

# Quarterly Report

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## National Network of Libraries of Medicine - MidContinental Region Region 4

February 1, 2011 - April 30, 2011

Contract No. N01-LM-6-3504

Spencer S. Eccles Health Sciences Library  
University of Utah

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# Executive Summary

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## Personnel

Two personnel changes occurred at the end of the year. The Technology Assistant position lost its funding and Sharon Dennis, Technology Coordinator, resigned her position to become the Assistant Director of the National Library of Medicine Training Center. Recruitment has begun to replace her.

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## Advocacy

The librarian at Providence Hospital in Kansas City, Kansas was laid off as well as other middle managers at the hospital. Barb Jones, Missouri/Library Advocacy Liaison, drafted a letter signed by Jean Shipman, Director, and Claire Hamasu, Associate Director, to the CEO of the hospital. The letter protested the dismissal of the librarian. The RML offered to work with the hospital on continued information access. The library dropped from Full to Affiliate membership since it no longer had staff to fill DOCLINE requests. The hospital is using Loansome Doc to obtain articles. Ms. Jones is a member of the MCMLA Library Advocacy Committee and worked with the committee chair to draft a letter on behalf of the chapter.

### Value of Libraries Research Project

Ms. Jones followed up with librarians interested in participating in the value of libraries research project. She worked with the librarian at Newton Medical Center to get the study approved by the hospital's ethics committee. The Wyoming Medical Center, VA Hospital-Kansas City,

VA Hospital-St. Louis, and University of Missouri-Kansas City are unable to participate due to IRB difficulties.

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## Community Outreach

Siobhan Champ-Blackwell, Community Outreach Liaison, held a meeting of her work group. They decided to meet monthly and prepare a presentation for MCMLA and MLA on their work.

Rebecca Brown, Kansas/Technology Liaison, visited the Kansas City Free Health Clinic and reviewed a proposal that they had submitted to NLM that did not get funded. She provided suggestions that would have made the proposal stronger. She had not been asked to consult on the proposal before it was submitted. The clinic has applied to become an Affiliate member.

Ms. Champ-Blackwell and Marty Magee, Nebraska/Education Liaison, met with the librarian at the Nebraska Indian Community College. Ms. Brown met with the library staff of the Haskell Indian Nations University Tommaney Library in Lawrence, Kansas. She inquired about Haskell health related programs and discussed NLM resources that would help support those programs. Haskell offers a BSc in environmental science.

### Embedded Project Efforts

Ms. Jones chaired the meeting of the Public Health-Missouri Practice-Based Research Network. They are looking at the value of accreditation on public health department performance.

For the past two years RML librarians have been working as members of a community organization to learn more about their information needs, how to assist them in addressing those needs, and how to promote and train on NLM resources. The RML staff met and discussed the results of an assessment of this strategy. (The assessment report was included as an attachment in our Quarter 3 report.) The RML decided to continue working with our current community based organizations or look for another that fits into the context of work we are already doing. This means going beyond the presenting and exhibiting levels of contact into involvement in their committees, etc.

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## Consumer Health

Ms. Champ-Blackwell contacted Michael Villaire, Chief Operating Officer of the Institute for Healthcare Advancement, a non-profit organization based in California. She wanted to build on the relationship established by NN/LM MCR and PSR at their annual health literacy conference. Mr. Villaire agreed to present an Adobe Connect session explaining health literacy; Ms. Shipman provided the introduction. He also invited Ms. Champ-Blackwell to participate in the preconference online session on the National Action Plan to Improve Health Literacy. In addition, NN/LM and MLA were offered a shared exhibit booth, at no cost and medical librarians attending the conference were offered a \$50.00 discount.

Dana Abbey, Colorado/Consumer Health Liaison; Betsy Kelly, Assessment and Evaluation Liaison; and Ms. Jones held classes approved for MLA's Consumer Health Information Specialization (CHIS) at the Denver Public Library for 17 librarians. The MCR had held an earlier series in year 3. Those who had taken classes in year 3 could attain a Level II; those who had not could attain a Level I. We heard back from five participants that two of them had received CHIS for Level II and three had received CHIS at Level I.

For the second year, the MCR awarded Outstanding Public Library/Public Health Partnership Awards to public libraries in the region. The Norton Public Library and Norton Community Hospital (KS); the Red Feather Lakes Community Library and 9 Health Fair (CO); and the St. Charles City County Library District and Siteman Cancer Center (MO) formed partnerships to promote access to health information.

### Information Rx

Liaisons signed up the following facilities for Information Rx materials at meetings where we exhibited:

- Quality Clinical Research (NE)
- Hastings Convenient Care (NE)
- Salud Family Health Center (CO)

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## Education

The MCR hosted the NTCC trainers Sharon Brown and Linda Milgrom for their series of classes in Omaha, Nebraska. PubMed and TOXNET were taught.

Ms. Magee is chair and Jim Honour, Wyoming Liaison, is a member of the chapter's Education Committee arranging CE for the annual meeting. They have been instrumental in getting CE classes offered in the areas of technology and new roles for librarians.

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## Network Membership

### Resource Library Directors Meeting

Ms. Hamasu facilitated the meeting of Resource Library Directors. The agenda for April included an overview of Assessment and Evaluation project activities by Ms. Kelly. Ms. Hamasu offered an update on the contract renewal with NLM and Deb Ward, Director of the J. Otto Lottes Health Sciences Library, described plans for the library's 25<sup>th</sup> anniversary.

### Branding Appearance

The Branding Appearance Committee comprised of RML staff and the graphic designer from McGoogan Library of Medicine met regularly throughout the quarter. They came up with a look that would unify the MCR's materials and publications. This included stationary, Powerpoint slides, brochures, newsletter, posters and business card. The colors for the MCR are a light purple and NN/LM blue taken from the web site.

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## Technology

Once a year, RML staff reviews all the project pages of the MCR web site for usability, relevance and currency. The review was

conducted in April and resulted in reorganization of content and deleting outdated materials.

Ms. Brown and Ms. Dennis contacted hospital librarians about their connectivity and use of social media. (*See Attachment 4 for the report.*) They interviewed 12 librarians asking the following questions:

1. Which social media services can you access at work?
2. Who defines the policy for which sites you can access?
3. Are you and your patrons allowed to use smart phones in the hospital/library?

As of April 29, 2011 there were 395 subscribers to the mcr-mcmla listserv.

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# Network Infrastructure

Table 1: Quarterly Infrastructure Data

	Current quarter	Previous quarter
Network members – full	164	167
Network members – affiliate	190	180
Libraries providing services to unaffiliated health professionals	109 (66%)	110 (66%)
Libraries providing services to public users	105 (64%)	109 (65%)
Average fill rate for resource libraries	79%	77%

**New Affiliate Members:**

Clearwater Public Library (NE)  
Norton Public Library (KS)  
Knowledge Exchange for the Child Health Corporation of America (KS)  
Colorado State Library (CO)  
Colorado Library Consortium (CO)  
Sanford-Brown College (MO)

**Full to Affiliate Members:**

McKee Medical Center (CO)  
Providence Hospital Medical Library (KS)

**Library Closed:**

VA ECHCS Medical Center (CO)

## Regional Advisory Board Activities

Advisory Board members assisted the RML in a number of ways this quarter. Roxanne Bowers attended the meeting of the MCMLA Education Committee to provide input on classes for the annual meeting. Sharon Medcalf offered suggestions for the classes. Bob Engeszer and Steve Rauch reviewed applications for the Public Library Public Health award. Louise Miller provided advice on the language and

issues that would capture nurses when librarians want to market to them. She was also invited to present on interactions between librarians and nurses for the region. Ms. Brown interviewed Dick Kammer, one of the board members whose term is ending. Mr. Kammer believes that the RML needs to do more to support solo librarians

Ms. Hamasu held a meeting of the Regional Advisory Board to report the budget cut NLM imposed on the year 1 budget for the next contract. She described the contract award process and asked for feedback on ways to make the RML more economical. The board recommended that liaisons coordinate outreach

activities with their colleagues in their library, and that the RMLs coordinate and share expenses with each other. They suggested that Network members and Advisory Board members could assist the RML in carrying out its mission.

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## Needs Assessment and Evaluation Activities/Data

Following the notice of the year 1 budget by NLM, RML staff held two meetings to review the logic model and activities proposed for the year. We identified strategies to reduce the cost of our activities while still addressing our outcomes.

NNLM MCR staff each worked with Network members who had completed awards during year 5 to add entries to the Library Success Wiki. The wiki is becoming a resource for members to showcase their projects and to search for ideas for future projects.

### Feedback to NLM

Ms. Hamasu participated in the teleconference facilitated by the OERC reviewing the final report form for subcontracted projects. The information in the report will be added to the Outreach Projects database.

The RML provided activity data on 2006-2011. This included the number of webinars presented, new classes developed and conferences organized. NLM also asked the RML to identify our highlights. The MCR submitted the online calculators, technology adoption, and the Bringing Health Information to the Blog as our accomplishments.

The RML carried out or assisted with several end of contract assessments.

### NN/LM NEPR Assessment

The MCR and OERC worked together to distribute the tool assessing the National

Emergency Preparedness and Response (NEPR) initiative in the region. Eighty five health sciences library members responded for a response rate of over 60%. This assessment was to collect data to compare emergency preparedness status of Network members in 2008 to their status in 2011. The MCR reflected the national trend with a greater number of members having continuity of service plans and a greater number of staff who had training on an aspect of emergency preparedness. Fewer members identified lack of need as a barrier to emergency preparedness indicating that awareness has been raised. Unlike the rest of the country, MCR libraries are not forming partnerships to support each other in times of disaster. An article was published in April 2011 issue of Plains to Peaks Post reporting the national findings and results from the region. ([http://nmlm.gov/mcr/services/comm/newsletter/P TPP\\_April\\_2011.pdf](http://nmlm.gov/mcr/services/comm/newsletter/P TPP_April_2011.pdf))

### Communication Audit

Salzmann and Associates was hired in January to conduct a communication audit for the RML. This audit included Full and Affiliate members. Salzmann and Associates recommendations touched all of our communication tools. The report confirmed that members appreciated the RML's efforts to share information. However many of our members did not subscribe to our main communication tool, the mcr-mcmla listserv, the email addresses in DOCLINE were not current, and social media was not incorporated into daily workflows. A summary of the report will be presented at a staff meeting in May and we will decide what recommendations will be implemented and how. (See Attachment 5 for the report.)

### Hospital Library Questionnaire

Ms. Jones completed and distributed a questionnaire to all hospital members in the region. The data collected will be used to track the status of hospital libraries in the areas of budget, staffing, physical location, new programming, and user populations. Questions were asked to determine whether/how

community events affect the hospital and the library. Sixty eight responses were received.

Measuring Your Impact

Ms. Kelly developed and tested questions to be sent out to participants of the Measuring Your Impact class to determine whether and how they had used what they learned in the class. The questionnaire was sent out to 585 email addresses using Survey Monkey. Ninety emails bounced immediately.

OERC Meeting

Ms. Hamasu, Ms Kelly, and Cindy Olney from the OERC met in February at Becker Library in St. Louis. They reviewed the MCR's logic model, data collection and reporting. Ms. Olney approved of the evaluation activities of the RML and recommended that we report our impact in a user friendly format by concentrating on the indicators and outcomes.



# Outreach

Table 2: Newly Funded Awards and Projects

Start/ end dates	Title of award/ project	PI institution	PI last name	Funding amount	Project type
	No New Projects				

## Update of Ongoing, Major Projects

No Activity

Table 3: Exhibits

Dates	Organization name	Meeting name	Location (city, state)
<b>RML NATIONAL EXHIBITS</b>			
<b>RML REGIONAL/STATE/LOCAL EXHIBITS</b>			
2/9/2011	Northeast Community College	Health Career Fair	Norfolk, NE
2/9/2011	Brother Jeff's Cultural Center	Colorado Black HIV/AIDS Summit	Denver, CO
2/16/2011	Public Health Nurse Association of Colorado	Annual Meeting	Denver, CO
3/4/2011	University of Missouri	Women's Health Fair	Columbia, MO

<b>Dates</b>	<b>Organization name</b>	<b>Meeting name</b>	<b>Location (city, state)</b>
3/26/2011	Black Family Health and Wellness Association	Nebraska Minority Conference / Black Family Health and Wellness Association Health Fair	Omaha, NE
3/26/2011	Mid-America Chapter of the American Translators Association	Raising the Bar- Professionalism in T & I	Overland Park, KS
4/6-7/2011	Kansas Library Association	Share the Vision	Topeka, KS
4/7/2011	Nebraska Academy of Physician Assistants	Physician Assistant Conference	Kearney, NE
4/11/2011	9Health Fair	9Health Fair	Boulder, CO
4/14/2011	Health Sciences Library University of Colorado	Visibly Human Symposium	Aurora, CO
4/16/2011	9Health Fair	9Health Fair	Niwot, CO
4/20/2011	9Health Fair	9Health Fair	Denver, CO
4/21/2011	Haskell Indian Nations University	Safety, Health, and Wellness Fair	Lawrence, KS

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### Actionable Feedback received from Exhibit Visitors

No suggestions or recommendations were received from exhibit visitors this quarter.

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### MedlinePlus Go Local

No activity

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**Table 4: Presentations and Training provided by RML Staff**

<b>Date</b>	<b>Last name of staff responsible</b>	<b>Title of presentation/training</b>	<b>Location (city, state)</b>	<b>Number of participants</b>	<b>In-person or distance education</b>
1/17-2/11/2011	Magee	Thinking Like an MBA	Omaha, NE	6	Distance education
2/1/2011	Abbey	Complementary and Alternative Medicine Resources	Aurora, CO	47	In-person
2/2/2011	Champ-Blackwell, Brown	¿No Comprendo? Online Health Resources for English Speakers Serving Spanish Speaking Communities - Part 1	Kansas City, KS	13	Distance education
2/5/2011	Magee	NLM Resources for Teachers	Omaha, NE	22	Distance education

<b>Date</b>	<b>Last name of staff responsible</b>	<b>Title of presentation/training</b>	<b>Location (city, state)</b>	<b>Number of participants</b>	<b>In-person or distance education</b>
2/7/2011	Abbey, co-presenter	MedlinePlus	Aurora, CO	56	In-person
2/7/2011	Abbey, co-presenter	Colorado School of Public Health – Foundations Class	Aurora, CO	8	In-person
2/16/2011	Champ-Blackwell, Brown	¿No Comprende? Online Health Resources for English Speakers Serving Spanish Speaking Communities - Part 2	Kansas City, KS	14	Distance education
2/16/2011	Guest Presenters	Breezing Along with the RML: Health Literacy Missouri, History of NLM	St. Louis, MO Bethesda, MD	Synchronous 12 Asynchronous 32	Distance education
2/18/2011	Champ-Blackwell	My Family Health History	Omaha, NE	16	In-person
2/18/2011	Abbey	Cultural Competency and Health Information Literacy	Aurora, CO	21	In-person
2/23/2011	Bramble	Spotlight! on Pillbox, Daily Med and My Medication List	Salt Lake City, UT	Synchronous 28 Asynchronous 7	Distance education
3/2/2011	Brown, Dennis	Social Media and Privacy: Facebook, Twitter, LinkedIn	Kansas City, KS Salt Lake City, UT	Synchronous 26 Asynchronous 62	Distance education
3/3/2011	Abbey, co-presenter	NLM Resources	Ft. Morgan, CO	18	Distance education
3/3/2011	Magee	Health Resources for Kids	Omaha, NE	18	In-person
3/4/2011	Guest Presenter	Supervision	Columbia, MO	58	Distance education
3/9/2011	Magee	Health Resources for Kids	Omaha, NE	6	Distance education
3/9/2011	Brown	Health Literacy and Public Health	Kansas City, KS	40	Distance education
3/9/2011	Abbey, Jones	10 Step Approach to Service Continuity Planning, Steps 9 and 10	Aurora, CO Columbia, MO	Synchronous 8 Asynchronous 10	Distance education
3/10/2011	Jones	What Does Health Literacy Have to Do with ME?	Chillicothe, MO	2	In-person
3/16/2011	Champ-Blackwell	Savvy Senior Health	Omaha, NE	5	In-person
3/16/2011	Brown, Guest Presenters	Breezing Along with the RML: Succession Planning, 2010 Health Literacy Institute	Denver, CO Topeka, KS Kansas City, KS	Synchronous 27 Asynchronous 20	Distance education
3/17/2011	Guest presenter	Health Literacy in the Real World: Awareness, Ideas, Solutions	La Habra, CA	Synchronous 160 Asynchronous 226	Distance education

<b>Date</b>	<b>Last name of staff responsible</b>	<b>Title of presentation/training</b>	<b>Location (city, state)</b>	<b>Number of participants</b>	<b>In-person or distance education</b>
3/18/2011	Brown, Dennis	Social Media and Privacy: Facebook, Twitter, LinkedIn	Kansas City, KS Salt Lake City, UT	Synchronous 26 Asynchronous 12	Distance education
3/23/2011	Jones	Spotlight! Finding Evidence Based Literature	Columbia, MO	Synchronous 30 Asynchronous 16	Distance education
3/24/2011	Guest Presenter	Long Range Planning	Columbia, MO	Synchronous 30 Asynchronous 5	Distance education
3/26/2011	Brown	MEDLINE/PubMed Database	Overland Park, KS	25	In-person
3/30/2011	Brown, Dennis	MedlinePlus Connect	Kansas City, KS Salt Lake City, UT	Synchronous 22 Asynchronous 50	Distance education
4/4/2011	Honour	Multicultural Health Resources	Thermopolis, WY	12	In-person
4/4/2011	Kelly, Jones	Measuring Your Impact	Denver, CO	23	In-person
4/5/2011	Abbey, Jones	Caring for the Mind	Denver, CO	17	In-person
4/5/2011	Abbey	Getting Started with Minority Health Outreach	Denver, CO	17	In-person
4/6/2011	Brown	Emergencies, Libraries, and Communities	Topeka, KS	12	In-person
4/7/2011	Honour	Nursing Resources	Cheyenne, WY	20	In-person and Distance education
4/7/2011	Abbey	PubMed and MedlinePlus	Denver, CO	9	In-person
4/11/2011	Champ-Blackwell, Vargas	Information Literacy from Birth to Earth: An Unconference	Austin, TX	25	In-person
4/11/2011	Magee	NLM and Its Resources	Omaha, NE	32	In-person
4/13/2011	Jones, co-presenter	Finding the Evidence – Part 1	Columbia, MO	9	In-person
4/13/2011	Jones, co-presenter	Finding the Evidence – Part 2	Columbia, MO	3	In-person
4/14/2011	Jones	Impact of the Library On Nursing Care [poster]	Columbia, MO	8	In-person
4/19/2011	Brown, Dennis	Mobile Apps and Devices: An Overview	Kansas City, KS Salt Lake City, UT	Synchronous 76 Asynchronous 54	Distance education
4/19/2011	Abbey	Environmental Resources	Aurora, CO	42	Distance education

<b>Date</b>	<b>Last name of staff responsible</b>	<b>Title of presentation/training</b>	<b>Location (city, state)</b>	<b>Number of participants</b>	<b>In-person or distance education</b>
4/20/2011	Hamasu, Kelly, Guest Presenter	Breezing Along with the RML: Grant Writing, Pervasive Assessment	Omaha, NE St. Louis, MO Salt Lake City, UT	Synchronous 8 Asynchronous 16	Distance education
4/21/2011	Champ-Blackwell, Leskovec	Caring for the Mind: Focus on Students and Veterans	Platteville, WI	12	In-person
4/21/2011	Abbey	PubMed and MedlinePlus	Denver, CO	15	In-person
4/21/2011	Guest Presenter	Budget and Finance for Librarians	Columbia, MO	17	Distance education
4/21/2011	Hamasu	Introduction to NN/LM	Salt Lake City, UT	10	In-person
4/25/2011	Magee	NLM and Its Resources	Omaha, NE	14	Distance education
4/25/2011	Guest Presenter	ASIST-RDAP Conference	Salt Lake City, UT	Synchronous 9 Asynchronous 6	Distance education
4/26/2011	Abbey, co-presenter	NLM Resources for Public Health	Denver, CO	7	In-person
4/26/2011	Jones	Emergency Preparedness and Disaster Planning for Public Librarians	Columbia, MO	24	Distance education
4/27/2011	Magee	Spotlight! on NLM Resources-Cancer Resources	Omaha, NE	Synchronous 40 Asynchronous 8	Distance education
4/27/2011	Jones	Measuring Your Impact	Miami, FL	23	In-person

## Other Staff Activities

Table 5: Publications and Resources Developed by RML Staff

*Note: The NTCC is in transition. Until criteria are developed for the new repository, no materials will be added.*

Date completed/published	Last name of staff responsible	Title	Medium	Submitted to Clearinghouse ("yes" or "out of scope")
2/12/2011	Brown	Health Literacy—What is it and What Does it Mean?	Newsletter	
2/17/2011	Honour	Wyoming state pages	Web site	
3/7/2011	Abbey	ClinicalTrials.gov	Newsletter	
4/12/2011	Dennis	Update of Technology pages	Web site	
4/29/2011	Champ-Blackwell	Refuge in a Storm	Web site	

### Notable Staff Activities

*February 9, 2011*

Ms. Brown attended the Health Sciences Library Network of Kansas City. She encouraged members to participate in the RML's hospital library questionnaire.

