

# **NATIONAL NETWORK OF LIBRARIES OF MEDICINE MIDCONTINENTAL REGION OUTREACH PROGRAM**

## **INNER CITY SCHOOLS PROJECT**

### **Background**

One of the challenges for the liaisons is to learn to work together as a team. Because liaisons carrying out the NN/LM-MCR programs are located in different states and different institutions a project was needed that would involve many different project liaisons. To be successful, the Inner City Schools Project with the Inner City and Minority Outreach Liaison, as team leader, will require the contributions of the Consumer Health, Education, Public Health, Assessment & Evaluation, Wyoming and Technology & Kansas State liaisons. In addition, the project addresses priority groups for NLM and this RML program—inner city population, minority population, public health professionals, public libraries and their patrons.

While adolescents should be in one of the healthiest periods of their life, they are at a very high risk for developing behaviors that will adversely affect their health. The decisions and attitudes they develop at this age, often from a lack of information or misinformation, impact their immediate safety and life-long health. Inner city teens are at high risk for addictive behaviors involving drugs, alcohol or tobacco, HIV infection and other sexually transmitted diseases, unplanned pregnancies, and injuries resulting from violent crime or abuse.

This project focuses on providing health information services to inner city teens and the health professionals who serve them by creating links between inner city schools, public libraries, offices of public health and community organizations to the resources the National Library of Medicine and other health sources on the Internet.

Recent research has shown that adolescents are heavy users of the Internet for information. They are therefore receptive to using electronic resources. But is it health information that they are accessing? If so, is the information authoritative and accurate? Those are the questions that this study will attempt to answer and address. Besides determining adolescents' current health information seeking behaviors, NN/LM-MCR liaisons will provide presentations on accessing electronic resources (e.g., MEDLINEplus) to secondary students in inner city schools.

Working in parallel to promote health information access within the schools, the state liaisons will work with public libraries, clinics, community and faith-based organizations, as well as public health offices to offer similar programming for the parents and adults in the community. The liaisons will also identify areas of need in information access (e.g., Internet connection) within those organizations and support the organization in applying for grant funding.

The Inner City and Minority Outreach Liaison during Year 01 worked with the Omaha South High School. His work with the Omaha South High School is proving to be a partial pilot of the Inner City Schools Project. Omaha South is located in the midst of Omaha's Latino community, with minorities (both Latino and African-American) making up 58% of the school's total enrollment. Discussions with two other inner city schools in Omaha and with a representative from the Kansas Educators Association have encouraged NN/LM-MCR to move this model to other schools and to include the affiliated community as a target of this project.

### **Methodology**

The Inner City and Minority Outreach, Education, and Consumer Health Liaisons will collaboratively design presentations (in addition to the ones used in Yr01) to be presented by a liaison or teacher in two to three secondary schools with high numbers of minority students located in Omaha, NE and Kansas City, KS. The presentations will provide the message that good health is a life-long process that relies on accurate and reliable information, as well as regular consultation with professional health care providers. Instruction will focus on accessing authoritative health information via MEDLINEplus.

Since both cities have sizable Spanish speaking populations that are mirrored in the student population, the Inner City Liaison will adapt presentations for limited-English proficiency students and members of the Spanish-speaking population. The Wyoming State Liaison will act as proofreader and consultant for classroom materials developed for the Spanish adaptations.

An Online Teacher's Lesson Plan Book will be developed to provide classroom teachers with ready-made lessons/ideas for incorporating MEDLINEplus into a variety of curricular areas. Teachers will be directed to the National Training Center and Clearinghouse to view the Lesson Plan Book and will be encouraged to submit lessons that they develop and wish to share with others. The Lesson Plan Book will be submitted to other websites used by public school teachers (i.e., Omaha Public Schools Curriculum Resources <http://www.ops.org/curriculum>).

During the same period as the visits to the schools, the Nebraska and Kansas state liaisons will provide presentations that mirror the school presentations to community groups at public libraries, clinics, community centers or churches. The Public Health, Education, Consumer Health, and Assessment & Evaluation Liaisons will develop a needs assessment tool (questionnaire, check-list) that can be used to assess the needs of organizations. The objective is to introduce any agency or organization, that is affiliated with the school or its students, to the Internet health resources dealing with teen and minority health. The RML has learned that medical/allied health students have programs where they interact with students. A similar program will be presented to these future health professionals. The liaisons will use their work group members to assist them in making contacts with the community organizations.

