project planning. In this way, we are trying to make evaluation intrinsic to other programs in the region.

We will use the Network Data Inventory and focus groups in the proposed contract to assess needs, provide us with baseline data on our members, and help us determine the impact of our services. The data we have collected has given us a better understanding of those we serve in our region. Each time we administer our evaluation tools we review, modify and improve on the questions asked and thus produce a more effective assessment and evaluation tool. The information gathered from our inventory and focus groups informs the goals we set each year.

In this next contract, we will encourage principle investigators to share the results of their outreach efforts by contributing to the Effective Practices Resource established by the National Services Resource Center. We expect that this will require our assistance, as they will not be familiar with writing effective practices. Liaisons oversee subcontract projects and will assist project staff in the analysis of their projects to formulate their effective practices.

Notes:

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Regional Services Plan

Section A: Network Infrastructure

A1 - Access to Information Services

Statement of Work
Develop and implement a program designed to provide health professionals in all parts of the region with a basic level of information services which includes:
a. Access to books, journal articles, and audiovisuals;
b. Access to online databases in the health sciences; and
c. Access to reference services.
The RML shall establish agreements with Network member libraries to provide these services to unaffiliated health professionals. For any areas where the RML is unable to establish such agreements, the RML will provide the service on a cost recovery basis.

Applicable NN/LM Goal
To develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective:

Develop and implement a program designed to provide health professionals in all parts of the region with a basic level of information services

Rationale:

The mission of the NN/LM is to provide "all U.S. health professionals equal access to biomedical information." Through its Network members the Regional Medical Library will provide basic services to all health professionals in the region.

Approach and Methodology

Continue to work with Network members to assure information access for health professionals in the region

Resources are available on the web that will connect unaffiliated health professionals to the information they need. The web site, "Find a library that can help you with health information", *(http://nnlm.gov/members/)* lists libraries in the region, the services that they provide (i.e., reference, access to resources, document delivery service), and whether they will provide it to unaffiliated health professionals. One of responsibilities of a Resource Library is to serve unaffiliated health professionals by providing the basic level of services mentioned in the statement of work. This service to unaffiliated health professionals will be included in the Resource Library subcontracts with the NN/LM MidContinental Region. Liaisons will promote the "Find a Library" web site, Resource Library services in the region, Loansome Doc and the free full text resources available on PubMed Central. We will inform unaffiliated health professionals about these services when we meet them in exhibit halls or at meetings and, where we have been given access, messages will be sent out via

association discussion lists and newsletters. Regional Advisory Board (RAB) members will be encouraged to inform unaffiliated health professionals with whom they work that library and information services are available to them.

The Network Member Liaison will annually ask liaisons to gather data from their ILL departments on the number of unaffiliated health professionals registered for Loansome Doc service. Because Resource Libraries have the largest collections, we expect that their statistics will be a good indicator for the region. We expect to see an increase in the number of Loansome Doc users due to our promotion of this service.

The MCR will update its list of non-member hospital libraries by comparing the AHA Guide to Hospitals against the current Network membership list. Liaisons will encourage non-members who qualify to become full or Affiliate Network members. Information on the resources and services available through NLM and the NN/LM will be provided to each non-member institution. (For details on our program for non-member hospitals see our response to section B7 of the statement of work.)

Continuity of Reference Service Plan

At the beginning of the new contract MCR will conduct its membership renewal to establish who our members are and who we will be working with for the rest of the contract. One of the ideas we have for assuring information access in the region is to support solo librarians. These librarians have no one within their institution to provide information services when they go on vacation, attend a meeting, or take a CE class off campus. The RML proposes to facilitate various kinds of agreements in order to provide for the continuity of reference service while the librarian is away. This may be an informal reciprocal agreement between two hospital librarians or between members of an established consortium. It may be a more formal agreement between a primary access library and a Resource Library. It may even be a primary access librarian announcing to her users that the region's 24 7 service will assist them while she is away.

The Library Advocacy Liaison will query the region to see where plans for continuity of service already exist. Incorporating the feedback from these librarians, she will create a benefits statement explaining the continuity of reference service. She will determine interest in the region for participating in a service plan and will facilitate agreements between and among Network members. Liaisons will document continuity of service agreements in the region. The agreements that are established may also have a role as the RML develops its emergency plans for the region.

Outcome: - Health professionals at Network member institutions have access to information resources and services

Indicators: - Membership does not decrease in the region. **During the five years of the current contract, the MCR has had 13 full member libraries close, and we have become aware of a significant number of other full member libraries that are worried about downsizing or closing. Downsizing could mean a transition from full to affiliate membership status. Closure would mean the loss of Network membership. Both the Colorado Council of Medical Libraries and the Health Science Library Network of Kansas City have developed advocacy programs trying to respond to potential library downsizing or closure. The MCR has added an Advocacy special project to address the status of health science libraries within their institutions because of concerns on this issue within the region. With all these facts in place, we feel that maintaining current full membership levels and increasing affiliate membership levels is a desirable and ambitious goal.**

- Affiliate membership increases in the region

- At least one continuity of service agreement is established in each state

- Number of unaffiliated Loansome Doc users registered with Resource Libraries in the region increases annually by 5%

Establish agreements with Network member libraries to provide these services to unaffiliated health professionals

In 2001 Denison Memorial Library, one of our Resource Libraries, approached the RML with a proposal to fund a 24 7 service in the region. The library would manage the project and invite other Resource Libraries to participate. The project that started out as the Virtual Reference Cooperative Pilot is now Ask A Medical Librarian with six academic health sciences libraries from California, Colorado, Iowa, Missouri, Utah, and North Dakota taking desk time. Together they provide a total of 12 hours of reference service per day. The group constantly receives requests from other health science libraries to join. In the next contract the RML will encourage the remaining three Resource Libraries in the region that provide state outreach services to participate in Ask a Medical Librarian. We will add a link on the MCR web site to Ask A Medical Librarian to promote the service to public librarians, health sciences librarians and unaffiliated health professionals.

The RML will offer three outreach awards for up to $10,000 each to Network members in years 2 and 4. Priority will be given to projects that provide outreach and training to health professionals in rural and inner city areas who do not have easy access to biomedical information (the unaffiliated) and who work with

underserved populations. Network members will be encouraged to submit projects that involve a partnership with a community organization. This activity is also part of our outreach program to health professionals in the region.

Outcome: - Unaffiliated health professionals have access to health information

Indicators: - Ask a Medical Librarian will report an increase in questions

- 6 awards will be made to Network members to provide outreach and training to health professionals in rural and inner city areas who do not have easy access to biomedical information

Where no agreements exist, the RML will provide basic levels of service at cost recovery

The Resource Libraries have agreed to provide a basic level of service for health professionals and the citizens of their states. (For details on Resource Library responsibilities see the MCR response to section A7 of the statement of work.) Should there be an area not covered by our subcontracts with the Resource Libraries, the Regional Medical Library, Spencer S. Eccles Health Sciences Library, will provide basic services at cost recovery.

Outcome: - All unaffiliated health professionals in the region will be provided with basic levels of service

Indicator: - The NN/LM contract is awarded for the MidContinental Region. **The RFP requires that the RML, in conjunction with the Resource Libraries in the region, will cover all parts of the region with a basic level of library services. Based on this cooperative provision of services, we conclude that all unaffiliated health professionals in the region will be provided with a basic level of service (our outcome). Hence our indicator, if the contract is awarded, this activity will take place.**

Schedule:

Year 1

Renew Network memberships

Create a benefits statement explaining the reference continuity service

Determine interest in the region for reference continuity service

Facilitate agreements to provide reference continuity service

Liaisons document continuity of service agreements in the region

Years 1-5
Update non-member library list by comparing AHA Guide to Hospitals against current Network membership list

Encourage non-members who qualify to become full or Affiliate Network members

Resource Library subcontracts include provision to provide unaffiliated health professionals with services

Promote the "Find a library that can help you with health information" site *(http://nnlm.gov/members/)* and access to reference services at state-funded health sciences libraries to unaffiliated health professionals

Liaisons will provide information about Loansome Doc and free full text resources to unaffiliated health professionals in rural and inner city clinics

Determine number of Loansome Doc agreements with Resource Libraries in the region

Encourage 24 7 service to include more Resource Libraries from this region

Promote 24 7 reference service to unaffiliated health professionals

Agreements with Network members and Resource Libraries cover all parts of the region

The RML will provide basic services at cost recovery should there be an area not covered by Resource Libraries

Year 2
Offer regional awards for outreach projects that give priority to training health care providers in inner city and rural areas who have limited access to biomedical resources

Year 4
Offer regional awards for outreach projects that give priority to training health care providers in inner city and rural areas who have limited access to biomedical resources

A2 - Needs of Health Sciences Libraries

Statement of Work
Assess and respond to the needs of health sciences libraries in order to support programs to improve the transfer of health care and biomedical information within their institutions and through their participation in the network. This includes promoting the use of relevant NLM services, e.g., LinkOut; testing new features of these services; and identifying the need for new or enhanced NLM services;

Applicable NN/LM Goal
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public.

Objective:

Support health sciences libraries' programs to improve the transfer of health care and biomedical information within their institutions and through their participation in the network

Rationale:

A strong Network of health sciences libraries provides an effective way to fulfill the mission of the NN/LM. It is incumbent on the Regional Medical Libraries to support the Network members in their region so that the Network develops to its potential.

Approach and Methodology:

The Assessment and Evaluation Liaison based at the Bernard Becker Medical Library at Washington University is responsible for coordinating the assessment phase of this program. The Network Member and Library Advocacy Liaisons are responsible for leading the programming phase.

Assessment

To evaluate whether we are serving the needs of our Network members, MCR will conduct two Network Data Inventories and two series of focus groups by the end of the current contract. During the fall of 2002 the Assessment and Evaluation Liaison designed and administered a questionnaire to elicit baseline information and feedback from Network libraries in the region. Of the 216 inventories that were distributed, 122 were returned. Between March and July of 2003, MCR conducted a series of 6 focus groups. Thirty-three librarians from all states of the region participated in the groups. Sessions were held in Denver, CO; Kansas City, KS; St. Louis, MO; and Salt Lake City, UT. Two sessions were held via teleconference with librarians from Nebraska and Wyoming. The data provided to us by our Network members from the Inventory and focus groups were used for program planning during the contract. Both the Network Data Inventory and the focus group reports are posted on the RML web site as part of the quarterly report in Appendix H.

In 2005-2006 we will administer another Inventory and hold another series of focus groups with our Network members.

We have found our assessment tools to be effective in describing the status of Network members in the region and identifying areas where the RML can assist

them. The Network Data Inventory and focus groups will be repeated during the next contract to assess the needs of health sciences libraries in order to support their programs to improve the transfer of health care and biomedical information within their institutions and through their participation in the Network. A consultant will assist us in analyzing the data and will write the reports of our assessment.

Less formal methods have also been used to assess the needs of Network members. At local and regional meetings RML liaisons raise issues that are under consideration to get feedback from members, for example the scholarly communication activities going on in their institutions. Liaisons will continue to gather information at local and regional meetings. We will also expand a practice by our Nebraska Liaison of working from a checklist to provide and collect information during visits to full Network and Affiliate members.

Her checklist for hospital libraries is as follows:

Checklist of Items to Cover in Hospital Library Visits

- Online Catalog
- Using LinkOut
- Familiar with Lonesome Doc
- Questions on Docline – Using Freeshare?
- Advocacy/Marketing with Hospital Administration
- MedlinePlus – Have a link to it from your web site?
- Pub Med
- NN/LM Membership – Funding and Promotional Materials
- Blog for Bringing Health Information to the Community and Brochures
- UNMC CHIRS program
- netLibrary
- MCR web site

This checklist will be reviewed and revised by all state liaisons. The information gathered from the visits will be added to a contact database. The University of Utah is licensing Sharepoint, Microsoft's collaboration program. In the next contract we will move our virtual office to this program. The Network Coordinator at the NN/LM Pacific Southwest Region is currently using this program to track her contacts with Network members. We will investigate using Sharepoint to track and share the contacts made by the RML staff with Network members and potential partners. The needs that are identified and status of the libraries that should be made known to NLM will be entered in the Activity Reporting System (ARS) so that it they can be included in our quarterly reports.

<u>Outcome:</u> - The needs of health sciences libraries to support programs that improve the transfer of health care and biomedical information are known

Indicator: - Health sciences librarians in all states indicate that they provided feedback to the RML about their needs

Response to Needs

The MCR will respond to the needs of member health sciences libraries to improve the transfer of health care and biomedical information within their institutions and through their participation in the Network. We will design programs based on needs expressed in the responses from the 2005 and 2007 Network Data Inventories, the 2005 and 2008 focus group discussions, and data gathered from the visit checklist. We will promote the programs and identify them as responding to the expressed needs. The designation of a Library Advocacy Liaison in the next contract is in response to library closures in the region and the request from Network members that we be more pro-active in working with and for hospital librarians.

Outcome: - Programs are designed and carried out that meet the identified needs of health sciences libraries

Indicator: - Health sciences librarians in the region report that RML programs support their work to improve the transfer of health care and biomedical information within their institutions

Promotion of NLM Services

The MCR will promote resources and services developed by National Library of Medicine to health sciences librarians. In response to the data from the Network Data Inventory liaisons will add themselves as instructors for established classes or develop training for NLM services. The Education Liaison will ensure that there is at least one instructor in the region for each of the workshops developed by other RMLs and shared across regions. We will promote and offer classes on NLM services and resources using the Access Grid. For example, with our two Access Grid partner RMLs we could offer a PubMed update that would review and demonstrate all the changes that occurred with PubMed in the past year. This would provide our Network members with an opportunity to refresh their search skills and offer them an alternative to the NLM Technical Bulletin to learn how to implement the changes.

MCR will promote the availability of classes on PubMed, MedlinePlus and PHPartners that Network members can take for CME and CE credits. The Resource Libraries have offered to host at least one visit by the National Training Center and Clearinghouse (NTCC) in the next contract. We will coordinate the training visits by the NTCC and promote the classes so that the minimum number of participants is registered.

In the current contract, MCR has promoted and supported other NLM services for example, LinkOut. Feedback from Network members indicated that having to create a LinkOut button or buttons was perceived as a substantial barrier to participation, and the Technology Liaison had the skills to both create buttons and the ability to host them on a "button farm" on the MCR web site. Participation increased substantially once this service was offered, and Network Members greatly appreciated customized buttons with their library name and logo which could be used as a marketing tool as well as a way to improve access to health information. NCBI now hosts LinkOut buttons, and so the "button farm" is less important than it was, but at the time it was our way of supporting this NLM service.

We will continue to promote and facilitate services such as LinkOut, DOCLINE, Loansome Doc and other relevant NLM services to member libraries. We will include information about these services as part of the standardized modules in the MCR web page so liaisons can add them to their presentations as appropriate. We will periodically publish information about the services using our communication tools and remind members, affiliates and others that liaisons are available to assist them in accessing NLM services. NLM services are included on our library visit checklist so that we inform Network members about changes to the services and ask about their use of the services. We will include these services in conversations during visits at appropriate library meetings/exhibits.

Outcome: - Health sciences libraries use NLM services

Indicator: - Health sciences librarians report that classes they take increase their use of NLM services

Test new features of NLM services

In the current contract MCR staff has tested new features of NLM resources. We will continue testing new features at the request of NLM and provide feedback.

Outcome: - NLM services are improved through RML testing and feedback

Indicator: - NLM reports that feedback from RML staff contributes to improvements in service features

Identify the need for new or enhanced NLM services

We will report the data gathered from the Network Data Inventory, focus groups and informal visits that identify the need for new or enhanced services. We will share with NLM and other RMLs suggestions and observations resulting from liaison experiences.

Outcome: - NLM is aware of needs articulated within the region

Indicator: - Data from Network Data Inventory and focus groups are sent to NLM and shared with appropriate RML staff

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Schedule:

Years 1-5
Gather information at local and regional meetings, and through informal visits to assess needs

Add data gathered from the visit checklist to contact database

Design programs based on needs articulated in 2005 and 2007 Network Data Inventories, 2005 and 2008 focus groups, and data gathered from the visit checklist

Implement programs based on needs articulated in 2005 and 2007 Network Data Inventories, 2005 and 2008 focus groups, and data gathered from the visit checklist

Participate in testing at the request of NLM and provide feedback

Report to NLM data gathered from Network Data Inventory, focus groups and from the visit checklist

Share with NLM and various coordinator groups, suggestions and observations from liaison's experience

Liaisons are added as instructors for classes developed by NN/LM and classes identified in the Network Data Inventory

Offer and promote sessions using Access Grid ex: PubMed Update

Offer and promote liaison led and NTCC led classes on NLM products and services

Promote and facilitate relevant NLM services to member libraries

Year 2
Administer 2007 Network Data Inventory

Years 2-3
2007 Network Data Inventory results are compiled and a report is published

Year 3
Hold focus groups with Network members

Year 4
Focus group results compiled and a report is published

A3 - Emergency Preparedness Plan

Statement of Work
Assist NLM with the implementation of a National Emergency Preparedness Plan

Applicable NN/LM Goal
To develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective:

The NN/LM MidContinental Region, in cooperation with the other NN/LM regions, will develop an Inter-Regional Emergency Preparedness Plan to be used in conjunction with the NLM's National Emergency Preparedness Plan

Rationale:

A discussion of emergency backup plans took place during the fall 2004 RML Directors' meeting in Baltimore, MD. A number of tasks were identified as prerequisites to the development of a National Emergency Preparedness Plan. These tasks fell into two categories: those to be initiated by the NLM and those for which the eight NN/LM regions should be responsible. The objectives relating to the MCR's responsibilities are presented below along with the means and strategies needed to accomplish them.

Approach and Methodology:

Resource Libraries in the MidContinental Region have emergency plans to evacuate facilities and save collections in the event of an emergency but have no plans for continuing services during the time of recovery. With the increasing number of resources available online, a collaborative approach to providing continuation of service is a logical way to proceed. The Associate Directors of the eight NN/LM regions will work together, and with the NNO and NLM, develop a core set of components to be addressed in an inter-regional emergency preparedness plan that will be adapted by each RML for its own region.

Inter-Regional Emergency Preparedness Plan

- The Associate Directors draft an NN/LM Inter-Regional Emergency Preparedness Plan
- Submit draft of plan to the NNO for review and comment
- Make final plan available on the NN/LM intranet
- As agreed upon by the RMLs, in the event of an emergency in the MidContinental Region, the New England Regional Network Office staff will provide the services not available in MCR

- Staff from the MidContinental Region and the New England Region will exchange contact information (name; position; home phone #; cell phone#; work phone #) for the Associate Director plus one other designated emergency contact
- The MidContinental Region will provide a list of emergency numbers to NLM
- We will help NLM identify resources within our region to assist in developing a national plan. Consider existing state and federal initiatives and agencies (e.g. DHHS, FEMA, the American Red Cross, etc.)
- Provide comment and feedback to NLM on draft National Plan
- Consult with those in the region who have experience with disaster planning to insure the plan is realistic and comprehensive.
- Publicize the plan regionally

Outcome: - A National and Inter-Regional Emergency Preparedness plan will be in place to provide guidance for the NN/LM MCR in case of emergency

Indicators: - A consistent core set of statements and materials will be created among the regions

- A yearly updated list of emergency NN/LM MCR contact numbers will be created and maintained

- A list of preservation and disaster networks within the NN/LM MCR will be created

- A hierarchy of libraries document (including contact information and other special information) to serve as support in an emergency

- An NN/LM Inter-Regional Emergency Preparedness Plan is available from the NN/LM web site

Document Delivery and Access to Collections

The NN/LM MidContinental Region, in cooperation with the other regions, will develop a network strategy to provide document delivery and access to collections in the event of a regional or national disaster.

- Create a hierarchy of libraries within and across regions to identify a natural chain of support in the case of emergency
- Work with Resource Libraries to have them negotiate with vendors to incorporate into their e-licensing agreements, language that will permit the transmission of documents to libraries affected by disaster. Vendors may be reluctant to extend such variations to their licenses. Librarians will

have to give assurances that such document delivery would occur only in the most extreme circumstances.

Outcome: - Document delivery and access to health sciences collections will be supported in the case of an emergency

Indicator: - A list of libraries that provide support to Network members during an emergency will be created

- A consistent "vendor statement" will be added to license agreements by resource libraries

- A network strategy will be formulated and publicized that supports document delivery during emergencies

Regional Emergency Preparedness Plan

The NN/LM MidContinental Region, in cooperation with its Resource Libraries and Regional Advisory Board, will develop a Regional Emergency Preparedness Plan. The NN/LM South Central Region experienced a disaster when a hurricane struck and flooded the facility. Resource Libraries in the South Central Region are very interested in working on a plan. The MidContinental Region will use the plan from the South Central Region and the inter-regional plan as the basis for its own plan.

- Identify anticipated needs for library materials and other information resources during different stages of a disaster and for different kinds of disasters within the region
- Identify existing preservation and disaster networks within the region
- Review existing resources on emergency preparedness, including the *Algorithm for Disaster Information Preparedness: Checklist for Medical Librarians, Third Edition – Revised 05/11/05*, created by the New Jersey Hospital Association Library
- Develop plan collaboratively with Network and Affiliate members addressing local and regional needs
- Distribute a draft version of plan developed for the region to the Resource Libraries, Regional Advisory Board and other stakeholders for review and comment
- Distribute the final version of the Regional Plan to all Network members and upload to the MCR web site
- Publicize the Plan and solicit enhancements

Identify and consult with those in the region who have experience with disaster planning to insure that the plan is realistic and comprehensive.

Network awareness of National and Regional Plans will be measured by an online survey (Survey Monkey).

Create three possible scenarios: single hospital failure; regional power outage; and toxic disaster in a mid-size city. Apply plan(s) to mock simulations. Critique.

Outcome: - Inter-regional and regional emergency preparedness plans are in place

Indicator: - Regional plan has been approved by NLM, Resource Libraries, Regional Advisory Board, and Network members

- Regional plan is available from the MCR web site

Schedule:

Year 1

Identify existing preservation and disaster networks within the region

Help NLM identify resources within our region to assist in developing National Plan

Provide comment and feedback to NLM on draft National Plan

Identify anticipated needs for library materials and other information resources during different stages of a disaster and for different kinds of disasters

Review existing resources on emergency preparedness, including the *Algorithm for Disaster Information Preparedness: Checklist for Medical Librarians, Third Edition – Revised 05/11/05*, created by the New Jersey Hospital Association Library

Years 1-5

Update emergency contact information and forward it to NLM and NN/LM New England Region

In the event of an emergency in the New England Region, the MCR staff will provide services not available in that region

Publicize final plan regionally

Year 2

Develop core set of components for and compose draft of NN/LM Inter-Regional Emergency Preparedness Plan

Create a hierarchy of libraries across regions to identify a chain of support in the case of emergency

Submit draft of Plan to the NNO for review and comment

Circulate Plan to outside reviewers

Revise Plan and submit to NNO for final approval

Make final Plan available on the NN/LM intranet

Year 3

Update list of existing preservation and disaster networks within the region

Work with Resource Libraries to develop a strategy for negotiation with vendors to incorporate into their language that will permit the transmission of documents to libraries affected by disaster e-licensing agreements

Year 4

Adapt and apply the Inter-Regional Emergency Preparedness Plan and the South Central Regional Preparedness Plan to the MidContinental Region

Develop Regional Plan collaboratively with Network and Affiliate members addressing local and regional needs

Distribute a draft version of Regional Plan to the Resource Libraries, Regional Advisory Board, Network members and other stakeholders for review and comment

Year 5

Distribute the final version of Regional Plan to all Network members and upload to the MCR web site and the NYAM/NLM *Resource Guide for Public Health Preparedness* (http://*www.phpreparedness.info*)

Publicize the Regional Plan

Conduct mock drill exercises

Evaluate and revise plans as necessary

A4 - Historical and Unique Materials

Statement of Work

Assist NLM with the development and implementation of a plan to identify collections of historical and unique materials related to the health sciences

Applicable NN/LM Goal

To develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective:

Identify collections of historical and unique materials to the health sciences

Rationale:

This NN/LM goal is consistent with part of Goal 1 included in NLM's "Long Range Plan 2000-2005"(1) to "Identify important and unique retrospective biomedical collections held by other institutions, including historically significant records of modern biomedical and health services research, and develop a national strategy to promote enhanced access and preservation."
(*http://www.nlm.nih.gov/pubs/plan/lrp00/lrp00.html*)

Approach and Methodology:

~~The MidContinental Region has seven collections in three states (Colorado, Kansas and Missouri) registered with the National Library of Medicine's Directory of History of Medicine Collections.~~
~~(*http://www.nlm.nih.gov/hmd/directory/directoryhome.html*)~~

The National Library of Medicine's Directory of History of Medicine Collections (*http://www.nlm.nih.gov/hmd/directory/directoryhome.html*) lists six collections in the region with historical and unique materials that may be appropriate for this initiative. A description of each collection is listed below. A plan to identify other collections will be developed as an inter-regional effort. ~~No plan currently exists~~.

Colorado

James J. Waring, M.D., History of Medicine and Health Sciences Collection – Denison Memorial Library

> **The James J. Waring, M.D., History of Medicine and Health Sciences Collection contains approximately 6,000 titles in medicine, nursing, pharmacy, dentistry, and biology; reflecting the history of the health sciences and the University of Colorado Health Sciences Center. The rare book collection contains some artifacts and archival materials, but the bulk of the collection consists of 19th century printed materials. Subject strengths include tuberculosis and respiratory medicine, cardiology, and homeopathy.**

Kansas

Center for the History of Family Medicine – American Academy of Family Physicians Foundation

> **The Center for the History of Family Medicine was established in 1992 by the American Academy of Family Physicians Foundation to serve as the official historical repository for the specialty of family medicine and related medical fields such as general practice and primary care. It holds approximately 2,000 linear feet of processed and unprocessed archival materials. The bulk of the collection consists of official records of seven family medicine organizations. In addition to textual materials, there are significant collections of photographs (c. 3,000 images), slides, videotapes, and audiotapes.**

Clendening History of Medicine Library and Museum – University of Kansas Medical Center

Clendening Library collects primary and secondary material pertinent to the history and philosophy of medicine, including the subject area of biomedical ethics. The library's collection includes books, journals, medical instruments and artifacts, prints, photographs, original art, manuscripts and videotapes. Format emphasis is on printed works; the collection contains approximately 26,000 volumes. Uncataloged museum artifacts: 1,000 items; portrait file: 1,000 photographs/engravings; caricatures: 200 items; manuscripts: 150 linear feet; original art: 100 items.

Missouri

Western Historical Manuscript Collection (Columbia, Kansas City, Rolla, St. Louis)

The Collection comprises manuscript holdings of both the University of Missouri and the State Historical Society of Missouri. Holdings with significance to the history of medicine fall into three categories: institutions, individuals, and related organizations. The collection includes papers and records of physicians, dentists, pharmacists, veterinarians, and other medical practitioners; records of professional and advocacy organizations; and general material concerning health and medical care.

Still National Osteopathic Museum and the National Center for Osteopathic History

The collection includes over 25,000 objects, photographs, documents, and books dating from the early 1800s to the present (bulk 1870-1940) that reflect the ongoing history of the osteopathic profession.

Archives and Rare Books Section – Becker Medical Library – Washington University School of Medicine

The Division administers nine collections of rare books and journals, the Washington University Medical Center archives, and a wide range of pictorial resources and ephemeral materials. There is strong subject coverage in European medicine since the late 15th century and all periods of American medicine. The Archives houses materials primarily relating to the history of Washington University School of Medicine and its affiliated institutions. The Archives also holds many personal manuscript collections.

Special Collections Department/UNMC Archives – McGoogan Library of Medicine – University of Nebraska Medical Center

> **The Department holds a collection of rare and important medical books, journals, and manuscripts; equipment, instruments, and other objects related to the health sciences; the official records and archives of the University of Nebraska Medical Center; and private manuscript collections with an emphasis in the health sciences, especially as they relate to Nebraska specifically. The collection also holds photographs, works of art, and other ephemera.**

It is assumed that additional materials exist in the region. MCR staff will work with the other RMLs to develop a plan to identify currently unknown historical and unique collections in the region. **The NN/LM MidContinental Region will use the plan developed by the inter-regional group to identify collections that are of historical interest. We hope that a plan will be available to us in year 2 that can be tried out in the region to identify these collections.**

In order to meet this objective, the regions will form an inter-regional group, composed of a representative from each RML, to provide assistance to NLM. These representatives will meet on a quarterly basis by teleconference, and will work with regional advisors who will review the progress of the group, and provide advice and feedback. We will identify and select advisors who work with historical and unique materials related to the health sciences; the History of Medicine staff at the Regional Medical Libraries and at NLM will be consulted as needed in the identification and selection of regional advisors.

The inter-regional group will need to know the definition and description of "historical and unique materials related to the health sciences." It will ask NLM to provide this information, if it is not to be decided as part of the development and implementation of the plan. Otherwise, the group will need to explore existing resources and work already done by NLM and other organizations to arrive at the definition and description. When this has been decided the regions will work with NLM on a national plan.

The national plan will need to address:

- Details of subject scope, format, time coverage
- Other selection criteria such as whether materials are rare and/or valuable and whether the materials are of local, regional, national, or international importance
- Methods of identification
- Methods of creating and storing metadata that will be interoperable across regions and with NLM
- Methods of making information about these collections widely available, whether as part of NLM's "Directory of History of Medicine Collections"

(*http://www.nlm.nih.gov/hmd/directory/directoryhome.html*) or through some other database

After the national plan has been developed, it will be implemented in the region. The mechanism for this may vary from region to region, and can be carried out by the regional medical library or by other designated institutions in the region. The inter-regional group will continue to identify other needs and barriers related to providing access to collections, and forward this information and any advisory group recommendations to NLM. A final report of the development and implementation of the national plan will be submitted to NLM.

Regional Depository

~~In years 4 and~~ **In year** 5 of the contract, the MCR proposes to develop a regional digital repository for unique, historical materials and for publications of Network members and the health professionals they serve. This is not for faculty and staff at Resource Libraries since they are developing repositories for their own institutions. This is for hospital and smaller academic libraries to archive their documents, photos and other materials yet to be identified. With the availability of a repository, Network members will have another contribution that they can provide to their own institutions.

This project will also bring the scholarly publication discussion down to our primary access library level. Health professionals who occasionally publish may want to add their article to the regional depository and will encounter copyright issues. The materials will have a clear copyright (if the author is deceased) or have copyright owned by the authors. The Creative Commons licensing system can be incorporated into the metadata in order to specify appropriate uses for the materials. (http://creativecommons.org/)

We propose to license Content DM to house digital materials and metadata. The libraries at the University of Utah are using this software as their institutional repository because it is more user friendly and offers more features than the open source software that currently exists (e.g., DSpace). In order to facilitate discovery of the materials, metadata in the digital repository can be shared with other repositories through the Open Archives Initiative (OAI) metadata harvesting protocol.

Management and Coordination

A consultant would be hired to provide the initial management and coordination of the repository with assistance from the RML technology staff, and the systems staff at Eccles Health Sciences Library. Most of the Resource Libraries in the region have begun institutional repository projects. By the end of the next contract we expect a fair amount of expertise in the region that would be available to the consultant develop the infrastructure for this project.

Evidence of Need

Our assumption is that every organization cannot afford to build and maintain its own institutional repository, yet each organization has materials that can be preserved digitally. The hospitals will want to preserve their own history and the health sciences archives will want to make their collections more widely available.

Some of these collections such as the one at Bernard Becker Medical Library at the Washington University (*http://beckerexhibits.wustl.edu/*) and Eccles Health Sciences Library at the University of Utah (*http://medstat.med.utah.edu/hsc_historypics*) are already digitizing their materials to produce online exhibits. Others are having their materials digitized as part of another effort. The Archie K. Dykes Library of the Health Sciences at the University of Kansas Medical Center is in the process of digitizing one of the Clendening History of Medicine Library and Museum prize collections, the collected letters of Florence Nightingale, to be made available though the University of Kansas' digital library. Several of the history of medicine collections in the region (e.g., Center for the History of Family Medicine American Academy of Family Physicians Foundation, the Western Historical Manuscript Collection; and the Still National Osteopathic Museum and the National Center for Osteopathic History) show no evidence of making their materials digitally available online nor are they affiliated with a Resource Library who is building an institutional repository. They would welcome the availability of a repository available for their use, but that would not require the investment of developing the structure for holding their materials.

Expected Level of Use

The Regional Digital Repository will be an open archive of unique and historical items in the MidContinental region. Since this is a repository for preservation, we expect materials to be of interest to a unique group of individuals who are doing research or need historical materials. Initially use would be low, but once the repository grows, heavier use is expected, especially as access points are added for users. This is a service that the RML is willing to support in order to preserve and extend the use of unique materials.

Evaluation

The evaluation of the regional repository will be based on several factors. We will develop indicators for the successful process of converting and entering content into the repository, for the number of institutions who participate in a shared repository, and the use of the resources made available digitally. A more complete logic model for this project will be created in Year 4.

Termination

Eccles Health Sciences Library is committed to maintaining access to resources that have been added to this repository. Should the project be terminated for any reason, the library would take on the responsibility for continued management of the collections so that the work that has gone into building the repository will be maintained.

Outcome: - Users have access to unique or historical health sciences materials

Indicators: - New regional collections are added to NLM's Directory of History of Medicine or another online database

-Materials are added to regional depository from at least 10 Network member libraries

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Schedule:

Year 1
Regional liaison will be identified and will work with NLM and the interregional group to determine the nature of assistance required

Liaison will work with NLM and the RML staff to identify regional advisors

Years 1-5
Liaison will work with NLM and the interregional group

The inter-regional group will confer at least quarterly by teleconference

Year 2
Develop plan based on NLM's definition of "historical and unique materials related to the health sciences"

Year 3
Develop plan based on NLM's definition of "historical and unique materials related to the health sciences"

Year 4
Establish depository servers

Hire consultant for regional depository project

Select pilot project library

Carry out depository pilot

Years 4-5
Implement plan for historical and unique materials

Provide regular feedback to NLM on progress

Year 5
The inter-regional group will submit a final report of the development and implementation of the national plan to NLM, including the regional component

Promote regional depository to Network members

Train Network members to organize and add content to depository

A5 - Network Membership

Statement of Work
Manage the NN/LM Network membership program for the region. Membership in the NN/LM Network is an integral part of the NN/LM program, serving to define the NN/LM library constituency. The Network member libraries (Primary Access Libraries and Resource Libraries) and Affiliate members are crucial to the operation of the NN/LM network, providing health professionals and consumers with access to needed information resources. Network membership is a way of recognizing the contributions of these libraries. The contractor shall:

a. Recruit new Network members and affiliates from eligible libraries in the region. Network membership certificates for the 2006-2011 time period will be provided by NLM and be personalized and distributed by the RML;
b. Ensure full participation by member libraries in DOCLINE which includes entering profile information about their libraries and keeping both profile and holdings information up-to-date;
c. Work with the DOCLINE Team on DOCLINE system enhancement testing and ensure full participation by member libraries in DOCLINE which includes entering profile information about their libraries and keeping both profile and holdings information up-to-date; implementation; and
d. Actively involve Network members in NN/LM infrastructure and outreach programs, including obtaining feedback on regional and NLM programs on a periodic basis.

Applicable NN/LM Goal
Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objectives:

Manage the NN/LM membership program for the region

Rationale:

Building, maintaining and extending the NN/LM membership program is the foundation of the MCR plan. The distributed model facilitates this process with staff at each of our Resource Libraries representing the RML and interacting with Network members. The NN/LM site visit team who met with Network members clearly heard the “ownership” that members had for “their” liaison. In order to

build a healthy region/RML relationship, we will involve members in all aspects of our program and build feedback mechanisms into our structure.

There are currently 191 full member libraries and 219 affiliate member libraries in the MidContinental Region. The list of potential Network members includes hospitals and public libraries and that do not fulfill the requirements for full membership, but could be affiliate members.

By state, the potential numbers of Network members are:

STATE	Hospitals	Public Libraries
Colorado	31	215
Kansas	29	341
Missouri	66	473
Nebraska	43	254
Utah	29	33
Wyoming	20	40

Approach and Methodology:

The Network Member Liaison working out of the Spencer S. Eccles Health Sciences Library at the University of Utah directs the membership program for the region.

Recruit new Network members and affiliates from eligible libraries in the Region

The NN/LM MidContinental Region has recruited 93 new members during the current contract. Most have resulted from our contacts with public libraries in the region. This year we have compiled a list of hospitals that are not Network members using the AHA Guide to Health Care Institutions and comparing it to the institutional records from DOCLINE. In year 1 of the new contract, we will contact these hospitals to promote membership. If they are not currently providing access to NLM resources, we will promote our services to introduce access. As the new contract begins, we will add to this list of potential Network members by checking directories of other library associations in order to discover libraries in our states that are providing health information and may benefit from membership in the NN/LM. These may be community college libraries that support LPN or healthcare technician/assistant programs. Non-member public libraries will also be added to the list. This list of potential members is the baseline that we will use to track the increased percentage of new members. Follow up with institutions who remain on this list will continue throughout the contract. New members will be reported in our quarterly reports to the National Library of Medicine.

The training environment will also be used as an opportunity to promote membership by distributing membership brochures and briefly mentioning the

benefits of membership. If the participants are non-members, we expect that this will provide them with the opportunity to join. If the participants are already members, we will enlist their aid in promoting membership to libraries in their communities who may benefit from joining the NN/LM.

Policies and procedures have been established to ensure an efficient and timely response to membership applications. A brochure was designed that describes the mission of the NN/LM and touts the benefits of membership. All documents related to the recruitment of members will be regularly reviewed and updated when necessary. These materials will be added to and maintained on our web site so that the web also becomes a resource used to promote membership. At the beginning of the new contract we will send a new agreement to all members to renew their membership in the National Network of Libraries of Medicine. The membership renewal will also provide us with the opportunity to update contact information. This is more likely to be required with Affiliate members who do not use DOCLINE and are not responsible for maintaining their own records. Certificates will be sent out as part of the renewal process.

Outcome: - Eligible libraries within the region will become members of the NN/LM

Indicator: - 25% of the eligible libraries from the Potential Member List will become either full or Affiliate members

Ensure full participation by member libraries in DOCLINE, which includes entering profile information about their libraries and keeping both profile and holdings information up-to-date

Our membership procedures require that full Network members update their institutional record in DOCLINE and state liaisons update records for Affiliate members. Keeping both profile and holdings information current is important for the efficiency of the document delivery in the region and also for the efficiency of the RML. In order to serve our membership, we need to know who they are and how to contact them. For the past four years, state liaisons spent considerable time contacting institutions to determine whether they were still open and providing service, asking contacts to update their information, and generally cleaning up DOCLINE records. Institutional and serial holdings information is now current.

Because RML staff are the main users of the data in the institutional record of DOCLINE, we are more invested in keeping this information current than our Network members. In the current contract we have used all of our communication tools (newsletter, weekly e-news compilation, meetings with consortia, etc.) to remind members to review and update their records or if they are Affiliate members, to contact their state liaison when information changes. The Network

Member Liaison, with the assistance of state liaisons, will regularly review reports and revision dates that will indicate whether DOCLINE users are maintaining their records. We will continue to use all of our communication tools to remind member libraries to keep their institutional records and serial holdings up to date.

DOCLINE is easy to use; however, training is still needed by new users and experienced users who have are attempting procedures that are not regularly done. Last year the Network Membership Liaison produced three online tutorials that show and tell DOCLINE users how to update their institutional record, how to change people listed on the institutional records and how to retrieve DOCLINE reports. The tutorials are very brief (1-2 minutes), and are a quick way to refresh the user's memory on a procedure. These tutorials will be updated as needed and additional units will be developed in consultation with DOCLINE coordinators from the other regions. Mini-instructional units are being produced in other regions and are all available from the nnlm.gov web site as part of the DOCLINE Tutorial. The MCR web site will contain links to this tutorial as well as other DOCLINE resources on the NN/LM web site.

In addition to ensuring that DOCLINE records are kept current and that users can use the system efficiently, the Network Member Liaison will regularly review DOCLINE reports available from NLM to monitor the fill rates of Resource Libraries and Level 2 holdings of member libraries. The reports have indicated that the system is working smoothly in the region and reviewing the reports will ensure that it continues to do so.

Outcome: - Member libraries will keep their Institutional Profile and Serial Holdings up to date

Indicators: - The number of libraries included on the "Serial Holdings Not Updated in the Last Year" report will decrease by 10% yearly

- 100% of Network members will be contacted annually to make sure Institutional Profiles are updated

Work with DOCLINE Team on DOCLINE system enhancement, testing and implementation

For a system like DOCLINE to efficiently facilitate document delivery throughout the U.S. and Canada, feedback from its users is necessary. The Network Member Liaison and RML staff will contribute and assist with enhancement, testing and implementation. The Network Member Liaison will represent the region at the monthly DOCLINE teleconferences. She will solicit input from member libraries about DOCLINE features and pass information along to the DOCLINE team. She will notify MCR members of new features and enhancements in DOCLINE using the RML's various modes of communication.

In year 2 of the contract the RML will issue a Network Data Inventory to assess the status of member services and member resources as well as to request feedback on RML services and resources. The Inventory will query members about DOCLINE services. Results will be forwarded to the NLM DOCLINE team.

Outcome: - NLM DOCLINE team will receive feedback from Region 4 Network members on DOCLINE services and system enhancements

Indicators: - A representative from MCR will attend all DOCLINE teleconferences and report any significant changes or improvements to Network members

- Feedback collected from member libraries will be reported to the DOCLINE team

Actively involve Network Members in NN/LM infrastructure and outreach programs, including obtaining feedback on regional and NLM programs on a periodic basis

The MCR will continue to actively involve Network members in the NN/LM infrastructure and outreach programs. We subcontract with seven of our members to be Resource Libraries which means that they are full partners in conceiving, developing and implementing MCR programs and services. We invite Network members to partner with us when exhibiting at national and local meetings as well as to participate in a work group that guides and helps implement RML programs.

Network members representing the diversity of our membership are invited to be on the Regional Advisory Board and participate in one of the special project work groups led by an RML liaison. In addition to being part of the MCR's infrastructure, this participation provides members with the opportunity to comment and advise the RML on its programs and services.

We will continue to encourage Network member participation in NN/LM programs by publishing programming opportunities in our quarterly newsletter, our weekly e-news compilation, on the MCR web site, and on the MCMLA-L (the shared MLA chapter and RML discussion list). Opportunities to participate will also be described at health science library meetings, both regional and local. We will promote participation in NN/LM programs in our collaborations with other library organizations, academic institutions, public libraries and community partners.

The MCR uses a variety of methods to obtain feedback from our Network members on NLM and NN/LM resources and services. We had success with two formal assessment instruments, our Network Data Inventory and focus groups.

We had a 56% response rate overall for the Network Data Inventory and a high percentage (66%) of member hospital libraries responded. In conjunction with focus groups held in person and via telephone, Network members gave us feedback on both the resources and services that the RML and NLM provide. In the next contract we will again administer the Network Data Inventory and hold focus groups. In addition, we propose a series of focus groups for public librarians who are Affiliate members. Informal methods, such as a question posted to the MCMLA/MCRML discussion list, will also be used to get quick feedback to brief questions. (See response to section A11 of the statement of work for more details)

Outcome: - Network members will be actively involved in the NN/LM infrastructure and outreach programs

Indicator: - Network members will serve on the Regional Advisory Board and on work groups for NN/LM member and outreach programs

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Schedule:

Year 1

Add membership applications and member benefits to MCR web site

Create a potential member list consisting of health sciences, public and special libraries offering health information services within the MidContinental region

Conduct membership renewal and distribute membership certificates to all Network and Affiliate members

Years 1-5

Update membership brochure as necessary

Update membership policies and procedures as necessary

Compile membership statistics quarterly on numbers of new full and Affiliate members within region

Enter member profile information when enrolling new member

Publish update reminders to help member libraries keep their DOCLINE Institutional Records and Serial Holdings current

Send reminders to Affiliate members to notify state liaisons of changes in institutional information

On an annual basis, review and if necessary contact member libraries whose DOCLINE records are not current

Notify MCR members of new features and enhancements in DOCLINE

Publish notifications of new DOCLINE training modules in MCR publications

Maintain links from MCR web site to DOCLINE and membership tutorials on the nnlm.gov web site

Update web-based instruction modules for Serial Holdings and Institutional Record information as necessary

Review DOCLINE reports to determine whether members are in compliance with DOCLINE policies

Represent the MCR at monthly DOCLINE teleconferences and post minutes for state liaisons

Promote NN/LM membership and provide membership brochures at all trainings and presentations conducted in the region

Year 2
Query membership about DOCLINE services and suggestions for enhancements in Network Data Inventory

Years 2-5
Contact non-member health science libraries within region to promote benefits of NN/LM membership

Contact non-member public libraries and other non-member libraries concerned with providing health information within region to promote benefits of NN/LM membership

Send membership certificates to new Network members

A6 - Document Delivery

Statement of Work
Implement that portion of the Regional Services Plan concerned with document delivery in order to provide health professionals including unaffiliated health professionals throughout the region with efficient, rapid access to health sciences information resources. The plan for the region shall conform to the NN/LM Document Delivery Plan.

Applicable NN/LM Goal
Develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective:

Provide document delivery in order to provide health professionals including unaffiliated health professionals throughout the region with efficient, rapid access to health sciences information resources. The plan for the region shall conform to the NN/LM Document Delivery Plan.

Rationale:

Document delivery services have been an important component of the NN/LM from the time of its inception until the present. Any number of technological innovations has affected these services over the years but the recent emergence of electronic publishing is likely to have an unprecedented impact. Already we are seeing a decrease in ILL requests across the country. This region experienced a 5% drop in DOCLINE requests submitted between 2001 and 2003. Libraries realize that not everything is published in digital format nor is everything available by clicking on a link. To assure that the health professionals we serve are not choosing convenience over quality we can improve document delivery by sending requested materials to the requestor's desktop.

Approach and Methodology

The Network Membership Liaison is based at the University of Missouri-Columbia. She is responsible for coordinating the document delivery program for the MidContinental Region.
Results of the 2002 Network Data Inventory and focus groups indicated that Network members felt that DOCLINE is a significant benefit of full membership in the NN/LM and that they were adequately supported in this area. State liaisons have continued to help new members with DOCLINE setup and establishing routing tables. The Interlibrary Loan office at the Spencer S. Eccles Health Sciences Library has also assisted new and existing members in establishing and maintaining routing tables as well as answering member questions. Training materials were produced. The Network Member Liaison and Education Liaison produced three Camtasia modules on updating DOCLINE records. These modules have been placed on the MCR web site, and are also available as part of the newly revised NN/LM DOCLINE Tutorial on the NN/LM web site. Additional modules will be created in year 5 of the current contract by both MCR and the Pacific Northwest Region. The Network Membership Liaison belongs to DOCLINE-L and participates regularly in the monthly DOCLINE teleconferences. Also, the Network Membership Liaison uses the existing MCR publications ("RML News" and "Plains to Peaks Post") to communicate with members on new developments in the DOCLINE system and how to use the system efficiently.

Support and promote electronic document delivery in the region

The MidContinental Region has 194 Network members who are DOCLINE participants. Over half of the DOCLINE libraries provide electronic document delivery service. One of the libraries, through funding by the RML, was able to improve their document delivery service: they were able to deliver high quality copies (better than fax) as well as offer a faster turnaround time (better than mail). The MCR will work to increase the number of libraries providing electronic document delivery.

At the beginning of the contract, the MCR will extract information from DOCLINE to find out which libraries are not using electronic delivery methods. Priority will be given to those libraries that also provide Loansome Doc services. We surmise that Loansome Doc libraries are probably serving unaffiliated health professionals and we would like to offer improved services to that population. State liaisons will contact member libraries to review document delivery guidelines and encourage their use of electronic document delivery.