*February 22, 2011*

Ms. Magee and Ms. Champ-Blackwell met with the Nebraska Library Commission and representatives of local hospitals participating in the Cancer Corners project. They recommended resources to be included in each corner. The cancer corner is a collection of print resources to be placed in community libraries.

*February 23, 2011*

Ms. Magee attended the Handheld Librarian classes sponsored by ICON.

*February 28 and March 29, 2011*

Ms. Magee participated in the NN/LM Exhibit Design Committee. They reviewed different exhibit options and graphics and have forwarded their recommendation to Angela Ruffin.

*March 2, 2011*

Ms. Hamasu, Ms. Dennis, and John Bramble, Utah/Network Membership Liaison, met with Susan Simpson, mentee in the AAHSL/NLM Fellows program, to describe the NN/LM program.

*March 3, 2011*

Ms. Magee attended the webinar, “Supervision is a Long-Term Relationship.”

Ms. Hamasu and Mr. Bramble met with a student from the University of North Texas library school who has a strong interest in medical librarianship. They will arrange for an orientation for her to introduce her to the responsibilities of health sciences librarians and work with her on an internship project.

*March 4, 2011*

Ms. Dennis represented the region at the teleconference on the NTCC class registration system.

*March 14, 2011*

Ms. Jones organized a meeting between the Daniel Boone Regional Library and the Columbia/Boone County Health Department. They discussed ways a partnership could facilitate access to consumer health information to the community both organizations serve.

*March 17, 2011*

Ms. Jones and Ms. Hamasu attended the webinar “Health Literacy in the Real World” with presenter Michael Villaire from the Institute for Healthcare Advancement.

Ms. Hamasu met with the president of the Utah Health Sciences Library Consortium to talk about increasing participation. They brainstormed ideas on how to elicit the benefits that the consortium could provide to its members.

*March 18, 2011*

Ms. Magee attended the presentation, “Mobile Applications in Education.”

*March 21, 2011*

The Missouri Regional Extension Center is presenting meetings across rural Missouri to promote electronic health records to clinics and practitioners. Ms. Jones talked to the Senior Information Specialist about MedlinePlus

Connect, who agreed to include a brochure in the orientation packets that are distributed at these meetings.

*March 21-23, 2011*

Ms. Magee, Ms. Brown, and Ms. Dennis attended the Computers in Libraries conference in Washington, D.C.

*March 23, 2011*

Ms. Champ-Blackwell held a meeting of the REFORMA Education Committee to discuss activities needed to be completed before the ALA Annual meeting.

*March 28, 2011*

Ms. Jones attended the PubMed and ToxNet training presented by the NTCC in Omaha, Nebraska.

*March 29, 2011*

Ms. Magee and Ms. Champ-Blackwell met with the Little Priest Tribal College Library Director. They discussed her priorities and programs that relate to health and health information.

Ms. Magee and Ms. Champ-Blackwell visited the South Sioux Public Library. The library supports the information needs for a branch of the Nebraska Indian Community College.

*March 29-30, 2011*

Ms. Champ-Blackwell and Ms. Hamasu attended the Disaster Information Outreach Symposium held at NLM.

*April 3, 2011*

Ms. Champ-Blackwell participated in the United Negro College Special Project/NLM ACCESS Board meeting at NLM.

*April 6, 2011*

Ms. Hamasu attended the E-science Symposium at the University of Massachusetts. The focus of this year’s conference was data curation.

*April 8, 2011*

Ms. Champ-Blackwell attended the webcast “National Stakeholder Strategy for Achieving Health Equity.”

Ms. Hamasu and Mr. Bramble attended the Emergency Preparedness & Response Initiative Summit organized by Dan Wilson and Susan Yowell and hosted by the NN/LM Greater Midwest Region. The current chair of MCMLA represented Network members in the region.

*April 11, 2011*

Ms. Magee attended the lecture “The Teaching Hospital-Origins and Controversies in 18<sup>th</sup> Century London.”

*April 13, 2011*

Ms. Brown attended the Health Sciences Library Network of Kansas City meeting.

*April 18, 2011*

Ms. Hamasu and Ms. Champ-Blackwell attended a presentation to TC4C by Laura Bartlett from Specialized Information Service. She demonstrated the American Indian Health portal, talked about future plans and how TC4C could use the portal to consolidate resources it felt was important to Native American communities.

Ms. Hamasu attended the Priscilla Mayden Lecture by Amanda Etches-Johnson entitled “From Usability to User Experience.”

*April 20, 2011*

Ms. Dennis and Ms. Hamasu attended the MLA webcast “Shifting Skills to Navigate the Changing Horizon: Finding our Way in New Biomedical Research and Health Care Environments.”

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# Attachments

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# Attachment 1: Quarterly OARF Summary Data - RML Staff Activities



## Map Report: Outreach Activities Conducted by "RML" Staff in Region "4" ("01-FEB-11 - 30-APR-11")

### Activity Summary

**Total Outreach**

Region 04 = 38.

**Total Number of Estimated Participants**

Region 04 = 902.

**Average Number of Participants Per Activity**

Region 04 = 24.

**Average Length in Hours**

Region 04 = 1.

**Under 1 Hour**

Region 04 = 1.

**Between 1 and 2 Hours**

Region 04 = 32.

**Over 2 Hours**

Region 04 = 5.

**Hands-On Practice**

Region 04 = 18.

**Conducted Remotely**

Region 04 = 24.

**Offering Continuing Education**

Region 04 = 8.

**Significant Number of Minorities**

Region 04 = 1.

### Type of Organization Involved

**Health Sciences Library**

Region 04 = 37.

**Public Library**

Region 04 = 6.

**Government**

Region 04 = 3.

**Hospital**

Region 04 = 1.

**Clinical/Health Care**

Region 04 = 1.

**Academic**

Region 04 = 38.

**Community-Based**

Region 04 = 4.

**Faith-Based**

Region 04 = 5.

**Public Health**

Region 04 = 4.

**Other**

Region 04 = 6.

### Session Content

**PubMed**

Region 04 = 12.

**MedlinePlus**

Region 04 = 20.

**ClinicalTrials**

Region 04 = 1.

**NCBI**

Region 04 = 1.

**NLM Gateway**

Region 04 = 1.

**TOXNET**

Region 04 = 6.

**Other Technology**

Region 04 = 19.

**Other Non-Technology**

Region 04 = 14.

### Significant Number of Minorities

**African American**

Region 04 = 1.

**Alaska Native****Asian and Pacific Islander****Hispanic**

Region 04 = 1.

**Native American**

### Participant Summary

**Completed Participant Information Sheet**

Region 04 = 602.

**Health Care or Service Provider**

Region 04 = 43.

**Health Science Library Staff**

Region 04 = 293.

**Public Health Worker**

Region 04 = 67.

**Public/Other Library Staff**

Region 04 = 126.

**General Public**

Region 04 = 76.

Generated: 2011-06-24  
Funded By: NLM  
Maintained By: OCCS GIS

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## Attachment 2: Quarterly OARF Summary Data - Subcontractor Activities



### Map Report: Outreach Activities Conducted by "SUB" Staff in Region "4" ("01-FEB-11 - 30-APR-11")

#### Activity Summary

**Total Outreach**  
Region 04 = 9.  
**Total Number of Estimated Participants**  
Region 04 = 81.  
**Average Number of Participants Per Activity**  
Region 04 = 9.  
**Average Length in Hours**  
Region 04 = 1.  
**Under 1 Hour**  
Region 04 = 2.  
**Between 1 and 2 Hours**  
Region 04 = 7.  
**Over 2 Hours**  
**Hands-On Practice**  
Region 04 = 9.  
**Conducted Remotely**  
Region 04 = 1.  
**Offering Continuing Education**  
**Significant Number of Minorities**  
Region 04 = 1.

#### Type of Organization Involved

**Health Sciences Library**  
Region 04 = 2.  
**Public Library**  
Region 04 = 7.  
**Government**  
Hospital  
**Clinical/Health Care**  
Region 04 = 1.  
**Academic**  
Region 04 = 2.  
**Community-Based**  
Region 04 = 4.  
**Faith-Based**  
Region 04 = 1.  
**Public Health**  
Region 04 = 1.  
**Other**  
Region 04 = 2.

#### Session Content

**PubMed**  
**MedlinePlus**  
Region 04 = 8.  
**ClinicalTrials**  
**NCBI**  
**NLM Gateway**  
**TOXNET**  
**Other Technology**  
Region 04 = 7.  
**Other Non-Technology**  
Region 04 = 5.

#### Significant Number of Minorities

**African American**  
Region 04 = 1.  
**Alaska Native**  
**Asian and Pacific Islander**  
**Hispanic**  
**Native American**

#### Participant Summary

**Completed Participant Information Sheet**  
Region 04 = 92.  
**Health Care or Service Provider**  
Region 04 = 9.  
**Health Science Library Staff**  
**Public Health Worker**  
Region 04 = 18.  
**Public/Other Library Staff**  
Region 04 = 16.  
**General Public**  
Region 04 = 49.

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## Attachment 3: Promotional Materials Provided

<b>Date</b>	<b>Who</b>	<b>Items Provided</b>	<b>Purpose</b>
2/14/2011	Centennial Area Health Information Center <i>Colorado</i>	<ul style="list-style-type: none"> <li>- 50 - MedlinePlus Bookmark</li> <li>- 50 - MedlinePlus Bookmark (Spanish)</li> <li>- 50 - Consumer Health Card</li> <li>- 50 - Health Information for Senior Citizens Card</li> <li>- 50 - Tox Town Brochure</li> <li>- 50 - Connecting Native Americans To Health Information Card</li> <li>- 50 - Asian American Health Brochure</li> <li>- 25 - DOCLINE Card</li> <li>- 25 - The Visible Humans Card</li> </ul>	To distribute at Health Fairs
3/18/2011	University of Missouri-Kansas City <i>Missouri</i>	<ul style="list-style-type: none"> <li>- 50 - MedlinePlus Bookmark</li> <li>- 35 - AIDS Information Services Card</li> <li>- 35 - Health Information for Senior Citizens Card</li> <li>- 20 - Tox Town Card</li> <li>- 20 - Tox Town Brochure</li> <li>- 1 - Tox Town Poster</li> <li>- 10 - Household Products Database</li> <li>- 10 - NLM Worlds Largest Medical Library Card</li> <li>- 25 - Good Health Information on the WWW card</li> <li>- 10 - WISER Card</li> <li>- 20 - Associate Fellowship Program</li> <li>- 20 - Telemedicine Card</li> </ul>	Consumer health at the April 9, 2011 UMKC Health Fair
3/23/2011	University Hospital <i>Utah</i>	<ul style="list-style-type: none"> <li>- 50 - MedlinePlus Bookmark</li> <li>- 40 - MedlinePlus Bookmark (Spanish)</li> <li>- 20 - Consumer Health Card</li> <li>- 20 - ClinicalTrials.gov Card</li> <li>- 30 - Health Information for Senior Citizens Card</li> <li>- 20 - Tox Town Card</li> <li>- 20 - Household Products Database</li> <li>- 10 - American Indian Health Brochure</li> <li>- 10 - Asian American Health Brochure</li> <li>- 20 - PubMed Card</li> <li>- 10 - Public Health Resources</li> <li>- 10 - Telemedicine Card</li> </ul>	For distribution in our hospital's consumer health library
4/1/2011	Denver Public Library <i>Colorado</i>	<ul style="list-style-type: none"> <li>- 300 - MedlinePlus Bookmark</li> <li>- 100 MedlinePlus Pens</li> </ul>	Distribution to library patrons

<b>Date</b>	<b>Who</b>	<b>Items Provided</b>	<b>Purpose</b>
4/11/2011	Grillo/Tebo Center Patient Library <i>Colorado</i>	<ul style="list-style-type: none"> <li>- 100 - MedlinePlus Bookmark</li> <li>- 50 - MedlinePlus Pens</li> </ul>	Distribution to library patrons
4/13/2011	Tina Moser <i>Colorado</i>	<ul style="list-style-type: none"> <li>- 100 - MedlinePlus Bookmark</li> <li>- 100 - MedlinePlus Pens</li> </ul>	Aurora lights pipeline program health information training

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Attachment 4:  
Social Media Conversations Report

## Social Media Conversations

Rebecca Brown and Sharon Dennis  
National Network of Libraries of Medicine, MidContinental Region  
May 2011

### Background

As part of our preparation for the 2011-2016 contract with the National Library of Medicine (NLM), the National Network of Libraries of Medicine MidContinental Region (NN/LM MCR) spoke with twenty full Network members. All of the members work in hospital libraries across the MCR's six-state region. The goal was to find out what type of Internet access issues these libraries have with regards to social media sites such as Facebook and Twitter.

The NN/LM MCR collects information from our members once every contract period with our Network Member Questionnaire (NMQ). In 2002 and again in 2005, we asked our members "What type of Internet connection does your library have?" (Table 1). From our questionnaire we learned for the majority of our members high speed connectivity is not an issue.

	High Speed	Total Responses
2002	76	102
2005	88	100

Table 1: NMQ. Internet Connection.

The 2011-2016 NLM RFP included a section on under-connected<sup>1</sup> libraries (also included in two previous RFPs). For the 2011-2016 response, we looked for a new way to define the term *under-connected*. The MCR believes that the new frontier for access issues can be found at social media sites such as Facebook and Twitter. More and more organizations and individuals are using Internet-based tools to communicate with their constituents.

### Methodology

John Bramble, NN/LM MCR Utah/Network Membership Coordinator, supplied Sharon Dennis, NN/LM MCR Technology Coordinator and Rebecca Brown, NN/LM MCR Kansas/Technology Coordinator, with a list of full hospital Network members. Sharon and Rebecca then used a random number generator program to choose which libraries to contact. The site can be found at: <http://www.random.org/sequences/>.

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<sup>1</sup> Under-connected defined in terms of speed of the Internet connection (Dial-up, DSL, LAN, etc.)

In preparing for the conversations, Sharon Dennis and Rebecca Brown spoke to Dona Christensen, one of the librarians at Primary Children's Hospital in Salt Lake City, UT. Primary Children's was the only library with which we spoke that had a Facebook page. Ms. Christensen described how the library was "just going to do it", but decided to talk to the hospital's Facebook page administrator first. The administrator works in the Public Relations department. By talking to the administrator first, they garnered his support, and he helped the library customize their page. Ms. Christensen reported that the Public Relations Department has administrative rights to the library's Facebook page so they can work on the page if necessary. The page can be found at: <https://www.facebook.com/libraryatprimarychildrens>. Future hopes are to link the hospital and the library's Facebook page to each other.

All conversations took place between February and April 2011 and lasted approximately 30 minutes each. Each member was asked the following three questions:

1. Which social media services can you access at work?
2. Who defines the access policies for staff at your institution?
3. Are you and your patrons allowed to use smartphones in the hospital/library?

### General Findings

Our conversations revealed that while the institution itself may have a Facebook presence (12 of the 20 institutions have a Facebook page), none of the hospital libraries in the MidContinental Region, except Primary Children's Hospital in Salt Lake City, UT has a Facebook page of its own. In addition, over half of the librarians could not access Facebook from their work computer. Twitter and Skype trailed close behind with just under half of the librarians unable to access those two tools. In many cases, however, the librarians could access social media sites by using the public access computers in their libraries. These are computers for patients and families to use that are not connected to the firewall.

### Analysis of the Data

1. Which social media services can you access at work?

Table 2 below shows that many NN/LM MCR members with whom we spoke can access a number of social media sites and tools. Out of the 11 sites discussed, Delicious, LinkedIn, RSS Feeds, Adobe Connect, blogs and wikis were accessible by the majority of members. On the flip side, 8 out of the 20 institutions block access to one of more social media sites on staff computers. The top three social media sites blocked by institutional firewalls were Twitter, Skype and Facebook. As mentioned above, many librarians can use the unblocked computers provided for the public, but we did not count that as access. In some cases, the librarian did not know if they could access the site or tool we asked about.

Access to:	Yes	No	Unknown
Delicious	12	3	5
Twitter	8	9	2
LinkedIn	12	2	5
RSS Feeds	12	0	8
Blogs	18	1	1
Adobe Connect	19	0	1
Skype	3	9	8
Wikis	11	2	7
SlideShare	6	3	11
Podcasts	5	0	15
Facebook	6	14	0

Table 2: Access to Social Media at Work

During our second contract with the NLM, the NN/LM MCR asked its members if they regularly access information through web 2.0 sources. Chart 1, from the 2008 Network Member Questionnaire (NMQ), shows their responses<sup>2</sup>.

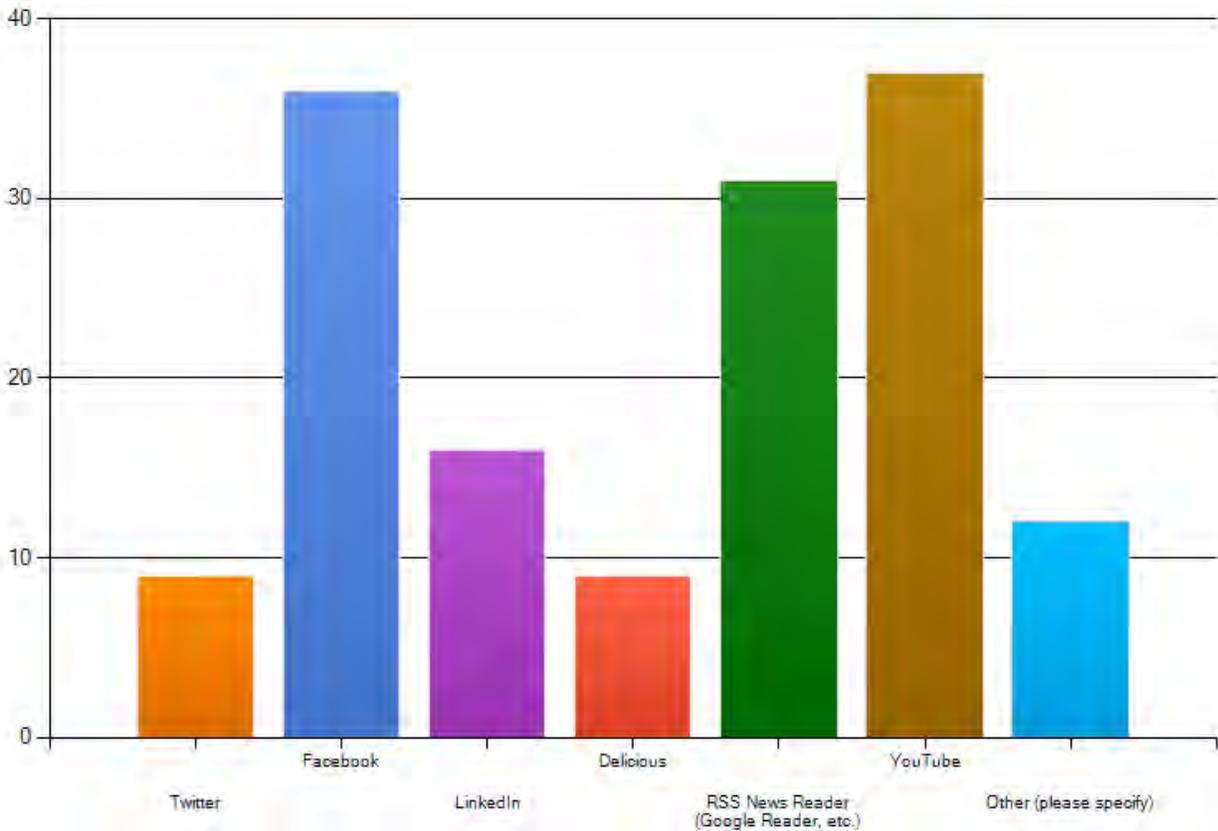


Chart 1: Do you regularly use the above services to access information?