## **Evaluation**

- **A pre-test** (questionnaire) assessing the students' Internet use and general health knowledge.
- **A post-test.** With the assistance of the Technology Liaison and the Technology Director, an on-line assessment tool will be developed to check student understanding of the information presented. Following the presentation, the students would log on to the Internet and complete the post-test. If the presentation should be delivered at a location where student computers with Internet access were not available, a pencil and paper alternative would be utilized.
- **Anecdotal, follow-up assessment by school officials.** Two to four weeks following the school visit, the classroom teacher, school nurse and/or school librarian would be asked to submit an anecdotal follow-up assessment indicating whether or not they saw increased health awareness and/or use of MEDLINEplus and other health resources by students.
- **Pre- and Post- questionnaires** (similar to those used in school setting) will be completed by participants who attend community presentations.

## **NATIVE AMERICAN OUTREACH**

### **Background**

Native American Nations in the region include the Goshute (UT), Omaha (NE), Ute (CO, UT), Navajo (UT), Paiute (UT), Potawatami (KS), Kickapoo (KS), Shoshone (UT), and Winnebago (NE). Tribal Connections Southwest has placed a trainer in the Four Corners area working full time to improve the health information access of the Native American Nations living there. Colorado and Utah were included in this project. Liaisons will assess the information needs of the different Native American communities and with representatives of the target audience, create a plan to improve their access to health information.

### **Methodology**

With Native American populations it takes a long time to establish a relationship and there is a cultural perspective in who should be approached. Baseline data on Native American populations will focus on identifying tribes, contact persons, health care providers serving the sites, available services, technology training, and connectivity needs. RML liaisons will find out who has already worked with Native American Nations in the region and discuss with them the best way to improve health information access. A number of these contacts have already been identified: Molly McGetrick, Health Information Trainer for Tribal Connections Southwest; the librarians at the Nebraska Indian Community College in Macy, NE and the Little Priest Tribal College in Winnebago, NE; and Randy Johnson Eastern Utah AHEC Director. State liaisons will assess the Ute reservation in Ft. Duchesne, UT; the Southwest Colorado Ute Nation; and

the Winnebago community in Nebraska. Discussions will be held with tribal contacts about RML involvement. The liaisons expect that training will be welcomed and will offer it locally. If warranted, the liaisons will work with the tribe to apply for an appropriate grant, such as NLM's Connections Grant.

### **Evaluation**

During the training sessions participants will be asked to evaluate effectiveness and appropriateness of the training. Following training efforts tribal contacts will be consulted to provide feedback about the usefulness the RML's efforts.

## **MULTICULTURAL MODULE**

### **Background**

Creighton University in Omaha NE received an Interdisciplinary Rural Health Grant "Continuous Connection: Consortium for Rural Interdisciplinary Training". Using HRSA funds the university is training an interdisciplinary group of health professionals "who can be responsive to the increasing diversity of the population".

<http://spahp.creighton.edu/ccc/index.htm>

### **Methodology**

The Inner City and Minority Outreach Liaison will be one of two health science librarians to prepare an instructional module in using online sources that will assist physical therapy students in serving under-served, minority patients. This module covers cultural sensitivity training and is intended to prepare and enhance student practicum at clinics located on Indian reservations. The librarians would also contribute to the online modules. All multicultural modules will be shared through the NTCC. In future years, the contacts made through the training program will be used to develop direct outreach projects to Native American and other minority groups.

### **Evaluation**

The evaluation of this module will be conducted through two mediums. First, the students involved will receive an e-mail message following the completion of their practicum, congratulating them on the completion of the experience and requesting feedback on the usefulness of the instruction and resources covered in the module. Second, the supervising instructor of the program will be asked to respond to a similar questionnaire, providing feedback on the usefulness of the instruction and resources in meeting the practical needs of the students while serving the Native American population in the field.

## **PUBLIC HEALTH WEB PAGE PROJECT**

### **Background**

A directive from the Utah Department of Public Health identified a lack of basic knowledge by public health employees of what constitutes public health practice. The health department also felt that training in the use of their information data retrieval systems would increase usage by public health professionals. As a result, a training program introducing the basics of public health practice was developed for CD ROM distribution. In 2000-2001, Eccles Health Sciences Library received Partners in Public Health funding from the NN/LM-MR to develop a web page ([http://medstat.med.utah.edu/pub\\_health/](http://medstat.med.utah.edu/pub_health/)) as a companion site to this training module. The purpose of the web page was to offer training for both the information data retrieval systems and information knowledge systems in a “one stop shopping” model. Flash tutorials reviewed use of Utah’s Maternal and Child Health Internet-Query Information Module (MatCHIIM) and Action 2000. Content obtained from the Centers for Disease Control demonstrating how to perform a search of CDC Wonder was animated in Flash. The information knowledge systems component offered an Information Needs Assessment checklist and Flash tutorials of the MEDLINE record and PubMed’s MeSH Browser. Toward the end of the project a number of events resulted in some of the program’s content becoming outdated before it was completed. The Utah Department of Health (UDOH) decided to integrate the two information systems into a single database and the National Library of Medicine released its comprehensive PubMed tutorial.