Electronic document delivery in the region will be coordinated by the Network Member Liaison. To assist libraries as they migrate to electronic document delivery, the Network Member Liaison will develop promotional and instructional materials on how to use current and emerging methods of electronic delivery. ~~These materials will be available from the web and will form the basis of articles to be published in the MCR newsletter.~~ **Information on electronic document delivery will be included on the MCR web site. Articles will be written for the Plains to Peaks Post newsletter, as well as short reminders or notices will be included in the weekly RML News. Articles will also be written for state and local health science library newsletters, where possible. State liaisons will be responsible for including information on electronic document delivery in communications and visits with member librarians. They will also present information on electronic document delivery at local health science library meetings and when teaching classes to health science librarians.** The MCR will pull statistics on an annual basis to determine whether we are meeting the indicators for the number of libraries offering electronic document delivery service.

In order to spread the knowledge of how to configure/assemble a hardware package that will allow members to provide e-document delivery service, the RML will highlight the electronic document delivery resources on the nnlm.gov site (http://nnlm.gov/libinfo/docline/edd.html). Using materials from the workshop "Basics of Electronic Document Delivery" developed by the NN/LM New England Region, we will hold regional round tables throughout the contract, bringing together those who do and do not offer the service. These round table discussions will allow librarians to share and learn how to offer electronic document delivery.

Funding may be an issue for those who need to purchase hardware to offer electronic document delivery. On its state pages, the RML lists funding agencies that members could approach for assistance. The RML proposes to offer awards that may be used for this purpose. The RML has funded such a project in the current contract. Liaisons will offer to consult with Network members who apply for grants or subcontracts.

In addition to promoting electronic document delivery we will also monitor DOCLINE usage by Network members to verify that the region is in compliance with the NN/LM Document Delivery Plan. We will remind Network members of

their responsibilities in maintaining records and filling requests as outlined in the plan. A link to the plan will be added to the MCR web site.

Outcome: - Health professionals and unaffiliated health professionals will have access to health sciences information through electronic document delivery

Indicator: - Five libraries not using electronic delivery methods at the beginning of the year will be using electronic delivery methods by the end of each year

Promote Loansome Doc

In 2004 the MCR started monitoring the number of Loansome Doc users in the region. Last year there were 2021 users; this year there are 1508 users. We know that, in preparation for the new interface, the DOCLINE Team cleaned up Loansome Doc accounts. This had never been done before. A review of the numbers in 2006 will tell us whether the availability of electronic resources is having an impact on the use of this service.

MCR still believes that the document delivery service Network members provide for unaffiliated health professionals is an important one. There are no promotional materials available from NLM to promote Loansome Doc. MCR staff will develop materials that can be easily understood. We will inform unaffiliated health professionals about Loansome Doc and distribute the promotional materials when we meet them in exhibit halls or at meetings. In addition, where we have been given access, messages will be sent out via association discussion lists and newsletters. Regional Advisory Board members will be encouraged to inform unaffiliated health professionals with whom they work that document delivery services are available to them.

The Network Member Liaison will annually ask liaisons to gather the number of unaffiliated Loansome Doc users registered with their Resource Library in order for us to determine whether this number is increasing.

Outcome: - Unaffiliated health professionals in the region will be more aware of available document delivery services

Indicator: - Number of unaffiliated Loansome Doc users registered with Resource Libraries in the region increases annually by 5%

Provide training for member libraries on proper use of DOCLINE

DOCLINE is easy to use; however, training is still needed by new users and to help users with tasks that are not regularly done. Instructional pieces will continue to appear in MCR publications on the proper use of DOCLINE and the importance of keeping DOCLINE records updated. The MCR will continue to provide training for new DOCLINE participants and to instruct members who need assistance. Last year the Network Membership Liaison produced three online tutorials that show and tell DOCLINE users how to update their institutional record, how to change people listed on the institutional records and how to retrieve DOCLINE reports. These tutorials are part of the DOCLINE Tutorial available from the nnlm.gov site. They will be updated to reflect the new versions of DOCLINE. Additional units will be developed in consultation with DOCLINE coordinators from the other regions, who are also producing mini-instructional units. The MCR web site will contain links to this tutorial as well as other DOCLINE resources on the NN/LM web site. Materials developed for DOCLINE will be added to the National Training Center and Clearinghouse (NTCC) Educational Clearinghouse.

The Network Member Liaison and state liaisons will teach at least three DOCLINE classes per year to Network members. During the contract, three of these classes will be at conferences (i.e., Midcontinental Chapter of the Medical Library Association or Wyoming Symposium).

With training resources easily available to them, we expect that Network members will have less need to call MCR staff with DOCLINE questions. State Liaisons and the Network Member Liaison will track the number of DOCLINE questions and the topics of the questions that they receive. We will use these statistics to determine whether we have met the indicator of decreasing questions and to determine which areas of DOCLINE use are not well understood. Training can then be offered on these areas. This information will be recorded in the MCR's Activity Reporting System.

<u>Outcome:</u> - Member libraries will be more familiar with DOCLINE and how to use it effectively

<u>Indicator:</u> - The number of questions answered by MCR staff on DOCLINE will decrease by 5% yearly

Monitor member statistics on DOCLINE and work with those libraries whose fill rates are below standard

To monitor the efficiency of the DOCLINE interactions in the region, the Network Member Liaison will review reports produced by NLM. Currently all libraries are

above the minimum standard in fill rates and we want to maintain that standard. Throughout the contract, the Network Member Liaison will monitor document delivery fill rates throughout region and contact institutions whose fill rates do not reflect compliance with NLM guidelines to help them improve their document delivery systems.

Outcome: - Member library fill rates will meet NLM document delivery standards

Indicator: - 75% of member libraries will meet NLM document delivery standards

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Schedule:

Year 1

Add a link to NN/LM Document Delivery Plan on MCR web site

Develop promotional materials for Loansome Doc

Years 1-5

Extract information from DOCLINE on libraries not offering electronic document delivery service

Determine which Network members provide Loansome Doc services using methods other than electronic delivery

Contact member libraries to review document delivery guidelines and encourage use of electronic document delivery

Continue to publicize the availability of Loansome Doc

Contact Resource Libraries to determine the number of unaffiliated Loansome Doc users

Publish articles in MCR publications on the proper use of DOCLINE and the importance of keeping DOCLINE records updated

MCR staff will track the number of questions and topics of questions on DOCLINE

Update DOCLINE training modules as needed

Produce additional DOCLINE training modules and make them available from the MCR web site

Provide links on MCR web site to DOCLINE information on NLM web site

Teach at least three DOCLINE classes annually to Network members

Teach at least three DOCLINE classes during the contract at conferences

Add all DOCLINE educational materials to NTCC Educational Clearinghouse

Monitor document delivery fill rates throughout region and contact institutions

whose fill rates do not reflect compliance with NLM guidelines

Year 2
Create promotional and instructional materials on how to use current and emerging methods of electronic delivery

Years 2-4
Publish articles on the importance of following NLM document delivery guidelines in RML publications

Years 2-5
Continue contacting member libraries to review document delivery responsibilities and encourage use of electronic document delivery

A7 - Resource Libraries

Statement of Work
Entering into formal agreements with a limited number of institutions in the region to serve as Resource Libraries:

a. Criteria for selection of Resource Libraries will be proposed by the offeror and may include, but are not limited to:

   (1) Quality and size of collection, or uniqueness of materials in the collection which add significantly to the resources of the region;
   (2) Special expertise which contributes to improving regional or national programs, in areas such as distance learning, advanced applications of technology to solving information delivery problems, digitization of information, library and information research, etc.;

b. The following responsibilities must be met by all Resource Libraries and the RML:

   (1) Agreeing to participate fully in the DOCLINE system and keep detailed library profile information in the system up-to-date;
   (2) Agreeing to contribute their institution's serial holdings data to DOCLINE and submit annual updates of holdings information to the NLM or keep holdings current by updating them online;
   (3) Agreeing to provide health professionals and other Network libraries with access to journal articles, books and audiovisuals via interlibrary lending mechanisms at a charge per filled request which is in accordance with network policy (Appendix 5: National Maximum Interlibrary Loan Charge). This includes negotiation of the ability to provide interlibrary loan from electronic journals to the extent possible; and
   (4) Adhering to network performance standards for fill rate and throughput for interlibrary loan service;

c. The following responsibilities of Resource Libraries may be negotiated with the RML:

   (1) Agreeing to provide unaffiliated health professionals within a designated area with access to document delivery services including fair use copies of electronic materials to the extent possible;

(2) Agreeing to participate in the implementation of health professional outreach programs;
(3) Agreeing to participate in the implementation of outreach programs to improve the public's access to electronic health information; and
(4) Other Resource Library responsibilities which may be proposed by the RML.

Applicable NN/LM Goal
Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation.

Objective:

Enter into a formal agreement with at least one institution in each state in the region to serve as a Resource Library

Rationale:

Resource Libraries are the major health sciences libraries in a region. Their partnership in carrying out the mission of the NN/LM is crucial to the success of the Network.

Approach and Methodology:

In the MidContinental Region decentralized model, Resource Libraries are provided with new resources through the MCR Liaison program. In return, each Resource Library has statewide outreach and/or special project responsibilities. The strong relationship between the RML and its Resource Libraries would not have developed in a centralized model. For example, through Washington University, the RML staff has access to IBM's Team Workplace, collaboration software that is now our web-based office space.

The selection criteria for Resource Libraries included:

- Quality and size of collection, or uniqueness of materials in the collection which add significantly to the resources of the region
- Special expertise which contributes to improving regional or national programs (e.g., consumer health, technology, etc.)
- Membership in the Association of Academic Health Sciences Libraries

For descriptions of the Resource Libraries see Appendix A

In the current contract responsibilities are apportioned as follows:

2001-2006 Contract

Spencer S. Eccles Health Sciences Library, University of Utah - RML Administration and Support - Public Health/Utah Outreach - Technology	Archie R. Dykes Library of the Health Sciences, University of Kansas - Technology - Kansas Outreach
Denison Memorial Library, University of Colorado - Consumer Health/Colorado Outreach	University of Wyoming Libraries, University of Wyoming - Wyoming Outreach
McGoogan Library of Medicine, University of Nebraska - Education/Nebraska Outreach	Creighton University Health Sciences Library, Creighton University - Community Outreach
J. Otto Lottes Health Sciences Library, University of Missouri-Columbia - Network Membership/Missouri Outreach	Bernard Becker Medical Library, Washington University - Assessment and Evaluation

In the proposed contract the MCR will divide the responsibilities for the public health outreach program among the state liaisons. We propose to increase our activities in support of Network members by adding a special project responsibility for library advocacy. This is in response to hospital library closures and downsizing in the region and requests from our Network members. The proposed responsibilities will be distributed as follows:

2006-2011 Contract

Spencer S. Eccles Health Sciences Library, University of Utah - RML Administration and Support - Network Member/Utah Outreach - Technology	Archie R. Dykes Library of the Health Sciences, University of Kansas - Technology - Kansas Outreach
Denison Memorial Library, University of Colorado - Consumer Health/Colorado Outreach	University of Wyoming Libraries, University of Wyoming - Wyoming Outreach
McGoogan Library of Medicine, University of Nebraska - Education/Nebraska Outreach	Creighton University Health Sciences Library, Creighton University - Community Outreach
J. Otto Lottes Health Sciences Library, University of Missouri-Columbia - Library Advocacy/Missouri Outreach	Bernard Becker Medical Library, Washington University - Assessment and Evaluation

All RML liaisons, as university professionals, have responsibilities to that institution and participate as members of library or campus-wide

committees. Liaisons are also called upon to teach NLM resources to students and staff of their institutions.

In the proposed contract, the Assessment and Evaluation Liaison, Kansas Liaison, Technology Liaison, and Technology Coordinator are funded from 15%-50% by other sources than the RML. In their other positions, liaisons are part of the reference staff or are administrators.

The Director, Associate Director, and Resource Library Directors have an excellent relationship. When problems with liaisons meeting expectations as described in the logic model have been encountered, the Resource Library Director is called, the issues are discussed, and all parties work out an approach to help to help the liaison fulfill her/his responsibilities. Regular contact between the Associate Director and the Resource Library Director keeps both informed of progress. This collaborative method to accomplish the goals of the RML worked in the current contract; it will be continued in the next.

Resource Libraries have agreed to all the required and optional responsibilities listed in the statement of work. In addition they have agreed to the following (See Appendix B, Memoranda of Understanding):

1. Implement special project and state responsibilities of the RML
2. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system
3. Include NLM resources as part of Resource Library outreach
4. Provide outreach to the public through consumer health resources on the library web site and/or through a consumer health collection
5. Serve as a health information resource for a state or local public health department
6. Provide the facility and host at least one training visit by the National Training Center and Clearinghouse instructors
7. Participate in regularly scheduled meetings of Resource Library Directors
8. Advisory Board service by Director
9. Contribute to an annual review of RML experience by institution's liaison(s)
10. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through VRVS, Skype, Breeze and QuickPlace
11. Submit reports and invoices in a timely manner

Each year, the Evaluation and Assessment Liaison administers a survey to the liaisons to assess their experience working for the Resource Library on the RML program. Liaisons give feedback on space, budgets, working conditions, benefits, workload and challenges, support, cooperation, tools,

RML staff, etc. Any issues identified by their responses are addressed as appropriate. The liaisons and Associate Director have had discussions during weekly teleconferences to understand the underlying causes and come up with procedures, processes, changes in behavior that would resolve the problem. The Associate Director has also had private meetings with the liaison and her/his director.

The Director, Associate Director, and Resource Library Directors meet bi-monthly. Issues that the directors have identified about the administration of the RML program are among the topics discussed during these meetings.

At the end of the current contract we will survey the Resource Library Directors asking them about their subcontract experience with the RML. Some of the questions they will be asked are:

- **Is there a better way to organize the RML to get the same or improved results? Please enumerate results that were desired/anticipated, realized/not realized and any suggestions for ways to reorganize the RML to achieve these results.**
- **How were you able to leverage RML resources to attain institutional and/or library goals?**
- **How were you able to leverage library and/or institutional resources to attain RML goals?**

Their responses will indicate satisfaction with the RML program.

In the 2006-2011 contract the RML proposes to fund Access Grids at the six libraries that currently do not have one. The grid is technology using the Internet 2 that supports interactive sessions for groups. It provides high quality audio, video and application sharing. Access Grids will enable Resource Libraries to become gathering centers for the exchange of information between communities at different institutions. (For more details on our Access Grid program see our response to section A13 of the statement of work)

Outcomes: - Resource Library staff participates in RML outreach activities

- Resource Library web sites indicate that public libraries, consumers and at least one public health department have access to health information through the Resource Library

- Resource Libraries sponsor events for the region using the Access Grid

Indicators: - At least one staff member from each Resource Library is involved in an RML outreach project

- Document delivery and reference support will be provided for public health, public libraries

- Each Resource Library is a participating site for at least one event using the Access Grid

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Schedule:

Year 1
Sign subcontracts with Resource Libraries

Evaluate network infrastructure at Resource Libraries to ensure that there will be successful implementation of Access Grids

Years ~~1-3~~ 2-4
Access Grids constructed at two Resource Libraries each year

Years 1-5
Annual check on Resource Library web sites to verify that document delivery and reference support are provided for public health, public libraries and a public health department

Outreach Activity Report Forms completed for Resource Library outreach activities

Public health department and public library relationships maintained or established

Document delivery and reference support are provided for public health departments and public libraries

Consumer health resources provided

Technology support for liaisons

Administer liaison experience questionnaire

Years 2-5
Events will be sponsored at the Resource Libraries using the Access Grid

Year 5
Evaluate impact of the Access Grid

A8 - Electronic Funds Transfer System (EFTS)

Objective:

Identify and collaborate with Resource Libraries that are not Electronic Funds Transfer System (EFTS) participants to facilitate their participation

Approach and Methodology:

All Resource Libraries in the MidContinental Region became participants of the EFTS in the first year of the current contract. They find it an efficient and cost-saving method for billing and paying for document delivery. If there are any issues that would precipitate a resource library to consider withdrawing from EFTS, the MCR will work with the Resource Library and EFTS to resolve the problem.

A9 – Communication

Statement of Work

Establishing and maintaining channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region. All print and electronic communication should include an acknowledgment of NLM funding and the NN/LM Logo using the National Network of Libraries of Medicine Graphic Standards dated July, 1992. Communication shall include:

a. Publishing and distributing an electronic newsletter to communicate important information about regional and national programs, policies, and procedures to current participants in the region;
b. Establishing and maintaining a regional LISTSERV™ for sharing information with Network members, other partner organizations, and health professionals;
c. Developing and maintaining a regional Web site as an integral component of the NN/LM web site;
d. Producing fact sheets, articles, FAQs, etc. to keep librarians, health professionals and consumers up-to-date about services provided by the RML and topics and issues of current interest in the provision of health information. These documents should be published on, or linked from, a central server. Development of these materials should be coordinated with other RMLs and NLM to avoid duplication of effort;
e. Participating in monthly teleconferences with NLM and the other RMLs to discuss topics of importance in the overall management of the NN/LM program;
f. Developing working relationships with other networks and relevant organizations by identifying common program interests and goals, working to develop regular lines of communication and developing appropriate cooperative programs;
g. Informing NLM about regional, state and local activities of health professionals and health sciences libraries, networks, and other organizations as they relate to the programs of the NN/LM, NLM and the national information infrastructure;

h. Assisting in the identification of training resources to be added to the National Training Center and Clearinghouse database;
i. Participating in/testing/using other methods of communication, such as videoconferencing, computer conferencing; and
j. Attending annual RML Directors' meetings and mid-year RML Directors' meetings.

Applicable NN/LM Goals
Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

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

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Objective:

Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region.

Rationale:

Advanced computing and networking technologies have and will continue to transform communication capabilities. Through an aggressive communications program, the MCR has built a model for a distributed RML program. Digital video to the desktop has emerged as a major application for synchronous and asynchronous education. In addition, videoconferencing capabilities have become a powerful communications tool. Free voice over IP (VoIP) tools offer communication over the Internet, forgoing the need for long distance telephone charges. Network bandwidth increases and more powerful computer processors will result in the reliable integration of voice, data and video. Dynamic information resources will incorporate these technologies into new forms of scholarly communication, education, and research.

The Network Data Inventory (NDI) completed in 2002 indicated only one member, out of the 216 members who responded, did not have access to a computer connected to the Internet. This is the minimal requirement needed for members to access many of the MCR's communication mechanisms, including the RML News, Plains to Peaks Post newsletter, and the MCR web site.

In some cases communication is accomplished using video and audio technology. In Year 5 of the current contract, we have conducted RML updates using Macromedia Breeze. Participants can hear the presenter's audio, view PowerPoint slides, and ask questions via chat. This method of communication again requires access to a web browser. We were able to resolve initial firewall issues with members by pointing our Breeze server to a commonly open port.

If we determine that some members are under-connected and unable to meet these basic requirements for access to our communication tools, we will work with them as part of the plan to fund and assist under-connected members (see section B8).

Approach and Methodology:

All print and electronic communication will include an acknowledgment of NLM funding and the NN/LM Logo using the National Network of Libraries of Medicine Graphic Standards dated July 1992.

Publish and distribute an electronic newsletter to communicate important information about regional and national programs, policies, and procedures to current participants in the region

The MCR currently publishes "Plains to Peaks Post" quarterly in both paper and electronic format. We have maintained the paper format because our members preferred paper to read and they told us the paper format is easier for libraries to catalog. More and more publications are being distributed in electronic format only. In the 2005 Network Data Inventory and focus groups we will ask about member's format preference for "Plains to Peaks Post" and inquire how to make an electronic version acceptable. We will continue to publish our newsletter in paper format for the first 2 years of our contract as we transition our members to accept and adapt to an electronic newsletter.

Outcome: - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicator: - 75% of members surveyed on 2007 Network Data Inventory indicate increased knowledge due to Plains to Peaks Post articles

Establish and maintain a regional LISTSERV™ for sharing information with Network members, other partner organizations, and health professionals

The MCR shares a discussion list with the Midcontinental Chapter of the Medical Library Association. When the MCR started establishing its communication mechanisms Network members were asked if they preferred separate discussion lists for the two organizations. The response was "No!" Members already subscribed to multiple lists and they did not want to sign up for another. The arrangement has worked well with all regional news for health sciences librarians coming through a single source.

The MCR distributes the "RML News," a weekly compilation of short news items, through the MCMLA-L as well as through an RSS feed. Staff find items to

contribute to the "RML News" in messages received from NLM, in discussion lists they monitor, and from activities and programs of the MCR. All items are archived on the MCR web site. In the next contract we will investigate moving the "RML News" to a blog. One of the criteria for changing our system will be the capability of distributing items as an aggregate and not item by item. Members have told us that they do not want their email boxes filled by a lot of messages from the RML.

Outcome: - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicator: - 75% of members surveyed on 2007 Network Data Inventory indicate increased knowledge due to reading the RML News and listserv postings

Develop and maintain a regional web site as an integral component of the NN/LM Web site

The MCR maintains a web site where we share our plans, activities, and reports. In 2003-2004 we conducted a usability study among our staff and the feedback was used to redesign our web site. In 2005, a usability study will be conducted as part of the larger NN/LM web site evaluation.

In year 3 of the next contract, we will have Regional Advisory Board members and Technology working group members assist us with a web usability study to continue to make sure that our web site is responsive to the needs of those who use it. We will adjust the web site design to reflect the usability study results.

Librarians in the region are developing library blogs and personal blogs (two popular blogs currently being published in the region include: the "Bringing Health Care to the Community" blog authored by Siobhan Champ-Blackwell and the ":30 Librarian" authored by Whitney Davison-Turley). In the next contract, we will encourage blogs among the membership by offering to host them on an RML server if their institution will not provide this service. Some libraries are not able to have their own library web site due to restrictions by their institutions. Creating a library blog will give the library a presence on the web and provide a way to communicate with the library's users. We will also create a blog that will incorporate all the blogs available by regional Network members. This regional blog will automatically publish messages that are being posted by participating blogs and will serve the purpose of keeping members informed about events, policies and news at each other's libraries. The regional blog will be available from the MCR web site. The RML will purchase multi-author blog hosting software that will be available to Network members and staff will teach members how to use it as part of our technology awareness program.

Other web based communication applications will also be explored. One of these is a wiki for Network members to post descriptions of projects they have had funded to encourage collaboration in the region. Since a wiki allows users to add content and to edit each other's content, it is an excellent way to build a knowledge base on particular topics of interest.

The MCR web site content includes: general information about the MCR and its staff; state pages that provide links to health information resources and health and information organizations in the states; and information appropriate to the special project areas of the MCR. We will continue to update and maintain the content on the web site in all these areas as well as the back-end databases and programming code.

In the next contract we will select an open source content management system (CMS). Content management systems simplify the creation, management, and publishing of web site content in a multi-author environment such as the MCR's. Web site authors add information to the CMS using a simple web-based interface. The CMS handles the design and formatting of the page according to a previously designed set of templates. This allows web authors to concentrate on the content rather than the technical details of web page authoring. In addition, a CMS provides mechanisms for version control, workflow (where content may need to be "approved" by an editor), and security. The CMS also ensures that the resulting web page code will be produced according to accepted technical standards.

The CMS will be selected and implemented in consultation with the Web Services Technology Operations Center (Web-STOC) and other RML technology coordinators. As was discussed at the 2005 NN/LM Web Developer's meeting, Web-STOC is also planning to evaluate and implement a CMS. Mambo (*http://www.mamboserver.com/*), an open source CMS that is gaining popularity and has a wide array of features, will be one of the leading contenders for an NN/LM CMS.

The CMS will be selected and implemented in year 1. RML staff will be trained to use the CMS in year 2 of the contract.

To evaluate how effective our web site is as a communication tool questions will be included in the 2007 Network Data Inventory to solicit feedback from our Network members.

<u>Outcome:</u> - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicator: - 75% of members surveyed on 2007 Network Data Inventory indicate increased knowledge due to reading the web site

Produce fact sheets, articles, FAQs, etc., to keep librarians, health professionals and consumers up-to-date about services provided by the RML and topics and issues of current interest in the provision of health information. These documents should be published on, or linked from, a central server. Development of these materials should be coordinated with other RMLs and NLM to avoid duplication of effort

To promote the RML program and services, staff has published brochures and written articles for both its own publications as well as for library and health professional publications. The Network Membership Liaison produced a membership brochure. The Community Outreach Liaison produced brochures that describe health information resources for different cultural groups. In addition, all liaisons have developed print materials to hand out at the exhibit booth for meetings they attend.

We have successfully submitted articles to state library and health professional newsletter and journals describing the services and resources available from the NN/LM. In the next contract we will continue developing materials as needed. We will submit articles to state and regional publications in order to promote NN/LM services and resources. These documents will also be available from the MCR web site and our DSpace archive.

The MCR is strongly supportive of open access to the content we publish in external publications. In the next contract, we will develop criteria to guarantee that access to our publications will not be blocked and that all of our articles will be available from PubMed Central. MCR staff will explain our policy and work with publishers to ensure access to our written works.

Traditionally RMLs have provided updates to the membership at a session of the local chapter of the Medical Library Association (MLA) meeting. For this region, it is the annual meeting of the MCMLA. This is the best meeting to reach a group of health sciences librarians from all over the region, but it is not the best way to reach a majority of the MCR members. Approximately one-third of our 300+ members attend the meeting. Affiliate members, the majority of them public librarians, do not attend this meeting. To provide a more equitable distribution of the RML update, MCR will provide regular updates through out the year using Macromedia Breeze or other distance communication tools. The sessions will last for an hour or less and may focus on a specific program or the RML as a whole. Sessions will be archived and made available from the MCR web site. We will solicit feedback from the members as to whether this format is an effective method to keep members abreast of what we are doing to achieve the objectives of the MCR program.

In the current contract the MCR has promoted NLM web casts, MLA satellite broadcasts, and other Internet live streaming media presentations as a way for members to keep up-to-date on issues of importance to health sciences librarians. By the end of the current contract we will have trained Resource Library staff at Creighton University, the University of Wyoming and the University of Missouri-Columbia to videobroadcast local events. In this way we are striving to counteract the lack of funding and lack of time that Network members have to physically attend these events, as well as increasing support for the professional development of our members.

Outcome: - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicator: - 75% of members surveyed on 2007 Network Data Inventory indicate increased knowledge due to brochures, articles, and video streams

Participate in monthly teleconferences with NLM and the other RMLs to discuss topics of importance in the overall management of the NN/LM program

The MCR is regularly represented at all the NN/LM teleconferences (Consumer Health Coordinators, Outreach and Education, Community Outreach Group, DOCLINE Coordinators, and All RML Staff) with a primary and back up staff member designated. MCR staff will continue to attend these meetings, suggest topics to be discussed and facilitate teleconferences as requested.

Each year liaisons are asked for their feedback on the operations and organization of the MCR. A question on the usefulness of the teleconferences will be added to the liaison survey to determine if we achieve our indicator for this activity.

Outcome: - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicator: - Liaisons indicate on MCR liaison survey that they have increased knowledge of their project areas and NLM services due to monthly teleconferences

Develop working relationships with other networks and relevant organizations by identifying common program interests and goals, work to develop regular lines of communication and developing appropriate cooperative programs

Throughout the contract we will continue to attend meetings and exhibits and, through our conversations with attendees, we will make note of those individuals

who are potential NN/LM partners. These are individuals who express an interest in NLM resources and want to make them available for their own agencies, organizations, or groups (e.g., a public library contact may provide the RML with an introduction to another library consortia). Liaisons will continue to obtain the contact information for these individuals and follow-up by offering training, by participating in meetings sponsored by the new contact, and by using them as contacts to other organizations.

Contact information will continue to be shared with other liaisons as appropriate. In the current contract we tested a commercial contact database to collect public health information contacts. This has been unsuccessful because it is difficult to produce reports and the database is not integrated into the other programs the RML staff use. The University of Utah is licensing Sharepoint, Microsoft's collaboration program. We will move our virtual office to this program. The Network Coordinator at the NN/LM Pacific Southwest Region is using Sharepoint and recommends the contacts section as a way to track contacts with Network members. We will investigate using Sharepoint to track and share the contacts made by the RML staff with Network members and potential partners.

The MCR has already established a communication mechanism with community organizations through the "Bringing Health Information to the Community" (BHIC) blog. The Community Outreach Liaison regularly posts information to the blog that fall into the following categories: articles, conferences, environmental health, HIV/AIDS, inner city, minority health concerns, public library, public health, regional information, rural, and scholarships/grants. This is becoming an increasingly well known resource for community groups to help them stay abreast of health information and health resources of value to them, not just in the region but throughout the country. The MCR will continue to communicate with community organizations through the BHIC blog.

In addition, state liaisons have made every effort to locate local discussion groups used by public health professionals, public librarians and local health sciences library groups in the region and to either subscribe to the list or gain permission to post to the list. Access to these discussion lists provides us with a communication mechanism to send messages to these priority professionals who may not receive messages from the MCMLA-L.

<u>Communication for Native American Health Information Outreach</u>
Health information outreach to Native Americans is being carried out through projects across the country. "Assessment of NLM's Health Disparities Plan: A Focus on Native American Outreach", a white paper prepared for the Symposium on Community-Based Health Information Outreach by Elliot R. Siegel, Fred B. Wood, Gale Dutcher, and Angela Ruffin, describes the efforts of the National Library of Medicine and the National Network of Libraries of Medicine. *(medstat.med.utah.edu/symposium/docs/CBOHDWhitePaperSiegelv4.PD)*

Our premise is that for RMLs who want to foster outreach to Native American communities, for health sciences librarians want to do outreach, and for communities who want to improve their health information access, awareness of projects going on across the country would facilitate sharing of effective practices and can be a basis of collaboration.

One of the challenges for those working to improve health information access among this population is to find out what others are doing:

- what group is the focus—health professionals, tribal librarians, community members
- what is the expected outcome—knowledge and expertise in using resources, development of resources, building an infrastructure
- what partnerships have been formed—tribal councils, foundations, Network members

Sharing plans and the status of projects would provide a basis for building on others' experiences, support the development of resources that would be useful for more than a single community, distribute the workload in developing resources, and expand the infrastructure (organizational, communications, technological) that is needed for integrated outreach.

The MCR (along with Regions 2, 3, 5, and 6) will identify Network members and other organizations who are working to improve the health information access of Native American communities. This information will be shared among the RMLs and, if requested, with those who contributed to the list. Those working on outreach projects will be queried to determine if they would benefit by hearing what others are doing and if there is a communication mechanism (exchanging newsletters, developing a discussion list, regular teleconference/videoconference) that would facilitate this sharing.

The University of New Mexico, under subcontract to the MCR, will hold a meeting of representatives from NLM, RMLs, Resource Libraries, and tribes involved in health information outreach projects to discuss communication and collaboration. An outcome of this meeting would be a decision on some kind of communication structure that would be easily used by all. This communication structure will be established, tested and continued or adapted as needed. In year 4 the RMLs who actively support outreach to Native Americans would fund an outreach symposium similar to the 2004 Community -Based Health Information Symposium but focused solely outreach efforts with Native Americans. Possible venues for the symposium would be the National Museum of the Native American in Washington D.C. or the University of Colorado Nighthorse Campbell Native American Health Building in Aurora, CO.

<u>Outcomes:</u> - Increased collaborations and access to biomedical information via effective communication mechanisms

- Sharing plans and status of projects provides a basis for building on others' experiences, supports the development of resources that would be useful for more than a single community, distributes the workload in developing resources, and expands the infrastructure (organizational, communications, technological) that is needed for integrated outreach

Indicators: - Each liaison in the RML will use at least three local communication mechanisms to communicate to current and potential NN/LM members in addition to "Plains to Peaks Post" and "RML News"

- The communication infrastructure made available to those doing outreach with Native Americans will be used by all interested Network members and RML staff in five NN/LM regions

Inform NLM about regional, state and local activities of health professionals and health sciences libraries, networks, and other organizations as they relate to the programs of the NN/LM, NLM and the national information infrastructure

The MCR will continue to send NLM quarterly and annual reports describing the activities and status of its programs, feedback from the region on NLM and NN/LM resources and services, changes taking place in the region that have import for NLM and NN/LM programming, and maps graphically displaying the location of Network members and outreach activities. Reports will be added to the NLM External Exhibit Reporting System, the Outreach Activity Report Form (OARF) system, and descriptions of projects funded by the MCR will be added to the NLM Outreach and Consumer Health System.

MCR staff will informally send news from the region that it deems to be of interest and will respond to NLM's requests for data from the region.

Outcome: - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicator: - Four quarterly reports, and annual report, OARFs, exhibit reports, and project descriptions are submitted in a timely manner

Assist in the identification of training resources to be added to the National Training Center and Clearinghouse database

"Reinventing the wheel" squanders resources and health sciences librarians have no time to spare. The NTCC Educational Clearinghouse serves as a resource to share materials used in training, allowing librarians to use and adapt materials without starting from scratch. The MCR will do its part to assist Network members to find suitable educational materials by submitting the educational materials we produce for all our program areas to the Clearinghouse.

Many of our Network members are not sharing their materials through the Clearinghouse. In June 2005 the five newest resources to the NTCC Educational Clearinghouse were submitted between February and April of 2005. Liaisons will work with colleagues in their own libraries and with their local health sciences library organizations to add materials to the NTCC Educational Clearinghouse.

We will ensure that the materials created by projects funded by the MCR are added to the NTCC Educational Clearinghouse by including this as a requirement in the subcontracts we issue. MCR will ask the NTCC to assist us in tracking materials coming from the region in order to evaluate the effectiveness of our efforts.

Outcome: - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicator: - Contributions from MCR have increased by 10% per year to NTCC Educational Clearinghouse

Participating in/testing/using other methods of communication, such as videoconferencing, computer conferencing

Motivated by the distributed structure of the MCR where team members are working in six different states, the RML is constantly on the look out for new technologies or improved existing technologies that facilitate internal communication. This organizational need has supported a program to introduce new technologies to our membership. During the existing contract the MCR has tested many communication applications. We have found that the mix and match approach serves us best—using selected features of multiple applications to achieve the result we need.

Collaboration applications investigated by the MCR team:

- Workplace by IBM provided by Bernard Becker Medical Library serves as our virtual office space

- VRVS open source videoconferencing system developed by CalTech serves as our desktop system allowing us to see each other during meetings
- Sametime by IBM serves as our application sharing software during meetings
- Skype serves as our instant messaging, presence indicator, and VoIP software for one-to-one conversations and conference calls of up to five participants
- Polycom desktop cameras connected to the University of Utah telehealth network bridge serves as the videoconferencing system for meetings with Resource Library Directors
- Microsoft's netMeeting was used for a while but has been replaced by IBM's Sametime
- New free videoconferencing and VoIP technologies are currently being tested; they include ineen and VSkype

The MCR will continue to investigate and implement videoconferencing and VoIP technologies to improve the operations of the MCR. Technologies that work will be communicated to the region so that they can be incorporated into the services and operations of Network members.

The MCR videobroadcasting program is in its infancy. We have advertised events both within and outside of the region so that Network members can view programs that cover topics of importance to health sciences librarians. This is a way for Network members to be kept current on relevant issues without having to leave their institutions. Examples of broadcasts that the MCR has provided to the region include: health informatics programs, the Priscilla Mayden Lectures, and Library and Information Technology Forums from the University of Utah; NIH programs; and CDC programs. The MCR also produces its own videobroadcasts. We have broadcast our Regional Advisory Board meetings, the NN/LM site visit, a Creighton University National Library Week event, and a panel discussion from the 2004 Wyoming Symposium. Starting in 2004 we began training staff at Resource Libraries to use our mobile videobroadcast equipment so that they could borrow it and broadcast their own events to the region~~. In the next contract we will offer this training to Network members. The MCR will purchase equipment that is smaller, lighter and easier to ship to use for this program. We will offer our training at three different sites each year of the contract.~~

The MCR will explore podcasting. A method of publishing audio files, podcasting allows users to subscribe to a feed and receive new audio files automatically. We will continue to seek new technologies yet to be identified that have implications for health sciences librarians.

<u>Outcome:</u> - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicators: - ~~At least three videobroadcast events per year are provided by the RML and/or Network members~~

- ~~Videoconferencing is used by members and liaisons at least twice a year in each state~~

Attend annual RML Directors' meetings and mid-year RML Directors' meetings

The Director and Associate Director will participate in all RML Directors meetings by suggesting topics and facilitating discussions as requested and collecting regional information in preparation for the meeting. The RML staff and Resource Library Directors will be consulted on items they would like to see on the agenda. The Director and Associate Director will inform RML staff and Resource Library Directors of the outcomes of discussions.

The MCR will volunteer to host a mid-year meeting and to facilitate a Director/Associate Director break out session once during the contract. Decisions and issues communicated at these meetings will be relayed to the RML staff and Resource Library Directors.

All staff will attend the RML Directors meetings preceding MLA.

Each year liaisons are asked for their feedback on the operations and organization of the MCR. A question on the usefulness of the reports of the RML Directors meeting will be added to the liaison survey to determine whether we have met our indicator.

Outcome: - Increased collaborations and access to biomedical information via effective communication mechanisms

Indicator: - Liaisons indicate that they have increased knowledge of their project areas and NLM services due to Director's meetings

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Schedule:

Year 1

Select and implement open source CMS

MCR (along with Regions 2, 3, 5, 6) will identify Network members and other organizations who are working to improve the health information access of Native American communities

MCR will ask those who are working on outreach projects with Native Americans to determine if they would benefit by hearing what others are doing and if there is a communication mechanism that would facilitate this sharing

MCR will send representatives to the communication and collaboration meeting for Native American outreach

Years 1-5

Publish and distribute “Plains to Peaks Post” newsletter quarterly

Maintain RML listserv

Distribute weekly “RML News“

Develop and maintain regional blog, member blog service, bulletin board

Participate on other organization discussion lists

Update and maintain content on MCR web site

Maintain web site databases and PHP programming

Develop and maintain brochures

Write and publish articles in state library publications

Write and publish articles for external journals and newsletters; post them on the MCR web site

Present RML Updates via electronic media

Broadcast regional events

Provide backup for NN/LM videostreaming server

Suggest topics for and participate in monthly NN/LM teleconferences

Facilitate monthly NN/LM teleconferences as requested

Suggest topics for and attend RML Directors meetings

Facilitate discussion at annual RML Directors meeting as requested

Volunteer to host an RML Directors meeting

Attend meetings and exhibits and note contacts made with current and potential NN/LM partners

Make contacts and maintain list/database of notable people for potential collaboration

Use institutional resources (people) as contacts to other organizations

Produce quarterly reports for NLM

Respond to NLM requests for information

Submit presentations and brochures to NTCC Educational Clearinghouse

Add to funding announcements and funding agreements that training materials developed as part of the project must be added to the NTCC Educational Clearinghouse

Liaisons will work with their own resource library staffs to add materials to NTCC Educational Clearinghouse

State liaisons will work with their local health sciences library organizations to add materials to NTCC Educational Clearinghouse

Continue to investigate and implement videoconferencing and VoIP technologies

Offer RML updates using distance technology

Offer video streaming events to Network members

~~Offer videobroadcast streaming training to 3 sites each year~~

Explore podcasting and other new technologies yet to be identified

Year 2
Include questions on the effectiveness of RML communication tools in 2007 Network Data Inventory

Train liaisons on use of CMS

Develop and test preferred communication infrastructure among those doing outreach with Native Americans

Carry out regionally any decisions made at the communication and collaboration meeting for Native American outreach

Year 3
Conduct usability study and adjust web site design to reflect results

Years 3-5
Continue or revise communication infrastructure among those doing outreach with Native Americans

Year 4
Question on the usefulness of reports from the RML Directors meeting will be added to MCR Liaison Evaluation Survey

Contribute to funding for a Native American health information outreach symposium

A10 – Regional Advisory Board

Statement of Work
Developing and implementing a mechanism for selecting a Regional Advisory Board (RAB). The RAB must include health professionals and health sciences librarians from hospital libraries and other large and small medical libraries within the region. The RAB should also include representatives of state library agencies, public and school libraries, health information consumer groups, special populations, as well as representatives of community organizations with which the RML has partnerships. The RAB need not be structured as a single

body, nor is it necessary for it to meet in a physical location, as long as mechanisms are developed which enable the RAB to function effectively. Responsibilities of the RAB include:

a. Advising the RML on appropriate mechanisms within the framework of the NN/LM contract for developing and implementing programs to improve health professionals' and consumers' access to biomedical information;
b. Advising the RML in establishing regional priorities, policies and procedures, including the development and implementation of a regional emergency preparedness plan;
c. Conducting review and evaluation of RML programs in the region at the end of years 2 and 4;
d. Developing plans to encourage health professionals and health sciences librarians to participate actively in regional and national programs affecting the delivery of health information; and
e. Assisting the RML in identifying health professionals without access to health information and recommending ways to assist them through NN/LM programs.

Applicable NN/LM Goal
To develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objectives:

The Regional Advisory Board is made up of health professionals, health sciences librarians from hospital libraries and other large and small medical libraries within the region, representatives of state library agencies, public and school libraries, public health, health information consumer groups, special populations, as well as representatives of community organizations

The Regional Advisory Board functions effectively

Rationale:

An advisory group is a useful mechanism to enable organizations such as the NN/LM to be responsive to the librarians and organizations it serves. This group can act as the sounding board before programs are piloted, provide outside perspectives, and bring additional expertise to the program.

Approach and Methodology:

The Regional Advisory Board (RAB) for the MidContinental Region will continue to be an active partner in program development, assessment and innovation. ~~The board meets immediately preceding the annual meeting of the Midcontinental Chapter of the Medical Library Association (MCMLA)~~. To engage Network members in this meeting, the RML has invited local librarians to attend the meeting, meetings have been videobroadcast, and Network members have been invited to call in and participate in board discussions.

There are twelve members on the board. Board members serve staggered two year terms, with the RML holding the option of re-appointing members who are particularly productive. ~~They are selected from recommendations made by RML staff based on their work in the region. This assures that board members are acquainted with the NN/LM as an organization and are familiar with at least one of its programs.~~ **The RML uses the following criteria for selecting Regional Advisory Board members:**

- **Network member, health professional or member of a community-based organization**
- **Exhibited interest and/or support for access to health information**
- **Evidence of status with a priority population (public librarians, public health workforce etc.)**
- **Lives or works in the MidContinental Region**
- **Recommended by staff of the RML, Resource Library, or previous Regional Advisory Board member**

In order to have a representative board, the RML selects a representative for: each state in the region, each special project area, Resource Library directors, and the MCMLA. In the current contract the members have been health professionals, health sciences librarians from hospital and academic libraries, state and public librarians, public health professionals, and staff of community organizations. RML expectations from board members are described when recruiting new members.

Members of the Board are listed on the RML web site and an article introducing board members is published in the RML newsletter.

In the next contract we plan to recruit from the American Library Association's Movers and Shakers who are in the region. These are librarians who have shown that they can be innovative, energetic, and are dedicated to information access. We also want to tap reviewers from the NLM's Biomedical Library and Informatics Review Committee. These individuals would assist us with ideas for adapting cutting edge projects to our region. Finally, we will add to our short list of board candidates, staff from community organizations and inner city clinics.

In order for RAB members to understand the use of technology in the region we propose that some of the discussions with board members use collaborative technologies. In the current contract we provided members with headsets and instruction on using Skype, a free VoIP service. In the next contract we plan to purchase desktop videoconferencing units for board members to facilitate their use of collaborative technologies and to hold meetings without involving travel.

Feedback from our RAB members indicated that they want the opportunity to contribute more to the RML program. We hypothesize that increased contact with board members may result in increased involvement. In the next contract RML

staff will arrange to visit the board member's institution when traveling to that locale. Liaisons will also contact the member on a quarterly basis. This contact may be part of a work group meeting or to exchange news on each other's organizations. We hope that these contacts will result in ideas for the RML and ways that members can facilitate communication between their constituency groups and the RML. These contacts could also result in announcements of interest in the weekly RML News that is distributed electronically via the discussion list to Network members as well as articles written by members for the RML quarterly newsletter.

We also want members to be aware of current developments regarding new NLM and NN/LM programs, products and services. We accomplish this by adding members to our communication distribution lists and by inviting members to attend electronic and in-person programs.

The RAB will continue to have the following responsibilities:

- Advise on appropriate mechanisms for developing and implementing programs to improve health professionals' and consumers' access to biomedical information
- Assist the RML in establishing regional priorities, policies and procedures
- Develop plans to encourage health professionals and health sciences librarians to participate actively in regional and national programs affecting the delivery of health information
- Assist the RML in identifying health professionals without access to health information and recommend ways to assist them through NN/LM programs
- Assist the RML in reviewing subcontract proposals
- Primary advisory responsibility for one of the RML project areas

New responsibilities of the RAB:

- Assist the RML in the development and implementation of a regional emergency preparedness plan
- Provide feedback on specific issues
- Advise the RML in its review and evaluation of RML programs in the region
- Present information on their organization or area of expertise. This may be an article in the newsletter or a presentation using collaborative software such as Macromedia Breeze
- Assist the RML to reach the constituency that the member represents (Network members, public libraries, public health workforce, etc.)

  This includes:

  - Promoting NLM resources
  - Forwarding RML messages to constituency group/population

- Recommending ways to best communicate with this group/population
- Providing insights into the organizational structure, culture of this group/population
- Providing perspective on how a group/population would react to RML plans

Full participation means that Regional Advisory Board members meet our indicators and fulfill all the responsibilities listed in our logic model. Liaisons will ensure full participation through regular contact with board members to encourage and work with them to meet their responsibilities. RAB members are each included on at least one working group to provide input to liaisons in their special project work. Staff will record the quality of the interactions with their board members and member contributions in the Activity Recording System. At the end of their term, board members will be surveyed to evaluate their experience and participation. At the end of board meetings, it has been our custom to ask members for any last words or recommendations on the meeting or their involvement in our program. ~~At the end of each board meeting board members will be asked for feedback on the meeting. At the end of each member's two year term, they will be asked for feedback on their board experience. Members will also be asked about their familiarity with primary NLM resources.~~ The RML will use these comments to revise its management of the Regional Advisory Board.

Outcomes:

- The board represents the different partners of the RML
- The board is effective
- The relationship between board members and RML staff includes more interaction

Indicators:

- The Board includes a representative for: each state in the region, each special project area, Resource Library Directors, and the MCMLA
- Each liaison will have at least 4 contacts (email, visits, phone calls, videoconferences) per year with a board member, in addition to the annual meeting, concerning RML work. These contacts will be recorded in the region's Activity Reporting System (ARS)
- Advisory Board members recognize the name and the major purpose of primary NLM resources as indicated by their responses in their annual review of their board experience
- Each advisory board member will make at least one suggestion or provide advice once a year to the RML (at a board meeting, work group meeting, or to an RML staff) OR

will facilitate the RML's contact with their constituent group during the year (his contribution will be recorded in minutes of the Regional Advisory Board meeting or in the region's ARS

Schedule:

Year 1
~~Purchase videoconferencing equipment for board members~~

Years 1-5
New member selection and orientation prior to annual Regional Advisory Board meeting

Advisory Board members are assigned to a specific project area

Liaisons review logic model with members

Consult with RAB on emergency preparedness plans

Introduction of major new developments of NLM resources will be scheduled during the year

Test videoequipment with board members

Assess Regional Advisory Board experience

Years 2–5
Purchase videoconferencing equipment for new board members

A11 - Evaluating Regional Programs

Statement of Work
Monitoring and evaluating the region's programs in order to assess their effectiveness in meeting NN/LM goals and to identify and resolve problems, which impede the effective delivery of health information services. This includes:

a. Developing a formal mechanism for evaluating regional programs in consultation with the NN/LM Outreach Evaluation Resource Center and the Regional Advisory Committee;
b. Developing a mechanism to provide NLM with regular feedback about NLM and NN/LM products and services from individuals and constituent groups;
c. Participating in a site visit and review of the regional program, to be conducted at least once during the contract, by selected representatives from NLM, the RAB, and at least one other RML;
d. To develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, community organizations, Network members and the public.