<sup>2</sup> Network Member Questionnaire, 2008.

Selected Comments Regarding Question #1

A few of the librarians that we spoke with indicated that either the library or their parent institution was looking at creating a Facebook page.

- VA Cheyenne, WY: Currently does not have Facebook page but is “looking into it”
- Campbell County Memorial Hospital, Gillette, WY: Only marketing can post to Facebook.
- St. Luke’s Hospital, Kansas City, MO: Investigating possibility of library Facebook page (working with marketing).

2. Who defines the access policies for staff at your institution?

Fourteen of the respondents indicated that the IT department set policy regarding which sites the staff could access (Table 3). Since IT is generally the department that is responsible for network security, it makes sense that they control access. One library indicated that the Publicity Department set staff policy for Facebook.

Nebraska Western Iowa VA Health Care System (Omaha)	Public Information Officer
Poudre Valley Health System – Ft. Collins, CO	Publicity Department
Olathe Health System – Olathe, KS	IT
Evans Army Community Hospital - Fort Carson, CO	Medical Centralized Command
VA Medical Center - Sheridan, WY	Security Information Officer
Vail Valley Medical Center - Vail, CO	Human Resources & IT
Via Christi Health - Wichita, KS	IT
VA Medical Center – Grand Junction, CO	National IT & Public Relations
Exempla Saint Joseph – Denver, CO	IT
Wyoming Medical Center – Casper, WY	IT
Providence Medical Center – Kansas City, KS	Corporate Office
VA Cheyenne – Cheyenne, WY	Information Security Officer
Campbell County Memorial Hospital – Gillette, WY	IT
Children’s Hospital, Aurora, CO	IT
St. Joseph Kansas City, MO	IT (off site)
St. Mary’s Health Center, Jefferson City, MO	Sister hospital
Utah Valley Regional Medical Center, Provo, UT	IT
St. Luke’s Hospital, Kansas City, MO	IT
Denver Medical Library, Denver, CO	Library has its own IT; corporate system determines policy
Promise Regional Medical Center – Hutchinson, KS	IT

Table 3: Who defines access policies?

Selected Comments regarding Question #2

- Wyoming Medical Center of Casper, WY: IT tells administration and finance what should and shouldn't be accessed by the staff.
- VA Cheyenne, WY: Library has public access computers so we can access anything if we want.

3. Are you and your patrons allowed to use smartphones in the hospital/library?

Unlike years gone by, hospital visitors can now, in most cases, use their cell phones in the hospital (Table 4). Only one of the librarians indicated that staff cell phone use was prohibited at their institution. However, another institution is considering banning cell phone use by staff (not including the physicians). Under the new rule, staff would have to keep their phones in their lockers.

	Yes	No	Not sure
VA Nebraska Western Iowa Health Care System - Omaha, NE	X		
Poudre Valley Health System – Ft. Collins, CO	X		
Olathe Health System – Olathe, KS	X		
Evans Army Community Hospital - Fort Carson, CO	X		
VA Medical Center - Sheridan, WY	X		
Vail Valley Medical Center - Vail, CO	X		
Via Christi Health - Wichita, KS	X		
VA Medical Center – Grand Junction, CO	X		
Exempla Saint Joseph – Denver, CO	X		
Wyoming Medical Center – Casper, WY	X		
Providence Medical Center – Kansas City, KS	X		
VA Cheyenne – Cheyenne, WY	X		
Campbell County Memorial Hospital – Gillette, WY	X		
Children's Hospital, Aurora, CO	X		
St. Josephs, Kansas City, MO	X		
St. Mary's Health Center, Jefferson City, MO			X
Utah Valley Regional Medical Center - Provo, UT	X		
St. Luke's Hospital, Kansas City, MO			X
Denver Medical Library, Denver, CO	X		
Promise Regional Medical Center – Hutchinson, KS		X	

Table 4: Smartphones

## Conclusions and Next Steps

The results of our conversations revealed that the top three social networking tools blocked by institutional firewalls are Twitter, Skype and Facebook. Half of our membership is unable to access social media sites and don't use them as a communication / learning tool at work. On the other hand, data from the 2008 NMQ shows that approximately 35% of our Network members use Facebook and approximately 9% use Twitter to access information. This difference begs the question, for what reasons do members use Facebook and Twitter; personal or work? Our conversations suggest that using social media may not be the path of least resistance for communication with Network members, but may indeed be an area where the NN/LM MCR can provide training about the role social media can play in providing alternative avenues to information access, discovery and dissemination. We also learned that in the majority of institutions, it is the information technology department that sets policy regarding which sites staff can access. In two cases, it was the publicity or public relations department that made the determination, and in another case, policies were set by a centralized office in a location other than the hospital where the library was located. Lastly we learned that unlike years gone by when cell phone use was banned in hospitals, only one member institution reported that cell phone use was not allowed for staff, but physicians could use their cell phones. The NN/LM MCR will use the information garnered from these conversations to help guide us in creating our communication plan with Network members. Globally, Twitter and Facebook are very popular communication tools<sup>3</sup>, but the results of our conversations reveal that a large portion of our Network members cannot access them. This may lead the NN/LM MCR to focus on non-members when it comes to social media communication. The question remains. Does the NN/LM MCR proceed with creating a social media plan to communicate with its members or not? Discussions continue.

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<sup>3</sup> As of March 2011, Twitter had 175 million registered users, while Facebook has over 750 million active users.

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**Attachment 5:**  
**Strategic Communication Audit Report**

National Network/Libraries of Medicine  
MidContinental Region

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# Strategic Communication Audit Report and Recommendations

Submitted by:  
Cyndy Salzmann, Principal  
Salzmann & Associates  
Omaha, Nebraska  
April 2011

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# I. Overview

To know you is to love you.

This sentiment, expressed by members who receive and assimilate communication disseminated by the National Network/Libraries of Medicine MidContinental Region (NN/LM MCR), is a reflection of both the strengths and opportunities for improvement discovered during the strategic communication audit conducted January-March 2011.

The public relations firm, Salzmann & Associates, was contracted to conduct the audit which included interviews with membership and staff, a written survey and a content analysis of publications and practices. The data, detailed in the body of this report, resulted in a series of recommendations which build on the many strengths of the organization including:

- A creative, proactive staff;
- Innovative online training programs; and
- Publications which are rich in content.

While the research project also indicates the MCR faces some communication challenges, the good news is that the fixes are relatively simple and straightforward. The MCR can build on the strength of its staff as well as the well-received distributive model to target and thereby enhance communication with its membership.

## II. Purpose

Communication strategy is important to the success of any organization. In the case of the NN/LM, however, it is central to the network's mission of "providing all U.S. health professionals with equal access to biomedical information and improving the public's access to information..." As part of the organization's ongoing efforts to provide service to members which exceeds expectations, the MidContinental Region (MCR) of the NN/LM underwent a communication audit in the first quarter of 2011. The purpose of the research project was to help MCR management and staff better understand which communication practices are working effectively as well as identify opportunities for improvement.

Specifically, the research process was designed to:

- Define key external audiences;
- Identify what communication practices and vehicles are most effective;
- Identify existing efforts that are ineffective;
- Locate communication gaps; and
- Offer recommendations to enhance communication to key audiences.

The successful completion of the communication audit presents NN/LM MCR with a clear picture of the communication needs and preferences of its members as well as the most effective way to deliver this information.

### III. Process

Since the information gathered during a communication audit is crucial to enabling NN/LM MidContinental Region to make wise use of resources, a research plan was designed to include both quantitative and qualitative analysis. After meeting with MCR staff to discuss information needs, scheduling and likely time constraints of members, the following methodologies were proposed:

- Telephone interviews (30-60 minutes) with key staff to determine communication goals and messaging;
- Telephone interviews (20-30 minutes) with a stratified sample of 20% of the membership to ensure key audiences were represented;
- Content analysis of communication and methods of delivery used by the MCR; and
- Written questionnaire distributed to all members via an online survey tool.

The research plan was designed, executed and analyzed by Cyndy Salzmann, APR, Principal of the communication firm Salzmann & Associates, located in Omaha, Nebraska. Ms. Salzmann is an accredited public relations professional with more than 25 years of experience in strategic communication research, planning and execution for clients ranging from nonprofit entities to Fortune 500 corporations. An award-winning journalist, Ms. Salzmann is a popular speaker on the subjects of strategic communication, marketing, writing for publication and social media.

## IV. Timeline

The timetable for the project was planned and executed in three phases.

### Phase One

- Instrument Design (interview guide) January 10-31
- Data Collection (member and staff interviews) February 1-11

Phase One was designed to incorporate staff input before and during the interview process to assist in clarifying issues that might arise during data collection. This input proved to be very helpful and allowed the consultant to more fully probe specific areas of concern. (A copy of the Interview Guide may be found in Appendix A.)

### Phase Two

- Instrument Design (online questionnaire) February 12-25
- Data Collection (online questionnaire) March 9-14
- Content Analysis January 10-April 1

Phase Two used data gathered from the staff and member interviews in Phase One to develop the written questionnaire. The goal was to test the veracity of information gathered during the interview process. Survey Monkey (<http://www.surveymonkey.com>) was selected as the online survey tool, in part, because the service had been previously employed by MCR to solicit feedback from members, thus reducing the likelihood that the tool would be a barrier to participation. (A copy of the questionnaire may be found in Appendix B.)

During Phase Two the consultant also reviewed material provided by MCR staff including membership lists, past research studies and publications. The consultant was granted access to the MCMLA listserv for the purpose of monitoring the content of information distributed through this communication channel. Content and delivery from the NN/LM MCR website (<http://nnlm.gov/mcr/>) was also evaluated in context of information gathered during the first two phases of the process.

## Phase Three

- Report and Recommendations March 15-April 22

Phase Three consisted of an analysis of the data collected during Phases One and Two and compilation of the information into this report. Based on the issues identified during the communication audit process, the consultant has made recommendations to capitalize on the strengths of the organization as well as address opportunities for improvement.

## V. Results

The communication audit for NN/LM MCR was designed with the expectation that data collected from the qualitative and quantitative portions of a research project would converge to present a cohesive picture. In this case, qualitative data collected during the interview process was supported by quantitative data collected through the online questionnaire. The following is a summary and analysis of this data.

### Telephone Interviews

Salzmann & Associates conducted a total of 77 telephone interviews from February 1-11, 2011. This included 10 interviews with MCR staff and 67 interviews of both full and affiliate members from MCR, representing 20.1% of the membership. Participants were selected using a stratified random sampling method to ensure those interviewed were reflective of the membership. The interviews were conducted by the research consultant and lasted approximately 30 minutes each.

The tables below provide a comparative summary of the interview sample and membership:

<b>Membership Type</b>				
	Sample (actual)	Sample (%)	Membership (actual)	Membership (%)
Full	33	49.2%	151	45.3%
Affiliate	34	50.7%	182	54.6%

<b>Library Type</b>				
	Sample (actual)	Sample (%)	Membership (actual)	Membership (%)
Hospital	23	34%	139	42%
Academic	19	28%	87	26%
Public Library	17	25%	86	26%
Other	8	12%	21	6%

<b>State</b>				
	Sample (actual)	Sample (%)	Membership (actual)	Membership (%)
CO	19	28.7%	77	23.1%
KS	5	7.4%	39	11.7%
MO	18	26.8%	90	27.0%
NE	12	17.9%	70	21.0%
UT	7	10.4%	36	10.8%
WY	6	8.9%	21	6.3%

Participants were assured that responses would be reported in summary format and would not be identified by name or organization. Interviews were also recorded, with permission from participants, to ensure accuracy. (Full text of the interview guide is available in Appendix A.)

### Audience Demographics

The first set of questions asked participants to share information regarding the organization, his or her position within the organization, staffing and most frequent health information requests. The goal was to create a picture of the diverse audiences served by NN/LM MCR.

Responses ran the gamut from solo librarians supporting a hospital staff to directors of public library systems. The comments,

segmented by member type, offer insight into the challenges faced by each group.

#### Academic (Full)

*"I'm the Director of a health sciences library responsible for oversight and budgeting. We have 45 people on staff – plus some student workers."*

*"I'm the director of a veterinary medical library. We have ten staff members."*

#### Academic (Affiliate)

*"We are a private university with three full time librarians. Most of our health info requests come from nursing students." (Affiliate-Academic)*

*"We are a business college with approximately 1500 full time students. The library has two full time librarians, six part-time student employees and a library clerk. The college has a medical assisting [and coding certification] programs so we get questions from students about coding or general information about the health profession like medical law or ethics case studies."*

*"We are privately owned with 150 students. The support of the regional medical library has been invaluable to helping me do my job."*

#### Hospital (Full)

*"We have three full time librarians and three part time students staffing the library. Our first clientele are students, faculty and staff here at the college – but we are also the library for all of the health system – four hospitals and 18 clinics. We take physician*

requests for literature searches, article doc delivery, ILL. We do the same for nursing staff."

"Our med library supports the whole health system. We have one main hospital and five regional hospitals with 40 beds or less. We also have a community health library which is open to the public. Including me, we have a staff of four."

"I'm the single medical librarian at a teaching hospital and I work part time. We are an AOA affiliated hospital so we have to keep journals on the shelf for seven years. I mostly get requests for surgical and medication info from physicians, nurses and other staff."

"I'm a solo librarian for a VA hospital. The last time I had any help was a student intern three years ago. A lot of what I do is get articles through interlibrary loan for doctors and nurses."

"I'm the library director – the sole medical librarian – but I'm not technically a medical librarian. I do medical searches for the medical staff and nursing students."

#### Hospital (Affiliate)

I'm a data management specialist and do a lot of report writing, CMS, Medicare data collection. The library isn't much of a library anymore. It's primarily for staff to use as research. We subscribe to less journals and have switched from full to affiliate membership. Most of the requests I get are for Loansome Doc articles that focus on rehab – brain injury or stroke.

#### Public Library (Affiliate)

"We are the headquarters and have one branch library. I have 16 employees serving a county-wide population of 14,000

patrons. Our health requests are very general – usually major health topics or dietary information.”

“I’ve been the interlibrary loan department manager since 2009. Prior to that, I managed a branch. We get requests for books on health issues, sometimes periodical requests on consumer health issues.”

“I’m a reference librarian and the adult services coordinator. We have a large retired population so we get a lot of requests from caregivers on things like Alzheimer’s, diabetes and cancer.

“We have 100 full time staff at five locations. I’m the electronic coordinator – which means I select all the databases. I’m also responsible for PR. We get a lot of health information requests from consumers looking to supplement what their doctor has told them.”

“The motivation behind joining the organization was not so much the health information but that we were interested in being a lead organization applying for grant. I frankly didn’t know much about the organization prior to that – until I found out that we could join as a public library and be eligible to apply for this grant – which we did receive.”

“We’re a medium-sized library serving a small population in a tiny county in the mountains. We have six staff – three full-time and three part-time who work 10-12 hours a week. We get all sorts of health information requests – often to look up terminology or symptoms so a person can self-diagnose. Or one person might come in several times as they begin to understand their own health information. In lieu of calling a doctor, they want to get health info but our staff tries not to explain what something means or give medical advice.”

“I’m the director of a public library that serves a community of 80,000 people. We have 70 people on staff. Most of our health information requests are about wellness issues or illnesses of

*family members. We used to subscribe to a database for health information but I'm pretty sure we cut it due to budget issues. We had an employee who used to work at the hospital so health questions would go to her – but she's gone now."*

*"I was once known as reference librarian but I do just about everything. We are a public library with four full time and 20 part time people. When we get requests for more than print materials, we refer to them to the University Medical Center."*

#### Other (Full)

*"I'm the library services manager – a one person operation with a part time assistant. We are a professional association so our requests come from members – usually about patient care."*

#### Other (Affiliate)

*"I am the program manager over a cancer research library. We have five health educators on staff."*

*"We are a non-library entity and I'm a non-librarian. We are an area health information center (AHEC) which was originally started as a federal program to improve workforce health. I now mostly work with public health clinics, physicians and satellite locations for the library."*

The interviews clearly show that while the members of NN/LM-MCR share the common desire for access to high quality, reliable health information, they are also very diverse. Some of the unique challenges identified during the interview process include:

- Hospital members (both full and affiliate) faced with shrinking budgets and more responsibility;

- Members who are not medical librarians – and in some cases do not have a library background;
- Public libraries, due to budget cutbacks, no longer have access to the health information databases they once subscribed to; and
- Hospital members, due to the cost and changes in licensing of journals, transitioning from full to affiliate membership.

## Information Flow

The next set of questions was designed to probe participants' perceptions regarding the information distributed by the NN/LM MCR. Members were asked to recall:

- what kind of information they receive from the RML;
- how they most often receive the information;
- how much information they receive; and
- if they are satisfied with the communication channels.

Members who are subscribed to the MCR-MCMLA listserv can most easily identify the various types of information sent by the RML. Comments include:

*"Two things pop into my head immediately and that is the newsletter that comes out via email. Then, in terms of the training opportunities, I have received information on those. And then I do receive an occasional email with a heads up to specific topics of interest from Rebecca Brown. Also the same is true with Claire Hamasu – I do receive some emails from her." (Affiliate –Public Library)*

*"I am on the listserv and get links to websites. This is very valuable as busy as I am." (Affiliate-Other)*

*"I get email and things in the mail like postcards about sessions or classes they are doing." (Full – Hospital)*

*"I get a variety of communication; email alerts, Breezing Along training updates. I also get communication from the RML due to our resource library role as well as informal communication between resource library directors. Oh – and then the newsletters." (Full-Academic)*

*"Survey requests, newsletter, training information." (Full-Hospital)*

*"I get information about upcoming training – that's about it." (Affiliate-Academic)*

*"I request free share articles because I can get things really quickly and then forward it to the person who requested it. It's very easy." (Full-Hospital)*

*"Mostly I just use PubMed as a search site. I do also listen to their Breezing presentations - the webinars." (Full-Hospital)*

Several members commented about duplication across communication channels, particularly the listserv and blog.

*"I get their email but also the RSS feed. I need to cancel one because there is a lot of duplication. Something will come across first by email and a duplicate later in the day through MCR News." (Full Member - Hospital)*

Some public libraries report receiving most, if not all, of their information from their state liaison rather than the listserv.