The intent in year 02 is to update and adapt the web page for use as a region-wide tool. This will require testing and revising the current tutorial content and adding components. Inclusion of the UDOH CD ROM Basics of Public Health training program will be investigated. The Links section will be enhanced to include academic programs of public health in the region, an explanation of the Public Health Online Library Project, and selective lists of major mega public health sites and other topics of interest to public health professionals in the region.

### **Methodology**

The Public Health Liaison will carry out the project with the assistance of a salaried public health graduate student and all other RML liaisons. . The student will coordinate the testing of tutorials and educational materials to be included on the site and will collect and review resources to be included. The Education Liaison will assist by identifying classes in the region that librarians are willing to share and by helping design new components as identified in the assessment process. The Technology Liaison and Technology Director will assist with the web redesign and creation of the tutorials. Eccles Health Sciences Library offers a full complement of software and hardware to carry out this project. The Assessment & Evaluation Liaison will help develop the

assessment tools. Other liaisons with special foci will contribute topical links. The Inner City and Minority Outreach Liaison and the Consumer Health Liaison will develop links to Native American/diversity sites and migrant worker sites.

### **Evaluation**

The tutorials from the original page will be assessed for content, usefulness and currency by the Education Liaison and Katie Junium, who helped develop the PubMed tutorial and is currently working at Eccles Health Sciences Library. A group of public health professionals and public health graduate students will test the tutorials. Pre-tests and post-tests will assess the participant's knowledge of the content. Web hits on the site will be tracked to determine the usage.

## **PUBLIC HEALTH GRADUATE STUDENT INFORMATION SEEKING SKILLS ASSESSMENT PROJECT**

### **Background**

Libraries have a vested interest in promoting information seeking skills among academic programs. Classes are designed and taught in person in graduate classes by librarians or are developed for individual learning via web based tutorials. Often classes and tutorials assess information seeking skills of public health graduate students in the region and identify and develop tutorials to address needs. The Public Health Liaison will survey information seeking skills presented to Public Health graduate students in the region and identify and develop tutorials to address needs.

### **Methodology**

Academic institutions offering graduate degrees in public health will be identified and an assessment made of the information seeking skills incorporated into each program. Tutorials and classes will be identified that address the needs of public health graduate students. Materials identified as appropriate and available on the web will be linked to the public health web page and contributed to the NTCC once permission has been granted by the authors. Classes not on the web, but available will be assessed for appropriateness. Online tutorials will be designed as identified by need. An informal information gathering exercise among public health school faculty will be used to collect baseline data to determine the content for the tutorials. The Public Health Liaison will be responsible for organizing the project. The Assessment and Evaluation Liaison will assist in preparing assessment tools. The Education Liaison will assist in identifying librarians working on public health related classes for academic programs and developing new classes.

## **Evaluation**

The tutorials will be tested and assessed for content, usefulness and currency. A test group will be composed of public health professionals and public health graduate students. Pre-tests and post-tests will assess the participant's knowledge of the content.

## **PUBLIC HEALTH ONLINE LIBRARY PROJECT**

### **Background**

The Utah Department of Public Health has no library and only if print documents and publications are submitted to the Utah State Library are they catalogued and made available to the public. With the advent of electronic access to documents via links in library online catalogs, the RML's Public Health Consultant, Linda Lange, proposed that Eccles Health Sciences Library provide access to the Utah Department of Health (UDOH) electronic publications. The goal of the current project is to improve access to public health information by creating a web-based library of reports and other documents produced by the Utah Department of Health. Documents are being catalogued in the Eccles Health Sciences Library online catalogue using medical subject headings (MeSH). The Public Health Document Online Library adds a finding tool to increase the availability of electronic UDOH reports. A University of Utah public health graduate student is developing the policies and procedures to make the project run smoothly, be self-sustaining within the health department, and is creating an algorithm for identifying appropriate MeSH terms and subject areas where there are no appropriate MeSH terms. In the next year, the Public Health Online Library will be extended to incorporate Missouri's health department reports and introduced to health departments in other states.

Jocelyn Rankin, CDC Librarian, expressed interest in the project and in working to link to state documents from their library of electronic CDC documents. The Public Health Liaison will collaborate with the CDC to determine if there is a method for including state documents in the CDC Virtual Library.