Applicable NN/LM Goal
Develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, and the public

Objectives:

Develop a formal mechanism for evaluating regional programs in consultation with the NN/LM Outreach Evaluation Resource Center and the Regional Advisory Board

Rationale:

Assessment and evaluation are essential to provide effective programming.

Approach and Methodology:

The effectiveness of the NN/LM MidContinental Region is a primary goal for this RML. In the current contract, we focused on creating assessment and evaluation tools in order to ensure that the resources and services we provide meet the needs of our members. The Assessment and Evaluation Liaison based at the Bernard Becker Medical Library at Washington University is responsible for coordinating this program.

To evaluate whether we are accomplishing our outcomes and goals, the Assessment and Evaluation Liaison introduced the use of logic models as a program planning tool in November 2003. All RML liaisons were trained in logic model development. Logic models are developed in the late fall of each year for programming the activities of the next year. The models are the foundation for a web based system called the Activity Reporting System (ARS); this system is used by RML staff to record activities for a monthly report. (See Appendix C for a view of the ARS) Liaisons recorded 985 activities the first year that the ARS was implemented, 2004-2005. The Assessment and Evaluation Liaison is using the ARS to determine how closely RML staff activities matched plans for the year and which and what kinds of activities contributed to achieving the goals and outcomes articulated for this RML. Modifications are made to ARS to reflect lessons learned during the previous year. ARS has replaced monthly reports submitted by each liaison. The Associate Director and Project Coordinator are able to create quarterly reports for the NNO by running ARS reports that describe the activities of each state and special projects liaison. Through the use of logic models and ARS the RML staff understand how their work relates to each others', what efforts are required to carry out RML activities and which activities and types of work are most effective in meeting the articulated goals of the RML.

To evaluate whether we are serving the needs of our Network members, MCR will conduct two Network Data Inventories and two series of focus groups by the end of the current contract. During the fall of 2002 the Assessment and Evaluation Liaison designed and administered a questionnaire to elicit baseline

information and feedback from Network libraries. Between March and July of 2003, MCR conducted a series of six focus groups. Thirty-three librarians from all states of the region participated in the groups. Sessions were held in Denver, CO; Kansas City, KS; St. Louis, MO; and Salt Lake City, UT. Two sessions were held via teleconference with librarians from Nebraska and Wyoming. The data provided to us by our Network members from the Inventory and focus groups were used for program planning during the contract. The Network Data Inventory and focus groups will be repeated during the current contract year 5 to ascertain Network members' perception of the NLM and the RML resources and services. This data will influence our objectives for the next contract. Both the Network Data Inventory and the focus group reports are posted on the RML web site as part of the quarterly report in Appendix H. (*nnlm.gov/mcr/about/qreports/Yr3Qtr4report.pdf*)

~~To evaluate ourselves as an organization, the Assessment and Evaluation Liaison developed a survey that assesses whether the liaisons are receiving the support needed for them to do their work.~~ **Each year the Evaluation and Assessment Liaison administers a survey to the liaisons to obtain their insights and input on their experience working within their Resource Library. The individual's responses are kept anonymous to ensure honesty and frankness. The survey results are shared with the Resource Library Directors and discussed during one of the directors' bi-monthly meetings. The liaison surveys conducted during the last three years have indicated outstanding support for liaisons' RML work from the Resource Libraries. That result is consistent across changes in staff at nearly all Resource Libraries over the course of the contract.** Because the RML personnel are distributed among six states it was important to determine how the model was impacting their work processes. ~~The survey is anonymous and is administered annually. The Resource Library Directors have bi-monthly videoconferences to discuss regional issues and the operations of the RML.~~

The RML also initiated a survey in Year 5 to seek input from both Resource Library Directors and representative Resource Library staff about the experience of having a liaison working in their library including the accommodations that needed to be made for the position.

Program Evaluation

MCR will continue to employ logic models for annual planning as well as using the Activity Reporting System to collect data about activities and to review our progress toward achieving the stated goals and outcomes. Informal feedback from the region on resources and services will be recorded in the ARS to ensure inclusion in quarterly reports to NLM. Activity reports will be reviewed monthly. We will review our progress quarterly and will modify activities to ensure that goals and outcomes are achieved. The year's activities will be matched against the planned goals, outcomes and activities in the logic model.

Logic models are not set in stone. The logic model guide published by the W.K. Kellogg Foundation reminds us that:

> **"The elements (Outputs, Outcomes, and Impact) that comprise (*your intended results*) give you an outline of what is most important to monitor and gauge to determine the effectiveness of your program. You can correct and revise based on your interpretation of the collected data."** [1]

Each year for the planning meeting, the five-year contract logic model is reviewed and edited to reflect the program for a single year. As the year progresses, the one-year logic model is reviewed quarterly as liaisons report activities in terms of logic model goals, outcomes and indicators. These reports are summarized annually. We expect that there will be adjustments to incorporate lessons learned, changes within our region, national priorities etc. Changes to the logic model are not made lightly and are usually made in the next year's logic model rather than in the active logic model.

The Resource Library Directors will continue to hold bi-monthly videoconferences with the Director and Associate Director. The operations of the RML will be added as an agenda item by a director or the RML as the need arises.

Liaisons will have the opportunity to provide anonymous feedback on the operations of the RML. Identified issues will be addressed the Associate Director or by all RML staff as appropriate to resolve any problems.

Outcomes: - An evaluation plan for the RML gathers data on how the RML contributes to improved access to health information by health professionals, and the public

Indicators: -Reports from the Activity Reporting System describe activities that contribute to improved access to health information

Feedback from Region

The MCR will repeat the Network Data Inventory and member focus groups. We will review and revise the questions in consultation with the Outreach Evaluation Resource Center and Regional Advisory Board. Elaine Graham, MLS., together with the Assessment and Evaluation Liaison, analyzed the data from the 2002 and 2005 Network Data Inventories and wrote the final report. Her experience as

[1] W.K. Kellogg Foundation. "Chapter 2 Developing a Basic Logic Model for your Program" in Logic Model Development Guide. Battle Creek MI: W.K. Kellogg Foundation, October 2000. p16.

an Associate Director for the NN/LM Pacific Southwest Region and with the evaluation data from our first inventories well qualify her as a consultant to analyze and write the report for the 2007 Network Data Inventory. We will compare data collected to data already obtained and use it to inform future planning and programs.

Ms. Graham will also be our consultant for the analysis and technical writing required to report the results of the focus groups that are planned for the next contract. We will hold a series of focus groups for Network members to obtain member perspectives and opinions on regional programs. We plan to use videoconferencing in order for participants to see each other and to enlist participants from all over the region. We will review the questions asked in 2005 to determine whether they are appropriate or need to be revised. For example we may ask about the usefulness of the virtual reference service in the region in supporting Network members. We also propose to hold a series of focus groups for our Affiliate Network members who are public libraries to ascertain their perspective on the NLM and the NN/LM. State library association meetings appear to be convenient time and location for gathering this group together. The results of the Network Data Inventory and focus groups will be shared with our Network members, RAB, NLM and other regions.

Our training evaluation forms will solicit suggestions for improvement of the resources which was the training focus. Their feedback may pertain to the scope of the resource or the usability of the interface. We will add feedback to questions about improving the NLM products that come from our post training evaluation report to the Activity Reporting System.

This region supports an initiative to develop a core set of measures to be used in evaluating each RML. These could be standard questions, indicators, or outcomes. The resulting data would be useful for affecting program changes, new service/product development or trend/outcome analysis. We will work with our advisory board members, other regions, the Outreach Evaluation Resource Center, and NLM on this initiative.

<u>Outcome:</u> - NLM receives feedback about its products and services as collected and reported by the RML

<u>Indicators:</u> - Quarterly reports and reports as requested are submitted to NLM

- RML will receive a 4 rating for Timeliness of Performance on the NIH Contractor Performance Report

Site Visit

During the last NN/LM site visit the MCR had participation from all around the region. Using videconferencing technology, team members heard from and conversed with liaisons, Resource Library Directors, Regional Advisory Board members, and Network members who gathered at Resource Libraries. Even more members watched the streaming media broadcast of the day. In the next contract we welcome another site visit so that RML staff and Network members can share their regional experience. In preparation for the visit we will review the last site visit report, gather information to demonstrate program effectiveness, develop presentations in response to questions from NLM, and publicize and invite Network members to participate either in person or via videoconferencing.

Outcome: - Site visit team is enthusiastic and supportive of RML programs and services

Indicator: - Site visit report contains no surprises indicating that the RML is aware of its strengths and weaknesses

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Schedule:

Year 1
Work with other RMLs to establish core set of measures to be used in evaluating each RML

Develop questions for Network Data Inventory

Consult with RAB and Outreach Evaluation Resource Center on Network Data Inventory

Add question on improving resource to training evaluation

Gather information for site visit

Review report from previous site visit in preparation for visit

Years 1-5
Logic models developed for next year

Reports of activities entered in ARS are produced and reviewed monthly

Review of year's activities against planned goals/outcomes/activities in logic model

Liaison feedback survey

Year 2
Develop questions for Network member and public library focus groups

Consult with Regional Advisory Board and Outreach Evaluation Resource Center on focus group questions

Administer Network Data Inventory

Gather information for site visit

Year 3
Develop presentations when visit scheduled

Share results of Network Data Inventory with Regional Advisory Board, NLM and other regions

Hold focus groups

Year 4
Share results of focus groups with Regional Advisory Board, NLM and other regions

Review site visit report for suggested changes and enhance regional programming

Year 5
Develop Network Data Inventory for Y1 of next contract

A12 - Network Feedback

Statement of Work
Obtain ongoing feedback from users about their information preferences, needs and uses, and recommending ways of improving health professional and consumer access to information

Applicable NN/LM Goal
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;

Objectives:

Obtain ongoing feedback from users about their information preferences, needs and use

Recommend ways of improving health professional and consumer access to information

Rationale:

Ongoing feedback from users provides the foundation for the programming of the Regional Medical Library. Network members, librarians, health professionals, and community members make up our user group. It is incumbent on the RML to

listen to their preferences as it relates to delivery, language, presentation, and understandability.

Approach and Methodology:

The Assessment and Evaluation Liaison based at the Bernard Becker Medical Library at Washington University is responsible for coordinating the feedback portion of this program. Staff at all RMLs are responsible for recommending ways of improving health information access.

Feedback from Region

To obtain feedback about Network member needs and preferences, MCR will have conducted two Network Data Inventories and two series of focus groups by the end of the current contract. During the fall of 2002 the Assessment and Evaluation Liaison designed and administered a questionnaire to elicit baseline information and feedback from Network libraries. Between March and July of 2003, MCR conducted a series of six focus groups to ascertain member's views on RML services. Thirty-three librarians from all states of the region participated in the groups. Sessions were held in Denver, CO; Kansas City, KS; St. Louis, MO; and Salt Lake City, UT. Two sessions were held via teleconference with librarians from Nebraska and Wyoming. The data provided to us by our Network members from the Inventory and focus groups were used for program planning during the contract. The Network Data Inventory and focus groups will be repeated during the current contract year 5 to ascertain Network members' perception of the NLM and the RML resources and services. This data will influence our objectives for the next contract. Both the Network Data Inventory and the focus group reports are posted on the RML web site as part of the quarterly report Appendix H.
(*nnlm.gov/mcr/about/qreports/Yr3Qtr4report.pdf*)

The MCR will repeat the Network Data Inventory and member focus groups. We will review and revise the questions in consultation with the Outreach Evaluation Resource Center and Regional Advisory Board. Elaine Graham, MLS, along with the Assessment and Evaluation Liaison, analyzed the data from the 2002 and 2005 Network Data Inventories and wrote the final report. Her experience as an Associate Director for the NN/LM Pacific Southwest Region and with the evaluation data from our first inventories well qualify her as a consultant to analyze and write the report for the 2007 Network Data Inventory. We will compare data collected to data already obtained and use it to inform future planning and programs.

Ms. Graham will also be our consultant in the analysis and technical writing to report the results of the focus groups that are planned for the next contract. We will hold a series of focus groups for Network members. We plan to experiment with videoconferencing in order for participants to see each other and to enlist participants from all over the region. The RML has videoconferencing units that it

will loan to all who want to join a focus group. We will review the questions asked in 2005 to determine whether they are appropriate or need to be revised. For example, we may ask about the usefulness of the virtual reference service in the region in supporting Network members. This question can also be asked in the public librarian's focus group we propose. We plan to hold a series for our Affiliate Network members who are public libraries to ascertain their perspective on the NLM and the NN/LM. State library association meetings appear to be convenient time and location for gathering this group together. The results of the Network Data Inventory and focus groups will be shared with our Regional Advisory Board, NLM and other regions.

Our training evaluation forms will solicit suggestions for improvement of the resource which is the training focus. Responses may refer to the preferred format, usability, and organization of the information. The responses to this question will be summarized in the report of the training and recorded in the Activity Report System so that it can be included in the MCR's quarterly report to NLM.

One of the regional licensing advisory groups is responsible for evaluating potential products. Their evaluation reports may have information about Network and health professional information preferences. The Network Member Liaison, who is responsible for the regional licensing program, will extract any appropriate comments and include them in her Activity Reporting System report so that it can be included in the quarterly report to NLM.

CBO Information Needs and Preferences

The RML has worked with community based organizations (CBO) throughout the current contract. Our successful partnerships include:

- Involvement in Bi-National Health Week. Our Kansas Liaison and Missouri Liaison joined with Alianzas and the Institute for Mexicans Abroad in its Bi-National Health Week. The liaisons became members of the planning group for this event, contributed to a number of activities including demonstrating MedlinePlus en espanol, and continue as planners for this year's Bi-National Health Week.
- Relationships formed with Omaha CBOs. The Community Outreach Liaison has formed relationships with several community organizations. She is a member of the Black Family Health and Wellness Association (BFHWA), and participates each year in the BFHWA Health Fair, where 700 low income residents of Omaha attend to receive screenings and learn about health prevention and treatment. She has also attended several staff meetings of the Nebraska AIDS Project (NAP) and presented at the NAP annual conference.

- The Utah AIDS Foundation (UAF) becoming an Affiliate member. They sent staff to the RML's proposal writing workshop, and submitted a successful proposal for an Access to Electronic Health Information award. In a shared exchange, UAF promotes resources of the NLM and MCR among its clientele and the Utah Liaison promotes the Foundation's services and resource center at meetings she attends.
- Additional relationships established with the Centro Latino de Salud Educacion y Cultura (MO), Johnson County (JoCo) Health Partnership (KS), Denver Healthy People 2010 (CO), and Sisters Together (NE).

All partners are introduced to, and when ever possible trained to use the most relevant of NLM's resources for their needs. Because community organizations tend to rely on soft money, liaisons inform them of NLM and NN/LM funding and offer to serve as consultants in the proposal writing process.

In the next contract we will increase the number of community organizations that we work with, so it is appropriate that we conduct an assessment of their information needs and preferences. Towards the end of the contract, state liaisons will use a variety of methods (e.g., personal discussions, questionnaires, distribution lists) to question the CBOs they have established relations with during the contract. The questions will be developed by the Community Outreach Liaison and Assessment and Evaluation Liaison. One of the questions will be to determine whether the RML's efforts are improving access to health information. The feedback we receive will be compiled and will influence our outreach program directed toward CBOs.

Outcome: - The RML will understand users' information preferences, needs and how they use health information

Indicators: - 85% of all individuals responding to questionnaires, participating in focus groups, completing class evaluations and/or evaluating products provide data about preferences, needs and uses of health care information

- 80% of CBOs responding to questionnaire report the RML has assisted them in increased awareness of and access to health information

Improving Information Access

The feedback that we receive from our Network Data Inventory, focus groups, post-training questions, and from the CBO questionnaire will be reported using our communication tools (i.e., web site, e-news compilation, newsletter). A summary of our findings will be presented in our annual update to Network members.

In order to assist our Network members we will investigate and share new technologies for information access. Our investigation and use of collaborative technologies has already expanded the educational offerings to the region and, we hope, has affected their service and thus the information access of health professionals and consumers. (For more details on our use of collaborative technologies see our response to section A9 and B6 of the statement of work)

The Regional Buying Consortium invites Network members to participate in a consortium where the licenses and pricing of an electronic resource has already been negotiated. It serves many purposes; one of them is to increase the number of electronic resources available in Network member facilities, thereby improving access to health information at those institutions. (For details on the consortium see our response to section A19 of the statement of work)

Our program to facilitate collaboration and partnerships between libraries and CBOs also improves access to health information for their staffs and the consumers with whom they work. There are a number of activities that make up this program:

- Resource Libraries establish a partnership with a CBO
- Outreach funding that can be used to partner with a CBO
- Reimbursements to Network members who provide training to CBO staff
- Exhibiting and presenting at meetings attended by CBO staff
- Promoting NN/LM resources and services
- Assisting CBOs with connectivity
- Publishing in CBO communication tools
- Bringing Health Information to the Community blog

(For more details on our outreach to community organizations see our response to sections B3 and B8 of the statement of work)

Outcome: - Feedback from Network members and CBOs is formulated as recommendations and disseminated across the region

Indicator: - Recommendations are posted to every RML communications tool at least twice a year

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Schedule:

Year 1
Add information preferences question to post-training form

Year 2
Administer 2007 Network Data Inventory

Year 3
Conduct focus groups with members and affiliated public libraries

Year 4
Create and administer questionnaire to CBO partners in the region to determine information needs and preferences and whether RML efforts are improving access to health information

Year 5
Analyze and report results of CBO questionnaire

Years 1-5
Liaisons will use whatever methods are appropriate to compile this information (e.g., personal discussions, questionnaires, distribution lists)

Distribute user feedback information using MCR communication tools

Investigate and share new technologies for information access

Coordinate consortia buying activities

Facilitate collaboration and partnerships between libraries and CBOs to improve access to health information

A13 - Training Facility

Statement of Work
Provide a training facility equipped with personal computers as well as technologies supporting distance learning, including webcasts, and for conducting NLM training classes as outlined in the NN/LM National Training Center and Clearinghouse Statement of Work. There will be one personal computer for every two students. Equipment requirements are in Appendix 3. Priority shall be given for scheduling regional training. When not in use for regional training classes, the facility may be used for other types of training;

Applicable NN/LM Goal
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

Objectives:

Provide a training facility equipped with personal computers for conducting NLM training classes as outlined in the NN/LM National Training Center and Clearinghouse and Clearinghouse Statement of Work

Provide a training facility with technologies supporting distance learning, including webcasts

Rationale:

About thirty years ago the first MEDLINE searching classes were held and since then the services and resources of health sciences libraries have become increasingly technology based. Adult learning stresses the importance of doing in the learning process. Computer facilities where librarians, health professionals, and the community can "do" NLM resources are an important component to providing access to these resources. The bandwidth offered by the Internet and improved applications are moving hands-on training opportunities from a computer lab to the individual desktop. The NN/LM recognizes the advantage of providing anytime, anywhere education, now made possible through technology advances.

Approach and Methodology:

National Training Center and Clearinghouse (NTCC) instructors have held workshops in three facilities in the region during the current contract. In order to bring the training closer to Network members, the Resource Libraries have offered their facilities for the next contract. All Resource Libraries have facilities that meet the requirements for NTCC training. The Education Liaison will coordinate the schedule of training sessions in the region with the NTCC to offer classes at the following libraries:

Spencer S. Eccles Health Sciences Library, University of Utah
Denison Memorial Library, University of Colorado
McGoogan Library of Medicine, University of Nebraska
J. Otto Lottes Health Sciences Library, University of Missouri-Columbia
Bernard Becker Medical Library, Washington University
University of Wyoming Libraries
Creighton University Health Sciences Library
Archie R. Dykes Library of the Health Sciences, University of Kansas

Outcome: - Network members, health professionals and others have facilities in the region where they can be trained to access health information from NLM resources

Indicator: - Each Resource Library hosts at least one training of the National Training Center and Clearinghouse

Distance Education

MCR has been aggressively testing and piloting collaborative technologies that can be also used for distance education. The weekly RML meetings use a combination of videoconferencing and application sharing applications. Several

distance education classes were offered by MCR staff in years 3 and 4. A PubMed class was taught by NTCC staff at the Eccles Health Sciences Library and broadcast to Loma Linda University using NetMeeting.

A class on grant writing was offered to members utilizing the University of Utah telehealth videoconferencing bridge system. The Utah telehealth bridge system is a videoconferencing system that has interactive advantages. It works best with one individual per camera. Participants at all sites are able to see and hear each other and applications, such as PowerPoint and documents etc., can be shared. The MCR has been successfully holding meetings with Resource Library Directors employing this system.

A class on graphic design was offered via Macromedia Breeze. Advantages of Macromedia Breeze include: class members only need a Flash-enabled browser to participate; access to a variety of tools within Breeze, such as a whiteboard, chat, polling, and screen sharing; class members can see and hear the instructor through the use of audio and video; and the class can be recorded so that it can be viewed at a later date. The MCR plans to offer additional classes using this technology in 2005-2006.

In addition to interactive, synchronous distance education classes, the MCR offered members the opportunity to view events around the region using the RealMedia streaming media technology. A mobile video broadcasting unit was configured to allow resource libraries to offer events at any time. Resource libraries may have access to the equipment after a one-day training session. The Technology Coordinator conducted three training sessions for member libraries in years 3 and 4. In Year 4, live streaming media events were offered at the Wyoming Symposium at the University of Wyoming, Creighton University and University of Missouri-Columbia. All streaming media events are archived on the MCR web site so that members can view them at any time. Streaming media was also used to provide member updates and to broadcast events such as the Regional Advisory Board meetings and the NN/LM Site Visit. Additional streaming media training and events will be offered in year 5.

Content to be covered can include and mirror current classes available from RML staff. For example:

- **"Dilbert in the Library," a class on utilizing best business practices and marketing in a library is currently under consideration for development into an online class using open access software (*Moodle*) and an NN/LM server.**
- **Assessment and Evaluation web pages include links to toolkits for self-directed training in evaluation.**
- ***Camtasia* software is already currently being used for self-teaching tutorials, including content on PubMed searching, MedlinePlus searching, NLM overviews, and good consumer health information.**

Training modules for DOCLINE, Loansome Doc, etc. have also been developed and placed on NN/LM national and regional sites.

- **Presentations can also be broadcast using Internet-based meeting rooms such as *Breeze*, which has already been purchased, to provide an interactive approach to learning. Classes can be captured from Breeze to archive for easy access.**
  - **Suggested content includes: Cultural Competence, HIV/AIDS or other language materials**
  - **Technology classes could include: PDA hardware and software, Bluetooth, Blogs, RSS feeds, pod casting, Voice over IP as well as video broadcasting**
- **To demonstrate the strengths of videobroadcasting, any presentation (i.e. mental health, NLM databases etc.) developed in the region can be presented using this medium. We will also consider a videobroadcast on WISER, showing not only web usage but the PDA application as well.**

By creating a schedule of easy to access training opportunities, the RML would hope to not only improve access to content, but at the same time, demonstrate use of technology in delivery of information to librarians, who might not otherwise have the opportunity to explore these technologies. Technology just provides an expanded array of tools to help the trainers get the content to the customer.

As the RML develops its distance training it will distribute via the web descriptive information such as learning objectives, target audiences etc. in a format that is user friendly and assists those in the region to determine the appropriateness of the sessions.

<u>Access Grid</u>
In the next contract MCR proposes to take videoconferencing among the Resource Libraries to the next level. We propose to fund Access Grids at each of our Resource Libraries.

The Access Grid is an open source videoconferencing technology developed for the Internet 2. It was designed for group-to-group interactions via high-speed networking and provides high quality audio and real-time video to provide interactive experiences for users at multiple sites. (*http://foxtrot.ncsa.uiuc.edu:8900/public/AGIB/)* The Access Grid supports interaction among all participants. It is not a one way videostream, or two way desktop videoconferencing, but a videoconferencing system in which all present are equal participants. It has excellent potential for training purposes because the instructor can see and hear all the participants. A hand can be raised for questions and participants can hold discussions just as in an in-person class.

In the MidContinental Region the Access Grid already exists at the Spencer S. Eccles Health Sciences Library and at the University of Wyoming. ~~Eccles Health Sciences Library constructed one in 2004 and has participated in the University of New Mexico's Touch (Telehealth Outreach for Unified Community Health) Project. It was also employed to teach a molecular biology session with an instructor from the University of Washington. The University of Wyoming Access Grid was built with Biomedical Research Infrastructure Network (BRIN) funding from the NIH. The MCR has participated in the Project TOUCH sessions originating out of the University of New Mexico. These sessions included participants from Arkansas, Hawaii, Michigan, New Mexico and North Carolina sharing their use of multimedia in education. It involved presentations, demonstrations of the multimedia products, and discussion by all participants. Each site had more than one participant (New Mexico and Hawaii had up to eight people in their groups) and each site could see all other sites.~~ **During the last contract, both the Universities of Utah and Wyoming were involved in Access Grid projects. The Resource Library in Wyoming is the only Resource Library in the region that has an Access Grid. Since other Resource Libraries do not have an Access Grid, they have not been able to participate in any programs.**

The RML staff at the University of Utah participated in the University of New Mexico's TOUCH (Telehealth Outreach for Unified Communities) project. During these meetings experiences were shared among participants from Arkansas, Hawaii, Michigan, New Mexico and North Carolina. Additionally, the University of Utah successfully offered a molecular biology class originating out of the University of Washington.

The Access Grid at the University of Wyoming is managed by the College of Health Sciences. One of their most successful meetings was with the principal investigators from the six western Biomedical Research Infrastructure Network (BRIN) state programs (Alaska, Hawaii, Nevada, Idaho, Montana and Wyoming). Although the meeting lasted only about 45 minutes, it demonstrated the capacity of the Access Grid technology to bring scientists at widely separated locations together for collaborative projects.

The participation of both institutions in successful Access Grid sessions have proven the concept and demonstrated the benefit of this technology. As reviewers have indicated, the Access Grid is an expensive tool, but one worth the support of the NN/LM. More sites are needed in order for it to

demonstrate its full potential. With only two institutions in a region the tool still cannot be used as a regional collaborative tool, especially when most Network members are in neither of the two states.

There are five Access Grid nodes at Regional Medical Library institutions (University of Maryland, University of Washington, UCLA, University of Illinois-Chicago, and University of Utah). Only at the University of Utah is the Access Grid in the Regional Medical Library. In order to make the Access Grid a tool for health sciences librarians there needs to be an increase in nodes accessible to the Network. The MCR proposes to fund Access Grids at all Resource Libraries in the next contract. ~~The Access Grid will make each of Resource Libraries a conferencing center within their institution, not just for Network members around their state, but also for scientists within their institutions who are involved in group collaborations. The Access Grid increases the opportunity of the Regional Medical Libraries to share expertise in the regions. RML staff or Network members from a single region will now have the technology to offer interactive training to groups of health sciences librarians around the country.~~

The RML with its proposal of building an Access Grid in each Resource Library is building a technology infrastructure within the region that serves multiple purposes. The most obvious is the one that has been described in the response to the RFP. It will provide us with a group communication technology that can be used for meetings as well as for workshops.

This, as well as other distance education technologies, allow us to leverage expertise from anywhere in the world as long as the technology is there to help us make the connection. For example, the Eccles Health Sciences Library has contracted with a former staff member, Nicola Gaedeke, who was part of the team that developed the tutorials for Blast and other gene databases. Ms. Gaedeke used to teach these workshops while she was at the library and we found no one who had her unique combination of skills that could continue offering her courses. Ms. Gaedeke is offering her workshop from Germany through Breeze. The ability to provide this workshop using the Breeze technology was a way to overcome this missing expertise. The Access Grid would give us another option in bringing in expertise to our Network members and would be especially useful when workshops or meetings involve small group work.

Another purpose is that it supports the Resource Library in a leadership position within their institutions as a demonstration center for advanced technology. By introducing faculty, staff and students to the Access Grid, the libraries add a service that supports the sharing of information and facilitates interactions that assist the scholarly pursuit of their affiliated health professionals. Resource Libraries also see the benefit of an Access Grid for health professionals in their community, thereby enhancing the image of their institutions within the community. The Access Grid would

enable the Resource Libraries to become conference centers for community health providers and scientists who are involved in collaborative groups.

In order to support the Access Grid locally, each Resource Library will be required to designate a member of their IT staff to provide Access Grid support. The Resource Libraries currently supply IT staff to support the liaison's IT needs and in the one of the items that is part of the Resource Library Memorandum of Agreement is to, "Provide technology staff and infrastructure to support hardware and software necessary for liaison activities...." The local IT staff will be trained to support the Access Grid at the time of installation. After the training, they will be able to contact the systems staff at the Eccles Health Sciences Library for answers to questions and troubleshooting assistance.

Outcome: - Network members, health professionals and others have facilities in the region where they can be trained to access health information from NLM resources

Indicator: - Distance education events are offered at Resource Libraries

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Schedule:

Year 1
All resource libraries meet facility criteria for NTCC training

Web streaming available at Bernard Becker Medical Library and Eccles Health Sciences Library

Access Grid available at Wyoming University and Eccles Health Sciences Library

Years ~~1-3~~ 2-4
Access Grid constructed at two Resource Libraries each year

Years ~~1-5~~ 2-5
Resource Libraries selected by NTCC will have training sessions

Resource Libraries develop the capability of hosting distance classes

Resource Libraries participate in Access Grid sessions

A14 - Needs Assessment

Statement of Work
Conducting or participating in needs assessments or surveys of users and non-users of NLM and NN/LM products and services, participating in tests of new NLM products and services as well as conducting and/or participating in usability studies of NLM and NN/LM products and services when requested by NLM

Applicable NN/LM Goal
Develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, and the public.

Objective:

Conduct or participate in needs assessments or surveys of users and non-users of NLM and NN/LM products and services

Rationale:

The program of the RMLs is health information outreach and our outreach population includes our Network members, health professionals, and consumers. As stated in *Measuring the difference: guide to planning and evaluating health information outreach*, "The outreach planning process thus begins with a community assessment to understand the context of the group….This process is a critical beginning to planning and evaluating a health information program as it sets the stage for developing overall program goals and objectives."[2]

Approach and Methodology:

During the current contract NLM staff has informally assessed the use of NLM and NN/LM products and services by Network members, health professionals and members of the community. We have reported our findings from exhibits, meetings, and workshops to NLM in our reports.

Using more formal methodologies, MCR will conduct two Network Data Inventories and two series of focus groups by the end of the current contract. During the fall of 2002 the Assessment and Evaluation Liaison designed and administered a questionnaire to elicit baseline information and feedback from Network libraries. An example of the feedback on NLM resources provided in Table 1. Two sessions were held via teleconference with librarians from Nebraska and Wyoming. The data provided by our Network members from the Inventory and focus groups were used for program planning during the contract. The Network Data Inventory and focus groups will be repeated during the current contract year 5 to ascertain Network members' perception of the resources and

[2] Burroughs, Catherine M. Measuring the difference: guide to planning and evaluating health information outreach. Seattle: National Network of Libraries of Medicine, Pacific Northwest Region; Bethesda, MD.: 2000. pp 1-2

services of the NLM and the RML. Resulting data will influence our objectives for the next contract. Both the Network Data Inventory and the Focus Group reports are posted on the RML web site as part of the quarterly report in Appendix H. (*nnlm.gov/mcr/about/qreports/Yr3Qtr4report.pdf*)

NLM & NN/LM Services	Libraries Responding to the Question	Like	Don't Like	Don't Need	Haven't Used Yet
DOCLINE	121	119	0	2	0
PubMed	120	112	4	3	1
MEDLINEplus	119	110	1	2	6

Table 1

Use of NLM Products

In the 2006-2011 contract liaisons will continue to elicit information from members, health professionals, and the community during classes, exhibits, visits, and meetings. All training evaluation forms will include questions about electronic access to health information. The MCR will administer a Network Data Inventory in year 2 of the new contract and will hold another series of focus groups for Network Members in 2008-2009. Public libraries who are Affiliate Network members are growing in number. There are now 61 public libraries in the region that belong to the National Network of Libraries of Medicine. In order to better assess their needs and use of NLM and NN/LM resources and services, we plan to hold a focus group in each state in conjunction with their state library association meeting.

Outcome: - We have identified products and services that are not used and understand reasons for non-use

Indicator: - Questionnaire results reflect user's needs and preferences

Testing of Products and Services

During the current contract MCR staff has provided feedback on the usability of the Outreach and Consumer Health System, the External Exhibit System, the Outreach Activity Report Form, and the mapping system. We have also tested new versions of NLM resources such as the Gateway and forwarded suggestions by users to improve NLM systems. In year 5 of the current contract, we will be participating with the other regions in the re-design of the nnlm.gov web site.

In the next contract we will continue to participate in testing and usability studies so that NLM resources will better meet the needs of Network members, health professionals, patients and communities.

Outcome: - NLM and NN/LM products and services are enhanced through feedback from region's participation in usability studies and testing

Indicator: - NN/LM acknowledges receiving feedback from region

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Schedule:

Years 1-5
Liaisons will elicit information from members and health professionals during classes, exhibits, visits, meetings

All training evaluation forms will include questions about electronic access to health information

Liaisons will assist members and others in the region to identify resources including funding and training to increase electronic access to health information

RML staff will participate in tests as requested by NLM and provide feedback

Year 2
The 2007 Network Data Inventory will ask members about their use of NLM and NN/LM products and services

Year 3
Focus groups will ask Network members and Affiliate members who are public librarians about NLM and NN/LM services and resources

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A15 - Promote Applications for NLM Grants

Statement of Work
Promote and encourage the submission of applications for NLM-sponsored grants

Applicable NN/LM Goal
To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective:

Promote and encourage the submission of applications for NLM-sponsored grants

Rationale:

For small institutions and for hospital libraries in particular, grants provide opportunities for funding that may be beyond the capabilities of local budgets. Equally important, pursuing grants is an excellent survival strategy, as bringing in outside funding increases the perceived value of librarians to their institutions. The grants process can be intimidating with lengthy instructions and enumerable forms to be completed. Even experienced grant writers must carefully examine the fine print so that all the stipulations are met. It is common practice that they call the grants officer for clarification. Applying for NLM grants has become more intimidating for inexperienced health sciences librarians since the elimination of the Internet Access to Digital Libraries grant program. Encouraging health sciences libraries to submit proposals for NLM grants is more important than ever.

Approach and Methodology:

The Library Advocacy Liaison working at the J. Otto Lottes Health Sciences Library at the University of Missouri-Columbia will have primary responsibility for this program.

As part of the Library Advocacy project, all state liaisons will include discussion about grant opportunities in classes and trainings presented to groups, and will continue to promote grant opportunities through regular communication channels such as Plains to Peaks Post and the RML News. ~~MCR staff will promote NLM's Extramurals Program using our normal communication tools. We will announce upcoming deadlines for NLM grants in the "RML News".~~ We will also seek input and participation in promotion from Regional Advisory Board members who may have ideas of how to promote these grants to the constituents with whom they work and serve.

In our presentations about the NN/LM we will include information about the availability of funding from the National Library of Medicine so that more health professionals and community based organizations will view it as a funding agency. **In this contract, the MCR created the "Bringing Health Information to the Community" blog as a tool for communicating with staff at CBOs. The BHIC blog includes the category of Scholarships and Grants. In this category, the Community Outreach Liaison posts grants that CBOs would be most interested in, and this includes NLM grant opportunities, NN/LM regional awards and NIH grants. The Community Outreach Liaison also sends notices of NLM grants to several listservs that have special populations as a focus, such as the DigitalDivide listserv and the**

NETWORK-Black Young Professionals' Public Health Network, Inc. This will continue into the next contract.

Potential Principle Investigators (PIs) for NLM grants are Network members in the region who have successfully proposed and carried out MCR funded subcontracts. As liaisons manage subcontracts, they will determine whether a project could be a pilot for a larger effort and whether it would be appropriate for an NLM grant. If the pilot could be expanded, the liaison will encourage the Network member to apply for an NLM grant. MCR staff will request successful proposals from Network members and obtain their permission to add them to the MCR web site. This will provide those thinking of writing a proposal with a successful example proposal to emulate.

To evaluate the success of our efforts we will annually document the number of proposals on which we consult. Consultation activities will be documented in our Activity Reporting System.

Outcomes: - Increased number of proposals for NLM grants from Network members

- Proposals for NLM grants from Network members who have not applied before

Indicator: - There will be an annual increase of two grant proposals on which RML staff consult that are submitted to NLM

Schedule:

Years 1-5

Promote NLM grants using our communication tools

Include NLM and NN/LM funding in presentations about the Network

Seek input and participation in promotion from Regional Advisory Board members

Actively identify potential projects, looking to MCR funded projects as potential candidates for NLM funding

Document the number of proposal consultations RML staff provide

Add successful proposals to MCR web site

A16 - Consultation on NLM and NN/LM Funding

Statement of Work
Provide consultation to Network members as well as community-based, faith based and other organizations representative of special populations on preparing proposals for projects to compete for NLM and NN/LM funding

Applicable NN/LM Goal
To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective:

Provide consultation to Network members as well as community-based, faith-based and other organizations representative of special populations on preparing proposals for projects to compete for NLM and NN/LM funding

Rationale:

For small institutions and for hospital libraries in particular, grants provide opportunities for funding that may be beyond the capabilities of local budgets. Equally important, pursuing grants is an excellent survival strategy, as bringing in outside funding increases the perceived value of librarians to their institution.

The grants process can be intimidating with lengthy instructions and innumerable forms to be completed. Even experienced grant writers must carefully examine the fine print so that all the stipulations are met and even after the examination may call the grants officer for clarification. Providing consultation for Network members and other organizations that need funding is a way to assure that high quality proposals are received by these agencies.

Approach and Methodology:

Throughout the current contract MCR liaisons have been available to consult with Network members and other organizations applying for NLM and NN/LM funding. As part of our consultation service we discuss the feasibility of the project, help develop an idea, recommend directories that list funding sources, review a proposal before submission and, when appropriate, write a letter of support. Our service is very effective when Network members take advantage of it. For RFPs issued by the MCR, we have noticed that proposals are more successful when a liaison has provided assistance. Proposals that were not funded were rejected for common mistakes (e.g., not following instructions) that would have been addressed in a consultation.

We will promote our consultation services using all of our communication tools: the newsletter, weekly e-news compilations, the Bringing Health into the Community blog, and the MCR web site. **It is challenging to reach special groups and populations who are not members of the NN/LM MCR because**

the MCR has no standard direct communication tool with these groups. To address this problem in the current contract, the MCR developed the "Bringing Health Information to the Community" (BHIC) web log, which is used to gather information related to health disparities and low income health concerns. Readers of the blog can subscribe to an RSS feed, can receive an email each time a post is made, or can subscribe to a daily digest provided by the Community Outreach Liaison. The MCR has a history of communication with these groups through the BHIC blog. The BHIC blog has a regional and national readership that is constantly growing. At this date there are 263 subscribers, composed of staff of organizations such as Catholic Charities, the YWCA, AHECs, public libraries, tribal health organizations and more. In addition to directly reaching the readers of the blog, oftentimes, the BHIC postings are forwarded by readers to others, either individually, or through listservs. Using the BHIC blog to promote the consulting services of the NN/LM will be an effective method of reaching CBOs who are not part of the network, and so do not receive standard communications from the MCR.

The MCR also exhibits and presents at public health and minority health conferences. Attendees at these conferences are composed of staff from CBOs that have health missions as their focus, as well as health care providers from unaffiliated clinics and offices; in addition, staff from public health departments and public health organizations in the region are reached through these presentations and exhibits. Networking and presenting at these meetings is another effective method of communicating consulting services of the MCR to organizations that do not receive standard communications from the MCR.

When we offer presentations at health professional conferences on the NN/LM we will include promotion of our consultation services and examples of projects that have been funded. MCR staff will request successful proposals from Network members and obtain their permission to add them to the MCR web site. This will provide those thinking of writing a proposal an example of how a successfully funded project can be presented.

To improve our consultation service liaisons will participate in one of the proposal writing workshops offered during the contract. In addition we will track the development of the Grants.gov resource. This resource now includes all grants offered by the U.S. government and is working with agencies to standardize their forms. All National Library of Medicine grants can be found on the site as well as the Institute for Museum and Library Services (IMLS), two major funding sources for library projects. Eventually, all proposals to a federal agency will be submitted electronically using a standard form through this web site. Liaisons will also assist with locating foundations and local funding agencies as a source to support projects.

As part of our consultation, we will recommend partnerships between CBOs and members as fundable projects. Liaisons will offer several resources to those who are proposing projects with a community based organization (e.g., the workshop developed by the NN/LM Community Outreach Group on effective practices for community outreach and the bibliography of participatory research that will be available from the MCR web site).

During the current contract the RML held proposal writing workshops in three of the most populous states in the region and taught it successfully to members using videoconferencing. In the next contract we plan to offer our proposal writing workshop via videoconferencing in years 1 and 3. In addition, the workshop will be proposed for the joint chapter meeting of the Midcontinental and Midwest chapters of the Medical Library Association in 2007. J. Randal Johnson, PhD, who has experience as both a proposal writer and reviewer, will team with the MCR's Associate Director, who is knowledgeable about funding from her work with the NLM and the RML. The workshop, *Grantwriting for $uce$$* uses the logic model to outline the decisions that are required and to build the components of a proposal before writing even begins. Participants are asked to come prepared with a project idea that they want to have funded. Both instructors work with the participants to develop their ideas, to identify possible organizations to approach, and to write an outline of their proposal. A presentation that will offer an introduction to proposal writing will be developed for meetings where participants may not be ready to write a proposal but are interested in the components of proposal writing. The Assessment and Evaluation Liaison will develop self-instruction modules that will assist members to create logic models. The modules will be available from the MCR web site and incorporated into the proposal writing workshop.

Outcome: - Increased number of successful proposals, NLM, NN/LM and other funding

Indicator: - The number of proposals funded by NLM, NN/LM, and other funding will increase by five each year

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Schedule:

Year 1
Liaisons take grant training workshop

Add tools for logic model development to MCR web site

Years 1-3
Offer proposal writing workshops

Years 1- 5
Promote consultation services on preparing proposals for funding

Include promotion of consultation services and examples of projects funded in presentations on the NN/LM

As part of our consultation, encourage partnerships between CBOs and members

Encourage and teach Network members about successful partnering practices with CBOs

Year 2
Add questions on the 2007 Network Data Inventory regarding NLM, NN/LM, or other funding Network members have received

Years 2-5
Post successful grant and award applications on MCR web site

A17 - NLM Funded Projects

Statement of Work
Follow up on NLM-funded grants in the region to keep abreast of project developments, to share progress, and to integrate results into appropriate regional programs

Applicable NN/LM Goals
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public

To develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, community organizations, network members and the public

Objective:

Keep abreast of NLM funded project developments to share progress

Rationale:

NLM funded projects illustrate new ideas in health informatics that could be implemented in the region.

Approach and Methodology:

Keep abreast of RML and NLM funded project developments

The MCR has a process in place for keeping abreast of RML funded projects. A primary liaison and a back up liaison are assigned responsibility for monitoring the status of every subcontract that the MCR awards. This involves reviewing and approving the quarterly and final reports, answering any questions the award recipient may have while carrying out the project, consulting if issues arise in the implementation of the award, and approving Outreach Activity Report Forms. Subcontractors are required to send the MCR a copy of promotional and training materials produced as part of the project. MCR will continue this process. Liaisons will also encourage PIs to publish results in peer reviewed journals and will require that publications that result from RML funded projects be added to PubMed Central.

To facilitate sharing information about the projects as well as the lessons learned from the project, the MCR will institute new requirements for each subcontract. A project wiki will be developed for members to share their projects, ideas and experiences. Other members in the region will be invited to contribute their projects to the wiki even if they are not funded by an external source. MCR will develop a training session on how to use the project wiki. These training sessions will be offered through distance education. Instructions will also be available from the wiki page. In year 3 of the contract MCR will evaluate whether or not the project wiki page contributes to sharing, whether or not it should be revised, and whether or not it should be continued.

Another requirement that will be added to RML subcontracts is that members conducting outreach projects must submit their lessons learned to the Effective Practices Collection. This is a database established by the Corporation for National and Community Service, the group that funds Americorp and other volunteer organizations. Staff reviews the submissions to determine if the content is reliable. The resource was developed as a way for their agency personnel to share practices but the collection is open to submissions from any service program. This depository was discovered through our partnership in Tribal Connection Four Corners (TC4C). TC4C is an outreach project funded by the National Library of Medicine through the NN/LM MidContinental Region. One of the objectives of this project was to share the lessons learned. Following its investigation of resources for sharing effective practices, TC4C decided to add its practices to the Effective Practices Collection.
(http://www.nationalserviceresources.org/epicenter/)

To monitor NLM funded projects, state liaisons will annually contact new recipients of NLM funding to determine whether the project would be of regional interest and applicable to regional programs. These projects are listed on the Extramural Program Awards page and on the AIDS Community Outreach

Projects page. PIs will be asked to share with the RML copies of reports submitted to NLM as well as any publicity their project may have received. They will be encouraged to add their projects to the wiki. Network members who receive non-NLM funding will also be asked to share reports with the MCR and add their project to the wiki.

Recipients of awards will be highlighted in the "RML News", our weekly compilation of news distributed through our discussion list. Projects that would be of interest to health sciences librarians will be spot lighted on the MCR web site with a brief description of the project. We will promote the project wiki in our newsletter, weekly news compilation, in messages to local discussion lists, and blog.

MCR will invite members whose projects have wide interest or application to share their methodology and results through a streaming videobroadcast. In this way we hope to disseminate ideas throughout the region. The broadcast will be archived and made available from the MCR web site.

Outcome: - Outputs of NLM and RML projects are shared

Indicators:
- 100% of RML funded outreach projects are submitted to Effective Practices Databases
- 100% of RML funded projects are submitted to Wiki page
- 100% of RML funded projects are available in PubMed Central
- Two projects will be presented via video broadcast

Integrating Results of NLM Funded Projects

In order to integrate results of the grant projects into regional programming, MCR staff will start by reviewing projects funded between 2001-2006. We will then decide which projects have aspects that should be adopted. PIs from those projects will be invited to present their accomplishments in a streaming videobroadcast to the region. Liaisons will encourage those who conducted outreach projects to contribute to the Effective Practices Collection. MCR will review completed projects to integrate into regional programs throughout the contract.

Using an instructional guide, liaisons will be trained on how to add data and use the Effective Practices Collection. They will be better able to assist Network members who want to contribute to and retrieve health information related practices from this collection. This resource will be recommended to the region for use by members who are interested in outreach. A link to the Effective Practices Collection will be added to the MCR web site.

Outcome: - NLM funded projects serve as a model when designing regional projects/activities

Indicator: - One NLM funded project serves as a model when designing projects in the region

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Schedule:

Year 1
Develop a project wiki for Network members to share projects, ideas, and experiences

Develop instruction on how to use the project wiki

Review projects from previous contract

Determine which projects should be adopted by others. Develop a presentation to demonstrate projects

Ask subcontractors of 2001-2006 outreach projects to add lessons learned to Effective Practices Collection

Add requirement for contribution to Effective Practices Collection to subcontracts

Train liaisons on how to input data and use the Effective Practices Collection

Years 1-5
State liaisons will contact recipients of NLM funding for copies of reports and publicity the project has received

Encourage Network members who receive non-NLM funding to add projects to the Wiki page

Assist Network members to add data to the Effective Practices Collection

Encourage PIs to publish results in peer reviewed journals

Require publications that result from RML funded projects to be added to PubMed Central

Liaisons are assigned to manage specific RML projects

Year 2
Promote use of Effective Practices Collection within the region

Add a link to Effective Practices Collection from Assessment and Evaluation section of the MCR web site

Years 2-5
Promote the project wiki

Year 3
Assess usefulness of the project wiki

Years 3-5
Videobroadcast and archive presentations on selected projects

Review completed projects to integrate into regional programs

A18 - Electronic Fund Transfer System

Statement of Work
Participate in the Electronic Fund Transfer System (EFTS) through the University of Connecticut and promote Network member participation in EFTS

Applicable NN/LM Goal
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objectives:

Participate in EFTS

Rationale:

The Electronic Fund Transfer System (EFTS) is an efficiency that has been made available to DOCLINE users. Because DOCLINE routes randomly among selected libraries holding the article, the accounting for interlibrary loan departments requires billing and paying a number of institutions. EFTS simplifies and economizes the accounting process for institutions by requiring payments to one source.