*"I get most emails from [state liaison]. She sends a wealth of info on a variety of subjects. Things like Medline Plus improvements and updates, seminars, online emergency disaster and resources for public libraries. I try to stay updated so can answer questions." (Affiliate-Public)*

*"I get email from Rebecca on funding and training." (Affiliate-Public)*

*"I recall seeing some emails in the past and I use the database. Also Jim Honor stopped by – he's been really wonderful." (Affiliate-Public)*

Unfortunately, interviewers found that some members are receiving little, if any, information from the RML.

*"I've never received anything from the RML. It would be great to have some training for public libraries on providing health information with shrinking budgets." (Affiliate-Public)*

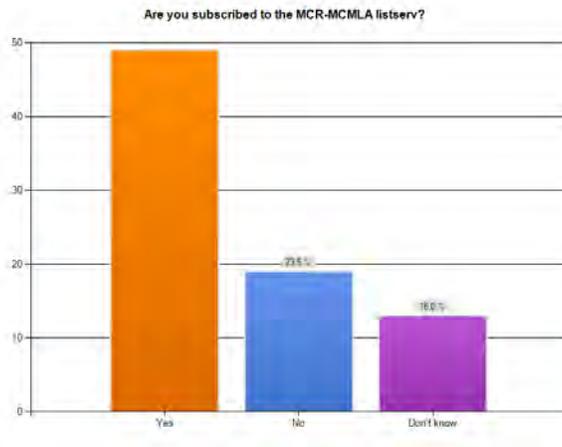
*"I've been in this position four months and haven't received any information or email from the RML." (Affiliate-Academic)*

*"We generally don't get anything directly from the RML except occasional information about workshops and webinars." (Affiliate –Public)*

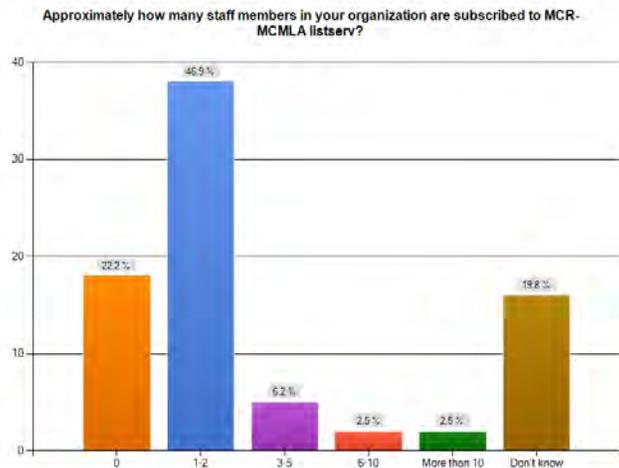
*"I'm sure I get some stuff in the mail but I don't see it. I work from home." (Affiliate-Hospital)*

As the interview process progressed, it became apparent that a significant number of participants were not receiving email from the RML because they were not subscribed to the listserv or their contact information was incorrect in the membership database. After staff confirmed that the listserv is a primary communication channel between the RML and members, a series of questions on the written survey were included to determine if this trend was an anomaly.

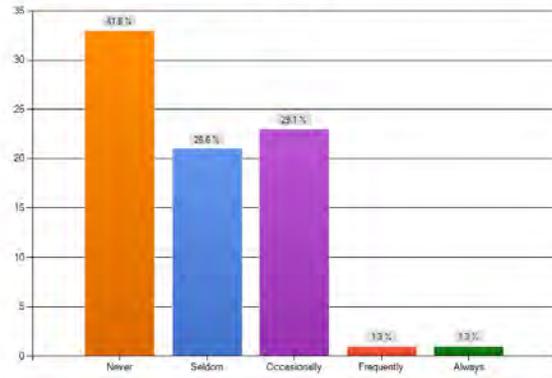
The first question asked if the member was subscribed to the listserv. As illustrated in the chart below, almost 40% of members are either not subscribed to the listserv or they aren't sure. This supports the findings of the interview process and represents a significant communication gap.



Another puzzling trend emerged during the interview process as it became apparent that the person identified as the contact in the database was often not the appropriate staff member to make best use of information from the RML. Consequently, two questions were added to the survey to determine if communication from the RML was forwarded to the appropriate staff member or if additional staff members were subscribed to the listserv. Unfortunately, as the charts below indicate, neither proved to be true in significant numbers. Approximately 47% of members report that only one or two staff are subscribed to the listserv – almost 70% seldom or never forward the information to others in the organization.

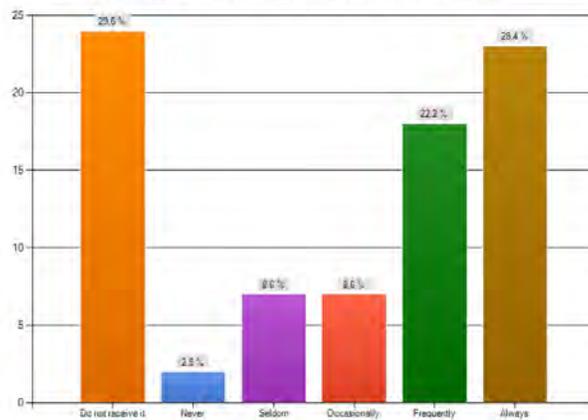


How often do you forward information you receive via the MCR-MCMLA listserv to others in your organization?

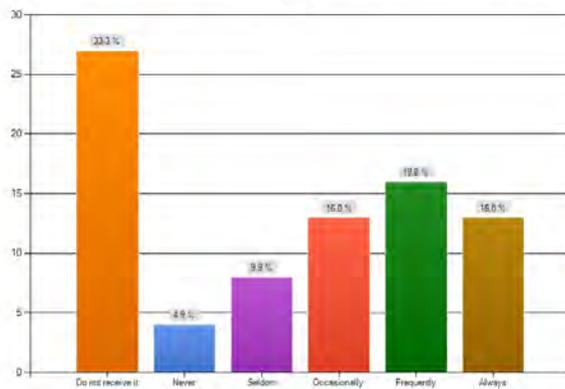


The consequence of this communication gap is demonstrated in the readership of both the popular RML News and Plains to Peak Post. In both cases, the answer with highest response rate is "Do not receive it."

How often do you read the weekly "RML News" sent via the listserv?



How often do you read the quarterly newsletter "The Plains to Peaks Post" sent via the listserv?



The interview process also revealed that some members feel the information sent by the RML is not applicable to their jobs. In the case of public libraries and certain other affiliate members, this perception is fueled by the combined listserv with MCMLA.

*"I believe I'm on the listserv but so far I haven't really found much stuff that's applicable. My background isn't in Library Science- I'm a health educator - so it's hard to connect with the library community." (Affiliate-Other)*

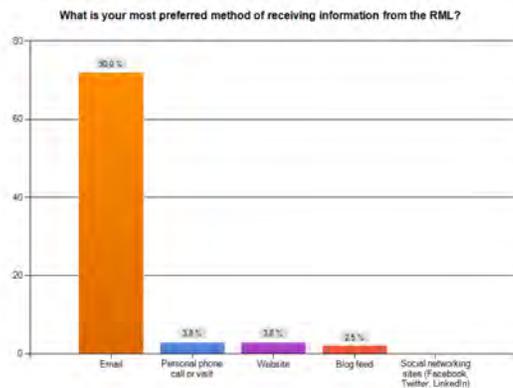
*"Interesting info – but not always applicable to what I do." (Affiliate-Academic)*

*"I read the emails that talk about certain programs - training, but I don't attend very often because of time." (Affiliate-Hospital)*

*"A lot of what comes by email does not apply to me." (Affiliate-Hospital)*

*"I'm on the listserv but don't read it unless a headline jumps out." (Affiliate-Hospital)*

Almost all members interviewed identify email as their primary method of communication from the RML – and they like it this way. The written survey supports this finding as indicated by the data on the chart below.



*"I would prefer to focus on one method to receive information. I check my email very regularly so this is the best way to communicate with me." (Affiliate-Academic)*

*"Email is perfect for me. I use it much more than social media and I think it is an effective way to get the information out and avoid the cost of printed pieces which are not at all needed for getting information from the organization." (Affiliate-Public Library)*

*"Email is great. I'm too busy to try and dig for information." (Full-Academic)*

*"It's easy to scan email." (Affiliate-Hospital)*

*"I can quickly read through the links and see if there's anything I need to respond to." (Affiliate-Hospital)*

As far as the amount of information sent to members, almost all report that it is "about right."

*"I've never felt like it was too much. In addition to the formal communications – the emails -- I receive occasionally from members on different topics. I'm comfortable." (Affiliate – Public)*

*"I'd say it's a modest amount." (Full-Academic)*

One participant reports only receiving the postcard advertising upcoming webinars.

*"Frankly, I get very little. I wish it was more." (Affiliate-Academic)*

Finally, one participant expressed concern about the amount of "chatter" on the MCMLA listserv.

*"Sometimes people on the listserv hit reply when they don't need to and it gets chatty. I think this is because it's part of the MCMLA listserv." (Affiliate-Other)*

## Preferred Communication Channels

With email being the most preferred method of communication with the RML, members were queried regarding two publications distributed via email.

### RML News

For the most part, participants had extremely positive comments about both the content and format of the RML News that is sent out weekly through the MCMLA listserv.

*"It's very well organized, I love it. I'm able to scan through sort of a table of contents at the beginning of it and then link to an article of interest." (Full-Hospital)*

*"When I first started, it would take me four hours just to get through it. There is always such good information." (Affiliate-Academic)*

*"I like the way they write their information – straight and to the point. If they can say it in twenty words – they say it in twenty words – not in 100 words." (Full-Hospital)*

*"The descriptions are good. I have a pretty good idea of what I'll find if I click a link instead of being surprised." (Full-Hospital)*

*"The information overall is good. I pass it along to the library staff." (Affiliate-Public)*

*"I would say on average I might find one or two things out of the email each week that might be useful." (Full-Hospital)*

*"I would say all of the info is useful. Sometimes doesn't pertain to me but I still think this is one of the stellar activities of the RML. It's organized and concise." (Full-Academic)*

Topics participants mentioned as being of particular interest include:

- Health information
- Training opportunities
- Funding and scholarships
- Tech tips
- Library advocacy
- JCAHO

*"I always like to see the latest findings on cancer. We get a lot of requests for this type of information." (Affiliate-Public)*

*"Generally all the info a person needs is there to take action. If you want to register for a class, the link is there." (Full-Hospital)*

*"I do find [information about funding] useful as well but they don't always apply to us." (Full-Hospital)*

*"I am always on the lookout for grant opportunities." (Affiliate-Public)*

Participants were asked for their suggestions on making the RML News better. Comments include:

*"I think they seem to stay on top of things. They communicate certain things on a weekly schedule and*

*others on an as needed basis.” (Full-Hospital)*

*“I think it’s very well organized. I don’t have many suggestions. I’m a faithful reader so it’s effective.” (Full-Hospital)*

*“I would like more information and training on searching techniques or changes in databases. Also, I’m interested in any special websites deal with policies and procedures.” (Full-Hospital)*

*“I think there should be a designated listserv for the RML.” (Full-Hospital)*

*“For me, maybe less frequent would be fine but then I’m not in a health library. I rate it highly because it’s not excessive.” (Affiliate-Public)*

## Plains to Peaks Post

The quarterly Plains to Peaks Post received mixed reviews. For the most part, members like the content. However, several expressed concern about the length and format.

*“I use it to keep up with what people are doing more on a personal level. Not just programs – people.” (Affiliate-Academic)*

*“I like it – it looks nice and doesn’t come out that often so I’m more interested in what’s new. I can pull it up while multitasking.” (Affiliate-Other)*

*“This tends to be something I really don’t have time to go through anymore.” (Affiliate-Public)*

*"I would get more out of it if I read the whole thing but I never have time. I prefer things in small bits." (Full-Other)*

*"Some of the articles don't seem to be very professionally written." (Full-Hospital)*

*"It usually ends up in a pile and by the time I get to it, it's no longer relevant." (Full-Hospital)*

*"It's too long and hard to read online. I have to print it out if I want to read it and that takes too long." (Full-Hospital)*

*"It gets lost in my email." (Full-Hospital)*

*"I've seen it in print, but not recently." (Full-Hospital)*

*"I've read it a few times but it is not very helpful for a consumer health library." (Affiliate-Other)*

*"A lot of times it's just repeating things that came out previously. It seems to be a holdover from old ways. Plus I don't like the format with the columns. It's hard to read onscreen." (Full-Academic)*

*"You know, I remember print version from a year or two ago. I used to read it pretty thoroughly – but I don't think I even get it anymore because I can't recall it." (Affiliate-Public)*

*"I like reading it but it's so few and far between. Maybe if it came monthly and was shorter rather than quarterly and longer." (Full-Hospital)*

*"I would recommend that if they want to write an article that they put it in with the weekly listserv. Then, if I decide it's worth reading, I can link to it." (Full-Hospital)*

*"The email alerts are more relevant but the longer articles can be useful." (Full-Academic)*

*"The article on the very front – I always look at. It applies to others as well as librarians." (Affiliate-Other)*

*"Let's put it this way, I don't eagerly await my Plains to Peaks." (Full-Hospital)*

*"When it was hard copy, I used to look at it, but not now. I never think to print it." (Full-Hospital)*

*"I print it out and put it in a pile but by the time I get to it, the information is old." (Full-Academic)*

*I like the "Who" column and the question and answer. The questions are right on and the answers are great. Good articles on folks who are dealing with shrinking resources. Also the little tidbits of info. (Full-Other)*

*"Frankly, it's not that interesting to me." (Full-Hospital)*

*"I like to read about news in the region." (Full-Hospital)*

*"I would rather have it come in bits and pieces. Maybe two mailings a week instead. It isn't crucial to go in-depth." (Full-Academic)*

## MCR Website

Members have a generally favorable view of the website, reporting satisfaction with the large amount of information available. Most however, don't visit very often.

*"I appreciate the access to articles." (Affiliate-Other)*

*"There's a lot there that I don't fully take advantage of because I don't have time." (Affiliate-Other)*

*"I only go there for DOCLINE." (Full-Hospital)*

*"Although I don't go there a lot, I know it's always there when I need it." (Full-Hospital)*

Some members expressed a desire for a more user-friendly site:

*"I can't always find what looking for but Barb Jones has been extremely helpful." (Full-Other)*

*"I sometimes have trouble maneuvering about." (Full-Hospital)*

*"I don't get a lot by just going there and looking around." (Full-Hospital)*

*"I don't use it very often. It's hard to find things." (Full-Academic)*

*"Have to dig most times – had to call liaison one day because I couldn't find a webinar." (Hospital-Full)*

The top reasons members report visiting the website include:

- Contact information
- EBooks
- Training
- Archived programs
- Document Delivery
- PubMed
- ROI calculator

*"I LOVE that they have the eBooks on the website." (Full-Hospital)*

*"I've looked at it when I've had questions about document delivery, when I'm looking for a course or if I need to look up a contact number or address for someone." (Full-Hospital)*

*"I might visit the website if I'm looking for a factual piece information such as contact info, spelling of name or information about a meeting." (Full-Academic)*

*"I usually go to look up information about a meeting or some training." (Full-Hospital)*

*"Definitely the archived webinars and the member search." (Hospital-Full)*

A few members had suggestions to make the website more valuable.

*"I'd like to see more about what the people of the RML are doing. Maybe a report on the weekly meeting of liaisons." (Full-Academic)*

*"Shared info from other RMLs around the country. Like – there's a great program in South Carolina." (Affiliate-Other)*

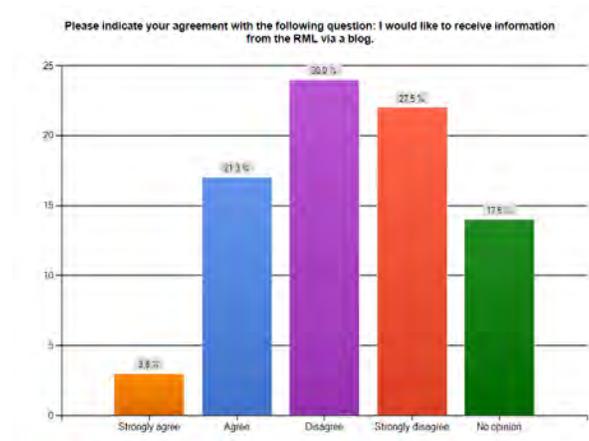
*"There was a discussion recently about what type of support hospital librarians are going to get due to budget cuts and the resources available to help you show what you're doing to support the institutions. It would be great to show how to do this for academic librarians – how we can show that the library contributes to the retention of students and increased graduation rates." (Affiliate-Academic)*

*"Maybe an interactive area for members." (Affiliate-Academic)*

## News Blog

Other than social networking, the news blog received the lowest rating as a preferred source of communication with the RML in both the interviews and survey. Participants were asked to

comment specifically on the News and Information blog. The Community Health blog was excluded from this study because it targets the general public rather than RML members.



Only one interview participant reported receiving the RSS feed. In addition, a majority of participants were not aware that the RML had a blog.

*"The RSS feed is redundant. Same info that's on the listserv."*  
(Full-Hospital)

*"I don't visit the news blog- I rely on the listserv."* (Full-Hospital)

*"I'm not a blog lover. I don't find them rewarding because they are not interactive. It's like you are preached to instead of having a conversation."* (Affiliate-Other)

*"I didn't know there was one."* (Full-Academic)

Participants in both the interviews and written survey report blogs being blocked at work.

A comment from the written survey also expresses the sentiment of many of the interview participants:

*"Taking time away from email to check out a blog means I may miss an email that requires immediate response. Not that*

*this applies to everyone, but as a manager, I need to be looking at emails (part of my job) not reading blogs. And blogs are extremely difficult in finding the specific information you need."*

Two interview respondents offered suggestions that would make it more likely they would read the RML blog.

*"I might go to it if it was linked in a Facebook post." (Affiliate-Other)*

*"I really like blogs that are frequently updated with valuable information." (Affiliate-Academic)*

The prevailing sentiment among members is best summed up by the following comment:

*"It would take a lot to get me to visit the blog." (Affiliate-Other)*

## State Liaisons

Next to email, personal contact (call or visit) from the state liaisons was reported as a preferred method of communication with the RML. Liaisons also received high marks from members for both knowledge and service.

*"They are both great. Lovely people. Very approachable." (NE) (Full-Hospital)*

*"She's sort of, in a way, a mentor when it comes to this organization and I do appreciate it." (KS)(Affiliate-Public)*

*"I think our personnel at RML [MCR] do a very good job at communicating what needs to be communicated to us. But they also do a really good job because they are all on the same team – trying to provide the best services to us for us*

*to provide to others. They have a professional approach but also know how to connect personally. I have lived in three other RMLs and I find this staff is great. It works very well and there's stability I haven't seen in other regions." (Full-Other)*

"She and I worked together to put together a computer lab based training on access to web health information through CDC that was very well-received by the folks who participated in it. She also made me aware of an award that's available to an organization based on the timeliness and applicability to other libraries of the grant we received. She emails me occasionally on other thoughts. I think she's great and communicates very effectively." (KS) (Affiliate-Public)

"I know both of them professionally and get a lot when we do our 'library talk.'" (NE) (Full-Hospital)

"She sends me a lot of info." (MO) (Full-Affiliate)

"I've spoken to him several times. He was very helpful." (UT) (Affiliate-Other)

"Marty has called a few times since we went from full to affiliate. She's been very good about helping us make the transition from DOCLINE to Loansome Doc." (NE) (Affiliate-Hospital)

"I know Barb and she is very helpful." (MO) (Affiliate-Hospital)

"Dana is really great about sending me information about training." (CO) (Affiliate-Academic)

## MCMLA Conference Workshop

Very few members report attending the MCMLA conference for a variety of reasons.

*"There are other conferences that are more applicable to public libraries so I decided to pass." (Affiliate-Public)*

*"I haven't attended in years." (Affiliate-Other)*

For the most part, those who have attended the RML's presentation at MCMLA, appreciate the content of the presentation.