### **Methodology**

Missouri department of health documents have been selected as the next collection to be added to the Public Health Online Library. The Missouri and Utah departments of health have developed similar data query information systems and, it is assumed, will have similar information needs. Utah public health professionals have identified Garland Land, Director of the Center for Health Information Management and Evaluation at the Missouri Health Department in Jefferson City, MO as a good resource for the Missouri Information for Community Assessment, Missouri's health data information system. The Public Health Liaison and the Missouri State Liaison plan to visit Mr. Land. It will be a good opportunity for the new state liaison to learn about these information systems and to

see how contacts of this kind can be used to establish collaborative relationships. Public health professionals dealing with information systems understand indexing and cataloging issues, making them the appropriate contacts to approach about participating in the Public Health Online Library project. The Missouri State Liaison, the Public Health Liaison and the Evaluation Liaison will devise a list of issues relating to the implementation of the project. A few of the issues to be considered are: Are there a significant number of documents in electronic format to warrant such a project? Is growth anticipated in electronic document publications? How are documents published and made available now? This list will serve as a template for other liaisons as they discuss the project with their health departments and resource library directors.

In order to translate the Public Health Online Library to other states the Public Health Liaison will work with the state liaisons to contact the appropriate divisions of the health departments to assess the availability of documents in electronic format. Documentation for the project, developed from the Missouri implementation, will be distributed to the state liaisons. Resource Libraries will be asked to consider the feasibility of incorporating these public health collections into their online catalogs and to suggest other ways to make the materials more easily available.

Because library catalogs are self-contained, must be searched individually, and are not surveyed by popular Internet search engines, the Public Health Liaison with the Technology Liaison will continue to seek alternative mechanisms to facilitate access to electronic public health reports. An improved scenario would allow a health professional to transmit a single query and retrieve federal and state reports instead of repeating the same search in multiple databases. The Center for Disease Control is interested in adding a link to state documents in their Virtual Library project and it is possible that the CDC system could be used to describe these documents. Incorporating state documents into the Virtual Library would expand the utilization of these documents well beyond local use and provide a central access point.

The Public Health Liaison will attend the American Public Health Association 2002 meeting in Philadelphia. She will participate in the Health Administration Section and the Public Health Informatics SIG to gain knowledge pertinent to this project and to discuss collaboration in online projects with other librarians.

### **Evaluation**

When a sufficient amount of a public health departments reports are added to the Public Health Online Library, the catalog will be monitored to obtain usage statistics. The importance of the library to the department will be evaluated by the number of materials that are added as staff time in public health departments is an indicator of the usefulness of the project.



## **VIDEO RECORDING PROJECT**

### **Background**

The Youth Without Borders Foundation is a community-based non-profit 501(c)(3) organization directing its efforts to all youth, and having a history of significant outreach to the Hispanic population. Their objective is to provide development opportunities for youth within a positive framework, emphasizing values of tolerance and acceptance. The foundation has an extensive network of adults and youth with varied backgrounds reflecting the wide variety in the Latin American community in the Salt Lake valley, from Mexico, Central and South America, and the Caribbean.

In 2001 they applied for a grant from the Utah Department of Health to present educational workshops in the community. Topics will include the basics of HIV transmission, prevention guidelines, and parenting skills to help parents communicate openly with their youth about sexuality and drug involvement. The targeted audiences will be Hispanic residents of Salt Lake valley. The RML was asked to support the project by videotaping the presentations and making them available over the web. The Public Health Liaison is now arranging the first recording. In Yr02 final recordings will be completed. The RML will then promote the availability of the video recording/digitizing service to the Utah public health community. The RML will also pursue extending the service throughout the region.

### **Methodology**

The Public Health Liaison will coordinate the recording and production of the educational presentations. The materials will then be digitized for Internet access to be used by the other RML liaisons in their projects such as the Inner City Schools Project. The Public Health Liaison will promote the availability of this service to public health professionals around the state and extend an invitation to groups within the UDOH to work with the RML on other video digitization projects. Those working with diverse and inner city populations will be targeted via UDOH email and word of mouth. Both versions of the materials (videotape, webstreaming) will be shown at the Utah Public Health Association RML exhibit booth.

### **Evaluation:**

The materials produced for this project will be reviewed by the Inner City Liaison and the Education Liaison and assessed for potential use with the Inner City Schools Project and future inner city projects. Accounting of the time commitment, costs of production, problems encountered, benefits of having done the project will be recorded for use with future video projects.