Approach and Methodology:

The Network Member Liaison based at the Spencer S. Eccles Health Sciences Library at the University of Utah has primary responsibility for this program.

EFTS Advisory Group

One RML staff member and two Network members currently serve as members of the EFTS advisory group; they include the MCR Network Membership Liaison, a representative from an academic library and a representative from a hospital library. We will continue this representation in the next contract by selecting librarians from the list of EFTS participants. The names and contact information will be made available on the MCR web site.

Outcome: - RML staff and Network members will support the activities of EFTS

Indicator: - Three librarians from the MidContinental Region participate as members of the EFTS advisory group

Market EFTS in the Region

In the current contract we have promoted EFTS participation by publishing an article by members explaining the benefits of the system. We have endorsed it at MLA chapter meetings and at local consortia meetings. In the next contract MCR staff will promote EFTS membership in the following ways:

1. Publish information about EFTS membership in RML publications
2. Distribute EFTS promotional materials to member libraries.
3. Develop an instructional module on EFTS for the MCR web site
4. Determine barriers to library participation
5. Investigate mandatory EFTS participation as a requirement for full membership

Outcome: - More libraries in the region will participate in EFTS through the University of Connecticut

Indicator: - By the end of Year 5, 113 Network Members will participate in EFTS (about 23 members per contract year)

EFTS Participation and Network Membership

The RML staff supports participation in EFTS because it eliminates the need for billing for document delivery and results in cost savings for our member institutions. Although we believe that EFTS has regional value, we do not want to lose members or to cause a decrease in document delivery activities and are proceeding cautiously toward EFTS participation as a requirement for full Network membership. We do not know all the barriers for participation and have not even begun to work with members or with EFTS in coming up with solutions. If EFTS becomes a criterion for full Network membership, it will be in the next contract when the obstacles for EFTS participation have been overcome.

Before requiring EFTS participation as a criterion for full Network membership, the MCR will need to be assured that it understands why members are not participating, resolve the barriers for participation, and provide enough transition time for Network members to join EFTS before the requirement is put into effect. MCR estimates that in the next contract, barring any unforeseen circumstances, EFTS participation will be a requirement for membership.

MCR staff will produce a list of members who are not participating in EFTS by comparing EFTS' list of participating libraries with our Network member list from DOCLINE. Using this list we will send an email to the libraries to solicit their reasons for non-participation. We will work with members and EFTS to eliminate the barriers identified for the whole term of the contract.

In year 2 MCR will formally announce to the region that the RML is considering EFTS participation as a requirement for full membership. This announcement would appear using all our communication tools and appear regularly throughout the rest of the contract so that Network members will be aware of the new requirement and will have enough time to influence our decision. In order to gather feedback from our Network members and prepare them for the new membership requirement, we will facilitate discussions on the barriers to participating in EFTS and the impact a participation requirement has for current Network members. These discussions would take place at local consortia meetings, during visits to member libraries, and at chapter meetings. In informal settings, liaisons will gather anecdotal data about non-participation and the impact of an EFTS requirement for Network membership.

After evaluating the feedback and the participation rate for EFTS, MCR will decide in year 5 whether or not to require EFTS membership as a criterion for full Network membership. An announcement will be made using all the MCR communication tools.

Outcome: - EFTS participation is or is not a requirement of full network membership

Indicator: - Publication of this decision in official RML publications—web site, "RML News", "Plains to Peaks Post"

Schedule:

Year 1
Query membership not using EFTS on reasons for non-participation

Years 1-5
Liaisons will keep EFTS promotional items in stock to distribute to Network members

Publish info about EFTS in RML publications

Distribute EFTS promotional materials to member libraries

Work with Network members to overcome barriers to participating in EFTS

Work with EFTS to overcome barriers to participating in EFTS

Review number of libraries participating in EFTS and evaluate change

Year 2
In 2007 Network Data Inventory include questions that will help determine why members do not participate in EFTS

Announce to region that RML is considering EFTS participation as a requirement for full membership

Years 2-5
In visits and meetings RML staff will gather anecdotal data about non-participation in EFTS and an EFTS requirement for Network membership

RML staff attending consortia meetings will facilitate discussions about non-participation in EFTS and an EFTS requirement for Network membership

Year 3
Develop instructional module on EFTS for the MCR web site

Year 5
Decide and announce decision about EFTS requirement for Network membership

A19 - E-Licensing

Statement of Work
Assisting Network members with negotiating e-licensing agreements that meet the needs of their institutions and support the mission of the NN/LM by providing resources on and training in e-licensing issues.

Applicable NN/LM Goal
To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective:

Assist Network members with negotiating e-licensing agreements that meet the needs of their institutions and support the mission of the NN/LM

Rationale:

An NN/LM E-Licensing Working Group was formed in 2004 to respond to concerns of Network members related to the challenges of negotiating license agreements that preserve the services that libraries have traditionally offered (i.e., to unaffiliated users and document delivery). In its December 1, 2004 report at the RML Directors meeting the NN/LM E-Licensing Working Group recommended that the NN/LM:

> Assist PALs (primary access libraries) with participation in group licensing by making funding available to:
>
> 1. Create or develop group licensing initiatives and
> 2. Provide seed money to PALs for initial purchase of digital resources

Opportunities for participation in group licensing agreements for PALs vary greatly by Region. States often fund access to databases, but e-journals are rarely selected to meet the needs of medical libraries in non-academic settings. Often, the only way hospital libraries can afford e-journals is through deep discounts offered by consortia or other group licensing efforts. Access to such a group is often restricted by geography or membership requirements. Existing groups that have succeeded in pricing and contract negotiations have taken years to develop to this level (e.g., *http://www.njha.com/librarysection/healthlibrary.html*).

Approach and Methodology

In 2002 the NN/LM MidContinental Region assessed the region to establish a baseline on its Network members. The assessment showed that MidContinental Region Network members strongly called for regional licensing. This message came from both academic and hospital libraries. In response, the MidContinental RML established the MCR Regional Buying Consortium advisory group in 2004. The group worked with Bibliographic Center for Research (BCR) to initiate regional licensing. The first licenses have been negotiated, with participation by libraries beginning in 2005. BCR will serve as the negotiating and billing agent.

BCR is a nonprofit, multistate library cooperative that has served the library community by providing cost-effective library and information services. (*http://www.bcr.org/about/)* It has an excellent reputation. Dave Brunell, the director of BCR, was a member of the E-Licensing Working Group and of the MCR Regional Advisory Board. He is very aware of the licensing expectations of the NN/LM.

Extending MCR Regional Buying Consortium to Additional Regions

The MCR Regional Buying Consortium consists of two advisory groups. The licensing advisory group is responsible for the licensing of electronic resources and the other group is responsible for the evaluation and recommendation of new electronic resources for possible licensing. The licensing group has written principles guiding license negotiation and the selection of shared electronic resources. In year 5 of the current contract, they will write the policies and procedures for selecting group members, for determining the resources to be offered, for offering trials of resources for Network members to test, accepting licenses proposed by vendors, and apportioning participant payment. The second advisory group is being formed in year 5 of the current contract. Its first responsibility will be to create an evaluation form that will be used to determine whether or not a resource should be recommended for regional licensing. Members will then write the group's policy and procedures.

During the term of the proposed contract the NN/LM MCR will invite the South Central Region, the Pacific Southwest Region and the Pacific Northwest Region to extend the MCR Regional Buying Consortium into their regions. BCR is willing to continue as the negotiating and billing agent for this multi-region buying consortium. A librarian from each of the three regions being invited to join the consortium will become members of the MCR Regional Buying Consortium licensing advisory group. This librarian may be an RML staff person or a librarian selected by the RML. The expanded licensing group will establish new policies and procedures to encompass Network members from other regions.

When the policies and procedures are in place the RMLs will promote participation in the regional buying consortium to their members. This will involve the recruitment of members to the licensing advisory group as well as to the group responsible for evaluating products. The RMLs will share responsibility for developing and maintaining a web site that will keep participants abreast of resources that have been recommended, are available for trial, and are being negotiated. The RMLs will solicit suggestions for resources to be evaluated through this web site and through other RML communication media.

A goal for extending the MCR's Regional Buying Consortium to other regions is to gain additional benefits for the MCR's participants. With more participants prominent and popular resources such as *Up to Date* and *MD Consult* may be willing to negotiate with us. To date they have not be willing to discuss an affordable pricing structure. An increased number of participants may also result in even better rates and savings. We currently have 19 libraries signed up for *ACP PIER* and 3 for *Access Medicine*. We will soon start licensing for *Evidence Matters*. Savings for *ACP Pier* participants is 45% off the price of a single seat.

It has been the policy of the RMLs to foster new projects with the expectation that if they are successful the support of the RML will no longer be needed. Towards the end of the contract, or when the processes are established and shown to be stable, the RMLs will start the transition of the licensing group to an independent organization. This will involve review and revision of the policies and procedures to determine how the advisory groups will operate, fill their leadership positions, and continue promoting their services. It may be that the groups will want to contract out some of their responsibilities. The RMLs may contribute to this transition with financial support until both the exact costs and the details of how the participants can underwrite those costs can be determined.

Outcome: - Network members from multi-regions will have e-license agreements through the a multi-regional buying consortium

Indicators: - Participants in the regional buying consortium will receive least a 10% savings for Network members. This percentage will be based on the participant's price for a single seat versus the vendor's price for one seat

- Libraries from MCR and at least one other region will license e-resources through a multi- regional buying consortium

- 50 Network members will participate in the multi-regional buying consortium

MCR Regional Buying Consortium

Even as we expand our regional buying consortium to include other regions, we will continue to work within the MCR. We will continue to promote participation by libraries in the MCR Regional Buying Consortium. We will continue to solicit recommendations from Network members to determine what products should be considered. We will facilitate trials of products that are being considered for regional licensing so that our Network members can make educated decisions on whether or not to join in licensing a resource. Through the 2007 Network Data Inventory and the 2008 focus groups we will evaluate satisfaction of participants with the regional e-licensing process.

Outcome: - Regional e-licensing results in lower costs for our members

Indicators: - Twenty Network members in the MCR will license e-resources through the regional buying consortium

- There will be a 10% cost savings for participating members

Resources for Electronic Licensing

There are local consortial buying groups in the region. The Health Sciences Librarians in Kansas City, the Intermountain Health System librarians in Utah, the Denver consortium, and a group of health sciences librarians in Missouri are the few that are known to us. There are also individual librarians who are responsible for negotiating licenses for their own institutions. It is for these health sciences librarians that the MCR will provide resources and training on negotiation and electronic resource licensing in the region.

We have already seen that licenses for electronic resources can deny document delivery or add extra steps in order to provide the service. Vendors may require that an electronic document be printed before being delivered as an interlibrary loan. The worst case scenario is that the Network no longer provides equal access to health information because of licensing restrictions.

As one of its first activities, the licensing advisory group for the MCR Regional Buying Consortium developed a "Statement of Principles Guiding License Negotiation" that requires document delivery. It states "The Licenses should permit the transmission of copies of parts of electronic publications for the purpose of non-commercial document supply between a Network member and a requesting library that is not a member of the Network as permitted under the Fair Use Guidelines. A part may be an article contained in a periodical publication or a reasonable portion of a work. Permitted methods for transmission should include electronic transmission, for example, Ariel." These principles are used by BCR when negotiating with vendors on behalf of the consortium.

MCR will make available resources on the web to assist Network members in their negotiations for electronic resources. We purchased access to netLibrary and offer a collection of e-books in the areas of technology and library management. In the next contract, we propose to add to the topics that we cover in our collection by including e-books on negotiation and licensing. These resources will be made freely available to Network members in order to assist them in negotiating licenses of electronic resources.

For those members who are negotiating their own licenses, we will include links on the MCR web site to resources that provide clauses for e-licenses that will permit document delivery. We will also include statements that can be found in licenses that restrict document delivery—a 'Negotiator Beware' link. ~~MCR will compile a list of conditions and clauses for e-licenses to assist health sciences librarians in reviewing licenses. We will include links to resources that provide clauses for e-licenses~~. Excellent sites are MLA's Resources on Electronic Licensing (*http://www.mlanet.org/government/licensing/index.html*) and also ARL's Licensing Electronic Resources. (*arl.cni.org/scomm/licensing/licbooklet.html*) MCR staff will contribute sites such as these to the nnlm.gov e-journals page.

Liaisons will monitor usage in their states, by contacting purchasing consortia to determine if they are using e-licensing materials that the RML has made available to them.

Outcome: - Network members use resources provided by the RML to negotiate e-license agreements that support equitable access to health information

Indicator: - At least seven Network members will use resources provided by the RML to negotiate effective e-license agreements

Training for E-Licensing and Negotiating

The MidContinental Region includes librarians in the region with significant experience working with electronic licenses; these librarians are very familiar with the issues involved. The RML will enlist these experts to provide a presentation on negotiating licenses. This presentation will be broadcast and archived on the MCR web site. **In the training sessions that will be taught in the region, the importance of negotiating a license that allows document delivery of electronic resources will be highlighted.**

In years 2 and 4 the MCR will sponsor a journal club on e-licensing and negotiating issues using collaborative learning technologies. The journal club will incorporate the resources available from MLA such as the excellent broadcast, "The Art and Practice of Electronic Journal, Book, and Database Licenses: Practical Tips for Health Care Organizations," and the follow up, "Tips for Negotiating Electronic Licenses". The MCMLA Research Committee has successfully experimented with a chat journal club so we know that holding a journal club with participants at a distance will work.

Outcome: - Network members will negotiate e-license agreements that support equitable access to health information

Indicators: - Network members will attend training on negotiations and the components of a good licensing agreement, and will report that these trainings are effective with a rating of at least 4 on the MLA rating sheet

Schedule

Year 1

Determine interest of other NN/LM regions in collaborating on licensing project

Selected members from regions participate on licensing advisory group

Promote e-licensing program and services of advisory group in participating regions

Develop policies and procedures for multi-regional advisory groups

Recruit evaluators from the participating regions

Review buying groups' principles on licensing standards and selection of electronic resources

~~Monitor netLibrary for new materials on either negotiation or e-licensing~~

Compile list of conditions for e-licenses

Contribute to e-journals page

Recruit e-resource evaluators from working group and project participants

E-resource evaluators will evaluate e-resources and recommend resources for licensing

Years 1-5

Review buying groups' principles on licensing standards and selection of electronic resources

Select and evaluate e-resources for licensing

Work with BCR to negotiate and administer e-licenses for participating libraries

Promote e-licensing program and services of advisory group in participating regions

Query Network members to determine desired products

Facilitate trials for regional licensing

Develop and maintain web site for regional buying group

Contribute to e-journals page on NN/LM web site

Year 2

Add question(s) to the Network Data Inventory to determine participant satisfaction with the MCR Regional Buying Consortium

Sponsor a journal club to address e-licensing and negotiating issues using collaborative learning technologies

Year 3

1Include the MCR Regional Buying Consortium as a program to be discussed in focus groups

Years 3-5
State liaisons will work with consortial buying groups in their states to determine use of e-licensing materials

Year 4
Make changes to regional buying consortium based on feedback from regional evaluations

Sponsor a journal club to address e-licensing and negotiating issues using collaborative learning technologies

Start transition of MCR Regional Licensing group to independent organization structure

Year 5
Determine what leadership roles are needed for the multi-region buying consortium to run smoothly

Determine selection process for leadership roles

Network Infrastructure

Logic Models

Network Infrastructure

A1 – Access to Information Services

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Develop and implement a program designed to provide health professionals in all parts of the region with a basic level of information services which includes: a. Access to books, journal articles, and audiovisuals; b. Access to online databases in the health sciences; and c. Access to reference services	Continue to work with network members to assure information access for health professionals in the region Develop a reference continuity service among network members to provide access to reference services at the hospital library level	Yr 1: Renew network memberships Create a benefits statement explaining the continuity service. Determine interest in the region for continuity service Facilitate consortial agreements to provide reference continuity services by other hospitals and resource libraries. Agreements may be formal or informal and executed between hospital libraries and/or between hospital and resource libraries (ties into emergency planning in the region) Liaisons document continuity of service agreements in the region Yrs 1-5: Identify non member libraries by comparing AHA Guide to Hospitals against current network membership list Yrs 1-5: Encourage non members who qualify to become full or affiliate network members	Membership agreements and documentation Continuity Service Consortia Benefits statement on continuity service	Health professionals at network member institutions have access to information resources and services	Full network membership does not decrease in the region Affiliate membership increases in the region At least one continuity of service agreement is established in each state Number of unaffiliated Loansome Doc users registered with Resource Libraries in the region increases annually by 5%

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Through Regional Advisory board, MCR web pages for health professionals, association listservs and newsletters, and other general news distribution channels, promote Find a Library site and access to reference services at state-funded health libraries for unaffiliated health professionals Liaisons will provide information about Loansome Doc and free full text resources to unaffiliated rural and inner city clinics Determine number of Loansome Doc users in the region			
Develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Develop and implement a program designed to provide health professionals in all parts of the region with a basic level of information services which includes: a. Access to books, journal articles, and audiovisuals; b. Access to online databases in the health sciences; and c. Access to reference services	Establish agreements with network member libraries to provide these services to unaffiliated health professionals	Yrs 1-5: Resource Library subcontracts include provision to provide unaffiliated health professionals with services Encourage 24 7 service to include more resource libraries from this region Promote 24 7 reference service to unaffiliated health professionals Yr 2: Offer regional awards for outreach projects that give priority to training health care	Resource Library agreement	Unaffiliated health professionals have access to health information	Resource Libraries report Loansome Doc agreements and activities Resource Libraries report an increase in 24 7 questions Awards will be made to Network members to provide outreach and training to health professionals in rural and inner city areas who do not have easy access to

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			providers in inner city and rural areas who have limited access to biomedical resources Yr 4: Offer regional awards for outreach projects that give priority to training health care providers in inner city and rural areas who have limited access to biomedical resources			biomedical information
Develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Develop and implement an agreement program with network member libraries designed to provide health professionals in all parts of the region with a basic level of information services	Where no agreements exist, the RML will provide basic levels of service at cost recovery	Agreements with Network members and Resource Libraries cover all parts of the region RML will provide basic services at cost recovery should there be an area not covered	Contract	All unaffiliated health professionals in the region will be provided with basic levels of service	NN/LM Contract is awarded for NN/LM MCR

Network Infrastructure

A2 – Needs of Health Sciences Libraries

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicators
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Support programs to improve the transfer of health care and biomedical information within their institutions and through their participation in the network	Assess the needs of health sciences libraries to support programs to improve the transfer of health care and biomedical information within their institutions and through their participation in the network	Yrs 1-5: Gather information at local and regional meetings, and through informal visits to assess needs (Data gathered from the visit checklist will be added to contact database) Yr 2: NDI Questionnaire administered Yrs 2-3: Questionnaire results compiled and report published Yr 3: Hold focus groups with network members Yr 4: Focus group results compiled and report published	Questionnaire Focus group questions Reports Data added to contact database	The needs of health sciences libraries to support programs to improve the transfer of health care and biomedical institutions are known	Health Sciences librarians in all states indicate that they provided feedback to the RML about their needs
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public		Respond to the needs of member health sciences libraries improve the transfer of health care and biomedical information within their institutions and through their participation in the network	Yrs 1-5: Design programs based on needs articulated on questionnaire in focus groups conducted in Y5 of previous contract, and years 2 and 3 and data gathered from the visit checklist Promote programs that are responding to the needs addressed Conduct programs designed as a result of questionnaire, focus group responses and data gathered informally	programs	Programs are designed and carried out that meet the identified needs of health sciences libraries	Health sciences librarians in the region report that RML programs support their work to improve the transfer of health care and biomedical information within their institutions

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicators
		Promote the use of relevant NLM services, e.g., LinkOut, PubMed, etc	Yrs 1-5: Liaisons are added as instructors for classes developed by NN/LM and classes identified in the NDI ~~Offer and promote sessions using Access Grid ex: PubMed Update~~ Offer and promote liaison led and NTCC led classes on NLM products and services Promote and facilitate LinkOut, Docline, Loansome Doc and other relevant NLM services to member libraries - will include information about these services as part of the standardized modules in the MCR web page so liaisons can add them to their presentations as appropriate - periodic postings to MCMLA listserv of information about the services with links to MCR web site http://nnlm.gov/mcr/services/technology/ and http://nnlm.gov/mcr/rsdd/docdelivery.html where information is currently maintained - include these services in conversations during visits, at appropriate library meetings/exhibits - use RML communications tools (web, listserv, blog, newsletter, conversations at meetings/exhibits) to remind members, affiliates and others that liaisons are available to assist with activatin of LinkOut, docline and loansome doc problems/services and other NLM services available to them	Classes linkout loansome doc memberships efts	Health sciences libraries use NLM services	Health sciences librarians report that classes they take increase their use of NLM services

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicators
			Yrs 2-5: **- Offer and promote sessions using Access Grid ex: PubMed Update**			
		Test new features of NLM services	Participate in testing at the request of NLM and provide feedback	Feedback to NLM	NLM services are improved through RML feedback	NLM reports that feedback from RML staff contribute to improvements in services features
		Identify the need for new or enhanced NLM services	Report to NLM data gathered from NDI, focus groups and informal visits Share with NLM and various coordinator groups suggestions and observations from liaison's experience	Feedback Reports	NLM is aware of needs articulated within the Region	Data from questionnaires and focus groups are sent to NLM and shared with appropriate RML staff

Network Infrastructure

A3 - Emergency Preparedness Plan

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
	The NN/LM MCR, in cooperation with the other NN/LM regions, will develop an inter-regional emergency preparedness plan to be used in conjunction with the NLM's National Emergency Preparedness Plan	Eight Associate Directors will work together and with the NNO and NLM to develop a core set of components to be addressed in an inter-regional emergency preparedness plan Write draft of NN/LM Inter-Regional Emergency Preparedness Plan (please note: in the event of an emergency in the MidContinental Region, the New England Region staff will provide the services not available in that region) Help NLM identify resources within the MCR region to assist in planning a National Plan List of emergency numbers for the NN/LM MCR will be sent to NLM	Yr 1: Send a list of emergency numbers for the NN/LM MCR to NLM (please note: The NN/LM MCR and the NER staff will exchange contact info (name, position, home phone #, cell phone #, work phone #) for the AD plus one other designated emergency contact) Help NLM identify resources within the NN/LM MCR to assist in the formation of a National Plan Identify existing preservation and disaster networks within the NN/LM MCR and report to NLM Provide comment and feedback to NLM on the draft National Plan Publicize the "progress" of the creation of the National Plan to the NN/LM MCR Yr 2: Update emergency information and forward it to NLM and the NER Identify anticipated needs for library materials / information resources during different stages of a disaster, and for different kinds of disasters Review existing resources on emergency preparedness, including the *Algorithm for Disaster Information Preparedness:*	Established meeting times when ADs discuss these issues Consistent, understandable core set of statements or useful materials that will be used to create an inter-regional plan List of NN/LM MCR emergency contact numbers List of preservation/ disaster networks within the NN/LM MCR Yearly message on MCMLA listserv or on MCR web site regarding National Plan List of libraries that can provide support during a disaster Draft of regional plan highlighting	A National and Regional Emergency Preparedness plan will be in place to provide guidance for the NN/LM MCR in case of emergency	A set of understandabl e, consistent among the regions, core set of statements and useful materials will be created A yearly updated list of emergency NN/LM MCR contact numbers will be created and maintained A list of preservation and disaster networks within the NN/LM MCR will be created A hierarchy of libraries document (including contact information and other

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
		Submit draft of plan to the NNO for review and comment Make final regional plan available on the NN/LM intranet Provide comment and feedback to NLM on the draft of the National Plan Publicize the final National plan to the NN/LM MCR	*Checklist for Medical Librarians Third Edition – Revised* 05/11/05, created by the New Jersey Association Library Write draft of NN/LM Inter Regional Emergency Preparedness Plan Publicize the "progress" of the creation of the National Plan to the NN/LM MCR Yr 3: Update emergency information and forward it to NLM and the NER Submit draft of regional plan to the NNO for review and comment Make final regional plan available on the NN/LM intranet and publicize to Network members Publicize the "progress" of the creation of the National Plan to the NN/LM MCR Yr 4: Update emergency information and forward it to NLM and the NER Create a hierarchy of libraries within and across regions to identify a natural chain of support in the case of an emergency Publicize the "progress" of the creation of the National Plan to the NN/LM MCR Yr 5: Update emergency information and forward it to NLM and the NER Publicize the final National Plan to Network members in the NN/LM MCR	key aspects		special information) that can serve as support will be developed The inter-regional plan is available from the NN/LM web site

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
	The NN/LM MCR, in cooperation with the other regions, will develop a network strategy to provide document delivery and access to collections in the event of a regional or national disaster	Create a hierarchy of libraries within the NN/LM MCR and across regions to identify a natural chain of support in the case of emergency Work with Resource Libraries to have them negotiate with vendors to incorporate into their e-licensing agreements language that will permit the transmission of documents to libraries affected by disaster Create a process to provide uninterrupted document delivery service for Network members	Yr 1: Create a list of libraries, in a hierarchical format, which serve to support Network members in case of emergency. Identify library contacts that can serve to assist with a "network strategy" Draft a statement of consistent, clear language that libraries can share with their vendors to include emergency type situations Yr 2: Vendor statement approved by NN/LM MCR and NLM Yr 3: Create a draft of a step-by-step approach to provide document delivery service (Draft will include resource library contacts, turn around time for document delivery, how long the supported service will last, what types of materials will be supported, how will billing be handled, what vendor resources will be available) Yr 4: Draft will be approved by NN/LM MCR and NLM. Network strategy will be publicized	List of libraries providing support Vendor statement Network strategy document	Document delivery and access to health sciences collections will be supported in the case of an emergency	A list of libraries that provide support to Network members during an emergency will be created A consistent "vendor statement" will be created to illicit vendor support during an emergency A network strategy will be formulated and publicized that supports document delivery during emergencies

Network Infrastructure

A4 – Historical and Unique Materials

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Assist NLM with the development and implementation of a plan to identify collections of historical and unique materials related to the health sciences	Work with NLM to arrive at a practical definition of and scope for "historical and unique materials related to the health sciences"	Yrs 1 -5: MCR representative will work with NLM and the interregional group by holding quarterly teleconferences Yr 1: Regional advisors will be identified and work with NLM and the interregional group to determine the nature of assistance required Liaison will work with NLM and the RML staff to identify regional advisors	Regional advisor group for historical materials Good definition of "historical and unique materials related to the health sciences"	More historical and unique materials related to the health sciences will be identified and accessible to the public	There will be an increase in resources identified and added to NLM's "Directory of History of Medicine Collections" or another publicly accessible database
		Collaborate with NLM and the other regions in the development of a national plan to identify these collections	Yrs 1 -5: Liaisons will work with NLM and the interregional group by holding quarterly teleconferences Yr 1: Regional liaisons will be identified and work with NLM and the interregional group to determine the nature of assistance required Liaison will work with NLM and the RML staff to identify regional advisors Yrs 2-3: Based on NLM's definition of	Plan for identifying historical and unique collections at the national level with the regional component defined	More historical and unique materials related to the health sciences will be identified and accessible to the public	There will be an increase in resources identified and added to NLM's "Directory of History of Medicine Collections" or another publicly accessible database

			"historical and unique materials related to the health sciences" develop plan			
		Begin implementation of the national plan in the region	Yrs 4-5: Implement plan Provide regular feedback to NLM on progress Yr 5: The interregional group will submit a final report of the development and implementation of the national plan to NLM, including the regional component	Plan for identifying historical and unique collections at the national level with the regional component defined Materials will be added to NLM's "Directory of History of Medicine Collections" Or another database to be accessible to the public Public feedback Final report of the interregional group	More historical and unique materials related to the health sciences will be identified and accessible to the public	There will be an increase in resources identified and added to NLM's "Directory of History of Medicine Collections" or another publicly accessible database
		Establish a regional digital depository for Network members (non-Resource Libraries)	Yr 4: Establish depository servers Hire consultant for regional depository project Select pilot project library Carry out depository pilot Yr 5: Promote regional depository to Network members Train Network members to organize and add content to depository	Organizational structure for depository Metadata schema Materials from libraries Training materials	More historical and unique materials related to the health sciences will be identified and accessible to the public	Materials are added to regional depository from at least 10 Network member libraries

Network Infrastructure

A5 – Network Membership

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
Develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Manage the NN/LM network membership program for the region	Recruit new network members and affiliates from eligible libraries in the region Provide network membership certificates for the 2006-2011 time period (In the current contract 93 new members were added in the MCR)	Yrs 1-5: Review and update regional membership policies and procedures to ensure efficient and timely response to membership applications Yr 1: Update membership brochure as necessary Update policies and procedures as necessary Add membership applications and member benefits to MCR web site Update list of non-member public libraries, academic libraries supporting health science programs Create a Potential Member list consisting of public libraries, special libraries involved with health information, public health departments with a library within the MCR region	List of new members (both full and affiliate) Updated membership brochures and benefits of member statements and policies and procedures web site updated with membership information List of potential members for recruitment	Eligible libraries within the region will become members of the NN/LM	25% of the eligible libraries from the Potential Member List will become either full or affiliate members

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			(This is will be compiled from a variety of sources and will serve as a pool of potential members. This list is also the baseline from which the indicator will work) Yr 2: Maintain updated membership brochure and membership application and description of member benefits Maintain membership application and description of member benefits on MCR web site Contact non-member health science libraries within region to promote benefits of NN/LM membership (This is the same process as the first activity in B7) Contact non-member public libraries and other non-member libraries concerned with providing health information within region to promote benefits of NN/LM membership. Examples of these libraries are non-			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			member public libraries, special libraries (found in the SLA directory and information solicited from other network members, state libraries) Promote NN/LM membership and provide membership brochures in all trainings and presentations conducted in the region (If the trainings are for full Network members, this will serve to remind our member of the benefits of membership, and will provide them with information to share with potential members) Yr 3: Follow up on non-member hospitals and health care institutions contacted in Year 2 Follow up with non-member public libraries, special libraries and public health departments contacted in Year 2 Maintain updated membership brochure			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Maintain membership application and description of member benefits on MCR web site Promote NN/LM membership and provide membership brochures in all trainings and presentations conducted in the region Yr 4: Follow up on non-member hospitals and health care institutions contacted in Year 2 Follow up with non-member public libraries, special libraries and public health departments contacted in Year 2 Maintain updated membership brochure Maintain membership application and description of member benefits on MCR web site Promote NN/LM membership and provide membership brochures in all trainings and presentations conducted in the region			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Yrs 1-5: Compile membership statistics on numbers of new full and affiliate members within region			
Develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Manage the NN/LM network membership program for the region	Ensure full participation by member libraries in DOCLINE which includes entering profile information about their libraries and keeping both profile and holdings information up-to-date	Yrs 1–5: Enter member profile information when enrolling new member (This information should be reviewed yearly to ensure accuracy. In the review of this information this year, considerable time was spent making sure all the records were up to date, accurate and consistent between the membership database and DOCLINE) Publish update reminders to help member libraries keep their Institutional Records and Serial Holdings current Publish notifications of new Docline training modules in MCR publications (RML News, Plains to Peaks Post) Link from MCR web site to DOCLINE and membership tutorials on	Up-to-date DOCLINE records	Member libraries will keep their Institutional Record and Serial Holdings up to date	The number of libraries included on the Serial Holdings Not Updated in the Last Year will decrease by 10% yearly 100% of network members will be contacted yearly to make sure Institutional Records are updated

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			the NN/LM web site Update Affiliate member information as soon as notified of changes Liaisons instruct and remind affiliate members to notify state liaisons of changes in institutional information Update web-based instruction modules for Serial Holdings and Institutional Record information as necessary Review DOCLINE reports to monitor whether members have updated serial holdings, and if their records are correct, to monitor fill rates of resource libraries, and Level 2 holdings of member libraries Contact member libraries yearly to ensure that Institutional Records are accurate and up to date			
Develop collaborations among network	Manage the NN/LM network membership	Work with the DOCLINE Team on DOCLINE	Yrs 1-5: Attend Monthly DOCLINE teleconferences and post minutes in Quickplace	Items on Network Data Inventory Feedback from	NLM DOCLINE team will receive feedback from Region 4 network	A representative from Region 4 will attend all DOCLINE

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	program for the region	system enhancement testing and implementation Attend monthly DOCLINE teleconferences Assist DOCLINE team with beta testing as requested Solicit input from member libraries about DOCLINE features and pass information along to DOCLINE team	Notify MCR members of new features and enhancements in DOCLINE Yr 2: Query membership about DOCLINE services and suggestions for enhancements in Network Data Inventory Forward results to the DOCLINE team	network members on Network Data Inventory Minutes from DOCLINE teleconferences Items and articles in MCR communication tools (newsletter etc)	members on DOCLINE services and system enhancements	teleconferences and report any significant changes or improvements to network members Feedback collected from member libraries will be passed along to DOCLINE team
Develop collaborations among network members and other organizations to improve access to and sharing of biomedical information	Manage the NN/LM network membership program for the region	Actively involve network members in NN/LM infrastructure and outreach programs, including obtaining feedback on regional and NLM programs	Yr 2: Query membership about NN/LM and NLM programs in the Network Data Inventory Yr 3: Hold focus groups for members in the region Yr 4: Hold focus groups for	Regional Advisory Board comprised of network members Network Data Inventory questions on NN/LM and NLM programs	Network members will be actively involved in the NN/LM infrastructure and outreach programs	Network members will serve on the Regional Advisory Board and on work groups for NN/LM member and outreach programs.

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
resources throughout the nation		on a periodic basis (See A11 for more details) Query membership about NN/LM and NLM programs using assessment tools	public library affiliate members Yrs 1-5: Recruit members to serve on Regional Advisory Board Include network members in work groups for NN/LM member and outreach programs Encourage network member participation in NN/LM programs by publishing programming opportunities in Plains to Peaks Post, RML News, MCR web site and on MCMLA-L Promote participation in NN/LM programs in trainings, classes and conferences as appropriate Promote NN/LM programs through collaborations with other existing library organizations, academic institutions, public libraries or other community partners	Feedback from network members on NN/LM and NLM programs Project work groups comprised of network members Contacts in other organizations (public libraries, library organizations, academic institutions, resource libraries, community partners)		

Network Infrastructure

A6 – Document Delivery

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
Develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Provide document delivery in order to provide health professionals including unaffiliated health professionals throughout the region with efficient, rapid access to health sciences information resources The plan for the region shall conform to the NN/LM Document Delivery Plan	Support and promote electronic document delivery in the region	Yr 1: Extract information from Docline to find out who is not using electronic delivery methods Note: 37 libraries now provide electronic delivery through Ariel; 72 provide delivery through Email PDF & TIFF, Web PDF & TIFF Determine which network members provide Loansome Doc services using methods other than electronic delivery. This will be the priority group to encourage offering the e-document delivery service. Contact member libraries to review document delivery guidelines and encourage use of electronic document delivery through visits and publications. Post NLM document delivery guidelines on MCR web site. Yr 2: Create promotional and	List of network members offering electronic document delivery List of network members offering Loansome Doc services, who don't offer e-document delivery Promotional materials for electronic document delivery Articles promoting use of electronic document delivery Information on MCR web site about NLM document delivery guidelines and	Health professionals and unaffiliated health professionals will have access to health sciences information through electronic document delivery.	5 libraries not using electronic delivery methods at the beginning of each year will be using electronic delivery methods at the end of that year.

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
			instructional materials on how to use current and emerging methods of electronic delivery Note: Ariel 4.0 can be purchased for $1295, or licensed on an annual subscription of $498/yr Continue contacting member libraries to review document delivery guidelines and encourage use of electronic document delivery Publish articles on the importance of following NLM document delivery guidelines in RML publications (RML News, Plains to Peaks Post) delivery systems Yr 3: Continue contacting member libraries to review document delivery guidelines and encourage use of electronic document delivery Yr 4: Publish articles on the importance of following NLM document delivery guidelines in RML publications (RML News, Plains to Peaks Post)	promotional material about document delivery Trainings on Loansome Doc Statistics on the increase in use of electronic document delivery		

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
			Continue contacting member libraries to review document delivery guidelines and encourage use of electronic document delivery Yrs 1-5: Review electronic delivery statistics in DOCLINE on an annual basis			
Develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Provide document delivery in order to provide health professionals including unaffiliated health professionals throughout the region with efficient, rapid access to health sciences information resources. The plan for the region shall conform to the NN/LM Document Delivery Plan	Promote Loansome Doc	Yrs 1-5: Develop promotional materials for Loansome Doc Continue to publicize the availability of Loansome Doc to unaffiliated health professionals in trainings, meetings/exhibits, presentations and through promotional materials Contact resource libraries to determine the number of Loansome Doc users	Loansome Doc promotional materials and presentations	Unaffiliated health professionals in the region will be more aware of available document delivery services	The number of unaffiliated health professionals registering to use Loansome Doc services will increase by 5% yearly Note: Statistics from DOCLINE team
Develop,	Provide	Provide training	Yrs 1–5:	DOCLINE class,	Member libraries	The number of

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	document delivery in order to provide health professionals including unaffiliated health professionals throughout the region with efficient, rapid access to health sciences information resources. The plan for the region shall conform to the NN/LM Document Delivery Plan	for member libraries on proper use of DOCLINE	Publish articles in MCR publication on proper use of DOCLINE, and the importance of keeping DOCLINE records updated State Liaisons and Camille Salmond will track the number of questions and topics of questions on DOCLINE Update DOCLINE training modules on web site as needed according to DOCLINE updates. In consultation with NN/LM Docline Coordinators determine additional modules to be added Develop new modules and make them available from the MCR web site Provide links on MCR web site to DOCLINE information on NLM web site Teach at least 3 DOCLINE classes to network members. 3 classes would be at conferences (ie MCMLA or Wyoming Symposium). So far there are no DOCLINE classes being taught in the region, according to ARS	DOCLINE training modules	will be more familiar with DOCLINE and how to use it effectively	questions answered by Camille Salmond and State Liaisons on DOCLINE will decrease by 5% yearly

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
			Add all DOCLINE educational materials to NN/LM's Education Clearinghouse			
Develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Provide document delivery in order to provide health professionals including unaffiliated health professionals throughout the region with efficient, rapid access to health sciences information resources. The plan for the region shall conform to the NN/LM Document Delivery Plan	Monitor member statistics on DOCLINE and work with those libraries whose fill rates are below standard	Yrs 1-5: Monitor document delivery fill rates throughout region and contact institutions whose fill rates do not reflect compliance with NM guidelines to help them improve their document delivery systems	Statistics on document delivery fill rates for regional members Communication with member libraries	Member library fill rates will meet NLM document delivery standards.	75% of member libraries will meet NLM document delivery standards

Network Infrastructure

A7 – Resource Libraries

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
Develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Enter into a formal agreement with at least one institution in each state in the region to serve as a Resource Library	Resource libraries will - Have quality collections that add to the resources of the region -Have expertise in at least one area such as distance learning, advanced technology applications for document delivery, digitization, information research, etc Agree to: - Participate fully in Docline - Contribute holdings to SERHOLD - Provide interlibrary loan services to health	Yrs 1-5: Proof collected annually that document delivery and reference support are provided for public health, public libraries. Reported in RML Annual report OARF input Technology support Administer liaison experience questionnaire Public health department and public library relationships maintained or established Consumer health resources available Yr 1: Sign subcontracts with Resource Libraries Evaluate network infrastructure at RL to	Outreach Activity Report Forms Liaison monthly reports include significant outreach activities/outcomes of non-rml staff Access Grid Liaison experience questionnaire Resource Library Agreements	Resource library staffs are involved in RML outreach activities Resource Library web sites indicate that public libraries, consumers and at least one public health department have access to health information through the Resource Library Resource libraries sponsor events for the region using Access Grid	At least one staff member from each Resource Library is involved in an RML outreach project Document delivery and reference support will be provided for public health, public libraries. For example: Indicated on the resource library web sites The resource library is a participating site for at least one event using the Access Grid

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
		professionals and network libraries - Support Special project and state responsibilities of the RML - Include NLM resources as part of Resource Library outreach - Provide outreach to the public thru consumer health resources on the library web site and/or thru consumer health collection/library - Information about library staff outreach activities will be shared for inclusion in OARF system - State Resource Libraries will serve as a health information resource for a state or local public health department	ensure successful implementation of Access Grid ~~Yr 1-3:~~ **Yr 2-4** Access Grid constructed at 2 resource libraries/year Yrs 2-5: Events will be sponsored at the resource libraries using the Access Grid Yr 5: Evaluate impact of Access Grid			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
		Technology staff and infrastructure is provided to support hardware and software necessary for liaison activities, including, but not limited to connectivity through VRVS, Skype, Breeze, Quickplace - Establish an Access Grid at each resource library or incorporate Access Grid sites in RML events - Directors will participate in regularly scheduled meetings - Directors will serve on the Regional Advisory Board - Resource Libraries will support document				

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
		delivery and reference services for public libraries in their state - Liaisons will participate in an annual review of their RML experience - Reports and invoices are submitted in a timely manner				

Network Infrastructure

A9 - Communication

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region	Publishing and distributing an electronic newsletter to communicate important information about regional and national programs, policies, and procedures to current participants in the region	Yrs 1-5: Publish and distribute "Plains to Peaks" newsletter on a quar Publish and distribute "Plains to Peaks Post" newsletter All print and electronic communication will include an acknowledgment of NLM funding and the NN/LM Logo using the National Network of Libraries of Medicine Graphic Standards dated July, 1992	Quarterly newsletter	Increased collaborations and access to biomedical information via effective communication mechanisms	75% of members surveyed on NDI indicate increased knowledge due to Plains to Peaks Post articles
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region	Establishing and maintaining a regional LISTSERV™ for sharing information with network members, other partner organizations, and health professionals	Yrs 1-5: Maintain listserv Publish weekly RML News via listserv, RSS Feed and web site—blog with real time notification Yr 2: NDI	Listserv RML News	Increased collaborations and access to biomedical information via effective communication mechanisms	75% of members surveyed on NDI indicate increased knowledge due to reading the RML news and listserv postings
To develop collaborations among network	Establish and maintain channels for effective	Develop and maintain a regional Web site as an integral component	Yrs 1-5: Update and maintain content on the web site	Web site Content management system	Increased collaborations and access to biomedical	75% of members surveyed on NDI indicate increased knowledge due to

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region.	of the NN/LM Web site Update and maintain content to the web site regularly In Year 3, conduct a web usability study and adjust web site design to reflect results. The previous usability study will have been conducted in Year 5 as part of the larger NN/LM web site evaluation	Regional blog, Member blog service Maintain web site databases and PHP programming Yr 1: Select and implement open source content management system (CMS) Yr 2: Train liaisons on use of CMS Yr 3: Conduct usability study and adjust web site design to reflect results	Usability study results	information via effective communication mechanisms	reading the web site
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	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region	Producing fact sheets, articles, FAQs, etc. to keep librarians, health professionals and consumers up-to-date about services provided by the RML and topics and issues of current interest in the provision of health information	Yrs 1-5: Maintain and develop brochures Write and publish articles Present RML Updates via electronic media Broadcast regional symposiums These documents will be published on, or linked from, a central server Work with other RMLs and NLM to avoid duplication of effort Maintain brochures for special populations Develop new brochures as	Brochures Articles Monthly RML Updates Archived Videostream of presentations	Increased collaborations and access to biomedical information via effective communication mechanisms	75% of members surveyed on NDI indicate increased knowledge due to brochures, articles, and video streams

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
			needed Write and publish articles for external journals, listservs, and newsletters; post them on the MCR web site Note: this means that author is required to hold copyright Yr 2: NDI			
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	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region	Participating in monthly teleconferences with NLM and the other RMLs to discuss topics of importance in the overall management of the NN/LM program	Yr 4: Question will be added to MCR Liaison Evaluation Survey Yrs 1-5: Participate in monthly conferences Suggest topics Facilitate meetings as requested	Teleconferences	Increased collaborations and access to biomedical information via effective communication mechanisms	Liaisons indicate on MCR Liaison Evaluation Survey that they have increased knowledge of their project areas and NLM services due to monthly teleconferences
To develop collaborations among network members and other organizations to improve	Establish and maintain channels for effective communication with current and potential NN/LM participants, other	Developing working relationships with other networks and relevant organizations by identifying common program interests and goals,	Yrs 1-5: Attend meetings and exhibits and note contacts made with current and potential NN/LM participants Make contacts and maintain list/database of notable	Regular communications with contacts BHIC Blog	Increased collaborations and access to biomedical information via effective communication mechanisms	Each liaison in RML will use at least three local communication mechanisms to communicate to current and potential NNLM

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
access to and sharing of biomedical information resources throughout the nation	RMLs, NLM, and other state and multi-type library networks within the region	working to develop regular lines of communication and developing appropriate cooperative programs	person(s) for potential collaboration Push information appropriate to the group, electronically to contact through BHIC Blog, RML news, MCMLA list serv , through liason e-mail contacts. i.e. Push phPartner information to Public Health contacts in state Participate on other organization lists, communication media to include Public Health and Public Library and library consortia Use institutional resources (people) as contacts to other organizations. i.e. a Public Library contact may have access to another library consortia			members in addition to Plains to Peaks and RML news
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region	Fostering opportunities for network members to collaborate with CBOs as part of their outreach effort	Yrs 1-5: Submit presentations and brochures to NTCC Baseline MCR contributions to NTCC possibly by state? Explore with NTCC Add to announcements of funding Requirement of subcontractors Liaisons will work with their own resource library staff by meeting with Resource Library	Communication Infrastructure Outreach to Native Americans meeting	Sharing plans and status of projects would provide a basis for building on others' experiences, support the develop of resources that would be useful for more than a single community, distribute the workload in	The communication infrastructure will be used by all interested network members and RML staff in the five NN/LM regions

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
			staff and encouraging them to add materials to NTCC Liaisons will work with their local health sciences library organizations to add materials to NTCC		developing resources, and expand the infrastructure (organizational, communication, technology) that is needed for integrated outreach	
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region	Informing NLM about regional, state and local activities of health professionals and health sciences libraries, networks, and other organizations as they relate to the programs of the NN/LM, NLM and the national information infrastructure	Yrs 1-5: Continue to investigate and implement videoconferencing and VoIP technologies Offer video streaming events to network members ~~Offer videobroadcast streaming training to 3 sites each year~~ Explore podcasting (method of publishing audio files that allows users to subscribe to a feed and receive new audio files automatically) and other new technologies yet to be identified	Quarterly reports Reports responding to requests OARFs Exhibit reports		Four quarterly reports, and annual report, OARFs, exhibit reports, and project descriptions are submitted in a timely manner
To promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within	Assisting in the identification of training resources to be added to the National Training Center and Clearinghouse database	Yrs 1-5: Attend annual RML Directors meeting Suggest topics Facilitate discussion as requested Attend mid-year RML Directors meeting	Presentations Educational Resource entries		Contributions from MCR have increased by 10% per year to NTCC Explore number of hits on NTCC web site (This information cannot be tracked by state but by individual liaison