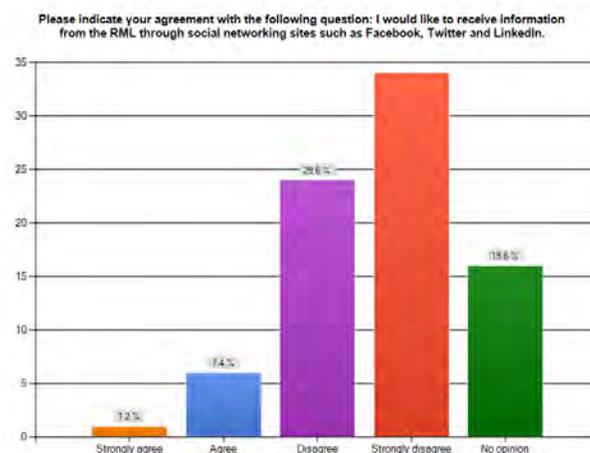
*"The information is very important and useful – but it always seems rushed." (Full-Academic)*

*"It doesn't always apply to me but it's good to know." (Full-Other)*

*"A lot of times they are just giving a very top level overview and I find I already know [the information]. Sometimes you find a new little bit of information." (Full-Hospital)*

## Social Networking

In both the interviews and survey, participants report social networking as their least preferred method of communicating with the RML. In the written survey, less than 9% of respondents indicated a desire to receive information from the RML via social networks.



One of the most prevalent concerns among members is an aversion to mixing personal and work-related communication. In addition, a majority of hospital members report that they do not have access to social networking sites at work.

*"I don't have work friends on Facebook." (Affiliate-Public)*

*"I only use Facebook socially." (Affiliate-Academic)*

*"I am not a Facebook user. I even have a note on my Facebook page that I don't regularly check my account. I have a few friends on it so I occasionally go in. But some people tried to contact me that way and I had to tell them this is not the best way to get in touch with me." (Full-Hospital)*

*"Some at the library use Facebook but I don't use it for work-related information." (Full-Academic)*

*"I only go there if I am directed to a page by a link." (Full-Hospital)*

*"I have a problem with mixing personal with business." (Full-Academic)*

*"I just don't like it." (Affiliate-Public)*

*I just don't see the advantage to Twitter unless it's something urgent. Also as a director, I don't want it to appear like I'm wasting time when Facebook is up. An email would tell me the same thing and it's easier to manipulate." (Full-Academic)*

*"That wouldn't be best idea because then I would be receiving the same information three different times." (Full-Hospital)*

*"On library related websites –there's not much give and take. It's almost always just posting of info. Until we can get a format where people do some give and take, it's better just to have an RSS feed of the info." (Full-Hospital)*

*"I know some people do a lot with Twitter feeds and such. But I'm so overwhelmed with information that comes across that I don't need more." (Full-Hospital)*

*"I really use Facebook and Twitter so that would be an effective way to communicate." (Affiliate-Public)*

*"I have noticed on my Facebook page that says I only visit about once a month. So if people need to get in touch with me – send an email." (Full-Hospital)*

*"It's not a policy barrier. It's just not my preference for work-related information." (Full-Other)*

*"I think it would be hard to get through all the muck." (Affiliate-Academic)*

Others report not having time to seek out information from social networking sites.

*"I have an account but it's just too much in terms of time. I would much rather have an email." (Full-Other)*

*"I don't have time for Facebook. I don't have a personal Facebook page so I don't find it useful for work." (Affiliate-Other)*

Only three interview participants report visiting social networking sites at least once a day. The remainder reported visiting from 1-2 times a month to "never." Only one member reports adding the RML Facebook page to her network.

*"I try not to mix work with personal but I do use the RML's page a lot." (Affiliate-Other)*

An important aspect of the study was to probe member's feelings regarding the use of Web 2.0 technologies. Interviews with staff during the study indicated a feeling that seasoned librarians might be averse to taking the time to learn the new technology required to use social networking as an information source. Since the data collected during the interview process did not appear to support this conclusion, questions were added to the written survey to determine if the aversion to using social media was age-related. By cross-tabulating the results with demographic questions, the chart shows that librarians most interested in receiving information from the RML via social networking are those who have been in the profession 11-20 years while those least interested have only been librarians for 1-3 years. The same pattern is indicated for receiving information via blog. The most seasoned librarians, in the profession more than 20 years, are the most amenable to receiving information from the RML from a blog while the least interested are those who have been librarians less than three years.

### Q1: Social Networking

**Please indicate your agreement with the following question: I would like to receive information from the RML through social networking sites such as Facebook, Twitter and LinkedIn.**

Answer Options	How many years have you worked as a librarian?			
	1-3	4-10	11-20	More than 20
Strongly agree	0.0%	0.0%	0.0%	0.0%
Agree	0.0%	7.7%	11.8%	7.0%
Disagree	66.7%	38.5%	42.2%	20.9%
Strongly disagree	33.3%	30.8%	35.3%	51.2%
No opinion	0.0%	23.1%	11.8%	20.9%

### Q2: Blog

**Please indicate your agreement with the following question: I would like to receive information from the RML via a blog.**

Answer Options	How many years have you worked as a librarian?			
	1-3	4-10	11-20	More than 20
Strongly agree	0.0%	7.7%	5.9%	2.4%
Agree	0.0%	15.4%	7.6%	26.2%
Disagree	33.3%	38.5%	41.2%	23.8%
Strongly disagree	33.3%	23.1%	17.6%	31.0%
No opinion	33.3%	15.4%	17.6%	16.7%

## Webinars

The use of webinars to offer training is highly valued by members. The programs receive high marks for both content and convenience.

*"I think they are very well done." (Full-Hospital)*

*"Webinars are a good vehicle for training. I really like Adobe Connect." (Affiliate-Academic)*

*"I haven't been involved in a webinar offered by the RML but have taken ones offered by other groups. I find them a very effective way of training and will probably do an RML based session." (Affiliate-Public)*

*"It's very convenient. I can do it at my desk at work. If I don't attend, they record it and I can watch it later." (Hospital-Full)*

*"I like them because they are on Wednesday once a month and they announce the topic ahead of time. They are always very well done and have time for questions. It's very concise – just what librarians need to know." (Full-Other)*

*"The training is really good and it saves money on travel." (Full-Academic)*

*"I like that you can see the person [presenter] and how many others are attending." (Full-Hospital)*

*"I like that I don't have to leave work. They provide good info in an hour. I also like that they record it so I can go back to review." (Full-Hospital)*

*"The fact that the training is free is a huge benefit. We have a very limited training budget and the presenters know*

*what they are talking about. It's also really convenient."*  
(Affiliate-Academic)

*"I've only done one but it was very good."* (Full-Hospital)

Some members report struggling to find an uninterrupted hour to participate in a webinar.

*"It really takes a chunk of time that I don't have."* (Affiliate-Public)

*"I wish I had time to attend."* (Full-Hospital)

*"I'd like to try one but I can't get away that long."* (Affiliate-Public)

*"I've thought about attending a couple of times. The topics look interesting. But I don't have time to figure out how to access it."* (Affiliate-Other)

Most members report a preference for attending the webinars live but appreciate the flexibility available of the archived programs. Only one interview participant says she almost always views the archived programs.

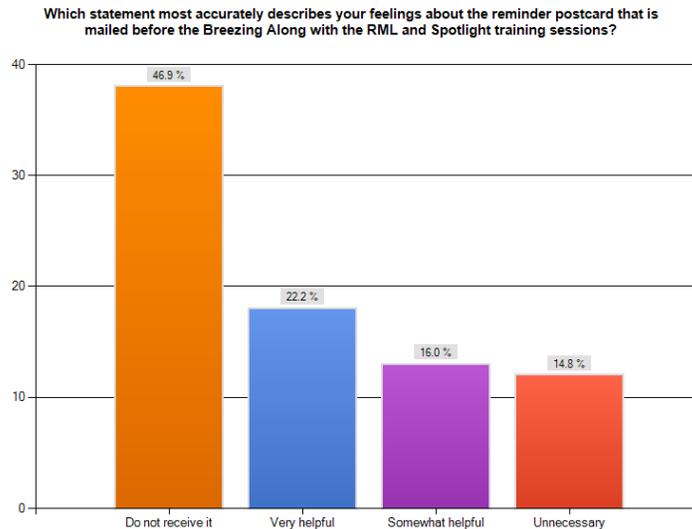
*"If I can attend live, I do."* (Hospital-Full)

*"I usually do watch them live because when I miss them I don't always go back."* (Hospital-Full)

*"Typically live and sometimes in a group setting. At our library we will advertise a webinar and project it on the screen for people who come to us. I also do webinars where I'm sitting at my own computer. They both work."* (Public)

*"I attend live if I can but frequently I can't. Thankfully it's archived."* (Affiliate-Academic)

Member attitudes are mixed regarding the usefulness of the postcard announcing upcoming training. Some members feel the postcard is extremely helpful and others feel it is unnecessary. Also, a significant number of those interviewed report not receiving it. Again, this is supported by data from the written survey.



*"Email is fine for me." (Hospital-Full)*

*"It's a good reminder but I wouldn't be heartbroken if I didn't get it." (Affiliate-Academic)*

*"I have it right in front of me, actually, on the table under my computer." (Hospital-Full)*

*"I post it next to the computer." (Full-Hospital) - 2*

*"I've never seen one." (Full-Academic)*

*"I think it's a waste of money. If you are going to do something electronically – the announcement should be electronic." (Full-Academic)*

*"One more reminder is always nice. A lot of times it gets lost and then resurfaces." (Affiliate-Other)*

*"I like the postcard but the email is also important." (Full-Other)*

## Final Comments

Before concluding both the interview and written survey, participants were given the opportunity to share additional information, comments or concerns regarding communication with the RML that they felt might be helpful to the study.

Comments include:

*"I would say that overall I'm very satisfied."*

*"Overall, I think the communication is extremely effective – and valuable even to public library members of the organization. I feel very much at home and that we are part of the group even though we are not a health sciences library and that's a neat thing."*

*"I was part of another RML for quite a while, but this group, even when I first came here, was much more available. With the other one, I had to go find their stuff. Here they are proactive instead of reactive. Also, you don't really know who anybody is. I can talk to Claire as much as Marty – with no indication that Claire is the big kahuna. I never feel anyone is not accessible. They also go above and beyond instead of just saying, "Try checking here..." The other RMLs have good information but the customer service here is like frosting on the cake." (Affiliate-Other)*

*"I don't feel like I'm missing anything so I must be getting what they have to share." (Full-Hospital) NOTE: This interviewee also reports not reading the weekly RML News, Plains to Peaks Post.*

News Blog or Facebook. Her primary source of information is the postcard regarding upcoming training.

*"I think they do a terrific job. I feel informed. Of course, I don't know what I don't know – but I don't think I have any significant knowledge gaps. It seems they are very proactive about keeping us informed – and I enjoy what I read."* (Full-Academic)

*"I would like to be added to the listserv. It seems like I'm missing a lot."* (Affiliate-Academic)

*"I've been such an infrequent user. Our company was sold and we need get preapproval to buy articles now – so people don't request as much."* (Affiliate-Other)

*"I just think the RML is great. It's good to know it's there and know that we can refer to it."* (Affiliate-Public)

*"It just seems that everything focuses on medical librarians – and they use MLS lingo. I'm just not sure what's available or pertinent to me and I don't have time to sort it out."* (Affiliate-Other)

*"I have no complaints but since we aren't library focused anymore, the RML isn't really relevant."* (Affiliate-Hospital)

*"They are very good people. Very easy to work with. I appreciate that they aren't all tech heads."* (Affiliate – Academic)

*"Biggest thing for me is to separate the RML from MCMLA. I thought the RML was part of MCMLA."* (Full-Hospital)

*"I really appreciate the Breezing and Spotlight programs. They are very helpful and I've learned a lot."* (Full-Hospital)

*"I think, in an attempt to be on cutting edge and do everything, communication becomes too diluted. Everyone does email – so I think the Tuesday thing is GREAT." (Full-Academic)*

*"I would like to visit their website so I know what RML has to offer and be added to listserv." (Affiliate-Public)*

*"I would like to receive updates pertinent to public librarians." (Affiliate-Public)*

## VI. Recommendations

Technology has transformed the way people access information as well as the volume of information available to them. While this offers a host of exciting new opportunities for communication, it has also resulted in significant challenges for organizations of all types. For NN/LM MCR, whose mission relies on the effective sharing of information, finding the right mix of content and delivery is imperative.

One of the most exciting findings resulting from the communication audit of the MCR, bears repeating. To know you is to love you.

The available programs and resources are extremely valuable to members. The challenge, however, is breaking through the glut of information that bombards librarians today– the same members who face shrinking budgets and increasing responsibilities.

While the MCR faces some significant communication challenges, the good news is that the fixes are relatively simple and straightforward. The MCR can build on the strength of its staff as well as the well-received distributive model to enhance communication with its audiences. Doing so will build relationships with members.

While communication vehicles seem to change in the blink of an eye, the principles of effective communication remain the same. To reach the intended audience, communication must be:

- ✓ Targeted;
- ✓ Relevant; and
- ✓ Easy to access.

The recommendations that follow are designed to help MCR achieve these goals.

## 1. Update and Expand the Member Distribution List

As noted in the research, a significant portion of the information distributed to members does not reach them due to outdated contact and email lists. We suggest utilizing the state liaisons to contact members in their areas to:

- ✓ verify contact information, particularly email and phone numbers;
- ✓ ask individual members how he or she prefers to receive information from the RML; and
- ✓ determine if additional staff members within the organization should be added to the distribution list.

## 2. Discontinue use of the MCR-MCMLA listserv as the primary source for MCR communication.

Information distributed on the listserv leaves the impression that it is intended for medical librarians, specifically MCMLA members. Those who do not belong to the association feel this information is not relevant. Discontinuing use of this list as the primary source of MCR communication will provide more flexibility to distribute targeted messages.

3. Develop and deliver targeted communication to members by employing an email marketing service.

Inexpensive, easy-to-use services, such as Vertical Response (<http://www.verticalresponse.com/>), Constant Contact (<http://www.constantcontact.com/index.jsp>) or Emma (<http://myemma.com/>), allow users to create and send emails, newsletters and special notices to a targeted mailing. These email services allow users to segment their mailing lists and use of graphics to make a bigger impact. Emma, in particular, offers template design services that would allow MCR to design a template for each audience, e.g. – Health Resources for Public Libraries. This type of service would also allow the MCR to segment the member database to create smaller lists based on interests resulting in messages that are more relevant. Another important feature is the ability to track when an email is opened – offering a built-in evaluation feature. MCR would also be notified if a member unsubscribes – giving the liaison an opportunity to follow-up.

4. Reformat *From Plains to Peaks Post* from print layout to online format.

The research shows that while MCR members value the publication, it has become difficult to read. Consider reformatting so it can be easily read online while offering a “print ready” option. In addition, sending shorter articles more often is proven to increase readership so MCR might consider the Plains to Peaks Post with the RML News.

5. Develop and implement a plan to personalize Web 2.0 communication or discontinue.

Web 2.0 is all about interaction and is not intended as a bulletin board. Instead of looking at social networking as another “spot” to post information, it’s important to view it as a way to build relationships – realizing that these have to be nurtured. For example...

- ✓ Each liaison might use Twitter to only send reminders to her list.
- ✓ The MCR Facebook page could become a forum to share ideas. Make it interactive with questions and photos that tag members. Look up members on Facebook and invite them to join the MCR-FB page with a personal note.
- ✓ Invite members to write a post for the blog and encourage discussion.

Successful social networking takes a big investment in time to nurture. The research indicates members are not that interested so this may be something to “let simmer on a back burner.”

## 6. Redesign the MCR webpage to make it more inviting and user-friendly.

The more information that’s available, the more important it is to make it easy to find. Although options may be limited due to a shared site for the NN/LM, we noted that the NLM has a more user-friendly website. If a significant redesign is not possible, we suggest incorporating graphics and a larger placement of the newsfeed to make the site easier to navigate.

## 7. Develop and implement a comprehensive plan to guide member communication.

One of the repeated complaints of members was the redundancy of information sent out. For each

communication strategy, the plan should specify the purpose, target audience, communication channel, timetable and responsible staff. This would eliminate duplication of effort and frustration of members.

#### 8. Develop a new member orientation protocol.

Taking the time to introduce new members to the RML will pay dividends far into the future. Consider developing...

- ✓ 10 minute online tutorial introducing the resources available through the NN/LM MCR with directions on how to sign up for the participant's preferred method of receiving information;
- ✓ Introduce new members to the membership in the RML News; and
- ✓ Schedule the state liaison to follow up with a phone call to answer any questions.

#### 9. Consider segmenting training offered via webinar.

Although the webinars are very well received, members report difficulty finding an hour of uninterrupted time. Consider structuring future webinars so each program runs no more than 20 minutes and perhaps provide an additional "after the show" segment to take questions.

## VII. Appendix A

### *Interview Guide*

I'm \_\_\_\_\_ from Salzmann & Associates. As you know, we've been contracted by the MidContinental Region of the National Network Libraries of Medicine to measure how effectively the RML communicates with its members and – if needed – make recommendations to improve communication. The interview is confidential. Individuals are not identified by name and answers are only reported in summary format. If it's okay with you, I'd like to record the interview. The recording allows me to listen to your responses rather than focus on taking notes. It will not be turned over the RML – and will be destroyed at the end of the project. Do I have your permission to record our interview?

Great, let's get started...

#### **GENERAL**

- First, would you mind telling me a little bit about you and your position? (Probes – how many people staff the library? What kind of information requests do you get most frequently – and from whom?)

Let's start with some general questions ...

- What **kind of information** do you receive from the RML?

*(Probe - news about upcoming events such as training opportunities, changes in resource offerings from the National Library of Medicine, links to information of interest to audiences you serve, information to help you do your job better)*

- **How do you most often receive** the information – in other words – by what communication vehicle?  
*(Probe: website, email (listserv) blog, newsletter – Plains to Peaks Post)*
- Is this method working for you – or would you prefer to receive the information another way?
- How would you rate the **amount of information** you receive from the RML? *(probe: too much, too little, redundant)*

Now I'd like you to rate some of the communication methods used by the RML...

- On a scale of one to five... with **one being least preferred** and **five being most preferred** ... how would you rate the following communication methods used by the RML to inform you of news and events?
  - Listserv announcements
  - Tuesday weekly update delivered through the Listserv
  - Plains to Peaks Post Quarterly Newsletter
  - Website
  - News Blog
  - Personal contact (call or visit) from liaison
  - Presentation at MCMLA conference
  - Facebook
  - Postcard sent out before the Breezing Along with the RML and Spotlight sessions

## **LISTSERV**

Now... let's talk a little more specifically about the Listserv...

- Are you subscribed to the Listserv?  
(Probe: IF NO, why not?)

**IF ANSWER IS NO... SKIP TO WEBSITE (PAGE 6)**

- Do you read the weekly news updates that are sent on Tuesdays?  
(Probe: IF NO, why not?)

**IF NO – SKIP NEXT QUESTION (below)**

- What information included in the weekly updates is most useful to you? (probe: announcements of training opportunities, information about the National Library of Medicine, funding opportunities, regional library news)
- How do you feel about the **amount of information** you receive via the Listserv?  
(probe: about right, not enough, redundant)
- Do you have any suggestions for making the Listserv better?

Now let's talk about the Plains to Peak Post (delivered through the Listserv)...

- Do you read the Plains to Peaks Post newsletter?  
(Probe: IF NO, why not?)

**IF ANSWER IS NO, SKIP TO WEBSITE (PAGE 6)**

- What information included in the newsletter is most useful to you?

*(probe: announcements of training opportunities, information about the National Library of Medicine, funding opportunities, regional library news)*

- What information would you like to see in the newsletter that is not included?

## **WEBSITE**

Now, let's talk about the RML website....

- Why do you typically visit the RML website?