## **CONSUMER HEALTH NETWORK**

### **Background**

Consumer health information is very much in demand. Since its advent, the web has increasingly become the resource that is used to locate health information. But there are still challenges for the public looking for health information and for intermediaries helping others locate this information. In year 01, the Consumer Health Liaison visited libraries of all types in Colorado informally assessing their needs. Through these discussions a number of issues were identified. When the web does not provide information on a specific ailment, how do patients locate a resource, other than the healthcare provider's office, where the information can be found? If a public library's collection lacks the health information a patron is seeking, is there a directory that will identify a consumer health library nearby? If a reference librarian, whose subject specialty is not medicine, is stumped by a medical question, is there a resource willing to provide assistance? At the ALA Midwinter meeting in 2002, the Consumer Health Liaison talked to public librarians about some of her ideas to address the needs expressed above and was reassured by the enthusiasm for her solutions.

In order to facilitate access to available consumer health resources a regional network is proposed of public and health sciences libraries. This Consumer Health Network includes an online directory of consumer health libraries, a component to encourage online catalogs to share holdings information, and a multi-type library collaboration for interlibrary loans, reference referral, cooperative instruction and other services.

### **Methodology**

Consumer health librarians in Colorado will hold a meeting to further discuss needs and suggest solutions. The Consumer Health Liaison will start the Consumer Health Network on a small scale beginning with libraries in Colorado and making use of community and regional resources.

To immediately facilitate the location of consumer health libraries in the region, NN/LM-PSR's consumer health library directory (<http://nlnm.gov/psr/chld.html>) will be revised to accept the MidContinental Region's data and consumer health libraries will be encouraged to add information on their services to the directory. State liaisons will be enlisted to promote participation in the directory within their states.

In discussions with the Consumer Health Liaison, librarians indicated that they wanted to see more than location information for health information organizations. They also wanted to know what the library or agency had in its collection. Colorado has two resources online that allow public viewing: Denison Memorial Library's catalog (<http://library.uchsc.edu/>) and the Colorado Virtual Library (<http://www.aclin.org/>). Both online resources are searchable and contain the holding of libraries around the state. Colorado Network libraries and public libraries will be encouraged to participate in either

catalog in order to make their titles publicly viewable. The Consumer Health Liaison working with state liaisons will evaluate the other states in the region to discover the best method for making consumer health collections accessible to all within each state and the rest of the region.

The Consumer Health Liaison will facilitate a referral network between health science libraries and public libraries to respond to consumer health questions. In the first year of the contract, Denison Memorial Library was awarded funding to train staff at one or two resource libraries to staff the Virtual Reference Project's reference desk and to explore the use of online reference as a way to support Network member services. In the second year of the project, the Virtual Reference Project will be expanded to include two seats so that two reference librarians can be on at the same time and enable helping each other help a patron. There are three resource libraries (Dennison Memorial Library, Creighton University Health Sciences Library, McGoogan Library of Medicine) in the region already using or about to implement a virtual reference service. The project will invite all resource libraries in the region to participate. With the participation of more resource libraries, the service can be extended to public librarians. This will allow public librarians who need assistance in answering a health related question to use the subject skills of the academic health sciences librarians in the region. The multi-type library use of 24/7 in California has found this to be a useful referral service. With the public librarian and patron sitting in the reference session, public librarians can increase their skills in locating evaluated medical sites and a patron's question can get answered, too.

In addition to the use of technology as a referral mechanism, the Consumer Health Liaison will work with librarians to share resources within the community between hospital and public libraries. They will be encouraged to establish policies for ILL and reference referral. The partners will also be encouraged to collaborate on presentations that can be scheduled at each of their institutions--the health sciences librarian providing information on health resources, the public librarian providing information on the resources and policies of the library that would support access to the health resources.

To promote the consumer health network, a flyer will be mailed to public libraries with information on the network, NN/LM services and resources. The mailing will occur after a sufficient number of regional libraries have contributed to the consumer health library directory to make it a viable resource. State liaisons who have arranged to be on the program at state library association meetings will be asked include the consumer health network in their presentations and to encourage libraries to participate. Information on the network will also be available from the NN/LM-MCR website.

### **Evaluation**

NN/LM-MCR and NN/LM-PSR will develop a short feedback form for users of the consumer health library directory on its usefulness, user-friendliness. Also to be collected will be general information on whether the person submitting the feedback is a consumer, public librarian, health professional, or health sciences librarian.

To evaluate the Virtual Reference Project, the questionnaire being used for evaluation in year 01 by the University of Colorado, will be revised to reflect the public libraries as users. The survey will be sent to each user immediately following a session and will capture general user demographics, comprehensiveness of the response, and timeliness of the response. NN/LM-MCR liaisons will track the partnerships that develop between public and health sciences libraries in their states through informal communication and through their visits to public libraries as they promote the NLM resources.