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
emphasis on contributing to the Healthy People 2010 goal of eliminating health disparities	the region					since name is a component of the submission information.)
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	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library networks within the region	Participate in/testing/using other methods of communication, such as videoconferencing, computer conferencing		Videobroadcast events Videoconferences VoIP conferences Training sessions		~~At least three videobroadcast events per year provided by the RML and/or Network members~~ ~~Videoconferencing used by members and liaisons at least twice a year in each state~~
To promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a	Establish and maintain channels for effective communication with current and potential NN/LM participants, other RMLs, NLM, and other state and multi-type library	Attending annual RML Directors' meetings and mid-year RML Directors' meetings		Meetings		Liaisons indicate that they have increased knowledge of their project areas and NLM services due to Director's meetings

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	Indicator
particular emphasis on contributing to the Healthy People 2010 goal of eliminating health disparities	networks within the region					

Network Infrastructure

A10 – Regional Advisory Board

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	The Regional Advisory Board (made up of health professionals, health sciences librarians from hospital libraries and other large and small medical libraries within the region, representatives of state library agencies, public and school libraries, public health, health information consumer groups, special populations, as well as representatives of community organizations)	Liaisons will suggest potential advisory board members Recruit from ALA's movers and shakers, NLM's Biomedical Library and Informatics Review Committee Director and Associate Director will finalize board member selection	Yrs 1-5: New members selection and orientation prior to annual RAB meeting Consult on emergency preparedness plans	List of board members on the web Advisory board member written article Article introducing the board in newsletter Announcement of board activities in the RML News Minutes of board meeting in the quarterly report	A board that represents the different groups that the RML is partnering with	The Board includes a representative from: Each state in the region Each special project area The pool of resource library directors MCMLA
	The RAB functions effectively	Each RAB member serves on at least one liaison working group RML expectations for the advisory board members are spelled out Members advise on appropriate mechanisms for developing and	Yr 1: ~~Purchase videoconferencing equipment for board members~~ Yrs 1-5: Advisory Board members are assigned to a specific	Assessment tool Summary of board assessment of their experience Minutes of RAB meeting in the Quarterly report	An effective board More interaction between board members and RML staff	Each liaison will have at least 4 contacts (email, visits, phone calls, videoconference) concerning RML work /yr recorded in the

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
		implementing programs to improve health professionals' and consumers' access to biomedical information Establish regional priorities, policies and procedures, including the development and implementation of a regional emergency preparedness plan Conduct review and evaluation of RML programs in the region in year 3 Develop plans to encourage health professionals and health sciences librarians to participate actively in regional and national programs affecting the delivery of health information Assist the RML in identifying health professionals without access to health information and recommend ways to assist them through NN/LM programs Assist the RML in reviewing proposal for subcontracts Assess the RAB experience for each member--annually and at term end Visit by RML staff to board member institution when in the neighborhood Hold annual meetings of the RAB ~~one day before the MCMLA~~	project area. Liaison reviews logic model with member Assess RAB experience Introduction of major new developments of NLM resources will be scheduled during the year Test video-equipment with board members Yrs 2-5: Purchase videoconferencing equipment for new board members			ARS with board member in addition to the annual meeting Advisory board members recognize the name and the major purpose of primary NLM resources (Annual review of experience) Each advisory board member will either make at least one suggestion or provide advice once a year to the RML (at a board meeting, work group meeting, or to liaison or associate director OR will facilitate RML contact with their constituent group during the year as recorded in Minutes or ARS

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
		~~chapter meeting~~ **RAB meeting will be held via distance teleconference in Year 1** Quarterly contact with board member and liaison (doesn't have to be 1 on 1) Board member assists RML to reach the constituency that the member represents (Network members, public libraries, public health workforce etc). By this we mean: o Promote NLM resources o Forward message from RML o Provide feedback on specific issues o Provide ideas on how to best communicate with this population. o Provide insights into the organizational structure, culture of this populations o Provide perspective on how population would react to RML plans. Board member makes presentations to Network o On their organization o On their area of expertise				

Network Infrastructure

A11 - Monitor and Evaluate

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
Develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, and the public The RML is effective in making health information available across the nation	Develop a formal mechanism for evaluating regional programs in consultation with the NN/LM Outreach Evaluation Resource Center and the Regional Advisory Board	Employ logic models for annual planning, collect data about activities conducted and relationship to planned activities; review progress toward achieving goals and outcomes in logic model; modify activities to ensure that goals and outcomes are addressed Resource library feedback Liaison feedback	Yrs 1-5: Logic models developed for next year Reports of activities entered in ARS are produced and reviewed monthly Review of year's activities against planned goals/outcomes/activities in logic model Liaison feedback survey	Reports based on ARS and OARF data OERC Regional Advisory Board	Evaluation plan for the RML gathers data on how the RML contributes to improved access to health information by health professionals, and the public	Reports from the ARS describe activities that contribute to improved access
	Develop a mechanism to provide NLM with regular feedback about NLM and NN/LM products and services from individuals and constituent groups	Repeat the Network Data Inventory and Member focus groups already developed - Compare data collected to data already obtained and use to inform	Yr 1: Work with other RMLs to establish core set of measures to be used in evaluating each RML Develop Network Data Inventory (24 7) OERC and RAB consulted on NDI Add question on improving resource	Quarterly report Feedback thru Docline "Ask a Question"; NLM CustServ or contact NLM staff directly	NLM receives feedback about its products and services as collected and reported by the RML	Quarterly reports and reports as requested are submitted to NLM RML will receive a 4 rating on Responsiveness to NLM in contract evaluation

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
		planning and program (tie this to objective) - Incorporate feedback to questions about improving the NLM products in post training evaluation in our report - Record informal feedback from ARS to ensure inclusion in quarterly reports to NNO -Conduct multi-region comparison and use results to enhance regional plan	to training evaluation Yr 2: OERC and RAB consulted on focus groups Yr 3: Results of Inventory reported to NN/LM, RAB, shared with other regions Focus Group(24 7) Focus group of public libraries who are affiliate members at state library association meeting (24 7) Yr 4: Results of focus groups reported to NN/LM, RAB, shared with other regions Yr 5: Planning for Network Data Inventory Y1 of next contract			
	Participate in a site visit and review of the regional program, to be conducted at least once during the contract, by selected representatives from NLM, the RAB, and at least one other RML	Gather information to demonstrate RML program effectiveness Develop presentations Publicize and invite network members to participate	Yr 1: Gather information Review report from previous site visit in preparation for next visit Yr 2: Gather information Yr 3: Develop presentations when visit scheduled Yr 4: Review site visit report for suggested	Data to be shared with site visit team Report to be shared with region	Site visit team is enthusiastic and supportive of RML programs and services	Report Contains no surprises indicating that the RML is aware of its strengths and weaknesses

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
			changes, enhance regional programming			

Network Infrastructure

A12 – Feedback

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
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	Obtain ongoing feedback from users about their information preferences, needs and uses	Administer Network Inventory Questionnaire and conduct focus groups Include a question on each course evaluation form that seeks information preferences Arrange for product evaluation for consortia purchase Obtain information from regional CBOs on information needs and preferences	Yr 1: Add information preferences question on evaluation form; Yr 2: Administer network inventory; Yr 3: Conduct focus groups with members and affiliated public libraries Yr 4: Product evaluation; obtain information from regional CBOs on information needs and preferences; determine whether RML efforts are aiding access to health information Liaisons will use whatever methods are appropriate to compile this information (e.g. personal discussions, questionnaires, distribution lists) Yr 5: Analyze and report results of CBO questionnaire	Classes Newsletters Questionnaires Web pages	The RML will understand users' information preferences, needs and how they use health information (Note: "Healthy People objectives have been specified by Congress as the **measure for assessing the progress** of the Indian Health Care Improvement Act, the Maternal and Child Health Block Grant, and the Preventive Health and Health Services Block Grant" and "a set of standardized measures for health care purchasers and consumers to use in **assessing performance of managed care organizations** in the areas of immunizations, mammography screening, and other clinical preventive services")	85% of all individuals responding to questionnaires, participating in focus groups, completing class evaluations and/or evaluating products provide data about preferences, needs and uses of health care information

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
	Recommend ways of improving health professional and consumer access to information	Post information on our web site Place information in weekly newsletter Publish in quarterly newsletter Discuss in our annual update at chapter meetings Investigate and share new technologies for information access Coordinate consortia buying activities Facilitate collaboration and partnerships between libraries and CBOs for access to health information	Yrs 1-5: Post information on our web site Place information in weekly newsletter Publish in quarterly newsletter Discuss in our annual update Investigate and share new technologies for information access Coordinate consortia buying activities Facilitate collaboration and partnerships between libraries and CBOs for access to health information	Same as above *****	Recommendations are formulated and disseminated across the region	Recommendations are posted to every RML communications tool at least twice a year 80% of CBOs responding to questionnaire report the RML has assisted them in increased awareness and access to health information

Network Infrastructure

A13 - Training Facility

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
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	Provide a training facility equipped with personal computers for conducting NLM training classes as outlined in the NN/LM National Training Center and Clearinghouse and Clearinghouse Statement of Work	Make training available from our resource libraries Identify resource libraries that meet the criteria for NTCC training Resource libraries meeting criteria are sent to NTCC to schedule training	Yr 1: All resource libraries offering training will meet criteria Yrs 1-5: Resource libraries selected by NTCC will have training sessions	Equipped training facilities	Network members, health professionals and others have facilities in the region where they can be trained to access health information from NLM resources	Each Resource Library hosts at least one training of the NTCC
	Provide a training facility with technologies supporting distance learning, including webcasts	Provide facilities for distance classes through Access Grid, streaming services, Breeze (?)	Yr 1: Streaming available at Becker and Eccles Health Sciences Library Access Grid available at Wyoming and Eccles Health Sciences Library ~~Yrs 1-3:~~ **Yrs 2-4** Access Grid constructed at two Resource Libraries each year Yrs ~~1-5:~~ **Yrs 2-5** Resource Libraries develop the capability of hosting distance classes Resource Libraries participate in Access Grid sessions	Facilities equipped for distance education	Network members, health professionals and others have facilities in the region where they can be receive distance education	Distance education events are offered at Resource Libraries

Network Infrastructure

A14 – Assessment

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
Develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, and the public	Conduct or participate in needs assessments or surveys of users and non-users of NLM and NN/LM products and services	Document NLM products used and not used as reported through contacts made during exhibits, informal meetings, outreach classes, Network Data Inventory, and focus groups	Yrs 1-5: Liaisons will elicit information from members and health professionals during classes, exhibits, visits, meetings All training evaluation forms will include questions about electronic access to health information Yr 2: Network Data Inventory will ask members about their use of NLM and NN/LM products and services Yr 3: Focus groups will ask Network members and Affiliate members who are public librarians about NLM and NN/LM services and resources	Questionnaire results ARS records with information elicited from members, etc	We will have identified products and services that are not used, understand reasons for non-use	Questionnaire results reflect users needs and preferences
	Conduct or participate in needs assessments or surveys of users and non-users of NLM and NN/LM products and services	Participate in tests of new NLM products and services and conduct and/or participate in usability studies of NLM and NN/LM products and services	Yrs 1-5: RML staff and RML members particpate in tests as requested by NLM and provide feedback.	Usability Studies	NLM and NN/LM products and services are enhanced through feedback from region's participation in usability studies and testing	NN/LM acknowledges receiving feedback from region

Network Infrastructure

A15 – Promote Applications for NLM Grants

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Promote and encourage the submission of applications for NLM-sponsored grants	Promotion through our communication tools	Yrs 1-5: Promote NLM grants using our communication tools Include NLM and NN/LM funding in presentations about the Network Seek input and participation in promotion from Regional Advisory Board members Actively identify potential projects, looking to MCR funded projects as potential candidates for NLM funding Document how many proposals RML staff consult on Add successful proposals to MCR web site	Items and articles in Newsletter, weekly update, blog; PPT slideshow; List messages	Increased number of Proposals from Network members Proposals for NLM grants from Network members who have not applied before	There will be an annual increase of 2 grant proposals that receive consults from RML staff submitted to NLM

Network Infrastructure

A16 - Funding Consultation

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Provide consultation to network members as well as community-based, faith-based and other organizations representative of special populations on preparing proposals for projects to compete for NLM and NN/LM funding	Promote our consultation service: review of proposal, feasibility of project, letters of support Offer a grant training workshop—1 day and shorter intro version –state library assn meetings, consortia meetings Track Grants.gov for when NLM is accepting applications through this site	Yrs 1-5: Newsletter, weekly update, blog Web site will include information on consultation services Yr 1: Liaisons take grant training workshop Yr 1 and Yr 3: Electronic Grant training workshop, priority Network members, open to all Yr 2: Offer it at MCMLA 2007 (interregional chapter meeting) Yrs 1-5: Follow Grants.gov progress Yrs 2-5: Post on MCR web site successful grant and award applications Yr 3: Question on NDI regarding NLM, NN/LM, other funding received	Items and articles in Newsletter, weekly update, blog; lists PPT slide show Grant training workshop NDI question Presentation for health Conferences Articles in newletters, posters and presentations that demonstrate successful partnerships between network members and CBOs Examples of successful grant and award applications	Increased number of successful proposals, NLM, NN/LM and other funding	The number of proposals funded by NLM, NN/LM, and other funding will increase by 5 each year

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Yrs 1-5: Offer presentations at health conferences that we exhibit at to present examples of projects awarded, and role of MCR in offering awards Yrs 1-5: As part of our consultation, we will encourage partnerships between CBOs and members Yrs 1-5: Encourage and teach network members on successful partnering with CBOs (COG Group is developing an Effective Practices of Community Outreach Class: Assessment & Evaluation and Community Outreach Liaisons – bibliography of Participatory Research)			

Network Infrastructure

A17- NLM Funded Projects

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
To develop tools and conduct evaluation activities to understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, community organizations, network members and the public	Keep abreast of NLM funded project developments, to share progress	Keep abreast of RML and NLM-funded project developments	Yrs1-5: A liaison will contact recipient of any kind of NLM funding to discover information applicable to regional programs and interest Yr 1: Develop a Project Wiki page for network members to share projects, ideas, and experiences Yrs 1-5: Add information to wiki and recommend that it be added to appropriate sharing sites Ask for copies of reports submitted or publicity received Yrs 3 and 5: Selected funding recipients will share project methodology and results using video broadcast technology and archived on NN/ LM web site Yrs 2-5: RML promotes Project Wiki with Newsletter, weekly update, blogs, lists Yr 1: Develop a resource on how to use a Project Wiki Yrs 1-5: Subcontractors for outreach projects are required to submit to the Effective	Project Wiki materials produced by funding are added to NLM, NN/LM resource pages like the Education Clearinghouse Highlight regional awards received by recipients on web site spotlight section and/or RML news	Outputs of NLM and RML projects are shared	100% of RML funded outreach projects are submitted to Effective Practices Databases 100% of RML funded projects are submitted to Wiki page NLM and other funded projects are publicized in RML publications

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Practices Resource Encourage PIs to publish results in peer reviewed journals Require publications that result from RML funded projects to be added to PubMed Central Encourage Network members who receive non-NLM funding to add projects to the Wiki page Liaisons are assigned to manage specific RML projects and follow up on NLM funded projects			
	Follow up on NLM-funded grants in the region to keep abreast of project developments to Integrate results NLM funded projects into appropriate regional programs	Identify projects that can serve as program models Extend the models via regional programs throughout the region Track Network members who receive non-NLM funding	Yr 1: Review projects from previous contract Determine which should be adopted by others. Develop a presentation to demonstrate projects Request that lessons learned from 2001-2006 projects be added to Effective Practices Resource Add requirement for input in Effective Practices resource to regional RFPs Training for liaisons on inputting into Effective Practices Resource Yr 2: Promote use of Effective Practices Resource within the region Link to web site from MCR web site	Entries in Effective Practices Resource Presentation of model projects	NLM funded projects serve as a model when designing regional projects/activities	One NLM funded project serves as a model when designing projects in the region

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Training on how to search for NLM & NN/LM MCR funded projects in the Effective Practices Resources Assist subcontractors with input Yrs 3-5: Promote use of Effective Practices Resource within the region Assist subcontrators with input Review completed projects to integrate into regional programs			

Network Infrastructure

A18 - EFTS

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE	OUTPUTS	OUTCOMES	INDICATORS
	Participate in EFTS	One RML staff member and two network members serve as members of the EFTS advisory group	Yrs 1-5: Participate in EFTS advisory group meetings Provide feedback to EFTS from network members in the region	EFTS policies and procedures; EFTS marketing plan and materials	RML staff and network members will support the activities of EFTS	Selected Three librarians from the MidContinental Region will participate as members of the EFTS advisory group
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Promote network member participation in EFTS	Create marketing plan for EFTS including: Publish information about EFTS membership in RML publications Distribute EFTS promotional materials to member libraries Develop instructional module on EFTS for the MCR web site	Yrs 1-5: Get a list of regional participations from EFTS web site Compare EFTS participation and evaluate change State Liaisons will keep EFTS promotional items in stock to distribute to Network members Distribute EFTS promotional materials to member libraries Publish info about EFTS in RML publications Yr 3: Develop instructional module on EFTS for the MCR web site	Updated EFTS membership list for MCR; Marketing plan for EFTS membership in region EFTS instructional modules Publications about EFTS membership	More libraries in the MCR will participate in EFTS through the University of Connecticut	By the end of Year 5, 113 Network Members will participate in EFTS (about 23 members per contract year)
		Investigate mandatory EFTS participation as	Note: EFTS has no current or future plans to conduct a survey	EFTS responsibility Evaluation of member participation satisfaction	Increased participation in EFTS in anticipation of it	An indicator that the decision has been made is publication of this

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE	OUTPUTS	OUTCOMES	INDICATORS
		a requirement for full membership	Yr 1: Query membership not using EFTS on reasons for non-participation with EFTS Yr 2: Announce to region that RML is considering EFTS participation as a requirement for full membership Yrs 2-5: Collect and evaluate responses from membership RML staff attending consortia meetings will facilitate discussions re: non-participation and impact of this requirement In visits and meetings RML staff will gather anecdotal data about non-participation in EFTS and impact of requirement Yrs 1-5: Work with Network members to overcome barriers to participating in EFTS	Evaluation of member non-participation	being required for Full Network membership	decision in official RML publications—web site, RML News, P2PP

Note: There are 56 current members of EFTS. The difference between the number of Docline members and the number who are on Freeshare is the minimum that we need for EFTS participation. According to Barb's numbers, the difference is 113 Libraries with in the MCR

Network Infrastructure

A19 – E-Licensing

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES –	INDICATORS
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Assist network members with negotiating e-licensing agreements that meet the needs of their institutions and support the mission of the NN/LM	Provide resources on e-licensing	Yr 1: ~~Add resources on negotiation and e-licensing to netLibrary~~ Compile list of conditions for e-licenses Contribute to e-journals page Yrs 2–5: Contribute to e-journals page Add resources on negotiation and e-licensing to netLibrary (netLibrary currently does not have any materials on either negotiation or e-licensing) Yrs 3-5: State liaisons will work with consortial buying groups in their states to determine use of e-licensing materials	List of license inclusions on web site (conditions and verbiage of e-license agreements) Additional links on the e-journals page (reports and conditions for e-licenses)	Network members use resources provided by the RML to negotiate e-license agreements that support equitable access to health information	At least 7 Network members will use resources provided by the RML to negotiate effective e-license agreements
To develop, promote, and improve electronic access to health information by network members, health professionals, and	Assist network members with negotiating e-licensing agreements that meet the needs of their institutions and	Provide training in e-licensing issues	Yrs 1-5: Training on negotiations Add training materials to NTCC Yrs 2 & 4: Sponsor a journal club to	Broadcasts Archived broadcasts Training materials Collaborative	Network members will negotiate e-license agreements that support equitable access to health information	Network members will attend trainings on negotiations and the components of a good licensing agreement, and will report that these trainings are effective with a rating of at least 4 on

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES –	INDICATORS
organizations providing health information to the public	support the mission of the NN/LM		address e-licensing and negotiating issues using collaborative learning technologies	learning technologies		the MLA rating sheet
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Assist network members with negotiating e-licensing agreements that meet the needs of their institutions and support the mission of the NN/LM	Facilitate Regional E-license agreements	Yrs 1-5: Promote participation by libraries in e-licensing consortia group Implement policies and procedures Facilitate trials for regional licensing Query network members to determine desired products Yrs 2-3: Through Network Data Inventory and focus groups we will evaluate satisfaction with regional e-licensing process Yrs 4-5: Start transition of MCR Regional Licensing group to independent organization structure	All policies and procedures will be on the MCR web site License agreements Promotional materials	Regional e-licensing results in lower costs for our members	20 MCR Network members will license e-resources through the MCR Regional Buying Consortium 10% cost savings for members
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations	Assist network members with negotiating e-licensing agreements that meet the needs of their institutions and support the	Expand licensing project beyond MCR	Yr 1: Determine interest of other NN/LM regions in collaborating on licensing project Select members from regions for participation on advisory group	E-license agreements for multiple regions of NN/LM Advisory group for multi-regional licensing project	Network members from multi- regions will have e-license agreements through the a multi-regional buying consortium	Libraries from MCR and at least one other region will license e-resources through a multi- regional buying consortium 50 Network members will participate in the muti-regional buying

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES –	INDICATORS
providing health information to the public	mission of the NN/LM		Promote e-licensing program and services of advisory group in participating regions Yrs 2-5: Select and evaluate e-resources for licensing Work with BCR to negotiate and administer e-licenses for participating libraries Develop policies and procedures for purchasing group without the coordination of the RMLs	Policies and procedures for operation of advisory group and project		consortium 10% cost savings for members

Regional Services Plan

Part B: Outreach Programs

B1 - Outreach to Health Professionals

Statement of Work
The contractor shall continue to develop, implement, and evaluate targeted outreach programs to bring biomedical information resources within easy reach of U.S. health professionals who still do not have access, with special focus on those in rural areas and inner cities. The RML outreach program shall enlist the assistance of hospital libraries and other Network members, through the use of subcontracts, agreements and other mechanisms, to carry out projects with the following foci:

a. Special populations or subject disciplines that have been identified as priority initiatives (e.g., health disparities, health information literacy, HIV/AIDS, health services research, public health) and that target the health professionals serving those populations or working in those disciplines;
b. Unaffiliated health professionals and health professionals in inner cities and rural areas;
c. Local/state public health departments with particular emphasis on Internet access and collaborations with other organizations/institutions that work with public health personnel;
d. One or two inner-city institutions per year which shall include identifying what the RML can do to improve or enhance the institution's access to biomedical information and developing and implementing a program that responds to identified needs; and
e. Institutions whose objective is to train minority health practitioners or those who serve minority populations, to develop specific linkages so that their health professionals and students have full benefit of the resources of the Network.

Applicable NN/LM Goal
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

Objective:

The contractor shall continue to develop, implement, and evaluate targeted outreach programs to bring biomedical information resources within easy reach of U.S. health professionals who still do not have access, with special focus on those in rural areas and inner cities

Rationale:

Goal 2 of the National Library of Medicine's Long Range Plan is to "Promote use of health information by health professionals and the public". Of special interest to the NLM in addressing this goal is to reduce health disparities. Support of health professionals who are working with underserved communities is a way for the NN/LM to address this concern.[3]

[3] National Library of Medicine. Long Range Plan 2000-2005. [Web document]. Bethesda, MD: N LM; 2001 [rev. 18 Mar 2001; cited 5 Jul 2005].<*http://www.nlm.nih.gov/pubs/plan/lrp00/goal-2-1.html*>

Health Professionals in the MidContinental Region

Regional Totals

Physicians: 21,850
Nurses (RN & LPN): 183,730
Total all Health Occupations: 394,570

State Totals

Colorado

Total Physicians: 7,010
Total Nurses (RN & LPN): 36,600
Total all Health Occupations: 79,280

Nebraska

Total Physicians: 1,590
Total Nurses(RN & LPN): 23,250
Total all Health Occupations: 46,790

Kansas

Total Physicians: 4,410
Total Nurses(RN & LPN): 32,660
Total all Health Occupations: 65,960

Utah

Total Physicians: 1,750
Total Nurses(RN & LPN): 16,540
Total all Health Occupations: 45,530

Missouri

Total Physicians: 6,670
Total Nurses(RN & LPN): 70,070
Total all Health Occupations: 146,430

Wyoming

Total Physicians: 420
Total Nurses(RN & LPN): 4,610
Total all Health Occupations: 10,580

U.S. DEPARTMENT OF LABOR. Bureau of Labor Statistics, Occupational Employment Statistics, May 2004 State Occupational Employment and Wage Estimates. Healthcare Practitioner and Technical Occupations. [Web Document], Washington, DC [rev. 2 June 2005, cited 14 December 2005]. <*www.bls.gov/oes/2004/may/*>

The RML has not found a reliable method for determining the number of health professionals in the region who are unaffiliated with institutions providing library services.

Approach and Methodology:

The 2002 Network Data Inventory gathered information about outreach programs in the region that were being carried out by Network members. The definition provided in the inventory for “outreach” was that “Outreach generally refers to efforts to raise awareness of health information resources among consumers and health care practitioners. A total number of 122 members responded to the inventory; of those, 94 answered this part of the questionnaire. Thirty respondents have “formal outreach programs that target groups or individuals outside” their institution. These members promote their services to public health departments, public libraries, rural health professionals, inner city health professionals, Native Americans, Spanish language speakers, Immigrants and

new Americans, and African Americans. About half of the libraries evaluate their outreach programs.

Focus on Priority Initiatives

The RML will enlist the assistance of hospital libraries and other Network members to focus on special populations or subject disciplines that have been identified as priority initiatives (e.g., health disparities, health information literacy, HIV/AIDS, health services research, public health) and that target the health professionals serving those populations or working in those disciplines.

The 2005 Network Data Inventory will again identify Network members already working with health care professionals who serve special populations. The Assessment & Evaluation Liaison, working with the Community Outreach Liaison, will develop questions to ask these Network members about the assistance the RML could offer to facilitate their services to health care professionals. The questions will be distributed to all state liaisons who will make the actual contact. Each state liaison will use the most effective method for her state (for example, targeted emails). The types of needs that may be identified include: patient education materials, how to work with someone from a specific culture (cultural competency), organizational and web resources. The Community Outreach Liaison will develop classes and make materials available from the MCR web site to address the needs identified in the assessment. Train-the-trainer classes will be developed for Network members so that they can train their health professionals on the course content. Some of the content may already be available in resources such as the "Public Health Information and Data: A Training Manual" and its accompanying tutorial. *(http://phpartners.org/tutorial/index.html)* The liaison will customize existing instructional materials to address the identified needs. The Community Outreach Liaison will pilot these sessions with the state liaisons who will offer them as in-person workshops in their states. She will adapt them and offer the workshops as distance education at least once a year to the region throughout the rest of the contract.

To encourage participants of the train-the-trainer workshops to provide outreach to health professionals who serve priority populations, liaisons will reimburse participant's expenses for providing demonstrations and training sessions. Allowable expenses include travel costs or duplication of materials; they do not include purchase of equipment. Class evaluation forms will be provided by the MCR. The reimbursements will come out of the Resource Library subcontract budgets. Liaisons will follow up via email with Network members to determine the number of classes offered to health care providers who work with underserved populations, who are in public health departments, or who work with HIV/AIDS patients.

CDCynergy
As a member of the Partners in Information for the Public Health Workforce, the NN/LM partnered with the Society for Public Health Education (SOPHE) in 2005 to support their training initiative for CDCynergy. CDCynergy steps public health professionals through the process of running a health communication campaign by providing stages, templates, and evaluation. The Education Liaison will co-teach two CDCynergy workshops in the region. This commitment was part of the training agreement between the NN/LM and SOPHE. A second Network member will also co-teach in the region.

Outcome: - Network members will provide training to health care providers who serve identified populations

Indicator: - Between years 2-5 of the contract, Network members will provide six trainings a year to health care providers who work with underserved populations, who are in public health departments, or who work with HIV/AIDS patients

Focus on unaffiliated health professionals and health professionals in inner cities and rural areas

The RML will continue to train health professionals in searching PubMed and MedlinePlus, and encourage successful partnerships between public libraries with Internet access and rural health providers without access. The RML will also continue to support rural outreach efforts by identifying rural health and hospital web sites that do not have a link to basic NLM resources, as well as training rural health workers on quality health information sites. We will continue to conduct training workshops and attend exhibits with an emphasis on rural health.

The RML will offer three outreach awards for up to $10,000 to Network members in years 2 and 4. Priority will be given to projects that provide outreach and training to health professionals in rural and inner city areas who do not have easy access to biomedical information and who work with underserved populations. Network members will be encouraged to submit projects that involve a partnership with a community organization.

Outcome: - Projects will provide outreach and training to health professionals in rural and inner city areas who do not have easy access to biomedical information

Indicator: - Six awards will be made to Network members to provide outreach and training to health professionals in rural and inner city areas who do not have easy access to biomedical information

Focus on local/state public health departments

The logic model will coordinate responsibilities for public health outreach. The logic model addresses public health outreach in terms of outcomes, the indicators that represent successful attainment of the outcomes, the activities that will be conducted to reach the outcomes and indicators, the schedule for these activities, and the responsible liaisons. For example, in B1c of the statement of work we have two indicators to meet, one that is part of our public health outreach. The indicator for the Online Public Health Library (OPHL) project that is in the process of being implemented in Missouri and Wyoming is: "States (Missouri and Wyoming) will have a process in place to manage access to electronic public health information." The Missouri and Wyoming state liaisons have been assigned this activity for Year 1 of the contract. A project within education has an indicator which states: "5 of the 7 Public Health graduate programs will have incorporated the Public Health Informatics Project." The Education Liaison and state liaisons have been assigned this activity and a schedule has been set for its implementation over the 5 years of the contract.

Accountability has been built into the logic model and the quarterly review of the Activity Reporting System will be used to track progress in meeting our outcomes through the indicators established in the logic model. Ultimately it is the Associate Director who will be responsible for public health outreach as well as all the other activities of the RML.

The Online Public Health Library (OPHL) project, an effort by the Utah Department of Health (UDOH), the Utah State Library Division, the Spencer S. Eccles Health Sciences Library and the MCR, has successfully improved access to electronic UDOH documents by providing links to these documents from the Eccles Library's online catalog. The technical services department of the library receives a description of the resource from the health department and then catalogs it for inclusion in the library's online catalog. Currently, the Eccles Library online catalog has links to 320 electronic UDOH documents. Future plans for this project involve building a DSpace archive of these documents in partnership with the Utah State Library.

State liaisons in Wyoming and Missouri have begun to explore the possibility of implementing this project in their states. The stake holders in each of the states have been identified and discussions begun to determine interest, resources and responsibilities. When processes have been designed and the workflow is tested, discussions about OPHL will begin in another state. The third state to start implementation may be Kansas. The Archie R. Dykes Library of the Health Sciences at the University of Kansas has expressed interest in seeing their health departments' publications more readily available. Each of the projects will be monitored with the intent of learning what processes are created to fit the health department's publication environment. An evaluation tool or measure will

be developed at the beginning of the contract with assistance from the Assessment a nd Evaluation Liaison. The outcome that the RML would like to see at every OPHL site is an understandable and consistent process in place for providing access to the health department's electronic documents. The state liaison, in consultation with the implementation team, will write up the report. A final report will be submitted to NLM and the Partners Steering Committee; the report will compare access to electronic health documents in all states in the region.

The MidContinental Region has seven public health programs and one school offering Master of Public Health (MPH) degrees. Several activities have occurred that promote NLM products and services to graduate public health programs in the region. In Kansas, the public health program at the Kansas University Medical Center requested a one credit hour course on public health informatics for their students. In Missouri, a proposal to NLM for teaching health resources to public health and school nurses has been submitted by the J. Otto Lottes Health Sciences Library, University of Missouri-Columbia. In Utah, a demonstration of NLM products has been given to students of a University of Utah public health research class and discussions are in progress for more classes.

In the new contract, the RML will collect curriculum materials from libraries that are providing public health informatics courses. The Education Liaison will build interest within the MPH program at the University of Nebraska Medical Center to incorporate informatics into their program. Working with her colleagues in the Resource Library, she will create a basic course that will be tested with the MPH program. "Public Health Information and Data: A Training Manual" will be used to develop the course. This course will provide training on public health web sites and the use of mobile technology to access resources such as WISER (NLM's Wireless System for Emergency Responders). (*http://wiser.nlm.nih.gov*) After the curriculum has been successfully tested, the state liaisons will work to get some version of the course incorporated into the curriculum of the MPH programs in their states that do not include a public health informatics component. In some cases this may mean contacting librarians at other institutions and encouraging them to work with their MPH faculty. The materials developed by the RML will be shared.

<u>Outcome:</u> - Network members, public health professionals, and the public will have improved access to public health information

<u>Indicators:</u> - Missouri and Wyoming will have a process in place to manage access to electronic public health information

- Each state will have a designated Resource Library and project manager who will be responsible for their state OPHL project

- Five of the seven public health graduate programs will have incorporated a basic public health informatics class into their curriculum

Focus on Inner City Institutions

One method of focusing on inner city institutions is to have them serve as active participants in our organization. The Community Outreach Liaison has a work group in Omaha that assists her in program development and implementation. The work group always includes a representative from an inner city organization. In the current contract, Florence Brown, Administrator of the Women's Health Center in Omaha, represented an inner city community organization on our Regional Advisory Board. In the new contract, a representative from an inner city organization will be considered annually for membership on MCR's Regional Advisory Board.

In order to identify needs of inner city and rural institutions, the Community Outreach Liaison will coordinate a series of Café to Go[4] sessions. Café to Go is a group process that "fosters collaborative dialogue, active engagement, [and] constructive possibilities for action."

The MCR will gather a group of members from CBOs and community health clinics in a relaxed setting to discuss pre-established topics or questions. Every round table will have a different question and people will move from table to table at regular intervals until everyone has had the opportunity to discuss all the questions. The mix of the group can remain stable or be self-determined so that with every new question an individual may talk to a different mix of people. Summaries of all the different discussions for a single question are presented to the whole group to conclude the café.

This process was used by the Community Outreach Liaison with her work groups to elicit suggestions for the 2006-2011 NN/LM contract. The MCR proposes to use this process to brainstorm and develop strategies for addressing both the information needs and the Internet connectivity needs of community based organizations and community health centers.

Café to Go sessions will be held in each state. State liaisons will identify and invite inner city and rural community organizations and community health centers to participate. Network members will be invited to facilitate the table discussions. The MCR will develop projects and facilitate partnerships between organizations and Network members based on the suggestions that result from the

[4] World Café Community. Café to Go: A quick reference guide for putting conversations to work. [Web document]. Whole Systems Associates, c2002 [cited 5 Jul 2005]. *<http://www.theworldcafe.com/cafetogo.pdf >*

discussions. For example, the Nebraska AIDS Project wants to store social services data on a PDA. When they are working on the streets they need to be able to access this information in order to make referrals. A library with the skills to organize information and to properly format data on a hand held device would be a welcomed partner. Liaisons will track the projects that result from the Café to Go process. In the last year of the project, proposals to present papers/posters describing the use of Café to Go as a project development tool will be submitted to appropriate meetings.

Outcome: - There will be increased access to biomedical information by unaffiliated inner-city institutions

Indicators: - One inner city staff member is considered for Regional Advisory Board membership each year

- Six Café to Go sessions are held

- Presentations/posters will be presented on the Café to Go process at three conferences

Focus on Outreach to Native Americans

The MCR has been a leader in the outreach to Native Americans in the Four Corners states of Arizona, Colorado, New Mexico and Utah. At the juncture of these states is a large Native American population living on reservations and pueblos. The RMLs and academic health sciences libraries that serve this geographic area have been working together to improve the communities' access to health information. Three additional states in the region (Kansas, Nebraska, and Wyoming) have Native American reservations. Liaisons have been working with various groups in order to establish a relationship with the tribes. Building on activities already accomplished, the MCR will carry out an activity with two tribal libraries based at tribal colleges in the region.

The region has four tribal colleges:

- Haskell Indian Nations University, KS
- Little Priest Tribal College, NE
- Nebraska Indian Community College, NE
- Wind River Tribal College, WY

Each state liaison has already visited and demonstrated and/or provided training on NLM resources at each library. None of the libraries have become members. In the next contract we will actively encourage the libraries to become NN/LM members. Haskell Indian Nations University offers an Associate Degree in Health and Physical Education. Little Priest Tribal Colleges offers an Associate of Arts Degree in Alcohol & Drug Counseling. The libraries for Wind River Tribal College

and Nebraska Indian Community College support at least one class related to health.

The MCR will encourage two of the libraries to promote access to health information to their communities by having them use our exhibit tool kit. We will develop the exhibit tool kit with two of the tribal libraries to use at community events (health fairs, pow wows); the tool kit will allow tribal libraries to promote health information resources at least twice a year. The tool kit will include a poster stand, a poster executed commercially based on the design of the tribal library, and promotional materials. The tool kit will be funded by the RML. In addition to exhibiting twice a year throughout the contract, the library will submit a report on their exhibit experiences.

Outcome: - Tribal libraries promote health information access to their community

Indicators: - Three tribal libraries in the region become affiliate members

- Two tribal librarians each use the exhibit tool kit at two events per year

The MCR subcontracts with Resource Libraries to place state liaisons on site for effective and efficient state outreach. In the current contract, state liaisons, as a part of their state outreach, work with the tribes in their states. This includes working directly with health care providers, offering training and presentations, as well as working with tribal librarians to keep them abreast of vital culturally related health information. This work will continue in the new contract.

In addition to general outreach to health care providers, the MCR has held a leadership role in the Tribal Connections Four Corners (TC4C) collaborative project that includes four academic libraries and three RMLs. The TC4C Project is an effort to improve access to up-to-date and reliable information for health care practitioners serving tribal members and their communities in the Four Corners area. The state liaisons in Utah and Colorado, along with the Community Outreach Liaison, have contributed to TC4C and have been members of its working groups, including the group that worked on the MedlinePlus "Four Corners Go Local" project. (***http://apps.nlm.nih.gov/medlineplus/local/tribalfourcorners/homepage.cfm?areaid=17***)

TC4C has applied for a grant from the National Library of Medicine for the "Four Corners Education and Tribal Health Electronic Resources" (FEATHER) project, with the primary goal of developing and delivering services to meet the following information needs of health practitioners:

- **Improved access to quality health information;**
- **Access to patient education materials that are both easy to understand and culturally relevant;**

- **Information on health topics relevant to their practice community;**
- **Contact with medical librarians and health sciences libraries.**

These information needs will be addressed through the development of a web-based resource that consists of:

1) **A set of at least 10 pre-formulated searches and links on health topics that reflect the results of the needs assessment, relevant health statistics, and the Healthy People 2010 Focus Areas;**
2) **Access to full text resources and databases; and**
3) **Access to virtual reference services.**

The MCR staff will be involved in developing and promoting the resource, and training health professionals to use the resource.

The following outcomes and indicators have been added to our plan:

Outcome 1: Develop a web-based resource that meets the information needs of the health practitioners and health consumers in the Four Corners area of Arizona, Colorado, New Mexico, and Utah.

Indicator: A web resource is created

Outcome 2: Develop and implement a training program for health practitioners and health educators on the use of the project's web-based information resource.

Indicator: a) At least nine attendees of the training program will be from the MidContinental Region
b) 50% of needs assessments participants in UT and CO

Outcome 3: A successful web site promotional campaign is created and implemented

Indicator: a) 10% of website users are first time users
b) One organization within CO and UT links to the web site

Schedule:

Year 1

Use the 2005 Network Data Inventory to identify Network members working with health care professionals who serve special populations

Develop questions to assess the needs of Network members working with health care professionals who serve special populations

State liaisons will assess the needs of Network members working with health care professionals who serve special populations

Continue negotiating the OPHL project in Missouri and Wyoming

The Nebraska Liaison working with library staff and faculty develops a basic public health informatics class for the MPH program

Promote membership in the NN/LM to tribal college libraries

~~Develop two exhibit materials tool kits with two tribal libraries~~

Years 1-5
Identify staff from unaffiliated National Association of Community Health Centers (NACHC) in the region

Invite key staff from inner city CBOs and health centers to join the Community Outreach Working Group

Staff members from inner city CBOs are considered for Regional Advisory Board membership

Teach two CDCynergy classes

Year 2
Develop a series of train-the-trainer classes for Network members working with health care professionals who serve special populations

Offer regional awards for outreach projects that give priority to training health care providers in inner city and rural areas who have limited access to biomedical resources

Begin discussions about OPHL in another state

The Kansas Liaison works with another institution in her state to add the basic public health informatics class to the MPH curriculum

Develop two exhibit materials tool kits with two tribal libraries

Years ~~1-3~~ 2-4
Hold Café to Go in each state in the region

Years 2-5
Promote and offer the series of train-the trainer classes for Network members working with health care professionals who serve special populations

Develop projects based on the feedback from Café to Go sessions

Review and Evaluation of each OPHL Project

Year 3
The Colorado Liaison works with her institution to add the basic public health informatics class to the MPH curriculum

Years 3-5
OPHL implementation begins in additional states

Develop projects based on the feedback from Café to Go sessions

Year 4
State Liaisons and Community Outreach Liaison will provide reimbursements for expenses to Network members to train health care professionals who work with underserved populations

Offer regional awards for outreach projects that give priority to training health care providers in inner city and rural areas who have limited access to biomedical resources

The Missouri Liaison works with St. Louis University's Health Sciences Center Library to add the basic public health informatics class to the curriculum

Year 5
Submit proposals to three meetings for presentations/posters on the Café to Go process as a project development tool

Publish final report of OPHL comparing all state projects

The Colorado Liaison works with the University of Northern Colorado's James A. Michener Library to add the basic public health informatics class to the curriculum

B2 - Consumer Health Information Services

Statement of Work
The contractor shall develop, implement, and evaluate outreach programs to increase the public's awareness of and access to high quality electronic health information. In carrying out these programs, the contractor shall work with a variety of intermediaries, including Network members, health care providers, public health personnel, librarians, K-12 teachers and staff, other educators, community organizations, health advocacy groups, churches, and self-help groups, through the use of subcontracts, agreements, and other mechanisms. The NN/LM consumer health outreach program shall include:

a. Developing the region's consumer health information goals and objectives and working with a variety of organizations to accomplish them;
b. Developing programs that focus on reaching minorities, senior citizens, and low income populations;

c. Working with NLM, the NN/LM, and other organizations to develop tools and linkages to improve access to electronic consumer health information at the local, state, and regional levels;
d. Developing programs to promote MedlinePlus and other NLM resources to all health professionals as a resource for them and their patients; and
e. Coordinating the development of MedlinePlus Go Local in the region

Applicable NN/LM Goal
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

Objectives:

Increase the public's awareness of and access to high quality electronic health information

Rationale:

Cultivating partnerships with public libraries will continue to be a major strategy in the region in order to promote access to consumer health information. Public libraries are largely supported by their local community or government and are highly focused on serving their local constituency. We wish to empower them to provide health information services and reach our outreach goal as well. A study done in 1998-1999 by the National Library of Medicine found that consumers frequently go to their public libraries for health information.

> "Health information was generally considered one of the top-five or top-ten topics of interest to patrons. About two-thirds of the libraries estimated that health requests account for 6% to 20% of their total reference requests. Libraries that had specialized science and technology departments and that kept separate statistics by department had higher percentages of health-related requests, ranging up to 60%."[5]

Our work to facilitate access to consumer health information also supports NLM's strategic objective to "Increase awareness and use of NLM services among the public."[6]

[5] Wood FB, Lyon B, Schell MB, Kitendaugh P, Cid VH, Siegel ER. Public library consumer health information pilot project: results of a National Library of Medicine evaluation. Bull Med Libr Assoc. 2000 Oct; 88(4):314-22. p. 318

[6] National Library of Medicine (U.S.). Board of Regents. National Library of Medicine long range plan, 2000-2005/report of the Board of Regents, National Library of Medicine. [Bethesda, MD.]: National Library of Medicine, 2000. p14.

Approach and Methodology:

Snapshot of Rural vs. Urban Populations in the MidContinental Region:

	Rural Population	Urban Population
Colorado[7]	650,536	3,950,867
Kansas[8]	1,021,010	1,714,492
Missouri[9]	1,555,507	4,199,111
Nebraska[10]	758,586	988,628
Utah[11]	273,006	2,116,033
Wyoming[12]	352,223	154,306

Outreach to consumers in rural areas will include:

1. **Supporting collaborative efforts between public libraries and community-based health organizations**
2. **Increasing awareness of electronic consumer health resources through communication and training with State Libraries, public libraries, and health professionals**
3. **Exhibiting at state and regional library association meetings to provide hands-on demonstrations of electronic consumer health resources**
4. **Collaboration with the NN/LM Regional Consumer Health coordinators to develop tools, training and projects that will result in access to electronic consumer health information**
5. **Tailoring trainings to specific health issues in individual communities**
6. **Coordinating the development of MedlinePlus Go Local projects in the region**
7. **Supporting and monitoring existing Go Local projects**
8. **Incorporating the use of mobile training units in communities that have transportation deficits**

[7] Economic Research Service: United States Department of Agriculture. State Fact Sheets: 2004 population estimates. Available at http://www.ers.usda.gov/statefacts/CO.HTM. (Accessed December 23, 2005).
[8] Economic Research Service: United States Department of Agriculture. State Fact Sheets: 2004 population estimates. Available at http://www.ers.usda.gov/statefacts/KS.HTM. (Accessed December 23, 2005).
[9] Economic Research Service: United States Department of Agriculture. State Fact Sheets: 2004 population estimates. Available at http://www.ers.usda.gov/statefacts/MO.HTM. (Accessed December 23, 2005).
[10] Economic Research Service: United States Department of Agriculture. State Fact Sheets: 2004 population estimates. Available at http://www.ers.usda.gov/statefacts/NE.HTM. (Accessed December 23, 2005).
[11] Economic Research Service: United States Department of Agriculture. State Fact Sheets: 2004 population estimates. Available at http://www.ers.usda.gov/statefacts/UT.HTM. (Accessed December 23, 2005).
[12] Economic Research Service: United States Department of Agriculture. State Fact Sheets: 2004 population estimates. Available at http://www.ers.usda.gov/statefacts/WY.HTM. (Accessed December 23, 2005).

9. **Collaboration with area AHECs**
10. **Collaboration with state rural health associations**

Develop the region's consumer health information goals and objectives and work with a variety of organizations to accomplish them

The Consumer Health Liaison is based at Denison Memorial Library in Colorado. She is responsible for coordinating the consumer health information outreach for the region.

This liaison will form a working group made up of representatives from the different populations, groups, and states that the RML plans to focus on in that year. The work group will contribute to the annual planning process by suggesting outcomes and activities for the coming year. Work group members will also be enlisted to help implement the activities that achieve the goals and objectives for this project area. The annual objectives and activities will be available from the MCR web site and submitted to the National Library of Medicine as part of the annual budget negotiation process.

In addition to working with a regional work group, the Consumer Health Liaison will work with the Consumer Health Coordinators from the other regions to identify common needs and share the responsibility of developing the resources (educational materials, workshops, promotional materials) to meet those needs. The Consumer Health Liaison will attend and contribute to the coordinators' monthly teleconferences and the coordinators' break out sessions at the RML Directors meeting.