***IF RESPONDENT HAS NEVER VISITED TO WEBSITE, SKIP TO SOCIAL NETWORKING PAGE 7***

- How often do you visit?  
*(Probe: Daily/Weekly/Monthly/Yearly/less often)*
- Are you generally able to find the information you are seeking?  
*(Probe - IF YES -- Is it easy to find the information you're looking for- or do you have to dig?)*
- Are there any features of the website that are especially useful to you? *(Probe: Document Delivery – Docline and Loansome Doc, DOCLINE Out of Office Planner, NN/LM members search, LinkOut, archived webinars)*
- What **type of information** would you like to see on the website that's not there?
- What **function** would you like the website to have that's not there? *(example – member search)*

## **SOCIAL NETWORKING**

I have a few questions about social networking...

- Are you able to access social networking sites such as Facebook and YouTube at work?  
**IF NO, SKIP TO PAGE 8**
- How often do you visit social networking sites for work-related information?  
*(Probes: daily, weekly, monthly, less often)*
- Would you like to receive information from the RML through social networking sites?  
*(Probe: Why or why not?)*  
**IF NO, SKIP TO BLOG, PAGE 8**
- What kind of information would you like to receive from the RML through social networking sites?
- Is THE RML's Facebook page a part of your social network - in other words -- have you accepted the invitation to "like" the RML's Facebook page?

## **BLOG**

Finally, I have a couple questions about the RML News and Information blog...

- Do you read posts from the the RML blog?

**IF NO, SKIP TO "CONCLUSION" ON PAGE 9**

- How do you access these posts?  
*(Probe: RSS or news reader feed, visiting the blogs online , forwarded link)*
- Do you have any suggestions for making the blog more valuable to you?

## **CONCLUSION**

That's all I have but...

Is there anything else regarding communication with the RML that you think would be helpful to this study?

Thank you so much for your time! The report will be available in few months on the RML website.

# VIII. Appendix B

## Written Questionnaire

1. Please indicate the type of institution your library is affiliated with.
  - Academic
  - Hospital
  - Public library
  - Other
  
2. How many years have you worked as a librarian?
  - 1-3
  - 4-10
  - 11-20
  - More than 20
  - My primary job is not as a librarian
  
3. What is your most preferred method of receiving information from the RML?
  - Personal phone call or visit
  - Email
  - Website
  - Social networking sites (Facebook, Twitter, Linked-In)
  - Blog feed
  
4. Are you subscribed to the MCR-MCMLA listserv?
  - Yes
  - No
  
5. Approximately how many staff members in your organization are subscribed to MCR-MCMLA listserv?
  - 0
  - 1-2
  - 3-5
  - 6-10
  - More than 10
  - Don't know

6. How often do you forward information you receive via the MCR-MCMLA listserv to others in your organization?
- Never
  - Seldom
  - Occasionally
  - Frequently
  - Always
7. How often do you read the weekly "RML News" sent via the listserv?
- Do not receive it
  - Never
  - Seldom
  - Occasionally
  - Frequently
  - Always
8. How often do you read the quarterly newsletter "The Plains to Peaks Post" sent via the listserv?
- Do not receive it
  - Never
  - Seldom
  - Occasionally
  - Frequently
  - Always
9. Please indicate your agreement with the following question: I would like to receive information from the RML through social networking sites such as Facebook, Twitter and Linked in?
- Strongly agree
  - Agree
  - Disagree
  - Strongly disagree
  - No opinion

10. Please indicate your agreement with the following question: I would like to receive information from the RML via a blog?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- No opinion

11. Which statement most accurately describes your feelings about the reminder postcard that is mailed before the Breezing Along with the RML and Spotlight training sessions?

- Do not receive it
- Very helpful
- Somewhat helpful
- Unnecessary

12. Please list any additional comments you think would be helpful for the RML to know regarding communication with you?

# IX. Appendix C

## Survey Results

Question One:

Please indicate the type of institution your library is affiliated with.		
Answer Options	Response Percent	Response Count
Academic	28.0%	21
Hospital	56.0%	42
Public library	16.0%	12
Other (please specify)		9
<b><i>answered question</i></b>		<b>75</b>
<b><i>skipped question</i></b>		<b>6</b>

Other:

School Library
non library, but use all three for resources
Both Hospital and Academic
Developmental Disabilities
Health Departments
Special - Medical
community organization
solo librarian working in for profit education [program for] accelerated bachelor of science in nursing
Doctoral nursing and allied health programs

Question Two

How many years have you worked as a librarian?		
Answer Options	Response Percent	Response Count
1-3	3.7%	3
4-10	16.0%	13
11-20	21.0%	17
More than 20	53.1%	43
My primary job is not as a librarian	6.2%	5
<b><i>answered question</i></b>		<b>81</b>
<b><i>skipped question</i></b>		<b>0</b>

### Question Three

What is your most preferred method of receiving information from the RML?		
Answer Options	Response Percent	Response Count
Personal phone call or visit	3.8%	3
Email	90.0%	72
Website	3.8%	3
Social networking sites (Facebook, Twitter, LinkedIn)	0.0%	0
Blog feed	2.5%	2
Other (please specify)		2
<b>answered question</b>		<b>80</b>
<b>skipped question</b>		<b>1</b>

Other:

don't really need info from RML, not a medical library not a DOCLINE library
postcards are nice also

### Question Four

Are you subscribed to the MCR-MCMLA listserv?		
Answer Options	Response Percent	Response Count
Yes	60.5%	49
No	23.5%	19
Don't know	16.0%	13
<b>answered question</b>		<b>81</b>
<b>skipped question</b>		<b>0</b>

### Question Five

Approximately how many staff members in your organization are subscribed to MCR-MCMLA listserv?		
Answer Options	Response Percent	Response Count
0	22.2%	18
1-2	46.9%	38
3-5	6.2%	5
6-10	2.5%	2
More than 10	2.5%	2
Don't know	19.8%	16
<b>answered question</b>		<b>81</b>
<b>skipped question</b>		<b>0</b>

Question Six

<b>How often do you forward information you receive via the MCR-MCMLA listserv to others in your organization?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Never	41.8%	33
Seldom	26.6%	21
Occasionally	29.1%	23
Frequently	1.3%	1
Always	1.3%	1
<i>answered question</i>		<b>79</b>
<i>skipped question</i>		<b>2</b>

Question Seven

<b>How often do you read the weekly "RML News" sent via the listserv?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Do not receive it	29.6%	24
Never	2.5%	2
Seldom	8.6%	7
Occasionally	8.6%	7
Frequently	22.2%	18
Always	28.4%	23
<i>answered question</i>		<b>81</b>
<i>skipped question</i>		<b>0</b>

Question Eight

<b>How often do you read the quarterly newsletter "The Plains to Peaks Post" sent via the listserv?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Do not receive it	33.3%	27
Never	4.9%	4
Seldom	9.9%	8
Occasionally	16.0%	13
Frequently	19.8%	16
Always	16.0%	13
<i>answered question</i>		<b>81</b>
<i>skipped question</i>		<b>0</b>

Question Nine

**Please indicate your agreement with the following question: I would like to receive information from the RML through social networking sites such as Facebook, Twitter and LinkedIn.**

Answer Options	Response Percent	Response Count
Strongly agree	1.2%	1
Agree	7.4%	6
Disagree	29.6%	24
Strongly disagree	42.0%	34
No opinion	19.8%	16
Comment		27
<b><i>answered question</i></b>		<b>81</b>
<b><i>skipped question</i></b>		<b>0</b>

Comments:

It would be ok, but would prefer via email. Through facebook etc., it would limit my ability to store the information, share the info and reference the info.
I just don't use these sites and can't find time to get to know them well enough.
I only use Facebook and that is for personal use. Our institution is somewhat ambivalent about the staff using social networking sites, I believe. I think the College only supports Facebook.
Social networking is blocked at our facility
Some of the sites are blocked at my institution.
The Army does accept these.
My hospital blocks access to Facebook and other social networking sites.
Linked-In only; I don't "twitter" and FB is personal social not business social
I am unable to access social networking sites on hospital computers.
Our hospital blocks Social Networking sites.
Some social networking sites are blocked by Inf Tech - Facebook and LinkedIn are among them. For some things, twitter can't communicate enough information. For example, I am currently trying to understand how Pubmed Health compares to MEDLINEPlus.
Firewall issues
Unable to do so on office computer.
Our hospital does not allow us to use any of those sites,

even for business purposes.
My hospital has social networking sites blocked.
I cannot access those sites in my workplace.
Army firewall prohibits social networking on our computers.
I recognize that there are generational changes occurring re: use of e-mail vs use of social media, but I'm not sure using Facebook is a more efficient means of official communications. The case for that in terms of impact on my efficiency and productivity hasn't been made in my opinion.
I would not mind when such updates are on these social media outlets, but getting an email is considered WORK. Updating Facebook or sending a tweet is not - at least not in the culture where I work. Communicating to the students using FB, sure - but not other professionals.
Hate them. Wouldn't use them for business purposes.
Facebook and Twitter are blocked. I access LinkedIn rarely.
Blocked at my institution, although I might make the case to allow it at my desk computer if professional groups used social networking.
I rarely log in to my own Facebook or Linked In accounts, and I am not a twit. The listserv has the best chance of capturing my already fragmented and overburdened attention.
Our facility blocks social networks, although I am able to access LinkedIn and do have an account there, but do not use it.
facebook and twitter are blocked at my work
I'd like to get emails
Connecting to Social Networks in not allowed at work

## Question Ten

Please indicate your agreement with the following question: I would like to receive information from the RML via a blog.		
Answer Options	Response Percent	Response Count
Strongly agree	3.8%	3
Agree	21.3%	17
Disagree	30.0%	24
Strongly disagree	27.5%	22
No opinion	17.5%	14
Comment		10
<b><i>answered question</i></b>		<b>80</b>
<b><i>skipped question</i></b>		<b>1</b>

### Comments:

most blogs are blocked at our facility
Agree if the site is not blocked at my institution.
not a big blog fan in general...
I do read the BHIC and MCR News blogs, but also getting the reminder email helps me look.
Again, most blogs are blocked as well.
Most blogs are also blocked content in my workplace.
Taking time away from email to check out a blog means I may miss an email that requires immediate response. Not that this applies to everyone, but as a manager, I need to be looking at emails (part of my job) not reading blogs. And blogs are extremely difficult in finding the specific information you need.
As long as I could subscribe to it. I subscribe to the news via Google reader.
Blogs are blocked also.
I have to remember to go to my rss feeds which I do monthly

## Question Eleven

<b>Which statement most accurately describes your feelings about the reminder postcard that is mailed before the Breezing Along with the RML</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Do not receive it	46.9%	38
Very helpful	22.2%	18
Somewhat helpful	16.0%	13
Unnecessary	14.8%	12
<b><i>answered question</i></b>		<b>81</b>
<b><i>skipped question</i></b>		<b>0</b>

## Question Twelve

<b>Please list any additional comments you think would be helpful for the RML to know regarding communication with</b>	
<b>Answer Options</b>	<b>Response Count</b>
	20
<b><i>answered question</i></b>	<b>20</b>
<b><i>skipped question</i></b>	<b>61</b>

### Comments:

I get the Breezing Along with the RML and Spotlight training session emails from another listserv and by the time I get the information it is no longer useful. Often there are classes or webinars I am interested in that I'm finding out about the morning before the class or webinar.
Love this interaction.....it shows one more time how the RML really cares about what members want! Very impressed
I did read the printed newsletter when it came. I understand saving paper, but just have way too much email.
You or the survey writer assumed the reader of the email would recognize RML and did not bother to identify for what it stands. I think abbreviations and such can be a determinant to an organization. People assume, because they know the abbreviations, that all people recognize those letters. Good communication includes identification of what one represents.
Many of the RML emails have [BULK] either in the address or the subject fields. Those items get automatically sent

to my spam folder. Is there a way to not put that in the email?
be an organization that helps in what I need and I'd participate more...
To elaborate on #11, I use the postcard to schedule sessions for the coming months. But this could be sent via email as well - especially as a single email so it isn't lost among other content.
As a public library in an area with very good medical resources, we usually refer customers to them.
email seems to work fine
none
While yes, social media is certainly a wonderful tool for some types of communications, it is not considered WORK
I think they do a good job of keeping us informed and offering training opportunities.
I think they do a great job! Thanks!
Not sure why I've been asked to participate in this survey. We aren't a medical library nor a DOCLINE library.
Repeated reminders about upcoming RML training events is a good thing.
I notice communications that come TO me rather than those I have to go get. There is just too much competition for my attention -- and memory.
I do post the postcard so I think it has some value.
The reminder postcard could be sent electronically, if you want to save postage. We route it around, and log the dates into our calendars, in the hope that when the time comes we will be able to attend.
They are an excellent resource. Keep it up.
I'm relatively new to the area. PLEASE add my name to the mail list. Joy Harriman RMUoHP jharriman@rmuohp.edu

## Cross-tabulated survey results

Are more seasoned librarians more or less responsive to Web 2.0 technologies?

### Q1: Social Networking

**Please indicate your agreement with the following question: I would like to receive information from the RML through social networking sites such as Facebook, Twitter and LinkedIn.**

Answer Options	How many years have you worked as a librarian?			
	1-3	4-10	11-20	More than 20
Strongly agree	0.0%	0.0%	0.0%	0.0%
Agree	0.0%	7.7%	11.8%	7.0%
Disagree	66.7%	38.5%	42.2%	20.9%
Strongly disagree	33.3%	30.8%	35.3%	51.2%
No opinion	0.0%	23.1%	11.8%	20.9%

### Q2: Blog

**Please indicate your agreement with the following question: I would like to receive information from the RML via a blog.**

Answer Options	How many years have you worked as a librarian?			
	1-3	4-10	11-20	More than 20
Strongly agree	0.0%	7.7%	5.9%	2.4%
Agree	0.0%	15.4%	7.6%	26.2%
Disagree	33.3%	38.5%	41.2%	23.8%
Strongly disagree	33.3%	23.1%	17.6%	31.0%
No opinion	33.3%	15.4%	17.6%	16.7%

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**Attachment 6:  
Subcontractor Quarterly & Final Reports**

**Denver Public Library  
A Bridge to Health Literacy for Denver**

# Quarterly Report

**Name and address of reporting institution:**

Denver Public Library  
10 West 14<sup>th</sup> Avenue Parkway  
Denver, CO 80204

**Project Title: A Bridge to Health Literacy for Denver**

**Name of person submitting report: Elaine Connell, Reference Librarian**

**Email address:** [econnell@denverlibrary.org](mailto:econnell@denverlibrary.org)

**Telephone number:** Phone: 720-865-1187 or 720-865-1363

**Reporting Period start date: December 1, 2010**

**Reporting Period end date: March 31, 2011**

**Publicity:**

- Windsor Life – Newsletter for Residents of Windsor Gardens – January, 2011 - [http://www.windsorgardensdenver.org/doc/toc.asp?assn\\_id=15778&doc\\_cat\\_id=97658](http://www.windsorgardensdenver.org/doc/toc.asp?assn_id=15778&doc_cat_id=97658) - page 19. Also in the Feb and Mar editions.
- Create an E-mail - <http://denverlibrary.org/files/medlineemail.pdf> has been linked from our webpage for some time, and takes the customer to MedlinePlus.
- See accompanying pdf re: *Pelican Cases to Go!* This is being distributed to the DPL Managers and Senior Librarians.

**Outreach:**

Class at Senior Support Services - 1/11/2011 – (packet to Director)

Classes in CTC - 12/15 and 12/21, 1/5/2011

Windsor Gardens – 1/21/2011, 2/18/2011, 3/18/2011 – At <http://www.windsorgardensdenver.org/>, click on For Residents, then under Resources, then under Windsor Life, then Windsor Life 2011 editions, then January, February and March. See accompanying copies of the announcements...

Classes at Schlessman Family Branch Library – 2/17/2011 and 2/24/2011 – in cooperation with Village at Lowry, an independent and assisted-living community just across the street from our Schlessman Branch.

Staff training – Online by Adobe Connect 1/31/2011 and 3/16/2011

Staff training – Face to face – 1/18/2011

Language & Learning "Your Life" Classes re: stress & the holidays - 5 programs, total of 18 adults & 12 children (+ 1 adult in November at a 6<sup>th</sup> class)

**Other accomplishments:**

Pieces of the project began coming together in this final quarter, going from vision to implementation. In this process of implementation, weaknesses in the vision became apparent, and improvements identified.

Connections within the community were tested and made real as classes were presented in each location.

A small number of library staff and volunteers gained direct experience in health literacy and providing basic computer training with new users.

Suite of laptop computers enabled the Library to do our outreach programs, as well as several additional ones that would not have been possible previously.

Same with Adobe Connect Pro – it was used for health training, but also for other classes, a breakthrough into our own e-learning for the library.

Arrangements made for storage and check-out of laptops through DPL CTC instead, for staff system-wide to use in outreach and training sessions. Promotion of this opportunity to Managers and Senior Librarians includes mention of MedlinePlus and NN/LM.

**Target audience:**

Clinical staff seemed surprisingly unaware of resources available for the public.

In a gross generalization, seniors in an assisted living setting seem quite a bit less likely to develop their computer skills than those in active/independent living settings.

**Goals, Outcomes, Objectives:**

While last quarter was difficult, this was more so. There were three different sources of major challenge this quarter:

- DPL changes –
  - Implementation of DPL's new catalog system
  - Move of the Reference Department and, in fact, a physical and functional shift of virtually all materials and many services of the Central Library.
- Staffing changes –
  - Cassi Pretlow, Co-Lead Investigator, left the Denver Public Library and took a position at the Aurora Public Library. Staff and volunteers filling in for her were great, but it was still a big loss for us. Her absence meant CTC staff were stretched even thinner than before, so while they were very helpful, they could not be as available as she had been for this project.
  - Weekly meetings became impossible this quarter, though they had been very helpful early in the project.
  - This left us without the diffused strong leadership we had anticipated, and instead the health information leadership remains largely centralized in Elaine Connell and the Reference Department.

- Delays in the early part of the project could no longer be deferred –
  - Objectives / activities were delayed due to the slow process of getting the signatures needed by the City of Denver prior to purchasing our equipment.
  - Ground work was well in-place for the implementation, but we had many classes and programs to be completed during this quarter.
- While this was a difficult quarter, and some of the objectives were strained in their completion, there were unanticipated benefits, as well, with a larger number of volunteers getting a vision for health information resources and outreach that might not have otherwise been possible.
- We met our goals in terms of numbers of classes and other presentations, but the hoped for numbers of 'trained' staff didn't fully materialize. With the severe time pressure we had not anticipated, it became difficult to schedule presentations for all the staff we had hoped to. None the less, the interest level of various individuals was most encouraging. The vision changed from one of presentation-style teaching to more of development-style supported learning, with fewer numbers but apparently a deeper interest.

**Evaluation:**

Testimonials: "When you come to do one class, would it be possible to do two, once you are already here and set-up? There are so many who want this kind of training!"

"Registration opened at 8:00 am, and the class was filled by 11:00 am!" Participants at Windsor Gardens begin arriving for our classes 20 minutes early, and stay the full 1 ½ hours, fully engaged and learning.

Pre-Post surveys have been collected for both staff training and basic email classes. These will be discussed in the Final Report.

**Impacts and Observations:**

We have pioneered the implementation of Adobe Connect and e-Learning at DPL. There is a longer and steeper learning curve with Adobe than had been anticipated. Materials support presenters and hosts, but there is also a need for more support for participants, as well. Completion of the Bridge to Health Literacy for Denver grant project was included within the DPL revised Strategic Plan, announced in January, 2011.

All five library staff participants in the January 18<sup>th</sup> 'face to face' training were both complimentary and interested in signing up for the 'Module Two' portion of the DPL health curriculum. This is a much more tangible and practical indication of staff enthusiasm than I have had in the 10 years I have worked on this.