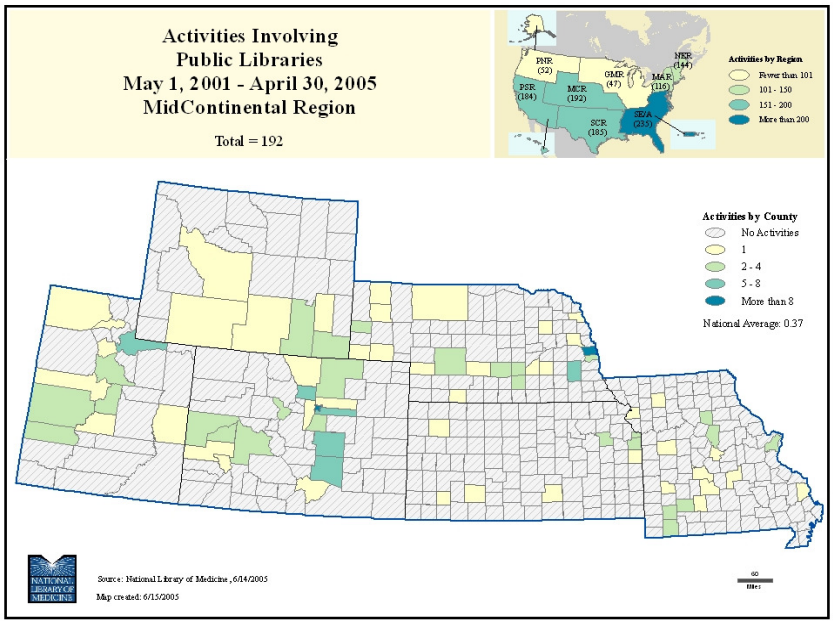

Figure 1: Activities with Public Libraries

Public Library Outreach

The RML will continue to work with public libraries to improve access to consumer health information in the regions' communities. In the four years of the current contract we conducted 192 activities with public libraries (see figure 1) including demonstrations and training sessions involving 744 participants (see table 2). This number does not include the librarians we talked to at state library association meetings. During these outreach activities we have introduced public librarians to MedlinePlus and other appropriate NLM resources. Introducing and training public librarians on the use of NLM consumer health information resources will continue to be a foundation of our program.

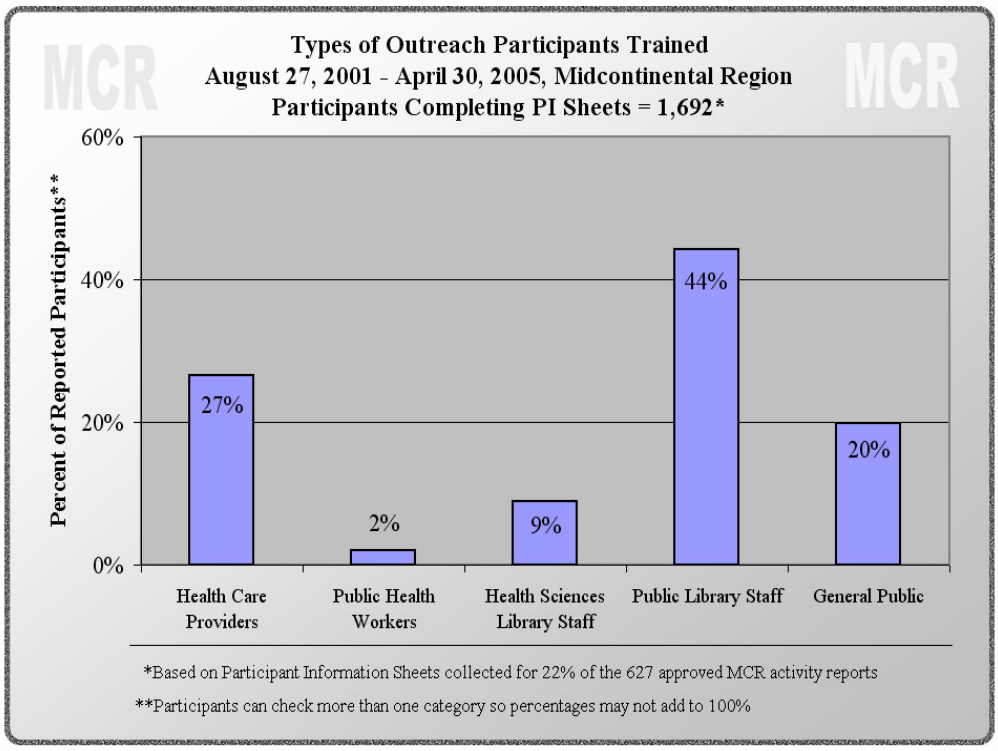

Table 2: Public Library Participants Trained

Outcomes: - MCR has well defined consumer health information outreach goals and objectives to share with public libraries, community and other organizations involved in providing health information to the public

- MCR has implemented regional consumer health information projects based on the goals and objectives

Indicators: - Six programs involving collaborations between two or more organizations will be implemented during the contract

Develop programs that focus on reaching minorities, senior citizens, and low income populations

Training

We are now incorporating into our program the four consumer health information training modules that were developed for the NN/LM during the current contract, either teaching them as designed or adapting them to the audience and time allotted. We predict that demonstrations and training will be a continuing need over the next five years. The modules developed for public librarians include hands on exercises training. "Doing" is an effective learning technique. Unfortunately not all sites where liaisons offer workshops have the facilities to incorporate the hands-on section. We propose to have liaisons configure mobile training units consisting of wireless networked laptops. Use of the mobile training units can be used to enrich the learning experience.

The MCR is an annual presence at all state library association meetings in the region. These meetings are an excellent venue for teaching classes because multi-type librarians from all over the state are brought together. Here too, the mobile training units will improve the workshops because computer labs are not provided for hands-on learning at the state meetings.

This mobile training unit will be useful not just in teaching consumer health modules but when working with health professional groups who want to learn about technical resources provided by NLM, such as PubMed and toxicology databases. The units will also be used in other environments such as public health departments and community based organizations where computer labs may not be available.

During the contract, MCR will hold a series of focus groups for public librarians who are Affiliate members. State library association meetings seem to be a convenient place and time for these focus groups. One of the areas that will be investigated is the usefulness of the training in meeting health information questions received at the reference desk from minority, low income and senior patrons.

The MCR does not provide computer literacy training. Many of the computer technology centers and public libraries have computer literacy classes aimed towards senior citizens. Our work with these types of organizations will be to encourage them to include resources for senior citizens, such as NIH SeniorHealth.gov and MedlinePlus "Seniors' Health Issues" Health Topic that can be used as web sites to practice on when the organizations are teaching seniors how to navigate the web.

Outcomes: - Organizations (CBOs, public libraries, public health departments and other organizations) serving minorities,

senior citizens and low income populations who received training and information about health information resources implement health information programs for their service populations

- Librarians in the region have increased skills in accessing resources and teaching about consumer health information resources for minorities, senior citizens and low income populations

Indicators: - At least two CBOs and two public libraries offer programs about finding and using health information for minorities, senior citizens and/or low income populations and attribute ideas for the new program to information provided by the RML when responding to a questionnaire

- Public librarians participating in focus groups indicate that the RML has provided needed training in supporting information needs of minority, senior and low income populations

~~Multilingual Resources Coordination~~

~~According to the American Institute for Social Justice, nearly 47 million people speak a language other than English in the United States. Twenty-one million people have only a limited ability to speak English. This number represents eight percent of the country's total population. As many states are mandating the provision of interpreter services throughout healthcare facilities for all patients, the demand for wider availability of non-English language health information resources can be expected to grow.~~[13]

~~Numerous initiatives have developed to make available non-English language health information resources. An extended list can be found at (*http://nnlm.gov/train/chi/multi.html*), NN/LM's multilingual health information web page. Several multilingual resource projects have received funding from RMLs throughout the country. These projects address the availability of health information resources in languages and groups such as Arabic, Armenian, Bosnian, Cambodian, Chinese, Croatian, Eritrean, Ethiopian, Farsi, Haitian-Creole, Hmong, Khmer, Korean, Laotian, Oromo, Russian, Somali, Thai, Tigrean, Vietnamese, and others. A list of NN/LM funded projects includes but is not limited to:~~

- ~~EthnoMed—University of Washington~~
- ~~SPIRAL—Tufts University~~

[13] American Institute for Social Justice. "Speaking the Language of Care: Language Barriers to Hospital Acces in America's Citites". A study commissioned by the Association of Community Organizations for Reform Now: Washington, DC. January, 2004. Cited June 17, 2005. <http://www.acorn.org/fileadmin/Additional_Accomplishments/National_report.pdf>

- ~~Healthy Roads Media—Multi-organizational Collaboration in the Greater Midwest~~
- ~~Refugee Health Information Network—Center for Public Service Communication~~
- ~~The 24 Languages Project—University of Utah~~
- ~~Urban Health Partners—Wayne State University~~

~~While many of these initiatives originated locally and serve the needs of their defined geographic areas, they have become useful resources for Network members and other groups across the country. There is no doubt that these projects have produced a large number of health information resources in other languages. They have also broadened access by making existing print resources more widely available in web-based and multimedia formats.~~

~~The growth of these locally-inspired projects may continue as resource needs emerge for new populations. No coordination efforts are in place to assure that development of resources is tied to statistical indicators or that they address local and/or national health initiatives.~~

~~Other initiatives that offer a wide variety of resources serve highly specific professional audiences. Access to these resources becomes limited because of their interface or login requirements. There are also no initiatives in place for collaborative production efforts across the regions.~~

~~One approach to solving the problems and meeting the needs identified above is to bring together stakeholders in this issue who could begin to lay a roadmap to possible solutions. We propose doing this in collaboration with the other regions of the NN/LM. Types of stakeholders concerned with enhancing access to multilingual consumer health information include: producers and developers of these materials, those who use these materials with their clientele (health information mediators), and those who represent the end users (target audiences) of these materials. Stakeholders may include representatives from the Refugee Health Information Network (RHIN), Ethnomed, Krames, the California Family Health Council/EPA, MedlinePlus, key NLM entities, the NN/LM, Healthy Roads Media, the Office of Minority Health, public health departments, other agencies, and initiatives such as New York Online Access to Health (NOAH), and Selected Patient Information Resources in Asian Languages (SPIRAL).~~

~~Stakeholders would be asked to (1) define the issues involved in producing authoritative, quality health information that is culturally and linguistically appropriate for non-English speakers, and in providing ubiquitous access to this information; and to (2) work collaboratively with the NN/LM and NLM to bring about solutions. We anticipate that participants from the Regional Medical Libraries will begin to make contacts with potential stakeholders at the October 2005 Refugee Health Meeting at NLM. An inter-regional group, including key~~

~~stakeholders, will begin planning in year 1 of the contract for a retreat in year 2. This retreat will provide the opportunity to assess the current status of multilingual health information access, to brainstorm ideas, and to establish goals for an invitational symposium to be held at NLM in year 3. The purpose of the symposium will be for strategic planning, outlining steps to short- and long-term implementation, and identifying resources needed. We will look for ways we can support the work of the interregional group in our region in year 4, and report on final outcomes of regional efforts in year 5.~~

~~Outcomes:~~ ~~- A national plan to coordinate multi-lingual web resources~~

~~- A regional plan to support the national strategic plan~~

~~Indicators:~~ ~~- Ideas are developed by stakeholders~~

~~- Goals are set for national symposium~~

~~- A strategic plan is generated as a result of the national symposium~~

~~- A regional plan is submitted to the National Library of Medicine and published on the MCR web site~~

Work with NLM, the NN/LM, and other organizations to develop tools and linkages to improve access to electronic consumer health information at the local, state, and regional levels

Links to NLM Resources

During the current contract, we have worked with our state and local libraries to add links to NLM's consumer health information resources to their web sites. All states libraries except Missouri now link to MedlinePlus. Many local libraries have added this link as well. Some of the states link to additional resources such as MedlinePlus en espanol, Tox Town and the NLM home page. During the next contract we will encourage Missouri to add a link to MedlinePlus and monitor the state library pages to verify that links to MedlinePlus are maintained. The state liaisons will also suggest to state and local libraries appropriate pages where other NLM resources such as Tox Town, Household Products Database, and Genetics Home Reference can be added.

Outcomes: - State library web pages have links to NLM Consumer Health resources, including MedlinePlus and Public Library Partnership pages

Indicators: - All state library web pages have links to NLM resources such as Medline Plus/Go Local, Public Library Community Partnership web site

Partnerships

The RML will encourage public libraries to form partnerships with other health information agencies in their communities as described on the Public Libraries and Community Partners web site. (*nnlm.gov/libinfo/community/*) This expands our current efforts, in which we encourage hospital and public libraries to form partnerships. In Colorado, the Colorado Consumer Health Information Librarians (CHILL), made up of public and health sciences librarians, meet to share developments and discuss common issues. In Wyoming, the annual Wyoming Symposium has developed into a meeting that gathers public and health sciences librarians together to learn about the latest in health information services from the NLM and NN/LM. Other state liaisons have identified consumer health information groups that are comprised primarily of health sciences librarians. They are encouraging public librarian participation. In the proposed contract, we will encourage public libraries, if they have not done so already, to form partnerships with other health information groups in their community. This is to take advantage of the various producers and holders of consumer health information and to centralize access to their resources through the public library. Utahealthnet is a project funded by the National Library of Medicine to the Spencer S. Eccles Health Sciences Library at the University of Utah. In the next three years it will develop collaborations around Utah with public libraries as principals in the collaborations. The RML will be incorporating lessons learned from Utahealthnet into its own efforts to foster similar partnerships. Examples of partnerships include public libraries sharing resources with school librarians and teachers, working with contacts on the Native American reservations, and collaborating with public health departments and community organizations.

Liaisons will invite librarians who have formed successful community partnerships to share information on their partnerships by writing an article for the RML newsletter, presenting at conferences, and submitting to the Effective Practices Collection *(http://www.nationalserviceresources.org/epicenter/overview/index.php)*. Liaisons will include information about the partnerships and their activities on the state and public library pages of the MCR web site.

Outcome: - Partnerships exist that enhance access to electronic health information

Indicator: - At least six partnerships between a public library and a community organization will be formed, one in each state

Develop programs to promote MedlinePlus and other NLM resources to all health professionals as a resource for them and their patients

Information Rx

Working through health professionals organizations in the region, the MCR plans to promote MedlinePlus by encouraging health professionals to participate in the Information Rx program developed by the American College of Physicians Foundation and the National Library of Medicine. This program provides information prescription pads for health professionals to use with patients. The health professional prescribes a topic in MedlinePlus as the health information remedy. Referrals to Network member libraries can also be included in the prescription. The MCR will continue to inform Network members about Information Rx and the benefits of incorporating it into their own library services.

In the current contract we tested the effectiveness of a mailer to physicians in Colorado promoting Information Rx. Data from NLM indicates that there was a 25% increase in material requests from Colorado during the month immediately following the mailer. Liaisons will try to obtain mailing lists from health professional organizations for physicians, nurses, and allied health professionals or request that the organizations send out our mailer. The Consumer Health Liaison will prepare a promotional piece for Information Rx referring the health professional to their institution's health sciences librarian or the state liaison for more information.

The program will also be promoted when the MCR exhibits at health professional meetings. Information prescription pads will be distributed at the booth along with material explaining how to issue information prescriptions, how to order more pads, and how to include a referral to a library.

Outcome: - Health professionals are able to direct their patients to authoritative health resources from the NLM

Indicator: - At least four clinical sites (or physicians) in the region will participate in the Information Rx project

Promotion

Liaisons have exhibited at health fairs in order to meet the community directly and introduce them to health information resources. In this contract we will encounter the community in a new venue--the state fair. State fairs are very popular in the region and we expect that this will be an excellent venue to raise awareness about MedlinePlus and MedlinePlus en espanol! Network members, both full and Affiliate, will be invited to join us at the state fairs. This should be a fun way to reach the different sectors of the population since people of all ages, economic and ethnic groups attend. Staff will poll visitors, in a manner that guarantees anonymity, to gather information on age, race and income level in

order to determine whether we are reaching the seniors, minority, and low income populations specified in the statement of work.

The Consumer Health Liaison and the Community Outreach Liaison will write articles about consumer health information resources for newsletters of senior organizations and community based organizations. These articles will be distributed to state liaisons who will add local information and submit them to local newsletters. This has been a successful procedure for dividing the responsibility in getting articles published. Liaisons will request demographics for the newsletters to determine whether they are reaching the seniors, minority, and low income populations specified in the statement of work.

The Community Outreach Liaison will develop heritage month health infobytes. For each month with an ethnic holiday or designation (e.g., Cinqo de Mayo, Black History Month) the Community Outreach Liaison will develop or locate an information item of interest to the ethnic group. It may be a health promotion piece on reducing lard in Mexican cooking or a brief biography of a prominent African American physician. These health infobytes will be distributed through the MCR web site, the Bringing Health Information to the Community blog, and local discussion lists. NLM consumer health information resources will be referenced in these infobytes. They will be posted early enough to be used by libraries and community based organizations who want to plan a health related program during the month. (For more detail see response to section B3 of the statement of work)

Outcome: - Minorities, senior citizens and low income populations receive information about finding health information

Indicator: - Liaisons records show that visitors to booths at state/county fairs are from intended audiences and articles for senior citizen publications reach intended audiences

Coordinate the development of MedlinePlus Go Local in the region

The MCR is proud to have had the second Go Local state in the nation. Missouri Go Local went live in March 2005. By the end of the current contract Wyoming, Utah and Nebraska will also be publicly available. In the next contract state liaisons in Kansas and Colorado will work with libraries and health organizations in their states to establish state wide Go Local collaborations. The Consumer Health Liaison and state liaisons will monitor existing projects through personal contacts and the reports that are submitted to the RML and NLM. The RML will budget funds for the new projects to help support their start up costs.

Outcome: - Populations in each state will be better served by local service information and better informed by MedlinePlus Topics

Indicator: - All six states will be participants in Go Local

Schedule:

Year 1

~~Create mobile training units (laptops, wireless routers, etc.) for each state liaison to use in public libraries, public health facilities and CBO sites, senior centers, faith based organizations, community centers currently lacking appropriate training equipment~~

Promote "NN/LM Public Libraries and Consumer Partners" and "MCR Public Library" web sites to public libraries across the region

Develop heritage month health infobytes

~~Participate in planning group for coordination of multilingual health information~~

Years 1-2

Identify new CBOs with health missions

Years 1-5

~~Liaisons will use the mobile training units and the consumer health modules three times per year to teach health information access to senior groups, low income population groups, and minorities~~

Exhibit and give presentations based on consumer health modules at regional and state meetings of public librarians, CBO workshops, aging and minority populations' health conferences

Year 2

~~Attend retreat on coordinating multilingual health information resources~~

Years 2-5

Liaisons will include information about partnerships and their activities on the MCR Public Library and MCR state web pages

Assist public health departments to make health information available to clients

Assist CBOs and faith based organizations to become aware of health information resources and other groups providing them

Year 3

~~Attend symposium on coordinating multilingual health information resources~~

Years 4-5

~~Implement ideas generated by symposium~~

B3 - Collaborating with Network Members and Other Organizations

Statement of Work
The RML shall pursue and maintain collaborations with Network members and other organizations including community-based organizations (CBOs) representing minority and other underserved populations to achieve its goals of outreach to health professionals and the public. Coordinating partnerships shall include:

a. Increasing awareness of the Network, especially among community-based organizations;
b. Fostering opportunities for Network members to collaborate with CBOs as part of their outreach effort;
c. Fostering opportunities for the training of staff at community-based organizations;
d. Providing consultation for Network members as they prepare project proposals; and
e. Providing consultation for Network members in project planning and evaluation.

Applicable NN/LM Goal
To develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objectives:

Pursue and maintain collaborations with Network members and other organizations including community-based organizations representing minority and other underserved populations to achieve the goals of outreach to health professionals and the public

Rationale:

Eugenie Prime, keynote speaker for the Community Based Health Information Outreach Symposium, gave a rallying call for participants to work together to eliminate health disparities and reach Healthy People 2010 goals. Access to health information can make a difference. Representatives from community organizations provided examples of the contributions health sciences librarians could make by working with their communities to eliminate health disparities and reach Healthy People 2010 goals.

Approach and Methodology:

The Community Outreach Liaison has primary responsibility for coordinating the MCR's outreach program focused on community-based organizations and minority populations. She works out of the Creighton University Health Sciences Library.

Increase awareness of the Network, especially among community-based organizations by assisting in the development of working relationships between Network members and grass roots, regional and national CBOs with the RML that include health information as part of their mission/priority

The focus of the Community Outreach Liaison is toward underserved populations, specifically people of color and residents of inner cities, and the health care providers that serve them. When the Community Outreach Liaison and the State Liaisons work to identify community based organizations, they concentrate on CBOs that have a health outreach initiative for minorities. One way to reach a large number of community and health care organizations that work with minorities is to be a presence at minority health conferences. In the current contract, the RML has been exhibiting and presenting at a minimum of one minority health conference per state. That action is being carried into this new proposal because of the success the liaison's have achieved. In Kansas, and Missouri, not only were liaisons invited back to the "BiNational Health Week" events, they are now on the planning committees. After several years of exhibiting in Nebraska, the Community Outreach liaison was asked to present this year at the invitation only conference. ~~e RML has worked with community based organizations throughout the current contract~~. Our successful partnerships include:

- Involvement in Bi-National Health Week. Our Kansas Liaison and Missouri Liaison joined with Alianzas and the Institute for Mexicans Abroad in its Bi-National Health Week. The liaisons became members of the planning group for this event, contributed to a number of activities including demonstrating MedlinePlus en espanol, and continue as planners for this year's Bi-National Health Week.
- Relationships formed with Omaha CBOs. The Community Outreach Liaison has formed relationships with several community organizations. She is a member of the Black Family Health and Wellness Association (BFHWA), and participates each year in the BFHWA Health Fair, in which 700 low income residents of Omaha attend to receive screenings and learn about health prevention and treatment. She has also attended several staff meetings of the Nebraska AIDS Project (NAP) and presented at the NAP annual conference.
- The Utah AIDS Foundation (UAF) becoming an Affiliate member. They sent staff to the RML's proposal writing workshop, and successfully submitted a proposal for an Access to Electronic Health Information award. In a shared exchange, the UAF promotes resources of the NLM and the MCR among its clientele and the Utah Liaison promotes the Foundation's services and resource center at meetings she attends.

- Additional relationships established with the Centro Latino de Salud Educacion y Cultura (MO), Johnson County (JoCo) Health Partnership (KS), Denver Healthy People 2010 (CO), and Sisters Together (NE).

The RML liaisons reviewed current contacts and developed the following list of possible collaborations for the next contract:

Mid-Missouri AHEC – We already work with the Mid-Missouri AHEC (MAHEC) librarian promoting and providing training on NLM resources as well as the resources that are part of their Digital Library in rural areas throughout Missouri. We will continue to work with the AHEC on health related projects such as the White Papers on the state of healthcare in rural Missouri.

Omaha Urban AHEC – The University of Nebraska Medical Center is collaborating with Creighton University Medical Center on a new AHEC. Both of the Nebraska Resource Libraries are part the collaborating organizations. Training new staff members of the AHEC would be provided. The AHEC has a training facility that could be used to train staff of community organizations that partner with the AHEC.

Rural/Frontier Women's Health Coordinating Center – Cheyenne, Wyoming – The Wyoming Liaison has been appointed to the Advisory Board. This will allow the RML direct access to a variety of health information opportunities taking place around the state. The staff is receptive to RML assistance with health information training programs and workshops for clients as well as participation in a statewide symposium. The Center will be working with women from all walks of life throughout Wyoming.

Geriatric Education Center – University of Wyoming College of Health Sciences – In addition to other potential partners, the GEC will be partnering with the Wyoming AHEC. The Wyoming Liaison is working closely with Dr. Deb Fleming, the PI, to provide information about NLM & NN/LM MCR resources to help support the GEC. The liaison is also listed as supporting faculty for the grant proposal and will be participating in a related class to be taught in summer 2006. The Center is seeking funding from HRSA and if funded, there could also be a tie-in with the Rural/Frontier Women's Health Coordinating Center as there will be a significant overlap of the intended audience.

Missouri Alzheimer's Association – The Mid-Missouri Chapter of the Alzheimer's Association is beginning to develop Centers of Excellence covering 26 counties in mid and northeastern Missouri for Alzheimer's patients and their families. There is a possibility that

the RML will work with this group to increase awareness of and incorporate NLM resources into treatment planning.

Nebraska Library Commission and the McGoogan Library of Medicine at the University of Nebraska Medical Center are teaming with the NN/LM Nebraska Liaison to seed consumer health partner projects in several communities across Nebraska to include public libraries, hospital libraries and public health entities, as well as other interested community based organizations.

Kansas Association for the Medically Underserved – The Kansas liaison has initiated contact with a representative of this group and sees a possible partnership in providing training for staff and clients.

United Methodist Mexican-American Ministries – Western Kansas – We could possibly partner with this organization to offer health information training to staff at their clinics in Western Kansas, as well as offer some workshops on consumer health information. With the CommunityRx Kansas project that has just been announced, many of their clients will need training on prescription drugs.

The MidContinental Region has two institutions participating in NLM's University Informatics Training Program. At the University of Missouri is the Biomedical and Health Informatics Research Training Program. One of their program areas is health informatics for populations and individuals. At the University of Utah is the Department of Medical Informatics. This department offers a course in public health informatics and has affiliations with the state's public health department. The RML has the opportunity to investigate collaborating with both these institutions by exploring research of populations that are of interest to both groups and by the NN/LM suggesting areas of research that would assist librarians in reaching these populations. We also have the opportunity to work with both programs to encourage Network members to apply for a fellowship for one of these programs to increase the number of librarians who have a higher level of understanding of biomedical informatics.

All partners are introduced to, and when ever possible, trained to use the most relevant of NLM's resources for their needs. Because community organizations tend to rely on soft money, liaisons inform them of NLM and NN/LM funding and offer to serve as consultants in the proposal writing process.

In the next contract we will increase the number of community organizations that are aware of the resources and services we offer. We will focus on organizations with health missions, since they can best use our services. We will identify community-based organizations that meet our criteria of a health mission by obtaining referrals from existing contacts, exhibiting at meetings attended by staff

of CBOs, and reviewing the Go Local directories for listings of CBOs. MCR liaison contact information and NN/LM products and services descriptions will be provided to twelve new CBOs per year. Liaisons will record the CBOs they contact in their monthly activity report. Liaisons will also approach CBOs about submitting articles to their publications in order to inform the organization's audience about the health information resources specific to their interest (e.g., HIV/AIDS, African American Health etc.). The Community Outreach Liaison will write an article that can be tailored for state organizations' news resources by each state liaison. Six articles will be written during the contract. State liaisons will edit the articles and submit them to CBOs for publication.

The MCR will exhibit and, whenever possible, give presentations at ~~ten~~ **two** minority health or CBO events, including health fairs, workshops, and pow wows, **per year**. This is a way for us to increase the visibility of the RML. Community organizations sometimes have difficulty seeing past our names (e.g., "regional medical library," "National Network of Libraries of Medicine") and envisioning how we can assist them to achieve their health mission. When we visit these events we can present examples of how we have worked with other organizations, of the funding available from the NN/LM and projects that have been awarded funding. Conferences provide a forum where we can formally make presentations describing local and national efforts of the NN/LM. The Community Outreach Liaison is one of the founders of the Community Outreach Group, made up of outreach staff from all RMLs. This group is always on the look out for conferences where the work of the NN/LM and the resources of NLM can be presented to increase awareness of this facet of the NN/LM's outreach program. For example, they are planning to submit a proposal to give a presentation at the TFF Reforma Conference 2007 (a conference that will focus on health disparities).

On the national level we have been working with the NN/LM Pacific Northwest Region and the NN/LM Greater Midwest Region to cultivate CTCnet. These are Community Technology Centers located primarily in the inner city that make computer labs available to the community. Our Community Outreach Liaison discovered that they have the infrastructure and are eager to have applications that can be taught using the computer centers they have established. For the past two years the Community Outreach Liaison and Technology Liaison have been developing modules that teach web searching and evaluation using health information for the examples. These modules are being beta tested and will be made available via the National Training Center and Clearinghouse and from the MCR web site.

Another idea to bring health information to the forefront is to provide health information or "health infobytes", small snippets of health related information and tied to months that have an ethnic designation or a cultural holiday. The Community Outreach Liaison will develop health infobytes from NLM resources and provide a link to more information. For example, for February, Black History

Month, she could feature Dr. Donna M. Christian-Christensen from NLM's "Changing the Face of Medicine" exhibit. Dr. Christian-Christensen is the first African American female physician to serve in Congress. For Cinco de Mayo a health infobyte could feature MedlinePlus en espanol. The infobytes would be distributed in enough time for an organization to use as a component of an event or to use as a focus for an event. Community organizations as well as librarians would receive the health infobytes. The Community Outreach Liaison established a blog to provide health related news of interest to community organizations. This blog, Bringing Health Information to the Community (BHIC), *(http://medstat.med.utah.edu/blogs/BHIC/)* is read by 203 subscribers, as well as those subscribing to RSS feeds, and regularly receives messages of appreciation. State liaisons will send health infobytes on distribution lists that they use for local organizations within their state as well as to the MCMLA-L that reaches a majority of our Network members. The health infobytes will be mounted and archived on the MCR web site.

Outcomes:
- More CBOs in the region recognize the NN/LM MCR as a network of health information providers
- Information on minority health issues provided by the MCR is published in CBO newsletters and posted on their discussion lists

Indicators:
- MCR contact information and product and service information will be provided to twelve new CBOs per year
- Twelve health infobytes will be published each year
- Six articles will be written over the course of the contract to be published in CBO newsletters

Fostering opportunities for network members to collaborate with CBOs as part of their outreach effort

Resource Library – Community Organization Partnership

Following the 2004 Community-Based Health Information Outreach Symposium at NLM, there was a discussion initiated by the Community Outreach Liaison with the two Resource Library Directors selected to attend this event. The project description that follows came about through this discussion. The Bernard Becker Medical Library in St. Louis and the Archie R. Dykes Library of the Health Sciences in Kansas City will initiate a partnership with a community organization in their city that will last at least for the duration of the contract. The Community Outreach Liaison and the Assessment and Evaluation Liaison will consult in the development and implementation of this partnership.

The libraries will survey their own institutions to identify departments that have already established an outreach project with a CBO. The Community Outreach

Liaison, along with staff at each library, will review possible partners, develop a strategy on how to form a partnership between a CBO and the Resource Library, and contribute to the project. The Community Liaison and Assessment and Evaluation Liaison will develop a list of resources on community outreach, participatory research, and assessment and evaluation that will be available to the Resource Library staff from the MCR web site. With representatives of the selected community organizations, a health information needs assessment will be developed and administered. All partners will review the results and formulate a plan of outreach. If needed, the Community Outreach Liaison will recommend sources of funding for the projects. The Assessment and Evaluation Liaison and the Community Outreach Liaison will offer to consult on the proposal. As the outreach projects are implemented both liaisons will monitor their progress and be available to offer advice on any issues that arise. In the final year of the contract the libraries will publish and/or present a summary of their partnerships with community organizations.

Outcomes: - Resource Libraries will develop partnerships with Community Based Organizations that increase access to health information to underserved populations in the community

Indicators: - Two Resource Libraries will develop collaborations with CBOs that result in 2 year partnerships

Effective Practices Collection

All outreach projects funded by MCR in the new contract will be required to submit items to the Effective Practices Collection. The collection focuses on "education, environment, public safety and other human needs" and much of it is with community organizations. This depository was discovered through our partnership in Tribal Connection Four Corners (TC4C). As described previously, TC4C is an outreach project funded by the National Library of Medicine through the NN/LM MidContinental Region. One of the objectives of this project was to share the lessons learned. Following its investigation of resources for sharing effective practices, TC4C decided to add its practices to the Effective Practices Collection. *(http://www.nationalserviceresources.org/epicenter/)* An instruction guide is being developed to assist participants to write their submissions. This instruction guide will be revised for those who are implementing outreach projects in the region so that they can share their effective practices. We hope the lessons added to this site will benefit others who want to work with CBOs. The Community Outreach Group has agreed to develop a class in the next contract that teaches librarians the principles of working with community groups. This class will incorporate a description of different levels of partnerships from networking to the partnership level, and will offer effective practices to reach the partnership level. The class will be offered with MLA CE credits to health sciences librarians at regional meetings and to attendees of state library association meetings. The group will also propose to teach it at an American

Library Association meeting and will investigate a method for teaching this as a distance class.

Participatory Research Symposium

This year MCR is sponsoring a regional community health information outreach symposium immediately preceding the Mountain Plains Library Association Meeting in October 2005. This meeting is a regional follow-up to the national Community-Based Health Information Symposium held at the National Library of Medicine in 2004 and the outreach conference sponsored by the NN/LM Greater Midwest Region in 2003. Health sciences librarians, state librarians, public librarians and representatives from community organizations will be encouraged to work together to improve health information access and thus reduce health disparities. Examples of successful efforts will be highlighted and networking facilitated so that participants can learn from each other. In the next contract we propose a symposium featuring another aspect of collaborating with community organizations.

We have informally polled our Resource Libraries and community organizations, and have discovered that there is interest in participatory research. By participatory research we mean working in partnership with a community or community organization in order to achieve a common goal and documenting the experience in a manner that would be acceptable for sharing through peer reviewed publications. This meeting would be open to health sciences librarians, researchers in the health and social sciences, and representatives from community organizations. We hope that during this meeting the academics will come to understand that the structure and data associated with a pure research project is not realistic in this setting. We hope that representatives from community organizations will come to understand why data collection is necessary and how it can benefit them. A year following this meeting, participants will be sent an email inquiry to determine whether they have begun a project with a community or changed the structure of working with a community or community organization. The MCR proposes to fund this meeting.

Outcomes:
- Network members will know where to turn for ideas on partnerships
- Partnerships between CBOs and Network members increase
- Attendees of the participatory research symposium will understand that participatory research is a tool to increase collaborations with CBOs

Indicators:
- Three new partnerships, developed between Network members who attended the participatory research symposium and a CBO, results in a project to deliver training to staff of the CBO

- 75% of the participants attending the participatory research symposium indicate that they understand the concept of participatory research

- Five new entries will be made to the Effective Practices Collection regarding projects funded by NLM or NN/LM

- The “Principles of Working with CBOs” class will be offered three times in the region

Foster opportunities for the training of staff at community-based organizations

State liaisons have already established contacts with community organizations in their states. During the contract they will continue these relationships and offer training to the staff. The emphasis will be on promoting the consumer health modules and the online modules developed for CTCnet. The Community Outreach Liaison will recommend that liaisons extend their outreach to CTCnet centers and the Urban League. CTCnet centers are in every state and the Urban League has chapters in Kansas, Nebraska, and Colorado. The Community Outreach Liaison has established a relationship with both of these organizations, with CTCnet at the national and state (NE) levels and with the Urban League at the state (NE) level.

The Urban League is a national organization that was established to empower African Americans to enter the economic and social mainstream. It is this country’s oldest and largest community-based movement. The Urban League of Nebraska is creating a health component to their web site using recommendations from the Community Outreach Liaison. Once the page goes public and they assess its usefulness, their intention is to approach the National Urban League to have a health page become a national priority for the organization. Staff from the Nebraska chapter has asked the Community Outreach Liaison to join them in recommending that the Nebraska pilot go national. They plan to make the recommendation during the first year of the new contract.

Once the health site becomes a national priority, the relationship that started with the Urban League of Nebraska will be duplicated in Kansas and Colorado. Workshops using the online module developed for CTCnet and the consumer health information modules developed for the NN/LM will be offered. In all states the CTCnet centers will be approached and the same training will be offered to the CTCnet communities using the centers’ facilities.

With the Community Resources Coordinator from the NN/LM Pacific Northwest Region, the Community Outreach Liaison will continue to offer workshops and exhibit at the national CTCnet meetings. This RML team has been very well received. This year they did a session entitled “Health Information as a Tool for Community Technology Centers” and next year they are planning a train-the-

trainer workshop which will teach the use of the online modules. A subgroup of CTCnet is the AC4 National Technology and Ministry group. This is the Christian arm of CTCnet and they hold their own conferences. The Community Outreach Liaison will submit a proposal to be on their program in year 3 of the contract**.**

Outcomes: - Staff at selected CBOs will be trained in accessing biomedical information

Indicators: - State liaisons will offer six training-the-trainer sessions at CBOs in the region

- State liaisons will offer advanced training to six CBOs in the region

Provide consultation for network members as they prepare project proposals

Bringing in outside funding to carry out activities that support the mission of their institution is a way for librarians to demonstrate their value and increase their visibility. During the current contract the RML held proposal writing workshops in three of the most populous states in the region and taught it successfully to members using videoconferencing. Liaisons have consulted with members and assisted them to write successful proposals. In the next contract we plan to offer our proposal writing workshop via videoconferencing in years 1 and 3. The workshop will also be proposed for the joint chapter meeting of the Midcontinental and Midwest chapters of the Medical Library Association in 2007. J. Randal Johnson, PhD, who has experience as both a proposal writer and reviewer, will team with the MCR's Associate Director, who is knowledgeable about funding from the NLM and the RML. In order to improve their consultation skills all liaisons will take the proposal writing workshop. The Assessment and Evaluation Liaison will develop self-instruction modules that will assist members to create logic models. Logic models are a systematic way of developing a project for funding from goals through activities, budget and concluding with evaluation. The use of the logic model in developing a proposal is the basis of the proposal writing workshop. The self-instructional modules will be made available from the MCR web site.

The consultation service provided by RML staff will be promoted every year of the contract using all the communication tools that the MCR has established (e.g., newsletters, discussion lists, web site, etc.). As part of their consultation service liaisons will suggest establishing a partnership with a community organization. This is another way for MCR to support the development of relationships between Network members and community organizations. Another recommendation for members who are searching for possible funding from a federal agency is to search grants.gov. This resource now includes all grants offered by the U.S. government and is working with agencies to standardize their forms. All National Library of Medicine grants can be found on the site as well as

the Institute for Museum and Library Services, two major library project funding agencies. Eventually, all proposals to a federal agency will be submitted electronically using a standard form through this web site. Foundations and local funding agencies will also be recommended as a source to support projects. (See section A16 of the Statement of Work for additional details on grant consultations)

To track the success of proposals generated from this region the 2007 Network Data Inventory will ask if the members have submitted a proposal to any funding agency, whether they were funded, and if they received assistance from MCR staff.

Outcomes: - The number of proposals funded by NLM, NN/LM and other funding increases

Indicators: - The number of proposals funded by NLM, NN/LM, and other funding will increase by five each year

Provide consultation for Network members in project planning and evaluation

Project planning and evaluation are important skills for librarians in managing their library. MCR will offer training using the Outreach Evaluation Resource Center modules currently under development. Two of these modules are appropriate: “Planning Outreach Programs and Evaluation” and “Conducting Evaluation.” In year 2, staff from Outreach Evaluation Resource Center (OERC) will be invited to teach these new modules and the Assessment and Evaluation Liaison will apply to be signed on as an instructor so that she can teach it in later years. The workshop will be offered in person and also using distance education technology. In the post-evaluation survey for this class there will be a question asking if Network members feel that they are more proficient in project planning and evaluation in order to determine whether we have reached our indicator.

Liaisons of the MCR are well qualified to advise Network members on project planning and evaluation. They are experienced in the use of the logic model to identify the key components of a project so that it can be evaluated. For their own project areas, liaisons develop a logic model and through the year track whether indicators are being met. MCR will promote the project planning and evaluation consultation service through articles in newsletters, posters, and the MCR web site, which will include information on our willingness to consult with members and other organizations considering project funding or project design. The proposal writing workshop also incorporates processes applicable to project planning and evaluation.

Outcome: - Network members are more proficient in project planning and evaluation

Indicator: - Network members will self report that they have an increased proficiency in planning and evaluating projects

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Schedule:

Year 1

Develop "Heritage Month" infobytes

Develop with NN/LM Community Outreach Group an effective practices for community outreach class

Modify and publish Tribal Connection Four Corners effective practices submission instructions is for use by Network members

Assist Urban League of Nebraska in bringing pilot Nebraska project to national Urban League

Offer proposal writing workshop

Community Outreach Liaison and Resource Library staffs develop strategies to identify and collaborate with CBOs

Years 1-3

Exhibit and offer training at national CTCnet annual meetings

Promote project planning and evaluation consultation service

Add question(s) to the 2007 Network Data Inventory to determine if Network members have submitted proposals for NLM and/or NN/LM funding

Submit presentation abstracts to Minority Health Conferences that include the topic of NLM and/or NN/LM funding

Update and maintain the MCR web pages that provide information and tools for logic model development, evaluation planning, and interpreting and reporting data

Add and maintain resources on community outreach and participatory research on the MCR web site

Years 1-5

Identify twelve new CBOs and faith-based organizations with health missions per year

Exhibit and/or present at ~~ten~~ **two** minority health and CBO conferences and workshops **per year** during the contract

Submit articles to CBO publications

Post health infobytes on listservs, etc

Build on current national projects with CTCnet, Urban League; present at national or regional level CBO conferences

Present training using consumer health information modules at CTCnet centers, Urban League and community based organizations within the region

Year 2
Submit proposal to teach an effective practices for community outreach class to MCMLA, ALA, and Wyoming Symposium

Investigate interest for a symposium focused on working with community organizations

Evaluate usability of CTCnet online modules and modify as needed

Develop a faith based presentation of CTCnet online modules

Submit proposal to teach use of the CTCnet online modules at MCMLA 2007 (interregional chapter meeting)

Resource Libraries and CBOs administer a health information needs assessment to CBO staff

Resource Library and CBO staffs develop a health information improvement project

Years 2-5
Encourage Network members who receive both NLM and non-NLM funding to assist others in project development and collaboration opportunities

Require MCR funded projects to submit to the Effective Practices Collection

Offer training on evaluation using Outreach Evaluation Resource Center modules

Year 3
Hold symposium on participatory research

Offer proposal writing workshop

Present at AC4 National Technology & Ministry Conference

Years 3-5
Submit proposal to teach an effective practices for community outreach class at state library association meetings

University of Kansas and Washington University health sciences libraries will implement outreach project and present results

Year 4
Follow up with participants of community outreach symposium to determine what new partnerships developed from symposium

B4 - Training to Support Electronic Access to Health Information

Statement of Work
The contractor shall support training in the effective use of electronic health information resources on the Internet. Emphasis should be on reaching health professionals, public, school and other librarians, and other intermediaries who do not have access to such training or who intend to train others, including consumers. Before developing any training materials, the NN/LM National Training Center and Clearinghouse will be checked to identify training products, tools, materials, or classes that can be used or adapted to serve identified needs. Copies of all training materials developed will be made available on the NN/LM Web server and will be registered with the NN/LM National Training Center and Clearinghouse. Training should focus on topics not available through other sources and should include, but not be limited to:

a. PubMed, MedlinePlus, and other specialized NLM databases; and
b. Finding and evaluating health information resources on the Web.

Applicable NN/LM Goal
To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public.

Objective:

Support training in the effective use of electronic health information resources on the Internet directed to health professionals, public, school, and other librarians, and other intermediaries who do not have access to such training or who intend to train others, including consumers

Rationale:

Providing effective, timely, and efficient training materials to Network members, other librarians and health professionals in the region is critical to ensuring access to and effective use of electronic health information resources. Traditionally, training referred to a lecture or hands-on class held at a specific location at a specific time. New technologies now allow for “just-in-time” training through asynchronous or synchronous methods. The MCR will leverage these methods to offer appropriate training that meets the needs of our region.

Approach and Methodology:

Support training in the effective use of electronic health information resources on the Internet

The MCR is committed to using a wide variety of technology tools to offer training to Network members, other librarians and health professionals in the region. We have produced mini-tutorials available on the web for DOCLINE users, developed CD-ROMs on searching for and evaluating health information for nurses, taught proposal writing using videoconferencing, and sponsored a class

on web design using Macromedia Breeze. In this next contract, we intend to make our distance training more mainstream and routine. The MCR will conduct a needs assessment in the region to determine the ground work we may have to do to ensure that potential participants have the proper technologies available and are able to attend training in this manner. We will partner with the Midcontinental Chapter of the Medical Library Association to survey members and Affiliate members to find out if they would take classes using distance technology as well as determine what training topics would be most useful. The MCR is especially interested in knowing whether they are willing to learn about Pubmed, MedlinePlus and other NLM resources in this manner.

~~In order to assess the needs of our non-Network members, state liaisons will send a questionnaire via local discussion lists to school librarians, public librarians, and public health professionals to determine what NLM resources they are interested in learning about and whether they are prepared to receive training via distance technology.~~ **The RML has many opportunities to identify individuals who have not yet had access to training, in both formal and informal ways:**

- **When enrolling new members or contacting existing members, liaisons can question members about access to training and barriers, etc.**
- **NOMC maps can indicate where liaisons have not conducted training.**
- **While liaisons are participating in community events and exhibits, training calendars, consisting of opportunities and topics, can be prominently displayed. Liaisons can talk to participants about training experience and opportunities.**
- **Solicit feedback about training experiences and needs through articles published in health organization newsletters, as well as state and public library newsletters. Include a contact name/number/email/web site with information for readers interested in training opportunities.**
- **The MCR works with specific groups that provide outreach to community organizations and unaffiliated clinics, like the Urban League, the National Association of Community Health Centers, and the Community Technology Center network (CTCnet). Working with administrators of those organizations will allow the MCR to identify who has not received training, as well as what the training needs are for those groups.**
- **The MCR plans to host six Cafe-to-Go sessions across the region, with participants from unaffiliated clinics, community organizations, and medical and public libraries. These sessions will include a question to identify organizations that need training and what those training needs are.**

- **Conduct short surveys on the mcmla-l list, such as a one-question survey. For instance, if we ask about RSS, and members respond that they don't know what RSS is, a training opportunity has been identified.**
- **Ask participants at the regular RML updates what training needs they have (perhaps with chat and/or a poll).**
- **RML liaisons can ask about training opportunities during site visits to Network members and other institutions or community based organizations.**
- **The Network Data Inventory asks respondents about CEs taken in the last year. Those who indicate they have taken none can be contacted to discuss reasons, needs, and opportunities.**

Unaffiliated health professionals can be reached in a variety of ways, such as through exhibiting at professional conferences and community events with a high concentration of unaffiliated health professionals. It's surprising how many physicians and nurses either do not belong to their state professional organization, or do not attend annual conferences. To reach these individuals, it's also important to contact as many individual clinics and small hospitals as possible that do not have libraries.

A wider audience may be contacted by writing articles for local medical society publications and professional organization newsletters, and using their communication tools.

Instructors from academic programs that place students in internships out in the state are a source for suggestions on how to contact individuals in specific areas. Further, since continuing education may often be provided from a university department, adding information to packets that are distributed at those CE venues may help to reach more unaffiliated health professionals.

The public health workforce in the region comprises a sizable percentage of the unaffiliated health professionals. Many times training opportunities result from meetings with public health professionals who may sponsor a training session. In some states it is also possible to add course content to a public health web site (i.e., in Kansas the state public health department, Kansas Department of Health and the Environment, KDHE, has a course developer's link on their training site). State liaisons can also use existing public health contacts to promote training opportunities, seek information on needs, and collaborate on training sessions.

Based on the feedback collected from both members and non-members, the RML staff will develop courses for resources that are not being taught or under development by the NTCC. We will consult with other regions and offer to partner in course design. All materials will be available from the MCR web site and the

NTCC Educational Clearinghouse. We will also consult with Network members to determine if they are teaching topics identified in the needs assessment. These instructors would then be enlisted to teach a class for the region or to share their training materials.

RML staff will give priority to developing synchronous distance education courses that will be offered regularly throughout the contract. This will provide participants with a live instructor and the closest simulation to an in-person class. Each workshop will be scheduled at least once a year. In person workshops will be proposed to state library association meetings, school media specialist meetings and health professional conferences we attend.

MCR will not develop training on the basics of using PubMed. A course is available from the National Training Center and Clearinghouse and is taught in-person. In the next contract the Resource Libraries are making their facilities available so PubMed will potentially be taught in every state in the region. Online modules are also available for those who want to learn how to use PubMed; in addition, the Education Liaison has created a CD-ROM tutorial that offers nurses a basic introduction to PubMed. These different methods of learning PubMed basics will be promoted throughout the region using our MCR and state liaison communication tools. Other online tutorials for NLM resources will be listed on our web site so that librarians, health professionals, and consumers can easily determine whether a tutorial exists for the resource they want to learn how to use.

Outcome: - Network members, health professionals, and organizations providing health information to the public have received training in the effective use of electronic health information resources

Indicator: - 75% of class participants indicate improved knowledge of electronic resources through post-class evaluation surveys

Include materials related to finding and evaluating health information resources in all classes taught on health information resources

Users of the Internet realize that all information found there is not valid, but the difference between National Library of Medicine resources (such as PubMed and MedlinePlus) and GuaranteedCures.com is not always understood. A section on evaluating web sites is included in several of the resources the MCR has created, such as the “Search Strategies CD” for nurses and “The Internet: Today’s Health Information Resource” online modules developed for our CTCnet partners. We will continue to apprise those we teach that it is important to evaluate any health information found on the Internet before using that information.

Many sites already exist that cover criteria for evaluating health information; for example, Health on the Net Foundation (*http://www.hon.ch/)* and the MedlinePlus page, Evaluating Health Information *(http://www.nlm.nih.gov/medlineplus/evaluatinghealthinformation.html).* We will add links to resources such as these to the MCR web site. The health information evaluation page will be promoted in classes taught by MCR staff as well as at meetings where we exhibit and present. In-person workshops will be proposed to state library association meetings and school media specialist meetings.

Outcome: - Network members, health professionals, and organizations providing health information to the public have utilized electronic and face to face opportunities to learn how to evaluate health information resources

Indicator: - 75% of class participants indicate increased knowledge about evaluating health web sites

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Schedule:

Year 1
Send questionnaire to determine health information training needs to school librarians, public librarians, and public health professionals in each state using local discussion lists

Partnering with MCMLA Education Committee determine whether members have an interest in taking Pubmed, MedlinePlus and other NLM databases classes using distance technology

Years 1-5
Promote online PubMed and MedlinePlus tutorials using MCR communication

Promote online PubMed and MedlinePlus tutorials using local discussion lists

Promote evaluation or Internet health resources

Include evaluation module in all classes

Each state liaison will exhibit at her state library association meeting

Years 2-5
Offer classes of interest as determined by questionnaire

Years 3-5
Present and/or exhibit at school media specialist conference in at least two states per year in the region

B5 - Exhibits and Presentations at Meetings

Statement of Work

The contractor shall promote NLM and NN/LM programs and services at national, regional and state meetings of health professionals and organizations that represent minority or underserved members of the general public. NLM will provide each RML with an exhibit backdrop to be used at national exhibits. The national exhibit schedule will be set for October-September, ten to twelve months in advance. Responsibilities shall include the following:

a. In consultation with NLM, providing full support for a minimum of twelve meetings (six national and six others) for an exhibit, technology-related presentation, program presentation, or course offering, including making all arrangements (scheduling, fees, shipping, logistics, equipment and publications). Coordination of course offerings, program presentations and other offerings at meetings should be in line with national initiatives and promotion activities identified by NLM;
b. Identifying a single RML staff member with responsibility for reporting exhibits and other RML activities at all national, regional, state and local meetings to ensure timely, accurate and complete reporting;
c. Enlisting the assistance of Network members in exhibiting at national, state and regional meetings;
d. Assisting NLM's National Network Office in identifying health professional and consumer focused meetings;
e. Seeking opportunities for program presentations at all assigned national meetings; and
f. Attending state library association meetings and exhibiting or making presentations to promote NLM and NN/LM programs and services

Applicable NN/LM Goal

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

Objective:

Promote NLM and NN/LM programs and services at national, regional and state meetings of health professionals and organizations that represent minority or underserved members of the general public.

Rationale:

The National Library of Medicine provides valuable health information services and resources for librarians, health professionals, and consumers. Exhibits and presentations at meetings is an effective way of reaching large numbers of these populations and offer opportunities to demonstrate and instruct attendees. RML staff can also ascertain health information needs and obtain feedback on resources and services.

Approach and Methodology:

Promoting NLM and NN/LM programs and services is a shared responsibility among the MCR liaisons. With the distributed model, the liaisons are in an excellent position to identify and exhibit at local meetings. Each liaison

purchased a table top exhibit with graphics designed by staff at the McGoogan Library of Medicine. The exhibit is easily transportable and the display panels can be changed to feature the resources appropriate for the audience. The exhibit backdrops provided by NLM are used for national exhibits but can also be borrowed for local meetings.

In consultation with NLM, provide full support for a minimum of twelve meetings (six national and six others) for an exhibit, technology-related presentation, program presentation, or course offering

The MCR will exhibit at 6 national meetings as assigned by NLM. We will make all the arrangements so that the equipment and material necessary to represent the products and services of the National Library of Medicine are available. In our exhibit report we will evaluate the meeting and recommend whether NLM should continue to include the meeting on the national exhibit schedule.

Local meetings are an excellent way for liaisons to make contacts for training opportunities, partnerships, and to identify representatives of organizations who have a mission similar to the NN/LM. The liaisons have prioritized meetings that they will attend in the next contract. MCR will annually exhibit at:

- all state library association meetings
- one state fair
- two meetings that are minority related
- two school media specialist meetings

The MCR identifies new minority-related meetings to exhibit at in several ways. Because state liaisons live in the states they provide outreach to, they learn about local meetings through announcements in their academic listservs and newspapers, etc. They also work with staff at CBOs and public health offices who inform them of events in the state. In addition, the Community Outreach Liaison is in contact with the Regional Minority Consultant of Region VII and is building a relationship with the consultant from Region VIII. These consultants are also a source for exhibit opportunities in the region. Finally, the Community Outreach Liaison is a member of several listservs that focus on community groups and health disparities. Through memberships in groups like the NETWORK-Black Young Professionals' Public Health Network, Inc., CBPR (Community Based Participatory Research) as well as the American Library Association's American Indian Library Association and Reforma, the Community Outreach Liaison learns of many minority health events within the region, and forwards that information to the state liaisons.

Liaisons will present and or exhibit at a minimum of ~~30~~ **6** meetings throughout the year. Meetings for organizations not stated above will be selected by the liaison in response to invitations or initiatives they want to pursue. **The MCR has**

considered developing a formal ongoing exhibit relationship with CTCnet. At this time, however, we are going to keep the relationship informal, and watch how the model partnership works for the PNR.

Outcome: - Health and information professionals and the public will be aware of and have access to health information and resources

Indicator: - The NN/LM MCR will exhibit or present at a minimum of ~~30~~ **6** local meetings and six national meetings

Identify a single RML staff member with responsibility for reporting exhibits and other RML activities at all national, regional, state and local meetings to ensure timely, accurate and complete reporting

The Project Coordinator will be responsible for ensuring that reports by liaisons are filed in a timely manner. Liaisons will add reports to the NLM External Exhibit Report System. They will file detailed reports on local exhibits in the MCR's activity reporting system (ARS).

Outcome: - NLM is made aware of exhibit activities in the region

Indicator: - One exhibit report will be filed in the National Exhibit Reporting System for each exhibit

Enlist the assistance of Network members in exhibiting at national, state and regional meetings

The MCR regularly invites Network members to join us in the exhibit booth when we exhibit at local and national meetings. They may work for a few hours or up to day. When MCR has had a conflict and could not exhibit at a local meeting, a staff member from a Resource Library has taken our place. In the current contract we want to take this practice to the next level. Liaisons will train and work with Network members who are interested in serving as an exhibitor at local and national meetings. The NN/LM Exhibit Manual will be used for training. Once a liaison deems that the librarian is now qualified to exhibit, the librarian can volunteer to staff a local exhibit as the primary exhibitor or partner with an MCR liaison at a national exhibit. This will give librarians the opportunity to work beyond the walls of their libraries as well as to interact with health professionals in a different setting. Recruitment and training will take place throughout the contract. **Network members who substitute for RML staff will be reimbursed for their expenses.** Network members will begin exhibiting starting in year 2 of the contract.

Outcomes: - Network members will be made more aware of NLM products and services as well as NN/LM exhibit procedures

- The NN/LM MCR will build a group of Network members who are experienced exhibit staff

Indicator: - The NN/LM MCR will provide Network members the opportunity to exhibit at one regional or one national exhibit (within our borders) per year

Assist NLM's National Network Office in identifying health professional and consumer-focused meetings

MCR will annually submit ideas for national exhibits to the online exhibit system. Liaisons will submit ideas for national exhibits to a holding “room” in the MCR’s collaboration software throughout the year. When the exhibit system is ready to accept the suggestions, the Project Coordinator will submit them.

Outcome: - Exhibit suggestions will be made according to special interest groups, such as health professionals or public librarians, who have been identified by NLM as target groups

Indicator: - NN/LM MCR will suggest at least three national exhibit per year

Seek opportunities for program presentations at all assigned national meetings

Liaisons will submit presentation proposals to the sponsoring organization of all assigned national meetings. Whenever possible, liaisons will present at local meetings.

Outcome: - NLM and NN/LM programs and services are presented as part of the program at NLM assigned conferences

Indicator: - MCR will be on the program of at least one national meeting each year

Attend state library association meetings and exhibit or make presentations to promote NLM and NN/LM programs and services

Each year of the contract, MCR will exhibit at all state library association meetings in the region. State liaisons will submit a proposal to be on the program of their state library association meetings twice during the five year period.

Outcome: - NLM and NN/LM programs and services are presented as part of the program of state library association meetings

Indicator: - Each state liaison will exhibit and/or present at their annual state library association meeting

Schedule:

Years 1-5

Exhibit at assigned national meetings

Exhibit at additional local and regional meetings as identified by RML liaisons

Liaisons will report on exhibits in the NLM External Exhibit Report System and the MCR activity reporting system

Network members will be recruited to assist with exhibits

Basic exhibit training will be offered to all members who assist with exhibits

MCR will submit ideas for national exhibits to the online exhibit system

Liaisons will submit presentation proposals to organizations of all assigned national meetings

Liaisons will exhibit and/or present at state library association meetings

B6 - Information Technology and Policy Awareness

Statement of Work

The contractor shall develop an information technology and policy awareness program which includes the following:

a. Holding regional showcases or forums focused on the use of information technology to improve access to biomedical information and on policy issues affecting production, distribution, and access to biomedical information; and

b. Monitoring current technological and policy developments and trends to identify those that will improve access to biomedical information. In cooperation with the NNO, the contractor shall design and test systems to help support these operations within the region.

Applicable NN/LM Goal

To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objectives:

The RML shall develop an information technology and policy program to improve access to biomedical information

Rationale:

Staying abreast of new technology developments and policies is critical for our members for several reasons: it assists them with being seen as valued professionals in their institutional settings; it allows them to increase the efficiency and effectiveness of the services they offer; and it offers them the opportunity to train their constituents on how to take advantage of new biomedical information resources. Learning about new trends in technology as they occur also allows members the opportunity to proactively adopt new technologies that will improve access to biomedical information and services.

Approach and Methodology:

The information technology and policy awareness program for the MCR is the shared responsibility of the Technology Coordinator at the Spencer S. Eccles Health Sciences Library at the University of Utah and the Technology Liaison at the Archie R. Dykes Library of the Health Sciences at the University of Kansas Medical Center.

Applying New Technologies

Technology is a priority area for the NN/LM MidContinental Region. One of the outcomes for the current contract is that we will have investigated, developed, incorporated, and promoted new technologies that assist health sciences librarians to serve their patrons. We have written about it, talked about it at meetings, taught classes on it and supported it with funding. We will continue these efforts into the new contract.

The MCR believes that the use of technology collaboration tools is the most effective and efficient method for our members to participate in collaborative meetings and distance education classes. However, we also recognize that there are a number of technical barriers that may make it difficult for our members to take advantage of these tools. The most notable barriers are:

- **Lack of the bandwidth required for video and audio applications**
- **Strict firewalls that do not allow video and audio traffic to be passed through the network**
- **Lack of funding for hardware or software**

Fortunately, our recent experience has shown that as technology has been improving, it has been possible to overcome these barriers:

- **New video conferencing applications, such as Festoon and the Macromedia Breeze client, will work well with a DSL connection. They do not require a T1 LAN connection.**

- **Two collaboration tools (Macromedia Breeze and Festoon) that the MCR has been successful in using with members work even with strict firewalls. Some of our members had firewall issues with the Macromedia Breeze client during our a recent MCR update; we were able to resolve those so that Breeze uses a commonly open port.**
- **All of the collaboration software that the MCR uses for communication with members is free for download, including Skype, Festoon, the Macromedia Breeze client, and VRVS.**
- **The videoconferencing applications that we use require very minimal investment in hardware (a $50 WebCam and a $20 headset). Those members who do not have a WebCam can still listen to the audio.**

We have also been investigating use of a telephone conferencing system that is integrated with Macromedia Breeze. This system can be used as a back-up to Breeze's audio capabilities. With this system, any member with a Flash-enabled Web browser will be able to participate in MCR meetings or classes.

In addition, we will work with under-connected members to fund and assist them with improving their connectivity to meet the requirements needed for basic videoconferencing. The plan for working with under-connected members is described in section B8.

The MCR newsletter regularly features a technology article; the articles keep Network members up to date on useful software applications or new hardware developments. A technology article written by either RML staff or techno-forward Network Members has been included in each issue of the MCR newsletter, *Plains to Peaks Post*. Articles have been written about accessing PubMed using mobile technology, VoIP, and the Firefox web browser. Articles are archived on the MCR web site for reference when needed. MCR staff will continue to investigate and showcase information technologies and the policies affecting their use on a regular basis through the MCR web site and newsletter.

In addition to newsletter articles, the MCR technology staff will offer workshops and forums to update members about new technologies as well as related policies that affect the use of new technologies. The forums will be offered through a variety of venues, including the annual MCMLA meeting and the annual Wyoming Symposium. The forums will be archived so that members can view them asynchronously from the MCR web site.

<u>Technology Work Group</u>
To involve Network members in the MCR technology program, the MCR technology staff will convene a work group this year that will continue throughout the next contract. Members will rotate on and off as determined by the Technology Coordinator and the Technology Liaison. This work group will contain at least one IT person from each state. Other members will be drawn

from the MCMLA technology listserv; an invitation will go out to all Network members to submit their name if they are interested in joining the work group. The purpose of the work group is to develop a community of information technology professionals and librarians that will share experiences or assist with testing and trouble shooting new technologies. The work group will provide MCR technology staff will with feedback on how different technologies are used successfully in member environments. They can also provide tips on new technologies that would be useful to other Network members and help test the applicability of the technologies. The work group could also help Network members in their area with the use of technology. Another way that the work group could contribute to MCR's technology awareness program is to help identify, evaluate and monitor the best authoritative technology resources to be listed on MCR web site. Included in these links would be e-books that are part of our netLibrary technology collection.

The technology work group will assist the MCR in recognizing new technologies and resolving technology issues in the region. Our colleagues in the other RMLs will also play this role for us. Both the Technology Coordinator and the Technology Liaison will continue to be members of the NN/LM Web Developer's group and participate in daily discussions with the group through IRC instant messaging.

Training in New Technologies

To help members become technology leaders in their institutions, the technology liaisons offered classes and technology updates throughout the current contract period. The MCR has a repertoire of technology workshops that it currently offers. The workshops are:

- basics of computer networking
- blog publishing
- use of and applications for handheld devices
- VoIP and videoconferencing
- tutorial development software

New workshops are being considered for the next contract. Before developing the course materials, we will check the NTCC Educational Clearinghouse to identify training products, tools, materials, or classes that can be repurposed. Our new workshops will be on topics related to those areas where technology meets open access publishing (e.g., Google Scholar, institutional repositories, learning object metadata). All workshops will be updated throughout the contract. All workshops will be proposed for MCMLA annual meetings. The MCR staff will offer two of the workshops each year. Several distance education classes were offered by MCR staff in the current contract. A class on grant writing was offered to members utilizing the University of Utah telehealth bridge videoconferencing system. A class on graphic design was offered via Macromedia Breeze. A

PubMed class was taught by NTCC staff at the Eccles Health Sciences Library and broadcast to Loma Linda University using NetMeeting.

After some experimentation with the various distance education technologies, the MCR determined that Macromedia Breeze currently provides the best tool for teaching new technologies. Advantages include: class members only need a Flash-enabled browser to participate; access to a variety of tools within Breeze, such as a whiteboard, chat, polling, and screen sharing; class members can see and hear the instructor through the use of audio and video; and the class can be recorded so that it can be viewed at a later date. The MCR plans to offer additional classes using this technology. In order to reach the widest audience, existing workshops will be revised for distance education. Workshops that are recorded will be made available from the "Anytime Anywhere Education" section of our web site.

All copies of training materials will be registered with the NTCC Educational Clearinghouse.

We will include questions about Network members adopting new technology in the 2007 Network Data Inventory to determine whether the MCR staff has been effective in our promotion of new technologies.

Outcome: - Members adopt new technologies to increase access to biomedical information

Indicators: - 50% of Network members indicate on the 2007 Network Data Inventory that have adopted at lease one new technology per year

- 80% of Network members indicate on the 2007 Network Data Inventory rated the technology portion of the MCR web site as "useful" or "very useful"

- 75% of class participants indicate increased knowledge about technologies

Inter-regional classes with the NN/LM MidContinental Region, South Central Region, and Pacific Southwest Region using the Access Grid

The Access Grid is an open source videoconferencing technology developed for the Internet 2. It was designed for group-to-group interactions via high-speed networking over and provides high quality audio and real-time video to provide interactive experiences for users at multiple sites. (*http://foxtrot.ncsa.uiuc.edu:8900/public/AGIB/)* The Access Grid supports interaction among all participants. It is not a one way videostream, or two way desktop videoconferencing, but videoconferencing with all present being equal participants. For training purposes it has excellent potential because the

instructor can see and hear all the participants. A hand can be raised for questions and participants can participate in a discussion just as in an in-person class. In the MidContinental Region, Eccles Health Sciences Library and the University of Wyoming have Access Grids. The MCR has participated in the Project Touch sessions originating out of the University of New Mexico. These sessions included participants from Arkansas, Hawaii, Michigan, New Mexico and North Carolina sharing their use of multimedia in education. It involved presentations, demonstrations of the multimedia products, and discussion by all participants. Each site had more than one participant (New Mexico and Hawaii had up to eight people in their groups) and each site could see all other sites.

The MCR proposes to fund Access Grids at all Resource Libraries in the next contract. Because there are a limited number of libraries who have are an Access Grid node, three Regional Medical Libraries will work together to make use of the technology. We will offer courses and invite facilities from the other regions to take the course. The MCR Technology Coordinator will offer technology classes ("Introduction to Networking" and "Introduction to Blogging") to attendees at institutions in the South Central and Pacific Southwest Regions that are Access Grid nodes. The SCR Technology Coordinator will offer courses such as “Managing Electronic Resources in Health Science Libraries” and invite participation from the facilities in the MidContinental and Pacific Southwest regions. This inter-regional collaboration will provide an expanded audience for existing courses taught in the regions as well as taking advantage of regional expertise. For facilities that do not have Access Grids, the MCR will experiment with providing them with PIGs or Personal Interface to the Grid. We will purchase equipment to make up three PIGs and loan them to institutions who want to participate in the workshops.

Outcome: - In conjunction with other RMLs, Network members, health professionals, and organizations providing health information to the public are able to learn about new technology developments that will help them to increase access to biomedical information

Indicator: - 75% of class participants rate Access Grid as an effective means of conducting a class

Open Access and Scholarly Communication

Academic health sciences libraries in the region are very aware of the issues involved in open access and scholarly communication. They have been working on their own campuses to raise the consciousness and gain the support of faculty for new models of publishing. The MCR will showcase their projects and activities on the MCR web site. Current repository efforts that could be showcased include HEAL (Health Education Assets Library) and the RML’s archive on DSpace.

At the level of the region's primary access libraries there has been very little activity. In the next contract the RML will work to educate all Network members so that they can increase the awareness of the health professionals with whom they work. It is not just the authors of articles, but the users of the information who need to participate in this discussion and influence the decisions made by their professional organizations on the model used for publishing.

For the 2005 RML Directors meeting the RMLs were asked to provide information on activities in their region. One of the questions we asked was the role that the RML could play to support open access publishing. We have used the suggestions from this feedback to form our open access/scholarly communication plan.

We will again identify the open access activities in the region in order to encourage collaboration and prevent duplication of effort. Many of the resource libraries are carrying out promotional campaigns, developing web sites, writing articles for the library newsletter, arranging presentations to faculty groups, and organizing events that frame the issues. The liaisons can easily collect information on what is going on in their own library. To discover what the rest of our Network members are doing, we will administer a brief survey at the 2006 MCMLA meeting. Once activities have been identified we can collect materials and ideas and make them available from the MCR web site for all to use. We will also request that training materials be added to the NTCC Educational Clearinghouse to make them available to an even wider audience.

Librarians requested that the RML develop promotional and educational materials that they can use with their health professionals. These materials will clearly and concisely explain the issues, suggest action that health professionals can take or list resources for more information. An example of an educational material that may be developed would be an FAQ on the NIH submission policy for PubMed Central, one for health professionals and another for health science librarians.

The MCR also plans to fund local educational events that would be sponsored by resource libraries or health science library consortia. These events would bring in speakers and provide the opportunity for Network members to focus on open access issues, new forms of scholarly communication, or copyright in the digital age. We would fund one event for each state. We would also sponsor an event at the MCMLA annual meeting. Presentations at state and MCMLA events would be broadcast to the region using streaming video technology and archived on the MCR site as one of the conditions for funding. In this way, all Network members will have access to educational opportunities provided by the RML.

At the beginning of the contract we will add a page to the MCR web site that will include links to relevant pages on scholarly communication and open access

already available (for example, the Electronic Journals and Open Access page on nnlm.gov and the Scholarly Communication and Publishing page on the Eccles Health Sciences web site).
(*http://medlib.med.utah.edu/km/scholarcomm.php*)

Outcome: - Network members will be more knowledgeable about open access and/or scholarly publishing resources

Indicator: - 75% of members that completed survey indicated that they have increased knowledge of open access/scholarly publishing

Regional Digital Depository

~~In years 4 and~~ **In year** 5 of the contract, the MCR proposes to develop a regional digital repository for unique, historical materials and for publications of Network members and the health professionals they serve. This is not for faculty and staff at Resource Libraries since they are developing repositories for their own institutions. This is for hospital and smaller academic libraries to archive their documents, photos and other materials yet to be identified. With the availability of a repository, Network members will have another contribution that they can provide to their own institutions.

This project will also bring the scholarly publication discussion down to our primary access library level. Health professionals who occasionally publish may want to add their article to the regional depository and will encounter the copyright issues. The materials will have a clear copyright (if the author is deceased) or have copyright owned by the authors. The Creative Commons licensing system can be incorporated into the metadata in order to specify appropriate uses for the materials. (http://creativecommons.org/)

We propose to license Content DM to house digital materials and metadata. The libraries at the University of Utah are using this software as their institutional repository because it is more user friendly and offers more features than the open source software that currently exists (e.g., DSpace). In order to facilitate discovery of the materials, metadata in the digital repository can be shared with other repositories through the Open Archives Initiative (OAI) metadata harvesting protocol.

Outcome: -The regional digital depository includes Network member collections

Indicator: -Materials are added to regional depository from at least 10 Network member libraries

Schedule:

Years 1-5
Identify open access projects in the region

Add links on MCR web site to relevant pages on scholarly communication and open access

Offer regular technology updates on web site and newsletter

Offer technology forums/workshops at MCMLA and Wyoming Symposium

Post forum streaming video on MCR web site

Identify and evaluate technology web sites; link to from MCR web site

Participate in NN/LM Web Developer's group

Hold regular meetings with technology working group

Offer two classes per year on technology applications

Offer one class via Access Grid

Videobroadcast and archive presentations from educational events on open access and scholarly communication

Year 2
Add questions to the 2007 Network Data Inventory on adapting new technology

Develop promotional and educational materials on the issues and developments in open access and scholarly communication.

Propose a forum on open access and scholarly communication at MCMLA

Years 2-5
Showcase current open access projects at Resource Libraries on the MCR web site

Year 4
Fund promotional/educational events on open access and scholarly communication

Establish depository servers

Hire consultant for regional depository project

Select pilot project library

Carry out depository pilot

Year 5
Promote regional depository to Network members

Train Network members to organize and add content to depository

B7 - Library Improvement

Statement of Work

The contractor shall implement an NN/LM library improvement program, if needed, in the region. If no program is proposed, the contractor shall provide an explanation of why the program is not needed. Site selection criteria are found in Appendix 5. The following shall be included in this program:

a. Identifying hospital libraries that do not have onsite access to NLM resources, do not participate in DOCLINE, and meet the minimum criteria outlined in Appendix 4; and
b. Developing a program to improve library services delivered to hospital staff, which may include:
    i. Loaning equipment necessary to access PubMed, MedlinePlus, DOCLINE and Web services;
    ii. Introducing the library manager, key staff, administrators and health professionals to the NLM systems, hardware, software and other resources available in the Network to improve their access to information;
    iii. Conducting frequent follow-up contacts with the librarian to assess progress and offer assistance;
    iv. Encouraging electronic document delivery; and
    v. Encouraging and supporting expanded collaborations between hospital library staff and institutional administrators to enhance the library's ability to contribute to hospital programs and priorities.

Applicable NN/LM Goal

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.

Objectives:

Implement an NN/LM Library Improvement Program for hospital libraries that have a non-MLS whose main responsibility is not library related providing library services

Implement an NN/LM Library Improvement Program for those hospitals that have an MLS librarian providing library services to the institution

Rationale:

The Library Improvement program in the MidContinental Region supports all libraries in the region. There are facilities that are too small to ever afford a full-time librarian to support the health information needs of their personnel and patients. Personnel at these libraries need basic training to provide access to NLM resources and information about the NN/LM so that they have resources that they can call upon. Our Network librarians who work in hospital and academic libraries are already providing basic access to health information services for their user groups. They still need training to maintain skills but also need resources and skills to prove themselves as valuable team members to their institutions.

Approach and Methodology:

The Library Advocacy Liaison is a new position for the J. Otto Lottes Health Sciences Library at the University of Missouri-Columbia. This librarian is responsible for coordinating the activities that improve the status of libraries within their institutions.

Outreach to Non-member Hospitals

Because of the requirements for Network membership, we presume that all Network members provide access to NLM resources. We will target non-Network members to determine whether they offer access. This year we compiled a list of hospitals that are not Network members by using the AHA Guide to Health Care Institutions and by comparing it to the institutional records from DOCLINE. We will contact hospitals on this list to determine whether or not they provide access to NLM resources. We will share information about access to health information resources and NN/LM services and membership by sending a mailer to the administrators of the AHA member hospitals in each state.

Throughout the contract we will continue making contacts with hospitals who do not offer access to NLM resources. Contact methods will include email, phone and personal visits. We will follow up with earlier contacts to share additional information about information access and determine whether the hospital library provides access. For hospitals that still do not provide access, we will determine the barriers and work with hospital staff to develop plans that will overcome the identified barriers.

Outcome: - More hospitals provide onsite access to NLM resources

Indicators: - Number of hospitals that have requested training or taken training on NLM resources has increased

- There is a 25% increase in hospitals with no previous access to NLM resources which are now reporting use of NLM resources

Hospital Library Support

The MCR will review the data from the 2005 and 2007 Network Data Inventories to determine hospital librarians who may need assistance in offering a standard level of services as defined by the Medical Library Association's Standard for Hospital Libraries. One indicator that assistance is needed would be if the librarian is not offering training in the use of health information resources.

RML staff will contact Network members who fall into this category to assess library programming and offer assistance. We will meet with administrators as well as librarians when we visit member institutions. We will develop materials to

inform administrators of the library's value to the institution and the benefits of being a member of the NN/LM. There are a number of strategies we could employ to assist the librarian. One is to offer to make a presentation with the librarian to administrators, key staff, and health professionals on the value to the librarian of being a member of the NN/LM. We would emphasize the resources that the Network makes available to improve the hospital staff's access to information. We could encourage collaborations between hospital library staff and institutional administrators to enhance the library's ability to contribute to hospital programs and priorities. Another strategy is to encourage the hospital librarian to utilize electronic document delivery. Document delivery to the desktop offers the health professional convenience and speed. It is a way for librarians to improve service through use of technology. (For more details on the MCR initiative to promote electronic document delivery, see our response to section A6 of the statement of work.) We will follow-up with the librarian to assess progress and continue to offer assistance.

The Library Advocacy Liaison will revise a checklist developed by the Nebraska Liaison that identifies topics to discuss and questions to ask when visiting a non-member hospital and a Network member. The intention is that this checklist will be used with hospital librarians when consulting about library activities within the hospital. This list will also include suggestions of promotional activities that hospital libraries can implement. State liaisons will review the checklist and add their comments and suggestions and use the list during visits to non-member hospitals and Network members.

The Colorado Council of Medical Librarians (CCML) and the Health Science Librarians in Kansas City (HSLNKC) are two local health science librarians groups in the region who have been locally developing methods to improve the status of libraries in hospitals. During this contract both groups have had members who lost their jobs because hospital administration closed the library. The Library Advocacy Liaison will incorporate a representative from each of these organizations into her work group in order to keep abreast of the status of their advocacy programs. She will work with other health sciences library groups in the region to facilitate sharing of information and to foster communication on the value of library service to administrators.

To market directly to health care administrators and health professionals, the MCR will present and exhibit at their conferences and write articles to be published in their newsletters and journals. We will identify and prioritize appropriate conferences and publications for each year of the contract. The MCR liaisons will provide information about the NLM systems and other resources available through the NN/LM that can improve their access to information.

The MCR will also market to the hospital librarian. We will publish articles/ reminders about library advocacy using our communication tools. Topics to be covered may include: promotions for National Library Week, National Medical

Information Day, promoting the worth of hospital library to hospital departments and medical staff, etc.

Identify and promote funding opportunities
The MCR will promote funding opportunities as a way to improve the value of the library to the institution. Funding would include NLM grants, regional funding, IMLS/LSTA funding and foundations. The MCR will provide proposal writing workshops and consulting services for those who are applying for an award. We will also promote the NN/LM Funding web site and the Bringing Health Information to the Community blog as resources for locating an agency willing to fund a library project. (For detailed information on the program to encourage proposal writing, see our response to section A15 and A16 of the statement of work.)

We will track hospital library additions and closures and report this information to the National Library of Medicine.

Outcome: - Administrators and health care professionals are more aware of NLM resources and the access to medical information provided by the hospital library

Indicator: - Hospital librarians and adjunct library personnel report increased support from hospital administrators

Business Practices for the Hospital Librarian

The MCR provides a collection of e-books on netLibrary available to all Network members in the region. This collection has averaged about thirty users a quarter without significant promotion by RML staff. The collection is about library management and technology and offers books that can help librarians who want to manage their libraries using business practices that are familiar to their administrators. Some of the titles are Excel Models for Business and Operations Management by John F. Barlow, The Benchmarking Book by Michael J. Spendolini and The Complete Idiot's Guide to Project Management by Sunny and Kim Baker. The Library Advocacy Liaison and the Education Liaison will have collection development responsibility.

The Assessment and Evaluation Liaison from this region and the Education/ Communication Coordinator from the Pacific Northwest Region teach a workshop that was developed under the auspices of the Outreach Evaluation Resource Center. “Measuring Your Impact: Using Evaluation to Demonstrate Value” teaches health science librarians to use evaluation techniques from the social sciences and from business administration to measure the impact of the library. The purpose of the workshop is for health sciences librarians to learn these techniques and use them to produce reports that will show the value of the library to their administrators. Topics covered in the class include determining return on

investment, creating a logic model, and ways to integrate the library into hospital activities. The region will propose offering "Measuring Your Impact" as a CE opportunity during the 2006 MCMLA meeting in St. Louis, MO.

Materials developed for all workshops developed by MCR staff and presented as part of the region's library improvement program for Network members will be available from the MCR web site and the NTCC Educational Clearinghouse.

Outcome: - Librarians are better equipped to promote the value of their library to their institution

Indicators: - Usage of netLibrary will increase by 20% over Y5 of previous contract

- At least fifteen librarians will register for "Measuring Your Impact: Using Evaluation to Demonstrate Value"

Marketing for the Hospital Librarian

Imitation is a sincere form of flattery. MLA has a good idea in its Swap and Shop, an arena to share public relations material, and the RML intends to see if it will work at the chapter meetings for this region. For the annual meeting of MCMLA the Library Advocacy Liaison will organize members to bring in their marketing materials and strategies. Strategies can be shared by creating a poster or some other mechanism. To encourage participation, the best marketing submission will receive a prize donated by the RML. If members bring their promotional ideas and if the area is well trafficked we will continue this marketing exchange throughout the contract.

netLibrary will promoted as a resource for marketing strategies and ideas. This area of the collection will be maintained with current useful e-books.

Marketing for libraries will be the workshop focus for year 2. Pat Wagner of Pattern Research has an MLA CE course that is presented in two sessions. The first day consists of in-depth work on what is marketing and how to do it. Each participant will identify projects to be implemented at their institution. Six months later the participants meet for the second session during which they present their projects, and analyze their successes and failures with the group. The RML will sponsor the workshop in two locations in the region. Participants with successful strategies or who can provide an experience that will benefit other members will be asked to contribute to an article for the RML newsletter.

From the workshop experiences the RML will create a list of recommendations of ways for hospital librarians to analyze their constituency, and then market their services. This list will be published on the MCR web site and individual items published in the "RML News".

Outcome: - Librarians are better equipped to promote the value of their library to their institution

Indicators: - Use of netLibrary will increase 20% over the 5 year contract

- At least fifteen librarians will register for marketing workshop at each location

- At least half of the participants will be successful with the implementation of their marketing plan

Advocacy Materials for the Hospital Librarian

For National Medical Librarians Month in 2004, the Colorado Council of Medical Librarians (CCML) and the MCR collaborated on a letter to hospital administrators about the value that hospital librarians can offer to the institution. This letter was made available from the MCR web site and hospital librarians were invited to send the RML the name(s) and addresses of their administrator(s). The MCR mailed 60 letters to administrators in the region. The letter was picked up by other RMLs and offered to their hospital Network members. CCML contacted librarians across the country to determine the impact of the letter. The questionnaire was sent to 265 hospital librarians. Of the 54 librarians who responded 23 received positive feedback from their administrators and 30 received no response from their administrators.

The MCR will again write a letter that hospital librarians can have us send to their administrators. Values that can be promoted include the use of new technology (i.e., voice-over IP, videobroadcasting), open access to information; e-resources; and furthering the goals of the institution. Examples of information that can be included in these materials include statistics from the MLA Benchmarking Survey. After the third year of this service we will evaluate its effectiveness and determine whether or not it should be continued.

There are links to advocacy resources on the Medical Librarians page of the MCR web site. These include the Hospital Library Advocacy Blog and MLA's Librarian Survival Kit. In the next contract MCR will devote more web pages to library advocacy resources. We will collect additional activities and practices and add them to the site. To determine the usefulness of the materials we make available to our Network members working in hospitals, state liaisons will contact two hospitals per year to assess value of the materials.

Outcome: - Hospital librarians will have materials available to use in advocating for the library within the institution

Indicator: - Hospital librarians and adjunct librarians report that materials provided by MCR are valuable for advocating to hospital administrators

Hospital Library Study

The J. Otto Lottes Health Sciences Library at the University of Missouri is one of the Resource Libraries for the region. The director has been asked by the Missouri Foundation for Health to provide outcomes data that can only come from a well-organized study. The library intends to lead an investigation into the value of information and would like to extend it to the region with both academic health sciences libraries and hospital libraries as the study environments. The RML has been asked to lend its support for a regional study by facilitating access to hospital Network members and promoting participation in the study to hospital librarians. The Library Advocacy Liaison, based at the J. Otto Lottes Health Sciences Library, would participate in study design, assist in the implementation as it relates to Network members, and contribute to the analysis.

The research team will be under the administration of the director of the J. Otto Lottes Health Sciences Library. In the current year, the team will be selected and begin to design the study and a database for data collection. It is expected that the team will include a biostatistician, and advisors would be available from the Center for Health Care Quality and Office of Clinical Effectiveness on the Columbia campus.

The preliminary plan is to include institutions that have clinical librarians, librarians in context, or informationist programs as well hospital library programs. Participation would include facilities of all sizes and from areas of different population densities. The study would begin in Missouri and Colorado. These states were selected for the implementation of the study because they have institutions with clinical librarian programs. Design issues would be worked out in this pilot phase before inviting hospital libraries from the rest of the region to participate. During the year that the study is taking place in the two states, the RML staff will promote it to libraries in rest of the region. All hospital libraries will be invited to apply to join the study. A manageable number will be selected to participate. A year of data collection at each institution is planned. A final report of the study is expected by the end of the contract. Following a review of the initial study, the researchers may decide to repeat the study with an even greater number of hospital librarians.

Outcome: - Members of the MCR have documented evidence of the value of information to health science institutions in the six state region

Indicator: - Data collected from study demonstrates the value of information provided by health science libraries

Schedule:

Year 1

Identify appropriate conferences for each year of the contract to exhibit and make presentations

Identify appropriate journals for articles and prioritize publication goals

Propose "Measuring Your Impact: Using Evaluation to Demonstrate Value" workshop at MCMLA 2006

Revise checklist of topics to cover during a visits to hospital libraries

Continue work begun in Y5 of previous contract on study design for hospital library study

Years 1-5

Update list of hospitals that are not NN/LM members

Review data from Network Data Inventory to determine which libraries are not providing a standard level of service

Schedule contacts with Network members that are not providing a standard level of service to assess library programming and offer assistance if needed or requested

Develop materials to inform administrators of library value to the institution

Work with health science library groups that are working on library advocacy projects and activities

Present and exhibit at conferences about NN/LM services that promote onsite access to NLM resources

Publish articles/reminders in MCR communication tools about opportunities to library promotion

Publish articles on NLM systems, hardware, software, and other resources in professional journals (open access) directed at librarians, health care administrators and health professionals

Identify and promote grant funding opportunities

Develop materials to inform administrators of library value to the institution

~~Identify and recommend materials for additions to netLibrary and actively promote netLibrary to membership~~

Organize a display of member marketing materials and strategies for the MCMLA annual meeting

Develop a template letter for hospital librarians to send to hospital administrators on a yearly basis, and place it on the MCR web site.

Maintain list of hospital libraries' changes (additions, closures, downsizing)

Year 2
Schedule two day classes for members on marketing for librarians

Begin hospital study in Missouri and Colorado

Provide training for librarians involved in hospital study (two sessions: one for MO and CO, another later for other states, perhaps conducted at MCMLA)

Promote hospital study across region

Years 2-5
Continue making contacts and following up with adjunct libraries to determine whether the hospital is providing access to NLM resources

Develop and post on the MCR web site a list of recommended activities and practices to emphasize the value of the hospital library to the institution

Identify and recommend materials for additions to netLibrary and actively promote netLibrary to membership

Year 3
Develop a list of ways for hospital librarians to analyze their institutions and constituency, and market their services

Select hospital libraries from the region that will participate in the study

Years 3-5
Consult with members of the marketing classes, and request that they publish the results of their study in MCR newsletter

Year 4
Develop resources on various business subjects (i.e., writing a business plan, return on investment, organizational change) to be made available on the MCR web site

Compile hospital library study data

Analyze hospital library study data

Year 5
Schedule "Measuring Your Impact: Using Evaluation to Demonstrate Value" workshop for the region

Write hospital library study final report

B8 - Connections

Statement of Work
The contractor shall develop, implement and annually update a plan to encourage high quality Internet connectivity for Network members and health professionals in the region.
This shall include, but not be limited to:

a. Reviewing the adequacy of the Internet connections of Network members on an annual basis, reporting the results to the region and to NLM, and assisting the "under-connected" in maintaining and upgrading their connections; and
b. Identifying inner-city and rural health care organizations that are not connected to the Internet or that are under-connected; consulting with them to determine if they would benefit from assistance with connecting/upgrading their connection, and providing the needed assistance; introducing staff to PubMed, MedlinePlus and other health information resources on the Web.

Applicable NN/LM Goal
To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public.

Objective:

Develop and implement a plan to encourage high quality Internet connectivity for Network members and health professionals in the region

Rationale:

The MCR has made videoconferencing and streaming media videobroadcasting technologies an integral method for communicating with members regarding health information resources, instruction, and services. In order to take advantage of this kind of communication, members must have access to a high speed Internet connection with at least 150K of available bandwidth. In addition, the RML plans to work with community and inner city organizations to help promote the use of online biomedical resources such as MedlinePlus and MedlinePlus en espanol; this will require that the organizations acquire reliable high speed access to the Internet.

Approach and Methodology:

The Technology Coordinator at Spencer S. Eccles Health Sciences Library and the Technology Liaison at the Archie R. Dykes Medical Library will have primary responsibility for coordinating the connectivity program for the region.

Network Member Connectivity

The RML will review the adequacy of the Internet connections of Network members on an annual basis, reporting the results to the region and to NLM, and assisting the "under-connected" in maintaining and upgrading their connections.

In 2002, the MCR sent a Network Data Inventory to the 216 Network members in the region. The Inventory included questions regarding the members' Internet connectivity. We inquired whether the library had access to the Internet. All members but one reported that they had at least one computer that was connected to the Internet. Furthermore, we queried the members about the level of their connectivity; asking the question "What is the speed of your Internet connection?" Ninety of the 122 institutions who took the inventory responded to this question as follows:

Dial-up: 7
Broadband (cable, DSL, or ISDN): 23
T 1 or faster: 41
Don't Know: 17

We assumed from these reports that there were a few members who were on slow dial-up connections but most of our members were well connected and capable of receiving the graphics and video that are being currently used in online instruction. Our individual experiences with hospital libraries over the 2001-2006 contract period and the research conducted by the NN/LM Hospital IT Task Force have revealed that having a high bandwidth connection may not be the reason our members are under-connected. Their connectivity issues may be caused by other factors, such as firewalls, institutional polices that restrict the installation of streaming media players (RealPlayer, Quicktime, or Windows Media Player) or the opening of ports that are required for videoconferencing.

Much of our communication with the region and the educational opportunities that we propose for the 2006-2011 contract will use videoconferencing, video broadcasting, and collaboration applications, such as Macromedia Breeze and the Access Grid. It is essential that our Network members be able to receive these streams and participate in collaborative sessions. This is why our current standard for adequate connectivity is set high (150 K per second) so that they can meet the bandwidth requirements to participate in videoconferencing. At the beginning of the new contract the technology staff of the RML will review the current 150 K standard for minimum connectivity. Based on the applications we want our Network members to be able to use at the time, this standard may be revised.

We will administer a Network Data Inventory this year (2005) to Network members to assess their connectivity. Annual reviews of Network member Internet connectivity will be conducted either through the Network Data Inventory

or through a separate inquiry focusing solely on connectivity issues. The responses to these assessments will reveal Network members who do not meet our minimum standard. Over the proposed contract term, we will work with hospital libraries identified as being under-connected in order to improve their access to Internet resources. The first step will establish the speed of the library's connection using the web site, Broadband Reports. *(http://www.dslreports.com/stest).*

Then we will apply a two stage plan. In stage one, we will consult with hospital librarians and the IT staff of the under-connected institutions on policy and security issues that may be contributing to their inability to take advantage of critical resources and services. If the IT department cannot work through the issues with the hospital library, the MCR will move on to stage two of the plan. One hospital library per state will be subsidized by the RML to provide an external (i.e., outside of the firewall) Internet connection for one year. This will be done upon the agreement from the institution that, if the connection gives the library access to needed resources and services, the institution will find continuing funding for the improved Internet connectivity. The technology staff of the RML will work with **one state in the first year of the contract and** two states for the ~~first~~ **second and third** 3 years of the contract. By the end of our third year, one library in each of our states will have received a subsidized connection. State liaisons will recommend funding sources to libraries not selected for subsidies and assist them with their proposals.

In the last two years of the contract, the MCR will follow up with the members that received the subsidized connections, to determine if the connections continue to improve their access to biomedical information and other services, such as videoconferencing. The MCR will also follow up with the under-connected members that did not receive subsidies to determine if they were able to improve their connections through other funding sources.

The strategies that we learn as we implement this pilot project will be reported in our quarterly reports to NLM and incorporated in the computer networking class developed by the Technology Coordinator. This class provides enough of an introduction to computer networks to enable librarians to present their needs to IT staff in the vocabulary that IT will understand. This workshop will be offered annually to Network members and will be taught using distance technology. Low level technology will be used for these classes so that librarians from under-connected libraries can participate. All under-connected libraries identified in our review process will be sent invitations to attend the computer networking class.

The MCR will report on the process and results of working with Network members to improve their connectivity by submitting articles for publication and proposals for meeting presentations. We will explore ways to use these success stories in our Library Improvement Program as examples to present to hospitals

about how libraries improved access to needed information. The NLM will be kept informed of our progress through our quarterly reports.

Outcome: - Under-connected Network members have increased access to biomedical information and to communication tools

Indicators: - Technology liaisons will increase the connectivity of at least 6 institutions (one per state) over the contract period

- Technology liaisons will consult with at least six additional organizations to help them develop a connectivity plan and find funds from other sources

Health Care Organization Connectivity

The RML will identify inner-city and rural health care organizations that are not connected to the Internet or that are under-connected; will consult with them to determine if they would benefit from assistance with connecting/upgrading their connection; and will provide assistance as needed.

Our current definition for adequate connectivity for health care organizations is a minimum of a DSL or cable connection. This permits adequate access to the graphics and multi-media available from MedlinePlus and MedlinePlus en espanol. At the beginning of the new contract period, the technology staff of the RML will review the standard for minimum connectivity as appropriate to new developments in connectivity speed. The state liaisons will be polled to determine if they are working with any organizations that meet the criteria of being under-connected and are located in the inner city or a rural part of the region. If all organizations are adequately connected, the state liaison will review local directories or Go Local to obtain a list of community organizations, including community health centers in rural areas or the inner city. By contacting the organizations, the MCR will identify under-connected organizations that are interested in participating in a pilot project .that will offer consultations to assist them in improving their connectivity.

Those organizations who are interested in the project will be invited to a “Café to Go”[14] discussion in their state. Café to Go is a group process that “fosters collaborative dialogue, active engagement, and constructive possibilities for action.” The MCR will gather a group of people in a relaxed setting to discuss pre-established topics or questions. Every round table will have a different question and people will move from table to table at regular intervals until everyone has had the opportunity to discuss all the questions. The mix of the group may be

[14] World Café Community. Café to Go: A quick reference guide for putting conversations to work. [Web document]. Whole Systems Associates, c2002 [cited 5 Jul 2005] *<http://www.theworldcafe.com/cafetogo.pdf >*

stable or self-determined (with every new question an individual may talk to a different mix of people). Summaries of all the different discussions for a single question are presented to the whole group to conclude the café.

This process was used by the Community Outreach Liaison with her work groups to elicit suggestions for the 2006-2011 NN/LM contract. The MCR proposes to use this process to brainstorm and develop strategies to address the information needs and improving Internet connections of community based organizations and community health centers in the region.

The results of the Café to Go process will be distributed through the MCR' communication channels, including posting them on the MCR web site. As part of the Café to Go process, the MCR will give a brief presentation of the NN/LM and its mission. RML staff will demonstrate NLM resources to participants to illustrate the health information resources that are available to organizations with adequate Internet connections. The Bringing Health Information to the Community blog will be promoted as a source of grant and funding information for organizations that need outside funding to make this infrastructure improvement. The Community Outreach Liaison regularly posts to the blog opportunities for community organizations to apply for funding from a variety of government agencies, national and local foundations.