Classes for the public have been universally popular and well attended, also for the first time.

Concurrent re-organization of our new Reference Room allows for health materials in a designated area, adjacent to our new private consultation rooms.

As the project developed, we chose not to do promotion on the level of news and radio announcements and press releases. The 'Bridge' is in place, but several internal elements need strengthening, and we are currently at our capacity for outreach. Perhaps in another few months an announcement or article may be appropriate.

**Planned Activities:**

Development of Health Appointment Services in the DPL Reference Services Department is under way, with four librarians interested in taking on these services. The appointment services group will determine which topics to undertake and when, but hopefully this will be in place by summer.

Additional programs are planned with:

- Windsor Gardens – 7:00 presentation May 11<sup>th</sup>, not hands on
- Inner City Health Center's community education – 2 classes on April 18th
- NN/LM – Dana Abbey, CHIS training on April 4<sup>th</sup> & 5th for DPL and other local library staff and volunteers
- An April series of programs in the Language & Learning Branches re: Bones!

Future programs are anticipated with:

- Center for African American Health
- CTC and others working with ex-offenders and the homeless
- CTC classes on health, health literacy, and basic computer skills
- Colorado Association of Libraries / mental health group

With the completion of the grant project, and the anticipation of even deeper on-going budgetary constraints, health will no longer be identified as a strategic initiative for DPL. There is recognition more informally of the importance of health information and health literacy throughout the system.

- Members of the Health Advisory Group, CTC and others who are interested, will consider opportunities appropriate for their positions and connections, both inside the library and in terms of outreach.
- They will be able to draw upon the 'Bridge' that has been created to enable and facilitate their efforts.
- I see my role as maintaining and further strengthening the fragile fabric that makes up this 'Bridge' in order to insure their success and the quality of our library's health information services.

Windsor Gardens Life Page 19 library

## ENTERTAINMENT, EVENTS & TOURS

### WINDSOR HAPPENINGS

Events posted in chronological order.

- **INTERNATIONAL LUNCHEON:** Tuesday, January 18, at 11:45 a.m. in the **EMERALD GRILL BANQUET ROOM**. Learn about Argentina and the Tango direct from Buenos Aires where it originated. Relax and enjoy a delicious luncheon featuring La Cabana's House Salad, Bistec Gaucho with Argentinian Chimichurri Sauce, Plantanos Maduros (delicious - similar to sweet potatoes), Alfajores (multi-layered cookie), coffee and iced tea. In addition to learning about Argentina, our luncheon speakers will give a Tango demonstration. Don't miss this one!!

Cost: \$13 per person. Tickets are available at the Activities Desk. This event is sponsored by the WATT group.
- **KICK START YOUR YEAR, KEEPING YOUR HEALTHY RESOLUTIONS** sponsored by **PORTER ADVENTIST HOSPITAL** Thursday, January 20, from 9:30 a.m. to 10:30 a.m. in **CENTERPOINT WEST**. If you over indulged during the holiday, join us to find out how you can get your healthy eating habits and exercise schedule back on track. Presented by Brittany Glasset, registered

**ACTIVITIES OFFICE HOURS**

Monday - Friday  
9 a.m. to 4:00 p.m.  
303-364-9141

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- dietician, and Nathan Boehlke, MS, clinical exercise physiologist, from Porter Adventist Hospital.

Cost: **FREE**. RSVP to Ask A Nurse at 303-777-6877.
- **HAITI - THE ROAD TO RECOVERY** presented by **ACTIVE MINDS®**: Thursday, January 20, at 1 p.m. in **CENTERPOINT**. January 2010 the poorest country in the Western Hemisphere was hit by a magnitude 7.0 earthquake with devastating consequences. International aid poured into the country to help it recover and rebuild. Join Active Minds® as we look at Haiti's troubled history and its path since this disaster.

Cost: **FREE**. Please sign up at the Activities Desk.
- **BASIC COMPUTER TRAINING - MOUSE, INTERNET & E-MAIL** presented by the **DENVER PUBLIC LIBRARY**: Friday, January 21, 10 a.m. to 11:30 a.m., in **CENTERPOINT**. The Denver Public Library will be bringing us their 'Computer Classroom in a Box!' They have 10 laptop computers and would love to introduce you to the basics. If you have never touched a keyboard or seen what a mouse can do, this is just the class for you! We'll divide into two groups, so if you have tried using a computer for e-mail or online searching, we invite you to join us and develop those skills too.

Cost: **FREE**. Sign up at the Activities Desk. Limit of 10 participants, but the class will be repeated in February and March.
- **TRIVIA FUN DAY**: Friday, January 21, at 2 p.m. in **CENTERPOINT**. Always the third Friday of the month. Full audience participation. Bring some friends, or better yet make some new friends, and form a team. Refreshments will be served.

Cost: **FREE**
- **VALENTINE'S DAY DINNER** sponsored by **WINDSOR GARDENS MEN'S CLUB**: Saturday, February 12, at 5 p.m. in the **AUDITORIUM**. Everyone is invited to the annual St. Valentine's Day Dinner. The dinner will be catered by the Emerald Grill and Seniors 88 will provide entertainment.

Cost: \$16 per person. Tickets are available at the Activities Desk or through a member of the Men's Club.
- **GETTING BACK YOUR GOLF GAME** sponsored by **EMERALD GREENS and PORTER ADVENTIST HOSPITAL**: Tuesday, February 15, 1 p.m. to 2 p.m. in **CENTERPOINT**. This class provides information concerning: back anatomy; factors influencing back pain related to the golf swing; techniques to reduce back stress; and exercises and stretches to help alleviate and prevent future back ailments. The program will be presented by David LaValley, MSPT, from Porter Adventist Hospital.

Cost: **FREE**. RSVP to Ask A Nurse at 303-777-6877.

**WINDSOR HAPPENINGS**  
continued on page 21

**WALK-IN RATHER THAN CALL BEFORE YOU FALL®**

January, 2011  
**Windsor Life**  
Newsletter, DPL Class  
announcement.

# ENTERTAINMENT, EVENTS & TOURS

## WINDSOR HAPPENINGS

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Monday – Friday  
9 a.m. to 4:00 p.m.  
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■ **AFTERNOON TEA**: Tuesday, February 15, at 2:30 p.m. at the **EMERALD GRILL**. Relax

and enjoy a lovely buffet of finger foods and tea. Learn all about silk-screening scarves and how to use them as lovely accessories! Linda Starcevic will share all her secrets with us.

Cost: \$9 per person. Tickets are available at the Activities Desk. This event is sponsored by the WATT Group and catered by the Emerald Grill.

■ **HANDS ON INTERNET TRAINING**: Friday, February 18, from 10 a.m. to 11:30 a.m. in **CENTERPOINT**. The Denver Public Library will again bring us their "Computer Classroom in a Box!" Elaine and Lisa, two staff librarians, will introduce the basics of Internet searching and finding reliable information. Even if you have never touched a keyboard, or seen what a mouse can do, this is a chance to see what you're missing out on and give it a try. Cost: **FREE**. Sign up at the Activities Office. Seating is limited to 10.

■ **TRIVIA FUN DAY**: Friday, February 18, at 2 p.m. in **CENTERPOINT**. Always the third Friday of the month. Full audience participation. Bring some friends, or better yet, make some new friends, and form a team. Refreshments will be served. Cost: **FREE**.

■ **A CHANGE HAS COME – REMEMBER THE DREAM**: Saturday, February 19, at 2 p.m. in the **AUDITORIUM**. In celebration of Black History Month, Maxwell Theatrical Self-Image Inc. presents a stage play at Windsor Gardens.

Cost: \$6 per person. Tickets are available at the Activities Desk.

■ **THE CELL EXHIBIT: ANYONE, ANYTIME, ANYWHERE with lunch at CHEROKEE DINING ON 12<sup>th</sup> AVE.**: Wednesday, February 23, at 10 a.m. Bus time is 9:45 a.m. The monthly Dayton Place bus trips will resume this month, weather permitting, with an exciting new project in Denver known as The CELL. Billed as the "World's First Exhibit Dedicated to Understanding Terrorism," the Center for Empowered Living and Learning (The CELL) opened in 2008 and is a non-profit institution dedicated to addressing the global issue of

**WINDSOR HAPPENINGS**  
*continued on page 22*

**BRIGHT LIVING IN-HOME CARE**

"Our mission is to bring joy into the lives of our clients with the knowledge they are cared for with the highest quality of care, honesty, dignity, safety, respect, loyalty and privacy."

We are an insured, non-medical in-home health care company. Locally owned and operated.

We have been in business more than seven years.

Our caregivers have passed a rigorous background check.

They are well-trained and experienced and are passionate about helping and taking care of elderly and patients who need a loving and nurturing company by their side.

Our Services include but are not limited to:

PERSONAL CARE

February, 2011  
**Windsor Life**  
Newsletter, DPL Class  
announcement.

Document Viewer - Mozilla Firefox  
 http://www.windsorgardensdenver.org/doc/AdobeViewer.asp?doc\_filename=/hoa/assn15778/documents/windsorlifemarch2011edition.pdf&sfind=&print=1&docid=621341

Windsor Gardens Life Page 21

## ENTERTAINMENT, EVENTS & TOURS

### WINDSOR HAPPENINGS

Events posted in chronological order.

- ENERGY SAVING SEMINAR:** Thursday, March 10, at 10 a.m. in **CENTERPOINT**. Find out how to save money on energy! After only one hour you'll come up with low-cost, money-saving actions. Receive planning tools and printed materials on programs for low-income energy assistance, weatherization and insulation programs, subsidized home energy audits, rebates and tax credit programs – plus a free compact fluorescent light bulb.

Cost: **FREE**. Sign up is required at the Activities Desk. Presented by Colorado Interfaith Power and Light.
- TRAVEL LUNCHEON (formerly known as International Luncheon):** Tuesday, March 15, at 11:45 a.m. in the **EMERALD GRILL MEETING ROOM**. Learn about Ecuador and Peru – the adventure, mystic beauty and marvels – including Machu Picchu and the Galapagos Islands. Abigail Nicholas (aka Marlene Menno) will take us on

**ACTIVITIES OFFICE HOURS**  
 Monday – Friday 9 a.m. to 4 p.m.  
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**CENTERPOINT.** Always the third Friday of the month. Full audience participation. Bring some friends, or better yet, make some new friends, and form a team. Refreshments will be served.

Cost: **FREE**. Sponsored by Kaiser Permanente Thrive.

- COLORADO RAILROAD MUSEUM with lunch at BRIDGEWATER GRILL:** Wednesday, March 23, at 9 a.m. We'll head over to Golden to explore the Colorado Railroad Museum. The museum preserves an important part of Colorado history and, in particular, the narrow gauge mountain railroads that were pioneered in our state. It houses an extensive collection of railroad equipment as well as original pioneer photographs and paintings. There are 50 train cars, trolleys and locomotives, including a 317-ton Burlington locomotive. This is a must see for train buffs and anyone
- HANDS ON INTERNET TRAINING – BASICS OF E-MAIL:** Friday, March 18, 10 a.m. to 11:30 a.m. in **CENTERPOINT**. The Denver Public Library will again bring us their "Computer Classroom in a Box!" Get help with signing up for an e-mail account. Learn to attach a document and send a photo, and see how to open these in your own e-mail. We'll talk about spam, phishing and more.

Cost: **FREE**. Limit of 10 participants. Sign up at the Activities Desk.
- TRIVIA FUN DAY** March 18 at 2 p.m. in

Searching 2 of 32

March, 2011  
**Windsor Life**  
 Newsletter, DPL Class  
 announcement.

## Email Basics

### Exercise# 1:

# Create a Yahoo Account

1. Double-click on Internet Explorer Icon 
2. In address bar of Internet Explorer window, type mail.yahoo.com



3. Click on Create New Account



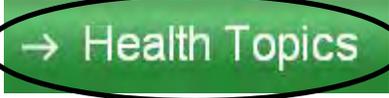
4. Enter your name and other required information.

## Exercise #2:

# Practice sending article to email

1. In address bar, type medlineplus.gov



2. Click on 

3. Click on a letter of your choice



4. Use the scroll bar to find a topic you are interested in and click on the topic
5. Click on Email



## 6. Fill out form and click Send email

A screenshot of an email form. The form has a light blue background and contains the following fields: 'Recipient's Email:' with a text input box and '(required)' in red text; 'Your Name:' with a text input box and '(optional)' in blue text; 'Your Email:' with a text input box and '(required)' in red text; and 'Your Message:' with a large text area. At the bottom of the form, there are two buttons: 'Send email' and 'Cancel'. The 'Send email' button is circled in black.

## Exercise #3:

# Practice sending a photo in email

### 1. On medlineplus.gov

1. **Scroll down** until you see this image.
2. **Right click** on the image
3. **Left click** on **Save Picture As**



MY ACCOUNT | CATALOG | BOOKS | MOVIES | MUSIC | EVENTS & CLASSES | **RESEARCH** | SOC



**HAVE OTHER QUESTIONS?**  
**Click on RESEARCH** or call the Denver  
Public Library:  
**720-865-1363**

This project has been funded in whole or in part with Federal funds from the National Library of Medicine, National Institutes of Health, Department of Health and Human Services under Contract No. N01-LM-6-3504 with the University of Utah.

## **PC's and Pelican Cases to go!**

DPL now has 10 large (17") Dell computers which 'live' and travel in two sturdy, locked Pelican travel cases. Reserve and check them out from H.R. (either 5 with one trainer, or 10 at a time with 2 or more trainers)

Enhance your outreach and training efforts. Take them anywhere with wifi and demo DPL's databases! Use them in a conference room at your branch for hands-on training!



### Multiple Laptop Shipping Cases - Pelican 1620

DPL Staff (only) may contact the CTC for additional details and to reserve this equipment.

[ctc@denverlibrary.org](mailto:ctc@denverlibrary.org)

Tel: 720-865-1706

Check Out [www.MedlinePlus.gov](http://www.MedlinePlus.gov)

This equipment and this project has been funded in whole or in part with Federal funds from the National Library of Medicine, National Institutes of Health, Department of Health and Human Services under Contract No. N01 LM-1-3514 with the University of Utah.

**FINAL REPORT ON AGREEMENT #62816**

**BETWEEN**

***THE UNIVERSITY OF UTAH***

***on behalf of the***

***NATIONAL NETWORK OF LIBRARIES OF MEDICINE***

***MIDCONTINENTAL REGION***

**AND**

**THE CITY AND COUNTY OF DENVER**

**on behalf of the DENVER PUBLIC LIBRARY, hereinafter “Denver Public Library”**

**A Bridge to Health Information Literacy for Denver**

**Subrecipient Contact**

Elaine S. Connell, MLS  
Reference Department  
Denver Public Library  
10 West 14<sup>th</sup> Avenue Parkway  
Denver, CO 80204  
Phone: 720-865-1187  
FAX: 720-865-1481  
[econnell@denverlibrary.org](mailto:econnell@denverlibrary.org)

Final Report:  
March 1, 2010 through March 31, 2011

Submitted: March 30, 2011

This project is part of the NN/LM  
Continuity of Health Information initiative.

**FINAL REPORT ON AGREEMENT #62816**  
**A Bridge to Health Information Literacy for Denver**

Final Report: March 1, 2010 through March 31, 2011

Submitted: March 30, 2011

**NARRATIVE DESCRIPTION**

1. Executive Summary: Summarize the project’s major accomplishments.

This project took a large, metropolitan public library, with average-to-good health resources for the community and crafted structures and services that will bridge many barriers to access of quality health information for those with low health information literacy in the future. To pave the way for reliable access to quality health resources at all of our locations and through our many diverse and busy staff members required the creation of a complex structure of information dissemination, our „*Bridge*.“

This „*Bridge*“ involved recognizing and building essential knowledge within Denver Public Library (DPL) staff on an on-going basis, and reaching effectively to those most in need of health literacy skills within the community. Initial departmental participants in this work included the Community Technology Center (CTC), the Schlessman Family Branch (SCH) and the Reference Department (REF).

<b>Building Essential Knowledge Within DPL</b>	
<b>Pre-Project</b>	<b>Project Accomplishments</b>
Staff health training was sporadic and poorly attended, with little enthusiasm or clear feedback.	29 staff trained (2 outside of DPL) 13 of these expressed interest in additional training
Standardized core curriculum for system-wide training on health and other information skills was a mere vision.	Health info curriculum as proposed received provisional approval and is the 1 <sup>st</sup> and only informational content so approved at this time. Enthusiastic responses to the trainings.
e-Learning was dependent on outside resources.  Many staff had never participated in an Adobe webinar.	e-Learning is a viable option within DPL. Used in several internal classes, 6 staff are comfortable presenting with it, and 3 more hope to use it to create their own programs. Adobe is seen as a tool for REF to provide training and increase collaboration with others in DPL.
Post-training evaluations showed only immediate reactions.	Development of a manageable way of measuring learning for critical elements of the training. Zoomerang surveys report effective learning in both staff and public trainings.

Health Advisory Group members were enthusiastic, but with minimal shared vision. Various departments operated independently and unaware of solid elements of health information services.	Structural elements in place for building together, supporting one another and customers at three locations throughout the system. Resources available for expanding our health information vision within DPL locations.
<b>Reaching Effectively to the Low Health Literacy Community</b>	
Classes required community participants to come to library locations, with limited success.	Classes can now be held at many locations in the community, where people are comfortable and at ease. Classes are well attended and well received in these expanded locations.
Partnerships with Senior Support Services, Village at Lowry, Windsor Gardens, Inner City Health Center and Center for African American Health were minimal.	Partnerships were more actively engaged with each of these partners, and we are exploring how to continue work with each one.
Language & Learning Branches were the only sites for direct health literacy impact.	Recognition of health literacy as an important community service with each of the trained staff representing several additional locations.

2. Geographic region/number of counties: List the geographic regions or all the counties that were impacted by the project.
  - Denver – by far the greatest impact has been within Denver
  - Greeley – Weld County through one member of our DPL Health Advisory Group
  - Aurora – connections with individuals there via Center for African American Health Fair
  
3. Collaborations/Partnerships: Include names and types of organizations with which there was collaboration at any time during the project. Provide the current status of the partnerships, challenges encountered, and lessons learned.

<b>Organization</b>	<b>Type of Organization</b>	<b>Partnership</b>	<b>Challenges / Lessons</b>
Senior Support Services	Non-profit providing multiple forms of support for very low income seniors in the area.	Brought our mobile laptops and offered training in computer basics at their site.	Many of their clients have very limited skills. E-literacy independence is very unlikely for most. Exploring ways to get the info to support staff / reps / liaisons / or intermediaries there.
Inner City Health Center	Non-profit org providing direct patient / health care for the un-insured,	Training to health professionals was very limited, but their community	Their group specifically asked “Why do Internet access & skills matter re: health disparities?” Only 2 were aware of MedlinePlus. They are

	on a sliding scale. They also have a network of liaisons in the community.	education liaisons arranged referrals to one community group for two classes in April, 2011.	extremely busy so hard to arrange group training. We're very pleased that their patient support person has presented at several L&L branch libraries and has a growing appreciation for library service for their client population.
The Village @ Lowry	Residential for seniors, including assisted living.	Classes for residents. No wifi and very poor computer access at their facility, but they are directly across the street from our Schlessman Branch.	Range of learner skills spanned the entire spectrum, including some with dementia and some quite vibrant and capable. Hard to plan a class to meet the needs of such a diverse group. We had 3 trainers for 5 participants, and needed all of us. Encouraging them to meet 1:1 with a computer trainer docent at Schlessman seems a viable follow-up option.
Windsor Gardens	Independent living HOA for 3,000 + active seniors.	Classes for residents. They have good wifi and lovely facilities.	Eager learners! Exploring how we can partner with them and provide them with follow up support. Working with the Schlessman docent won't work well for them as they will need to drive there, and parking is extremely limited. Would like to do additional classes here.
Center for African American Health	Non-profit offering health advocacy and classes targeted to the African-American community. They have a network of health liaisons to over 80 local churches.	The intention was to offer classes on-site to their liaisons. By the time we had laptops ready, they were hard at work on other projects. Attended their annual health fair and connected with several folks.	Barriers here are not yet clear. Attending their annual health fair helped make several great contacts and move us forward with CAAH. One of these contacts attended our „train the trainer“ class and was very excited about the resources. She is an RN working on her Master's Degree, and looks forward to doing some co-training of her peers with us in the future. Great to have an advocate „inside“the organization!
The Gathering Place	Non-profit offering multiple support services for women and children in Denver.	CTC has an active partnership here, but we did not get there with our health classes during the grant.	Cassi Pretlow would have headed up health outreach to the Gathering Place through CTC, but we no longer have a „health point person“ in CTC. Exploring possibilities with new CTC staff.