The Community Outreach Liaison and the state liaisons will select the organizations that the MCR will work with, based on which organizations would offer the best strategic partnerships and collaborations with Network members. Each state liaison will work with one community organization in her state during the contract period. The state liaisons will formulate a plan with the community organization using the RML technology staff as technical advisors. State liaisons will contribute ideas of funding sources, offer advice on proposal writing, and review proposal(s) written to fund improved connectivity. The community organization will be responsible for on-going maintenance of the connection to the internal network. We expect that this will be a multi-year process. Within the last two years of the contract each state liaison will follow up to determine whether her organization improved their connection and whether it has increased access to biomedical information.

MCR will report on the process and results of working with the community organizations to improve their connectivity by submitting articles for publication and proposals for meeting presentations. NLM will be kept informed of our progress through our quarterly reports.

<u>Outcome:</u> - There will be increased access to biomedical information by previously under-connected inner city and rural organizations

Indicator: - Each state liaison will increase the connectivity of one under-connected inner-city or rural organization over the contract period

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Schedule:

Years 1-5
Review and if necessary redefine under-connectivity as it relates to Network members

Identify under-connected Network members using the 2005 Network Data Inventory and subsequent technology surveys.

Use web site: Broadband Reports (*http://www.dslreports.com/stest*) to determine speed of connection

Work with under-connected members to formulate plan for increasing connectivity

Work with under-connected members not selected for subsidies to identify funding from other sources

Update and present Networking class

Years ~~1-2~~ 2-3
Organize a Café to Go to identify ways to work with or assist under-connected inner city or rural organizations

Demonstrate NLM resources to Café to Go participants

Years 1-3
Select under-connected members to receive subsidized connections

Review and if necessary redefine under-connectivity as it relates to inner city or rural organizations

Identify under-connected inner city or rural organizations

Promote the blog, Bringing Health Information to the Community, as a source of funding information

Years 2-3
Work with under-connected organizations to formulate a plan for increasing connectivity

Years 2-5
Conduct an annual review of members to identify the under-connected

Year 4
Follow up with under-connected members that received subsidized connections

Follow up with under-connected members that did not receive subsidies

Follow up with inner city/rural organizations assisted by state liaisons

Year 5
Submit proposals for posters and papers on the process and results of improving connectivity of Network members and community organizations to appropriate meetings

Outreach Programs

Logic Models

Outreach Programs

B1 - Outreach to Health Professionals

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
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	Continue to develop, implement, and evaluate targeted outreach programs to bring biomedical information resources within easy reach of U.S. health professionals who still do not have access, with special focus on those in rural areas and inner cities	Focus on special populations or subject disciplines that have been identified as priority initiatives (e.g., health disparities, health information literacy, HIV/AIDS, health services research, public health) and that target the health professionals serving those populations or working in those disciplines Enlist the assistance of hospital libraries and other network members to:	Yr 1: Use the 2005 NDI to identify network members already working with HCP who target special populations Contact these Network Members to assess their needs, example Patient Education materials, cultural competency –how to work with someone from the Sudan, organizational and web resources Each state liaison will directly contact their state members using the most effective method for their state, for example targeted emails to affiliate and full network members Yr 1: A&E and CO liaisons will develop questions to use with Network members (in above activity) Yrs 1-5: Maintain state pages for public, consumer and community health resources for Network members doing outreach Yr 2:	Assessment Train-the-trainer modules Awards/RFPs Items in Publications tools	Network members will provide training to health care providers who serve identified populations	Between years 2-5 of the contract, Network members will provide 6 trainings a year to health care providers who work with underserved populations, who are in public health departments, or who work with HIV/AIDs patients

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
		Offer Train the Trainer Sessions that target special populations Offer awards to Network members to conduct Training Maintain state pages for public, consumer and community health resources	Develop a series of train-the trainer classes for Network Members based on above assessment; or customize already existing modules (i.e. Modules of Public Health Training Manual) and provide training to network members. (use distance training tools whenever possible) Yrs 2-5: Promote and offer Train-the-Trainer Classes Follow up via email with trained network members to determine the number of classes offered to health care providers who work with underserved populations, who are in public health departments, or who work with HIV/AIDs patients CDC Synergy trained trainers will offer per year in conjunction with CDC regional offices Yr 4: State Liaisons and Community Outreach Liaison will provide funding to network members to reimburse travel when training unaffiliated HCP who work with underserved populations HCP will be advised of training opportunities through postings to their listservs, newsletters, and the MCR web site.			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
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	Continue to develop, implement, and evaluate targeted outreach programs to bring biomedical information resources within easy reach of U.S. health professionals who still do not have access, with special focus on those in rural areas and inner cities	Focus on unaffiliated health professionals and health professionals in inner cities and rural areas	Yr 2: Offer awards with the criteria that projects must focus on providing outreach and training to health care providers in inner city and rural areas who have little access to biomedical resources Yrs 2-5: Community and State liaisons will be assigned oversight of awards	Awards	Projects will provide outreach and training to health professionals in rural and inner city areas who do not have easy access to biomedical information	3 awards will be made to network members to provide outreach and training to health professionals in rural and inner city areas who do not have easy access to biomedical information
To promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on	Continue to develop, implement, and evaluate targeted outreach programs to bring biomedical information resources within easy reach of U.S.	Focus on local/state public health departments with particular emphasis on Internet access and collaborations with other organizations/ institutions that work with public	Yr 1: Continue negotiating the OPHL project in Missouri and Wyoming Yr 2: Begin discussions about OPHL in another state Yrs 3-5: OPHL implementation begins in additional states	Each state will have a documented OPHL process (written materials) with flow of work, names of contacts, areas of responsibility, identified problem areas, methods to	Network members, public health professionals, and the public will have improved access to public health information	Missouri and Wyoming will have a process in place to manage access to electronic public health information Each state will have a

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
contributing to the Healthy People 2010 goal of eliminating health disparities	health professionals who still do not have access, with special focus on those in rural areas and inner cities	health personnel	Yrs 2-5: Review and Evaluation of each OPHL Project – Create an Evaluation Tool Investigation and reporting will be done by state liaison; and implementation team Yr 5: Final Report of OPHL comparing all state projects (A&E) Yr 1: Create a basic Public Health Informatics project: Provide training on PH web sites; training on equipment, i.e. PDAs NE Liaison working with library staff puts together a basic informatics class Yr 2: Kansas Liaison works with second public health program Yr 3: Colorado Liaison working with library staff puts together a basic informatics class Yr 4: MO Liaison working with library staff puts together a basic informatics class	promote the project to vested audiences Public Health Training Presentations Public Health Informatics component	.	designated resource library and project manager who will be responsible for their state OPHL project 5 of the 7 Public health graduate programs will have incorporated the Public Health Informatics Project

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Yr 5: CO Liaison will work with additional PH programs in the state			
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	Continue to develop, implement, and evaluate targeted outreach programs to bring biomedical information resources within easy reach of U.S. health professionals who still do not have access, with special focus on those in rural areas and inner cities	Enlist the assistance of hospital libraries and other network members to focus on institutions whose objective is to train minority health practitioners or those who serve minority populations, to develop specific linkages so that their health professionals and students have full benefit of the resources of the network	Yr **2**: Promote membership in the RML for tribal college libraries Develop two exhibit materials tool kit with two specific tribal libraries, including stand alone exhibit booth and materials to assist exhibitor in their demonstration of resources including information about University of New Mexico, Albuquerque Native American Database free document delivery services Distribute exhibit tool kit to Tribal college libraries agreeing to use the kit to mount an exhibit of health information resources at least twice a year at health fairs, Pow Wows	Tribal College Libraries are Network Members Canned exhibit toolkit	Institutions who train minority health professionals will have promoted health information access to their community	3 Tribal Libraries in the region will become affiliate members (see list below for Tribal Colleges in the Region) Tribal Librarians who are affiliate members will each use the kit to exhibit at two event per year
To promote awareness of, access to, and use of biomedical information resources for health professionals	Continue to develop, implement, and evaluate targeted outreach programs to bring biomedical	Enlist the assistance of hospital libraries and other network members to focus on one or two inner-city institutions	Yrs 1-5: Identify staff at clinics that are unaffiliated; have key staff join the Community Outreach Working Group; suggest them as RAB members Yrs ~~1-3~~: **2-4:** Community Outreach Liaison will	Project focused on inner city access to biomedical information Feedback from Café to Go process	Increased access to biomedical information by unaffiliated inner-city institutions	One inner city clinic staff member will be considered for the RAB each year 6 Café to Go sessions will

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
and the public, with a particular emphasis on contributing to the Healthy People 2010 goal of eliminating health disparities	information resources within easy reach of U.S. health professionals who still do not have access, with special focus on those in rural areas and inner cities	per year which shall include identifying what the RML can do to improve or enhance the institution's access to biomedical information and developing and implementing a program that responds to identified needs Develop and implement a program that responds to identified needs	travel to each state to work with state liaison to use **Café to Go** process to garner feedback from CBOs and community health clinics (This will build from our outreach in prior contract to NACHC clinics) Networks will be facilitators in this process ~~Yr 4:~~ **Yr 5** Develop projects based on the feedback from process – RML can assist in facilitating partnerships between CBOs and Network members to develop projects such as: NEB AIDS Project and use of PDAs to find social services Yr 5: ~~3 presentations/posters will be made on the Café to Go process as a project development tool~~	Poster/paper at MLA, MCMLA		be held

Outreach Programs

B2 - Consumer Health Information Services

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
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	Increase the public's awareness of and access to high quality electronic health information	Develop the region's consumer health information goals and objectives and work with a variety of organizations to accomplish them	Yrs 1-5: Form a working group from appropriate organizations that will assist liaison in developing goals and objectives for consumer health information access, help implement RML activities and provide feedback on consumer health information needs Yrs 2-5: Develop programs to facilitate collaborations between public libraries and public schools to train school and library staff, parents and students in finding answers to health related questions Assist public health departments in making health information available to clients Assist CBOs, faith based organizations, to become aware of health information resources and other groups providing them	Goals and objectives Programs Working Group	MCR will have well defined goals and objectives to share with organizations MCR will have implemented regional projects based on the goals and objectives	Working group contributes to the development of goals and objectives for consumer health outreach Six programs involving collaborations between two or more organizations will be implemented during the contract

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Encourage Native American reservation representatives and public libraries to collaborate in providing consumer health education materials			
	Increase the public's awareness of and access to high quality electronic health information	Develop programs that focus on reaching minorities, senior citizens and low income populations	Yr 1: ~~Create mobile training units (laptops, wireless routers, etc.) for each state liaison to use in public libraries, public health facilities and CBO sites, senior centers, faith based organizations, community centers currently lacking appropriate training equipment~~ Yrs 1-5: ~~Liaisons will use the mobile training units and the Consumer Health Modules three times per year to teach health information access to senior groups, low income population groups, and minorities~~ Exhibit and give presentations based on Consumer Health modules at regional and state meetings of public librarians, CBO workshops, aging and minority populations health	Presentations; articles; Contact list of new CBOs which have a health mission in addition to a contact list of current CBOs which we already work with. We will add senior centers to this list as well since all of them have an interest in health topics Mobile training unit	CBOs, public libraries, public health departments and other organizations serving minorities, senior citizens and low income populations receiving training and information about health information resources implement health information programs for their service populations Librarians in the region will have increased skills in accessing resources and teaching about consumer health information for minorities, senior citizens and low income populations Minorities, senior citizens and low income populations receive information about	At least two CBOs and two public libraries offer programs about finding and using health information for minorities, senior citizens and/or low income populations and attribute ideas for the new program to information provided by the RML when responding to a questionnaire Public Librarians participating in focus groups indicate that the RML has provided needed training in supporting information needs of minority, senior and low income populations

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			conferences Yr 1: Promote "NN/LM Public Libraries and Consumer Partners" and "MCR Public Library" Web sites to public libraries across the region Yrs 1-2: Identify new CBOs with health missions Yrs 1-5: One or more liaisons will exhibit at state and county fairs Write at least one article per state per year for a senior organization or CBO newsletter Yr 1: Develop "Heritage Month" health info bytes: Black History Month, Cinco de Mayo, seniors Yrs 1-5: Post health infobytes on MCR web site, BHIC to encourage libraries and CBOs to plan health related programs during "heritage months". Post before the month to serve as reminder	Blog and newsletter posts, MCMLA listserv posts, web site posts	finding health information	Liaisons records show that visitors to booths at state/county fairs are from intended audiences and articles for senior citizen publications reach intended audiences Brief questionnaire filled out by exhibit booth visitors in exchange for NLM giveaways

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			and send notice to appropriate listservs (such as Mountain Plains Library Association, MCMLA, other listservs to be identified)			
	Increase the public's awareness of and access to high quality electronic health information	Work with NLM, the NNLM, and other organizations to develop tools and linkages to improve access to electronic consumer health information at the local, state, and regional level	Yrs 1-5: Facilitate a public library/community organization partnership in each state in the region following the guidelines of NNLM's Public Libraries and Communities Web site Encourage partnerships to share lessons learned about collaboration efforts through articles in Plains to Peaks Post, presentations at conferences and submissions to Effective Practices Database Yrs 2-5: Liaisons will include information about partnerships and their activities on the MCR Public Library and MCR State web pages Yr 1: Work with Regional Consumer Health coordinators to identify common needs of	Web Pages Publicity materials	Partnerships exist that enhance access to electronic health information State Library web pages will have links to NLM Consumer Health resources, including MedlinePlus and Public Library Partnership pages	At least six partnerships will be formed, one in each state All state library web pages have links to NLM resources such as Medline Plus/Go Local, Public Library Community Partnership web site

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Consumer Health Coordinators to carry out their mission Yrs 2-5: Consumer Health Coordinator will participate in collaborative efforts among RML Coordinators to develop tools, publicity, projects etc, that will result in improved access to NLM and NN/LM, and other electronic consumer health resources Yrs 1-5: Exhibit and present at state and regional library association meetings State liaisons will contact State Libraries to support and encourage links from State Library web pages to NLM resources such as Medline Plus/Go Local, Public Library Community Partnership web site			
	Increase the public's awareness of and access to high quality electronic health information	Develop programs to promote MedlinePlus and other NLM Resources to all health	Yr 1: Promote the Information Rx project to Network members Yrs 1-5: Contact health profession	Articles in health care professional association newsletters Promotional materials	Health professionals are able to direct their patients to authoritative health resources from the NLM	At least four clinical sites (or physicians) in the region will participate in the Information Rx project

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
		professionals as a resource for them and their patients	associations (nursing, allied health professionals' and public health associations) to get mailing lists distribute materials about Information Rx including information about contacting the State Liaison and their local hospital library Yrs 1-5: Promote Information Rx by exhibiting at health care professionals' conferences			
	Increase the public's awareness of and access to high quality electronic health information	Coordinate the development of MedlinePlus Go Local projects in the region	Yrs 1-5: Continue to support and monitor Go Local work in Missouri, Utah and Wyoming Facilitate expanding participation in Go Local in Colorado, Kansas and Nebraska	All states in the region fully participate in Go Local	Populations in each state will be better served by local service information and better informed by MedlinePlus Topics	All six states will be participating in Go Local

Outreach Programs

B3 - Collaborating with Network Members and Other Organizations

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Pursue and maintain collaborations with network members and other organizations including community-based organizations (CBOs) representing minority and other underserved populations to achieve its goals of outreach to health professionals and the public	Increase awareness of the network, especially among community-based organizations by assisting in the development of working relationships between network members and grass roots, regional and national CBOs within the RML that include health information as a part of their mission/priority	Yrs 1-5: Identify 12 new CBOs and faith-based organizations with health missions per year Exhibit and/or present at ~~10~~ **2** minority health conferences and other CBO workshops **per year** as a way of identifying new groups and present examples of projects awarded, and role of MCR in offering awards **TFF Reforma** Conference 2007 (Focus on Health Disparities) (COG Activity) Liaisons will approach CBOs about submitting articles to CBO publications Write articles for CBO publications (Y1-5 CO Liaison will write basic articles for state liaisons to adapt) A total of six articles will be submitted to CBO publications over the course of the contract Yr 1: Develop "Heritage Month" info bytes: Black History Month, Cinco de Mayo (for examples for Black	Presentations articles Examples of successful grant and award applications Heritage Month InfoBytes Healthfinder Health	More CBOs in the region recognize the NN/LM-MCR as a network of providers of health information Information on minority health issues provided by the MCR is published in CBO newsletters and posted on their discussion lists (Note: We are writing articles for their newletters – so we will submit those, and hope that the CBO will publish them. but also we are posting to various listservs we already belong to. If they send the information on to their constituency beyond the listserv, that's great, but not the	MCR Contact information and product and service information will be provided to 12 new CBOs per year. 12 infobytes will be published each year and 6 articles will be written over the course of the contract

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			History Month – info about Black HCP, or for Asian Heritage Month, info on Asian HIV/AIDS inf) Yrs 1-5: Post infobytes on listservs, etc. regarding heritage months CO liaison will develop one infobyte per month; the infobyte will be distributed in RML news, BHIC blog, and one relevant listserv each month	Observation Calendar	goal)	
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Pursue and maintain collaborations with network members and other organizations including community-based organizations (CBOs) representing minority and other underserved populations to achieve its goals of outreach to health professionals and the public	Foster opportunities for network members to collaborate with CBOs as part of their outreach effort by developing Lessons Learned Resources for network members Host a Regional CBO symposium in MCR, based on prior symposium (2008 MPLA will be held in Salt Lake City, UT)	Yr 1: Develop with COG an Effective Practices for Community Outreach class(MLA CE approved class) Yr 2: Submit to MCMLA, ALA, WY symposium Yrs. 3-5: Offer across the region at State Library Assoc meetings Yr 1: Modify TC4C Effective Practices Guide for MCR network members Yrs 1-2: Present guide at MCMLA, newsletter, blog, web site	Effective Practices written by PIs Symposium Regional Symposium Community Outreach Class with MLA credit Revised TC4C guide	Network members will know where to turn for ideas on partnerships; The Effective Practices for Community Outreach Increased number of partnerships between CBOs and network members	Three new partnerships will have developed between network members who attended the symposium and a CBO that results in a project to deliver training to members of the CBO Network members who attend the symposium will understand that participatory research is a tool to use to increase collaborations

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
		Create Effective Practices of Community Outreach Class through the COG group	Yrs 2-5: Encourage Network members who receive both NLM and non-NLM funding to assist others in project development and collaboration opportunities Require MCR funded projects to submit to the Effective Practices Database Yr 2: Investigate needs for additional symposium: determine focus so that it brings together members and CBOs (I think we should focus on Participatory Reseach) Yr 3: Hold Symposium Yr 4: Follow up with survey to determine what new partnerships came about due to symposium			with CBOs 75% of members attending the symposium indicate on an evaluation form that they understand the concept of participatory research Five new entries will be made to the Effective Practices Database regarding projects funded by NLM or NN/LM The “Principles of Working with CBOs” class will be offered three times in the region
To develop collaborations among network members and other organizations	Pursue and maintain collaborations with network members and other organizations	Foster opportunities for the training of staff at community-based organizations	Yrs 1-5: Build on current national projects with CTCnet, Urban League; present at national or regional level CBO conferences	CTCnet and Urban League National Projects Evaluation of online modules	Staff at CBOs will be trained in accessing biomedical information	6 training-the-trainer sessions will be offered at CBOs in the region

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
to improve access to and sharing of biomedical information resources throughout the nation	including community-based organizations (CBOs) representing minority and other underserved populations to achieve its goals of outreach to health professionals and the public		Yr 1: Assist Urban League of NE in bringing pilot NE project to national Urban League Yrs 2-5: Use Consumer Modules to train staff at interested Urban League offices Yrs 1-5: Follow the development of health web pages on Urban Leagues within the region and provide resources. (i.e Go Local) Present Consumer modules to CTC at CTCnet centers within the region Yr 2: Evaluate success of online learning modules; modify as needed; In this contract, an evaluation group will have been developed in current contract that will continue to work on evaluating the modules; the success will also be measured in terms of how often liaisons are able to offer it Develop a faith based presentation Yr 3: Present at AC4 National	Presentation of online modules TechMission 2007		

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Technology & Ministry Conference http://www.techmission.org/ Yrs 4 -5: Continue to build on relationships and programs begun in years 1-3			
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Pursue and maintain collaborations with network members and other organizations including community-based organizations (CBOs) representing minority and other underserved populations to achieve its goals of outreach to health professionals and the public	Foster opportunities for the training of staff at community-based organizations	Yrs 1-5: State liaisons will continue to provide training opportunities for CBOs they are already partnering with	Training sessions	Staff at CBOs will be trained in accessing biomedical information	State liaisons will offer advanced training to 6 CBOs in the region
To develop collaborations among network members and other	Pursue and maintain collaborations with network members and other	Provide consultation for network members as they prepare project proposals	Yrs 1-5: Promote consultation service through articles in newletters, posters and presentations that demonstrate successful partnerships between network	Items and articles in Newsletter, weekly update, blog; PPT slideshow;	Increased number of funded proposals, NLM, NN/LM and other funding	The number of proposals funded by NLM, NN/LM, and other funding will increase by 5 each year

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
organizations to improve access to and sharing of biomedical information resources throughout the nation	organizations including community-based organizations (CBOs) representing minority and other underserved populations to achieve its goals of outreach to health professionals and the public	review funding sources, feasibility of project, support required, potential partnerships (Look at A16)	members and CBOs Web site will include information on consultation services; consult with members and other organizations considering pursuing project funding or project design In the NDI surveys, ask if network members have submitted proposals for NLM and/or NN/LM awards Yr 1: Liaisons take grant training workshop; Videoconference Grant training workshop will be offered, with priority given to Network members, open to all Yr 2: Offer to teach it at MCMLA 2007 (interregional chapter meeting) A&E pages will include self directed logic modules Yr 3: Videoconference Grant training workshop will be offered, with priority given to Network members, open to all Yrs 1-5: Follow Grants.gov progress to	NN/LM MCR web site Grant training workshop Survey question Presentation for Minority Conferences Articles, items for discussion lists, blogs, posters, presentations		

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			keep abreast of funding opportunities as consultation service Yrs 1-5: As part of our consultation, we will encourage partnerships between CBOs and members identified during activity "a" – increase awareness Submit presentation abstracts to Minority Health Conferences that include the topic of NLM/NN/LM funding			
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Pursue and maintain collaborations with network members and other organizations including community-based organizations (CBOs) representing minority and other underserved populations to achieve its goals of outreach to health professionals	Provide consultation for network members in project planning and evaluation	Yrs 1-5: Promote our consultation services through our communication tools Newsletter, weekly update, blog Web site will include information on consultation services Maintain and update the MCR Assessment and Evaluation webpages to provide information and tools for logic model development and evaluation planning, and interpreting and reporting data Yrs 2-5: Employ OERC training modules (Training module will include an evaluation question regarding network members self-reporting	A&E webpages OERC classes Posts on communication tools	Network members are more proficient in project planning and evaluation	Network members will self report that they have an increase in the proficiency in planning and evaluating projects

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
	and the public		of increased proficiency due to class attendance) Yr 3: Offer training (i.e. using distance technology like Breeze) Either A&E Liaison or someone from the OERC will teach these new modules in this region			
To develop collaborations among network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation	Pursue and maintain collaborations with network members and other organizations including community-based organizations (CBOs) representing minority and other underserved populations to achieve its goals of outreach to health professionals and the public	Provide consultation for network members in project planning and evaluation	Yr 1: Community Liaison will develop strategies for RL to identify appropriate CBO partner; database of contacts Community Liaison will develop strategy with RL to form strong partnership between CBO and RL (KUMC and Wash U in particular) Community Liaison & AE Liaison will develop a list of resources on Community Outreach and Participatory Research and Assessment and Evaluation and add them to the MCR web site Yrs 2-5: They will maintain and update resources Yrs 1-5: Community Liaison will provide RL with funding opportunities to support projects	Strategies to identify appropriate CBOs Possible Database of contacts within CBOs? Strategies to develop partnerships with CBOs Listing of funding opportunites RFP Model outreach project Presentations at MCMLA or	RL will develop partnerships with CBOs that increase access to health information to underserved populations in the community.	Two network members (resource libraries) will develop collaborations with CBOs that result in a 2 year partnership .

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Yr 2: KUMC and Wash U RL Directors/staff will work with Assessment Liaison to develop a needs assessment with CBO KUMC/WashU and CBO together will develop a plan of outreach KUMC/WashU will apply for funding for outreach project; AE and Community Liaisons will consult on application Yrs 3-5: KUMC/WashU will implement outreach project and present results	papers in PTPP by RL staff on successful outcomes Online bibliography of Community Outreach/Participatory Research and Assessment and Evaluation		

Outreach Programs

B4 - Training to Support Electronic Access to Health Information

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Support training in the effective use of electronic health information resources on the Internet Direct training at health professionals, public, School, and other librarians, and other intermediaries who do not have access to such training or who intend to train others, including consumers	Send questionnaire to determine educational needs to school librarians, public librarians, and public health professionals in each state using available listservs Survey members and affiliate members in cooperation with MCMLA Education Committee to find out if they would have an interest in Pubmed, MedlinePlus and other NLM databases classes using distance technology Schedule classes as indicated from survey with NTCC or with MCR providing training for same using a distance education tool such as Breeze We will offer classes for NLM resources not taught by NTCC	Yr 1: Send questionnaire to these groups via individual listservs Yrs 2-5: Offer classes of interest using Breeze and/or other synchronous distance education technologies. Hands-on practice of participants can be handled through screen-sharing functionality currently available on Breeze Yrs 1-5: Promote online PubMed and MedlinePlus tutorials through listserv and RML news as well as to listservs of public librarians, school librarians, and public health professionals	Survey for members and listserv questionnaire for non-member groups Breeze classes Articles, listserv, RML news promotional materials MCR web site	Network members, health professionals, and organizations providing health information to the public have received training in the effective use of electronic health information resources	75% of class participants indicate improved knowledge of electronic resources as indicated through post-class evaluation survey

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
		Promote online tutorials to Network members, affiliate members, public librarians, school librarians, and public health professionals for PubMed, and MedlinePlus tutorials by including a slide on MedlinePlus tutorials is included in NLM resource presentations Develop and promote PubMed, MedlinePlus, and specialized NLM database presentation modules to be posted on MCR web site and the NTCC clearinghouse Make copies of all training materials developed available on the MCR web site and will be registered with the NN/LM National Training Center and Clearinghouse Standardized modules and tutorials are posted to MCR web site and NTCC,				

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
		including objectives				
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Support training in the effective use of electronic health information resources on the Internet Direct training at health professionals, public, school and other librarians, and other intermediaries who do not have access to such training or who intend to train others, including consumers	Include materials related to finding and evaluating information resources in all classes taught Add links to evaluation of health information resources module on MCR web site Check NN/LM National Training Center and Clearinghouse to identify training products, tools, materials, or classes that can be used or adapted to serve identified needs Make copies of all training materials developed available on the MCR web site and will be registered with the NN/LM National Training Center and Clearinghouse	Yrs 1-5: Promote online evaluation tutorial Include evaluation module in all classes Each state liaison will exhibit at their state library association meeting Yrs 3-5: Present and/or exhibit at School Media Specialists conference in at least two states per year in the region	Evaluation tutorial PowerPoint presentation	Network members, health professionals, and organizations providing health information to the public have utilized electronic and face to face opportunities to learn how to evaluate health information resources	75% of class participants indicate increased knowledge about evaluating health web sites

Outreach Programs

B5 - Exhibits and Presentations at Meetings

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
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	Promote NLM and NN/LM programs and services at national, regional and state meetings of health professionals and organizations that represent minority or underserved members of the general public	In consultation with NLM, providing full support for a minimum of twelve meetings (six national and six others) for an exhibit, technology-related presentation, program presentation, or course offering, including making all arrangements (scheduling, fees, shipping, logistics, equipment and publications). Coordination of course offerings, program presentations and other offerings at meetings should be in line with national initiatives and promotion activities identified by NLM	Yr 1: Exhibit at Amer. College of Sports Medicine, CTCNet and additional assigned national exhibits. Exhibit at additional local and regional meetings as identified by RML liaisons Yrs 2–5: Exhibit at assigned national meetings. Exhibit at additional local and regional meetings as identified by RML liaisons	Exhibits and presentations at national and other meetings	Health and information professionals and the public will be aware of and have access to health information and resources	The NN/LM MCR will exhibit or present at a minimum of ~~30~~ **6** local meetings and 6 national meetings
	Promote NLM and NN/LM	Identifying a single RML staff member	Yrs 1-5: Liaisons will record exhibits in	Required reports	NLM is made aware of exhibit	One exhibit report will be filed

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
	programs and services at national, regional and state meetings of health professionals and organizations that represent minority or underserved members of the general public	with responsibility for reporting exhibits and other RML activities at all national, regional, state and local meetings to ensure timely, accurate and complete reporting	ARS and exhibit reporting system Project coordinator will check ARS and exhibit reporting system to assure that all exhibit reports are completed		activities in the region	in the National Exhibit Reporting System for each exhibit
	Promote NLM and NN/LM programs and services at national, regional and state meetings of health professionals and organizations that represent minority or underserved members of the general public	Enlist the assistance of network members in exhibiting at national, state and regional meetings;	Yrs 1-5: Network members will be enlisted to assist with exhibits Basic exhibit training will be offered to all members who assist with exhibits Members will be vetted at local exhibits before being asked to assist at national exhibits	Training module	Network members will be made more aware of NLM products and services as well as NN/LM exhibit procedures The NN/LM MCR will build a group of Network members who are experienced exhibit staff	The NN/LM MCR will provide Network members the opportunity to exhibit at one regional or one national exhibit (within our borders) per year.
	Promote NLM and NN/LM programs and	Assist NLM's National Network Office in identifying	Yrs 1-5: Liaisons will submit ideas for national exhibits to the online	Exhibit opportunities identified	Exhibit suggestions will be made	NN/LM MCR will submit at least 3 national exhibit

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
	services at national, regional and state meetings of health professionals and organizations that represent minority or underserved members of the general public	health professional and consumer-focused meetings	exhibit system		according to special interest groups, such as health professionals or public librarians, that have been identified by NLM as target groups	suggestions per year
	Promote NLM and NN/LM programs and services at national, regional and state meetings of health professionals and organizations that represent minority or underserved members of the general public	Seek opportunities for program presentations at all assigned national meetings	Yrs 1-5: Liaisons will submit presentation proposals at all assigned national meetings	Presentations at meetings	NLM and NN/LM programs and services are presented as part of the program at NLM assigned conferences	MCR will be on the program of at least one national meeting each year
	Promote NLM and NN/LM programs and services at	Attend state library association meetings and exhibit or make	Yrs 1-5: Exhibit and/or present at State Library Association Meetings	Exhibits and/or presentations at State Library Association	NLM & NN/LM programs and services are presented as	Each State Liaison will exhibit and/or present at their

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
	national, regional and state meetings of health professionals and organizations that represent minority or underserved members of the general public	presentations to promote NLM and NN/LM programs and services	State liaisons will submit a proposal to be on the program of their state library association meetings twice during the five year period	Meetings	part of the program of state library association meetings	annual state library association meeting

Outreach Programs

B6 - Information Technology and Policy Awareness

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	The RML shall develop an information technology program and policy issues to improve access to biomedical information	Investigate and showcase information technologies and policies affecting their use on a regular basis through the MCR web site and newsletter Provide a forum or workshop on the use of technologies and policies affecting their use at the annual MCMLA meeting Provide a forum or workshop on the use of technologies and policies affecting their use at the annual Wyoming Symposium Provide asynchronous access to the forums through video technology A common Technology work group will be continued (Work group will contain at least one IT from each state.	Yrs 1-5: Offer regular technology updates on web site and newsletter Offer technology forums/workshops at MCMLA and Wyoming Symposium Post forum streaming video on MCR web site Yr 2: Add questions to the NDI (question concerning adopting new technology)	Web site pages Newsletter articles Conference program presentations Streaming video archives Network collaborative projects	Members adopt new technologies to increase access to biomedical information, helping to eliminate health disparities	50% of network members surveyed indicated that have adopted at lease one new technology per year

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
		Other members will be drafted from the MCMLA tech listserv as needed)				
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	The RML shall develop an information technology and policy awareness program	Participation in the NN/LM Web Developer's group through IRC and annual meetings Identify, evaluate and monitor the best authoritative sources for new technology information Link to identified web sites on MCR web site Hold regular meetings with Technology working group Provide example(s) of what will be discussed during the meetings?(implementation of new technologies by members, what new technologies are of interest and getting members to test them)	Yrs 1-5: Identify and evaluate technology web sites; link to on MCR web site Participate in Web Developer's group Hold regular meetings with Technology working group	Web page with list of links Technology working group meetings Regional contribution to NN/LM Web Developer's group	Members are able to learn about new technology developments that will help them to increase access to biomedical information	80% of network members surveyed rated the technology portion of the MCR web site as "useful" or "very useful"
To develop, promote, and improve electronic	The RML shall develop an information technology and	Encourage and educate network members in matters of open access and/or scholarly	Yr 1: Identify current open access projects in the region how do you	Web site pages newsletter articles	Network members will be more knowledgea	75% Members that completed survey indicated that they have

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
access to health information by network members, health professionals, and organizations providing health information to the public	policy program to improve access to biomedical information	communication in the region (topics such as copyright education, institutional repositories, PubMed Central, etc.) Fund educational events Identify, evaluate and monitor the open access activities in the region in order to prevent duplication of effort and encourage collaboration Educate network members about changes in policies concerning open access Develop promotional and educational materials Provide forum for librarians to discuss open access issues	intend to identify network member projects? (Forum or Survey at MCMLA) Yr 1: Survey members at MCMLA(ST. LOUIS) Move RML D-space Archive from Washington University to KUMC For scholarly communications, open access, institutional repositories issues Yr 2: Develop promotional and educational materials --ex: (Tip sheet for PubMed Central See needs identified for RML Directors meeting) Forum at MCMLA (OMAHA) Administer a post event survey Showcase on the MCR web site current open access projects at Resource libraries, such as RML Archive or	promotional and educational materials listserv video broadcasts video archive	ble about open access and/or scholarly publishing resources as indicated in a post-event questionnaire	increase knowledge of open Access/Scholarly Publishing

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
			HEAL Yr 1: Link MCR web site to relevant pages on scholarly communication and open access Eccles/ NNLM.gov Yr 4: Host promotional/ educational events by resource libraries OR HSL groups. (Open access/ Scholarly Communication) Administer a post event survey Present and archive presentations via video broadcasting (educational events)			
To develop, promote, and improve electronic access to health information by network members, health professionals, and	The RML shall develop an information technology and policy program to improve access to biomedical information	Update and offer class on networking Update and offer class on blog publishing Update and offer class on handheld devices Update and offer class on VoIP and videoconferencing	Yrs 1-5: Offer 1 class per year on two of the following topics and other technologies as identified: networking, blog publishing, handheld devices, VoIP, tutorial development software and videoconferencing, open access publishing	Revised Classes	Members adopt new technologies to increase access to biomedical information.	75% of class participants indicate increased knowledge about technologies

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
organizations providing health information to the public		Update and offer class on tutorial development software Check NN/LM National Training Center and Clearinghouse to identify training products, tools, materials, or classes that can be used or adapted to serve identified needs Make copies of all training materials developed available on the MCR web site and will be registered with the NN/LM National Training Center and Clearinghouse	(Google Scholar, institutional repositories, learning object metadata) Classes be offered—distance or in person. Will propose classes for MCMLA CE Need an activity to promote the classes that will attract the audience specified in the objective			
To develop, promote, and improve electronic access to health information by network members, health professionals, and		Conduct inter-regional classes with MCR, SCR, and PSR using the Access Grid	Yrs 1-5: Offer one class via Access Grid Provide examples of classes that are being proposed	Class taught on Access Grid	In conjunction with other RMLs, Network members, health professionals, and organizations providing health	75% of class participants rate Access Grid as an effective means of conducting a class

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
organizations providing health information to the public					information to the public are able to learn about new technology developments that will help them to increase access to biomedical information	
		Establish a regional digital depository for Network members (non-Resource Libraries)	Yr 4: Establish depository servers Hire consultant for regional depository project Select pilot project library Carry out depository pilot Yr 5: Promote regional depository to Network members Train Network members to organize and add content to depository	Organizational structure for depository Metadata schema Materials from libraries Training materials	The regional digital depository includes Network member collections	Materials are added to regional depository from at least 10 Network member libraries

Outreach Programs

B7 – Library Improvement

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
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	Implement an NN/LM Library Improvement Program for hospital libraries that have a non-MLS whose main responsibility is not library related providing library services	Identify hospital libraries without onsite access to NLM resources, etc.=(that are not NN/LM members) by comparing NN/LM membership list with DOCLINE database and AHA guidebook Contact hospitals on targeted list to determine whether they provide access to resources (A non-Network member does not=no access)	Yr 1: Update information about hospitals with no access. We assume that these are libraries that are not NN/LM members. Continue to contact hospitals previously identified and share information about access to health information resources and RML services and membership by mailing a cover letter and promotional materials to the AHA member hospitals in each state Yrs 2-5: Continue making contacts by email, phone and personal visits, follow up with earlier contacts to share information about information access and determine whether the hospital library provides access. For hospitals not providing access, determine the barriers and develop plans to assist them	Targeted list of hospitals that are not NN/LM members	More hospitals provide onsite access to NLM resources	Number of hospitals has increased that have requested training or taken training on NLM resources. There is a 25% increase in hospitals with no previous access to NLM resources which are now reporting usage of NLM resources

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
	Implement an NN/LM Library Improvement Program for those hospitals that have an MLS librarian providing library services to the institution	With the library director, introduce key staff, administrators and health professionals to the NLM systems, hardware, software and other resources available through the NN/LM to improve their access to information Conduct frequent follow-up contacts with the library manager to assess progress and offer assistance Encourage electronic document delivery Encourage and	Yrs 1-5: Schedule contacts with library personnel identified by Network Data Inventory that are not providing a standard level of service as defined by MLA to offer assistance if needed or requested (ie librarians who are not offering trainings in the use of health information resources.) Develop materials to inform administrators of library value to the institution Develop a checklist of topics to cover and questions to ask in a state liaison visit to member and non-member hospitals. It will include advanced promotional activities to implement to improve status. To be used with hospitals librarians in consulting about library activities within the hospital. Review check list with state liaisons Identify, promote and work with health science library	List of hospitals without access to NLM resources or appropriate library equipment List of appropriate conferences List of appropriate journals List of appropriate funding resources Survey results and evaluations Articles published in journals addressing library managers, hospital administrators, and health care professionals	Administrators and health care professionals are more aware of NLM resources and the access to medical information provided by the hospital library	Hospital librarians report increased support from hospital administrators

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
		support collaborations between hospital library staff and institutional administrators to enhance the libraries' ability to contribute to hospital programs and priorities	groups that are involved with library promotions (such as HSLNKC and CHILL) to share information about their programs within the region and to foster communication on the value of library service to administrators Present and exhibit at conferences including library managers, health care administrators, and health professionals. Include information about the NLM systems, hardware, software, and other resources available in the network to improve their access to information Publish articles/ reminders in RML News, Plains to Peaks, MCR web site, MCMLA listserv and other NN/LM publications as determined about library advocacy. Topics to be covered are promotions for National Library Week, National Medical Information Day, promoting worth of hospital library to hospital departments and medical staff			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Publish articles on NLM systems, hardware, software, and other resources in professional journals (open access) directed at library managers, health care administrators and health professionals Identify and promote grant funding opportunities Grant funding would include NLM grants, regional funding if developed, LSTA funding if appropriate Develop materials to inform administrators of library value to the institution. Association newsletters, professional journals (Directors of nursing, hospital administration, etc) state association publications (ie state hospital association journals or newsletters if applicable) Yr 1: Identify appropriate conferences for involvement, and prioritize for each year of the contract. Examples of meetings that would be appropriate are the			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			Missouri Hospital Association, Missouri Rural Health Association Conference, Nebraska Nurses Association, etc. Identify appropriate journals for articles and prioritize publication goals Yr 3: Query hospital librarians via NDI for current use of NLM products and relationship with administration and health care professionals			
	Implement an NN/LM Library Improvement Program	Provide education materials for hospitals librarians for business practices in the hospital setting	~~Yrs 1-5:~~ **Yrs 2-5** Identify and recommend materials for additions to netLibrary and actively promote netLibrary to membership Yr 1: Present class on library assessment and evaluation at MCMLA 2006 Develop a checklist of topics to cover and questions to ask in a state liaison visit to traditional and adjunct libraries as well as more advanced library activities to implement. To be used with	Class Checklist Web –based instructional modules Video Broadcast	Librarians are better equipped to promote the value of their library to their institution	Usage of netLibrary will increase by 20% over Y5 of previous contract. Class attendance at MCMLA 2006 will include 15 librarians.

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			hospitals librarians in consulting about library activities within the hospital. Review check list with state liaisons Yr 4: Develop packets of resources on various business subjects to be linked from the MCR web site.(ie business planning, ROI, organizational change). Materials will also be made available from the NTCC Educational Clearinghouse Yr 5: Utilize (update if appropriate) the class for hospital librarians including material on assessment, evaluation, and financial practices. Consider video broadcast and web streaming for presentation of class across the region Objectives for this class include determining return on investment, creating a logic model, suggesting ways to integrate into hospital activities			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
	Implement an NN/LM Library Improvement Program	Provide education materials for hospital librarians for marketing and promotion of the hospital library	Organize display of member marketing materials and strategies for MCMLA yearly. Offer a prize for the best display. If a hospital does not have brochures for example, but has a distinct plan to share, they can create a poster displaying their program. Participants will write up their projects, and submit them to the RML which will then publish selections in Plains to Peaks Post ~~Yrs 1-5~~: **Yrs 2-5:** Identify and recommend materials for additions to netLibrary and actively promote netLibrary to membership Yr 2: Schedule two 2-day classes for members with Pat Wagner of Pattern Research. These classes will consist of 2 days each, each approximately 6 months apart. The first day will consist of in-depth work on what is marketing and how to do it. A project from the individual's library will be identified. The second day will be used to have	Class List of recommended activities Video Broadcast	Librarians are better equipped to promote the value of their library to their institution	Usage of netLibrary will increase 20% over the 5 year contract At least 15 librarians will attend class on marketing at each location At least half of the participants will be successful with the implementation of their marketing plan

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			enrollees present their projects, and analyze their successes and failures with the group Yrs 3-5: Consult with members of the marketing classes, and request that they publish the results of their study in Plains to Peaks Post Yr 3: Following up on the marketing class, develop a list of recommendations of ways for hospital librarians to analyze their institutions and constituency, and then market their services			
	Implement an NN/LM Library Improvement Program	Design and implement study on the impact of library-provided information in health related institutions in the MCR	Yr 1: Continue work begun in Y5 of previous contract on study design, including designing database for data collection This study will include information from existing clinical librarian (informationist) programs as well as hospital library programs. Recruit partners for study (partners will reflect the various types of institutions within the	Information Value Study Results	Members of the MCR will have documented evidence of the value of information to health science institutions in the six state region	Data collected from study demonstrates the value of information provided by health science libraries

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
			region, ie academic; hospital---small, medium and large---urban, suburban or rural --- AHEC, etc.) Yr 2: Begin study in Missouri and Colorado Provide training for librarians involved in study (2 sessions: one for MO and CO, another later for other states, perhaps conducted at MCMLA) Promote study across region Yr 3:Promote study across region Implement study across region Yr 4: Compile data Analyze data Yr 5: Write final report			
	Implement an NN/LM Library Improvement Program	Develop and distribute library advocacy materials for	Yrs 1-5: Develop a template letter for hospital librarians to send to hospital	Template letter for use by hospital librarians on	Hospital librarians will have materials available to use	Hospital Librarians and adjunct librarians report that

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATOR
		use by hospital librarians in the MCR	administrators on a yearly basis, and place it on the MCR web site. Should be in conjunction with Medical Librarian month (Values that can be promoted include use of new technology (ie voice-over IP, videobroadcasting), open access to information; e-resources; support and furthering goals of institution. Information that can be included in these materials are statistics from the MLA Benchmarking Survey) Publicize and promote use of letter by hospital librarians Yrs 2-5: Develop and post on the MCR web site a list of recommended activities and practices to emphasize the value of the hospital library to the institution Yrs 1-5: Maintain list of hospital libraries' changes (additions or closures)	MCR web site List of recommended activities and practices on MCR web site List of hospital libraries	in advocating for the library within the institution	materials provided by MCR are valuable for advocating to hospital administrators. State liaisons will contact 2 hospitals per year to assess value of materials

Outreach Programs

B8 - Connections

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
To develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public	Develop a plan to encourage high quality Internet connectivity for network members and health professionals in the region	Review the adequacy of the Internet connections of network members on an annual basis, reporting the results to the region and to NLM, and assisting the "under connected" in maintaining and upgrading their connections	Current Definition: 150K (minimum) for video conferencing Yrs 1-5: Redefine under-connectivity as appropriate to new developments in connectivity speed Yr 1: Identify under connected members using the Year 5 NDI Yrs 2-5: Conduct an annual survey of members to identify underconnected members (The Year 3 survey will included in the NDI; the other years will be separate surveys) Use web site: Broadband Reports http://www.dslreports.com/stest to determine connectivity Yrs 1-5: Work with under-connected members to formulate a two stage plan for increasing connectivity (Stage 1: consult with hospital librarians and IT staff of under connected institutions on policy issues and ports)	Connectivity plan focused on improving connectivity of members to improve access to biomedical information Updated Networking class	Under-connected Network Members have Increased access to biomedical information and to communication tools	Technology liaisons will increase the connectivity of at least 6 institutions (one per state) over the contract period Technology liaisons will consult with at least 6 additional organizations to help them develop a connectivity plan and find funds from other sources

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
			(Stage 2: provide external connections for one year subsidized by MCR or consult with them to identify other appropriate funding sources) Yrs 1-5: Provide subsidies to under-connected institutions (Subsidies last for one year; after the end of the year, institutions must find on-going money to keep the connection. Over a 3 year period, 2 institutions per state will receive one year's worth of subsidies. For example, a Utah institution may receive this in Year 2; Kansas and Missouri in Year 3; etc.) Work with under-connected members not selected for subsidies to identify funding from other sources Yrs 4-5: Follow up with the selected members that received the subsidized connections to determine if the connections improved their access to biomedical information and other services such as videoconferencing Follow up with under-connected members that not receive subsidies to determine if they were			

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
			able to improve their connections through other funding sources Yrs 1-5: Update and present Networking class as needed --determined by member interest			
	Develop a plan to encourage high quality Internet connectivity for inner city and rural health care organization in the region	Identify inner-city and rural health care organizations that are not connected to the Internet or that are under-connected; consulting with them to determine if they would benefit from assistance with connecting/upgrading their connection, and providing the needed assistance	**Current Definition: DSL** Yrs 1-5: Redefine under-connectivity as appropriate to new developments in connectivity speed. Yrs ~~1-5~~: **2-5** Identify under-connected organizations (Identification is a 3-tiered process: First identification is through liaisons. Then through organizations participating in Café to Go. Then through Go Local.) Yr ~~1~~: **2** Make use of the "Café to Go" process to identify ways to work/assist under- connected inner city or rural organizations Demo NLM resources to café to go participants Yrs 1-5: Promote BHIC as a source of grant information	Connectivity plan focused on improving connectivity of inner city and rural organizations to improve access to biomedical information Poster/paper Article Café to Go feedback	Increased access to biomedical information by previously under-connected inner-city and rural organizations	Each state liaison will increase the connectivity of one under-connected inner-city and rural organization over the contract period

NN/LM Goal	OBJECTIVES	ACTIVITY	SCHEDULE (year/s of contract)	OUTPUTS	OUTCOMES	INDICATORS
			Yrs 2-3: State liaisons will work with under-connected organizations to formulate a plan for increasing connectivity (State liaisons will consult with technology liaisons for technical advice) Yr 4: Gather feedback from the organizations re: improved connection, funding Yr 5: Posters and papers presented at appropriate meetings (e.g., MLA and MCMLA) on the process and results of working with the community organizations			