4. Training: Within two weeks of any training or demonstration session, complete a

record of the event in the online outreach activity reporting system at <https://staff.nlm.gov/extra/>.

In the final report, provide a summary of the training events and participants:

- Total number of sessions conducted as part of the project = **20**
- Total number of sessions in which half or more than half of participants were from minority populations = **5**
- Total number of participants in the project's sessions = **118**
- Breakdown of participants as follows:

Session #	Session	½ + Minorities	# of Participants	Health care providers/ Public Health	Public Library staff members	Health Sci Library Staff	General Public
1	7/7/2010 Mouse & Internet - CTC	No	5				---
2	7/27/2010 Email Basics - CTC	No	7				7
3	10/14/2010 Staff Training / Adobe	Yes	3		3		
4	10/21/2010 Mouse & Internet @ SSS	Yes	5				5
5	11/16/2010 Email Basics @ SSS	Yes	6				6
6	11/23/2010 Email Basics – CTC	No	3				---
7	12/15/2010 Email Basics – CTC	No	1				---
8	12/21/2010 Mouse & Internet – CTC	No	3				3
9	1/5/2011 Internet Basics – CTC	No	5				5
10	1/11/2011 Email Basics @ SSS	Yes	4				4
Session #	Session	½ + Minorities	# of Participants	Health care	Public Library	Health Sci	General Public

				<b>providers / Public Health</b>	<b>staff members</b>	<b>Library Staff</b>	
11	1/18/2011 DPL Staff Training – face to face	No	5		5		
12	1/21/2011 Mouse & Internet @ WGA	No	10				10
13	1/31/2011 DPL Staff Training / Adobe	No	5		5		
14	2/14/2011 Staff Training @ Inner City Health Center	No (but close!)	8	5			3
15	2/17/2011 Mouse & Internet – TheVillage @ SCH	No	5	1			4
16	2/18/2011 Basic Internet @ WGA	No	9				9
17	2/24/2011 Email Basics – The Village @ SCH	No	5	1			4
18	3/8/2011 Train the Trainers @ Ford-Warren	Yes	2	1			1
19	3/16/2010 Staff Training - Reference Staff / Adobe	No	16		16		
20	3/18/2011 Email Basics @ WGA	No	11	1			10
<b>Totals</b>		<b>Yes / 5 No / 15</b>	<b>118</b>	<b>At least 9</b>	<b>29</b>		<b>At least 71</b>
<p>These totals do not include the 1:1 sessions in the CTC. Volunteers provide basic mouse, Internet and e-mail assistance and we requested they use MedlinePlus.gov as their example site for these trainings.</p>							

5. Training Sites: Provide a brief description of training sites.

Between March, 2010 and March, 2011 we provided training in six different sites.



- CTC - Small Computer Training Lab (SCTR) - had seating an individual pc's for 12 students, with projection equipment – 2 library volunteers assisted in these classes

- CTC - portable laptops in the new, vastly expanded CTC - 3 other computer docents observed and / or supported us. During the expansion, the CTC went from 4 staff for an enclosed lab with 18 computers and several docents to an open computer center which grew over several months to a total of 94 computers. The SCTR was closed to relocate those computers. We used the grant laptops at empty tables for several trainings during this expansion.



- Senior Support Services – Their facility is crowded with participants, but still a very warm and cooperative environment. We used their back room, where there is one large table and wifi access. Maximum class size of six at this location, but the class was out of traffic and people could concentrate and enjoy trying new skills.

- Small waiting room at the offices of Inner City Health Center – Their offices close from noon to 1:30 pm, so we used their waiting room as it was convenient and has wifi. Our colleague there thought „laptops = we“ll put them on our laps“ (ie: she had zero experience with this technology). It was a last minute scramble for



us to set up on end-tables, but everyone was flexible and cooperative. The time allotted was brief, and most came with food and drink in hand. I wasn“t able to cover all that I hoped, but it was a good start.



- Schlessman Family Branch Library conference room - for face to face training of staff & for Seniors from The Village at Lowry. Quiet space with tables and chairs, projector, wifi. Second floor space, separate from the rest of the library, with elevator and easy restroom access.

- Windsor Gardens Community Center conference room – comfortable space which could be used for a much larger group. It has wifi access, and is located in the building that is the hub of this community of more than 3000 active seniors, 55 years of age and older.



We set up two rows of tables facing one another and taught by handout and guided coaching step by step. In the most effective session, I taught the whole group together, using the handout as I described the steps. Three other training staff or volunteers would rove among the participants to help each one accomplish items as described.



In addition, on four separate occasions, trainings or meetings were held by Adobe Connect Pro. Participants joined in from their desks or their living rooms, and one even came in her pajamas!

6. Exhibits: List all the exhibits connected with the projects (if applicable). Include the

meeting name, dates, location, estimated number of contacts made, demonstrations given and general impressions of success.

1/22/2011 Center for African American Health Annual Health Fair - An estimated 85% of those in attendance were minorities. We spoke with 55 people and made 6 new connections with groups or organizations in the community, and all have strong ties with minority and low income clients. In addition, we had the help of an outstanding volunteer from the CTC, so he, too, learned about the health information resources and services that are provided by Denver Public Library, and the potential for addressing health information literacy needs through reliable information, in particular MedlinePlus.gov.

This was the first time that Denver Public Library has participated at this fair and we were very impressed with the great many organizations present and the wealth of free services provided for attendees. The location for our table could not have been better and we have already followed up with some of our contacts. One is a Registered Nurse who is finishing up her Master's Degree in Nursing. She came to our „train the trainer“ session March 8, 2011, and was very impressed and excited to explore MedlinePlus.gov, and to learn more about our services and other resources. She is closely involved with Center for African American Health, as well as seniors at her own church. We look forward to working more closely with her in the future, and consider our experience overall with this fair to be very successful.

7. Resource materials: Provide a brief description of any materials that were developed for training or for promotion/marketing (include newspaper announcements, brochures, etc.). Include copies of materials developed. If web-based resources were developed, please provide the URL for the site where the materials are located.

URLs for all web-based training materials should also be sent the National Training Center and Clearinghouse (NTCC) for inclusion in the Educational Clearinghouse (<http://nmlm.gov/train/>). Provide verification that this has been done or provide a date by which it is expected that URLs of web-based training materials will be sent to the NTCC's Educational Clearinghouse.

Training Materials:

<p>Mouse &amp; Internet Basics          Mouse &amp; Internet Basics for Seniors          Mouse &amp; Internet Basics – Spanish            Health Information Search Tips</p>	<p>Extremely basic information with minimal large text and lots of illustrations guiding the learner through a variety of steps of both understanding and mouse skills development, &amp; culminating in a brief introduction to MedlinePlus.gov. We talk about <u>why</u> we use</p>
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<p><b>Note:</b> the Spanish version of Mouse &amp; Internet Basics is being translated at this time, along with one on Searching the Internet. These will be available, and all training materials will be sent to the Clearinghouse by April 20<sup>th</sup>.</p>	<p>MedlinePlus.gov, and about choosing reliable resources online. We encourage customers to contact the Reference Department or a medical library for assistance with a health information search.</p> <p>A separate handout lists MedlinePlus.gov, tips for evaluating health information, and local medical libraries that provide assistance to the public.</p>
<p>E-mail Basics E-mail Basics – Spanish</p>	<p>Extremely basic handout with minimal large size text and lots of illustrations takes the user step by step through creating a Yahoo email account. We discuss spam, and phishing, and then go to MedlinePlus.gov where we select a page and send to ourselves. We also use an image from MedlinePlus.gov to attach a photo to an email the participant will send. We talk about why we choose MedlinePlus, and how to contact us or medical libraries for assistance.</p>
<p>So Much More Than Your Mother's Library! – An Orientation for Leaders</p>	<p>PowerPoint and various other handouts as needed.</p>
<p>Helping Others Find Health Information in the 21<sup>st</sup> Century – Training for Trainers</p>	<p>We use mostly the same materials for Module One staff training. (CYOA below)</p>
<p>Choose Your Own Adventure – Helping Your Customers Choose Health! – DPL Health Services – Module 1 (CYOA)</p>	<p>Ppt, Pre/Post Surveys, Practice sheet /handout, Health Information Search Tips handout above.</p>
<p>Collaborative Learning for Health – DPL Health Services – Module 2</p>	<p>This will be a process of discussion of various topics 3-4 times per year. No curriculum per sé.</p>

On our page, “How to Find a Job: Getting Started,” the library has integrated our handout for the Email Basics class in PDF version as a “step by step guide” to opening an email account. Here is the page where this is located, followed by the direct link to our training document.

<http://denverlibrary.org/content/how-find-job-getting-started>

<http://denverlibrary.org/files/medlineemail.pdf>

Promotional Materials:

- CTC MedlinePlus.gov Bookmark - print version by snail mail

- CTC flyer for Email Basics - print version by snail mail
- PC's and Pelican Cases to go! – electronic version attached
- A Bridge to Health Literacy for Denver – electronic versions as attached
- Windsor Gardens Promotional articles from their newspaper, *Windsor Life* on 1/21/2011, 2/18/2011, 3/18/2011 – At <http://www.windsorgardensdenver.org/>, click on For Residents, then under Resources, then under Windsor Life, then Windsor Life 2011 editions, then January, February and March. See accompanying copies of the announcements... - electronic versions attached

8. Web sites: Detail the current status of web sites created as part of the project. Include URL, plans for future maintenance, and impact.

No Web sites were developed as part of this project.

9. Document delivery and reference services: If document delivery services and reference services were provided, please provide appropriate statistics.

Health reference services are on-going throughout the Denver Public Library system. We did baseline statistics on health and other reference questions on the Reference Desk at the Central Library in June, July and August of 2010. We used software called Ref-Tracker, and at that time questions about health were found to be approximately 3.1% of the actual reference questions we received.

A great deal has changed since that time. Our desk is no longer on the first floor of the building, where it had been for the past 15 years. We have not run the Ref-Tracker process since our move. It is unlikely that our health questions have increased significantly as a result of the project since our promotion has been limited and targeted to the small numbers of participants in our classes.

10. Approaches and interventions used: Describe the specific steps or activities used in the following areas: identifying and scheduling sessions; promotion/marketing; training; personnel/staffing; web site development.

Promotion / Marketing -

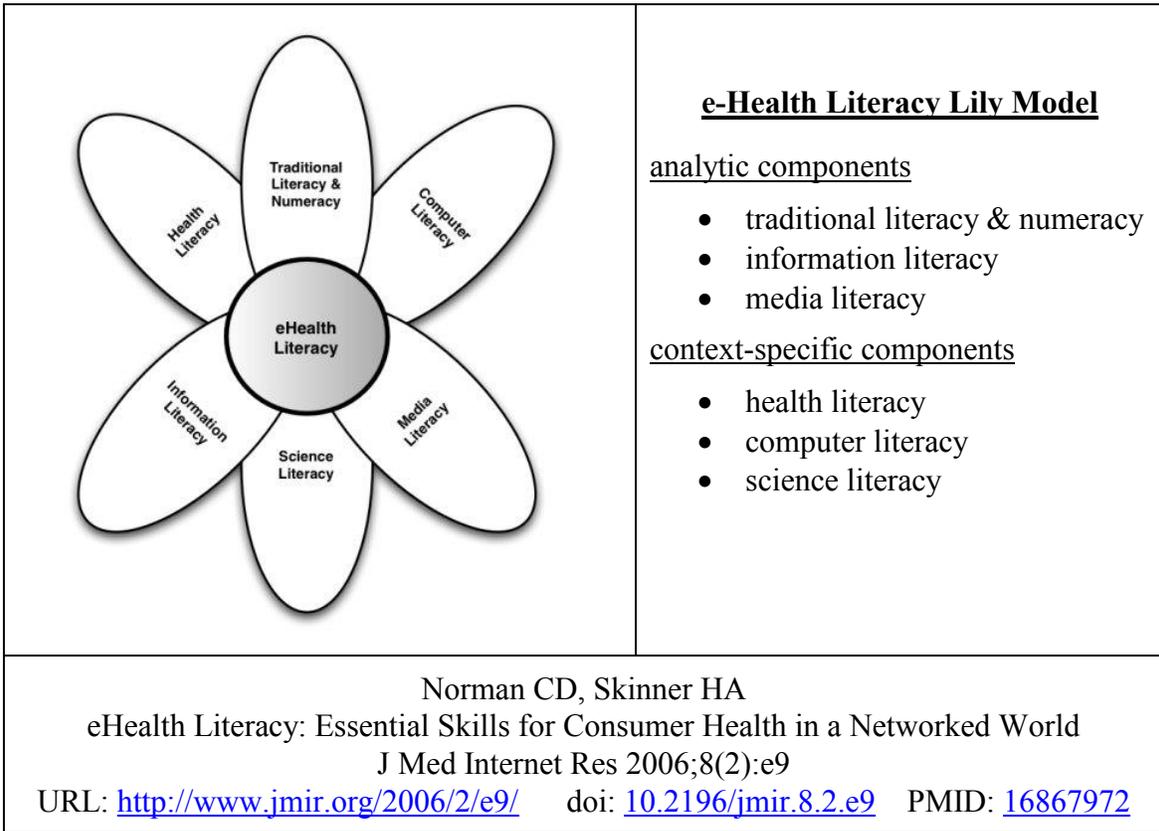
When viewing our promotional materials, one will quickly see that we did not promote our classes as health services. In the past, a great deal of effort has gone into health classes, with a disappointing participation. Rather than offering classes specifically in health information, we chose to integrate health information within on-going popular DPL services that can teach valuable skills for health literacy. We targeted our classes to people with low literacy in terms of computer skills, and we went directly to our partners where we anticipated we would find many with low health literacy skills, as well.

This strategy did not disappoint! We had consistently good, if not excellent, numbers of participants. They enjoyed our classes, and did not appear to mind the imposition of health information, evaluating information, and the use of MedlinePlus within the framework of the classes. Most participants were happy to know about MedlinePlus, and tickled to have the white and purple pens to remind them. They got their „felt needs“ met in the class, and more so, with the limited knowledge they gained of MedlinePlus and contacting libraries for assistance.

As we got into the final quarter of the project and lost our co-lead person, it became clear that we did not (and would not soon) have the capacity for teaching larger numbers of these classes on an on-going basis. As a result, we chose not to do promotion of this service through news or broadcast media. We continue promoting through our direct connections and partnerships and have future sessions on the calendar at this time. Having the suite of laptops and the curriculum in hand allowed me to spontaneously offer to arrange a session through a walk-in customer who shared what he is doing within his church. Formal brochures or bookmarks, DPL e-newsletter or blogging, or a web-based application for scheduling 1:1 or group training sessions will be kept in mind as we work to strengthen the capacity of our „Bridge“ in the coming months. We will continue to plan classes in our CTC for basic computer skills as well as health information searching, and will market these classes through their popular monthly calendar that they use for all their classes.

#### Identifying / Scheduling Sessions -

The vision for using basic computer skills as the primary content for our classes arose from the article: *eHealth Literacy: Essential Skills for Consumer Health in a Networked World*. They make the point that e-health literacy involves six fundamental literacies. There is strong demand for computer basics classes, and these skills afford people access to many great online resources. In the push for Electronic Health Records, these skills will become increasingly essential.



**Personnel / Staffing:**

We began our project with three highly skilled leaders at three different locations within the DPL system. As one and then another of these leaders moved on to other positions, it became clear that succession planning needs to be further developed at the outset. Neither of these people anticipated a move early in the project, but no one can anticipate the unique openings that may arise. We were most fortunate to have the eager participation of several young volunteers from the CTC, all of whom were extremely computer savvy and very good with our participants. We had very good support from staff at both the CTC and the Schlessman Branch Library, the two locations where our initial leaders had been located. Nonetheless, it was not possible for the staff joining the project later on to pick up the depth of the vision or to function as independently as their previous cohorts could have done. With that in mind, it seems wise to have a minimum of five people committed to any grant project from the outset.

**Web Site Development:**

The only development we did during this project was in linking pdf versions of some of our print materials onto our site.

#### 11. Evaluation:

How was the project evaluated? What results were achieved based on the objectives of the project?

The Stages of Change Model from Measuring the Difference recognizes progress not just as full accomplishment of the ultimate goal, but also as willingness to consider, willingness to try, and providing avenues for those who already have skills to maintain or expand on them. We tried to build a full range of opportunities into the system of health information services and into the surveys we used to measure success in our classes. We offer reference services and referrals to libraries where users will find support. We used a 10-step range of self-identifying progress in our surveys.

- We received thanks and appreciation from virtually all of our participants.
- Classes were well attended.
- We noted both our own frustration and that of participants when we did 1 hour sessions, rather than 1 ½ hrs.
- We collected the following results from digesting our surveys and class input:

#### Mouse & Internet Classes (survey mostly done on paper) –

1. How comfortable are you using a computer mouse?									
Not at all	2	3	4	5	6	7	8	9	Very Conf.
4	1	5	1	3	2	7			3
2. How comfortable are you getting to the Internet?									
Not at all	2	3	4	5	6	7	8	9	Very Conf.
6	2	5	1	2	1	1	2		
3. How comfortable are you maximizing, minimizing and closing Windows?									
Not at all	2	3	4	5	6	7	8	9	Very Conf.
9	2	4		1	1	1	1	1	
4. How comfortable are you with clicking on links?									
Not at all	2	3	4	5	6	7	8	9	Very Conf.
7		7	1	2			2	1	
5. How much do you know about finding <b>reliable</b> information on the Internet?									
Nothing	2	3	4	5	6	7	8	9	A lot!
9	2	4	1	2	2				
1. How comfortable are you <u>now</u> using a computer mouse?									
Not at all	2	3	4	5	6	7	8	9	Very Conf.
		1	1	3	3	1	5	4	6

2. How comfortable are you <u>now</u> getting to the Internet?									
Not at all	2	3	4	5	6	7	8	9	Very Conf.
	1		2	4	1		8	2	4
3. How comfortable are you <u>now</u> maximizing, minimizing and closing Windows?									
Not at all	2	3	4	5	6	7	8	9	Very Conf.
	1	1	3	1	4	1	3	2	7
4. How comfortable are you <u>now</u> with clicking on links?									
Not at all	2	3	4	5	6	7	8	9	Very Conf.
	2	1	3	2	5	1	4	3	3
5. How much do you know <u>now</u> about finding <b>reliable</b> information on the Internet?									
Nothing	2	3	4	5	6	7	8	9	A lot!
		3	3	4	3	2	5	1	3

In addition to the shift in skills and confidence that we see with the above numbers,

- Twenty participants said that they learned what they wanted to learn when they signed up.
- Eighteen people said they would go to MedlinePlus.gov if they needed health information, while one said they would call the Denver Public Library and two said they would wait until their next doctor's appointment.
- Seventeen said the instructors were excellent, seven said we were above average, and one said average.
- Ten said they knew someone else who would benefit from the class. There was a wide range of likelihood as to whether the person they thought of would be apt to come to the library to attend the class.

Not likely at all!	2	3	4	5	6	7	8	9	Very Likely!
7	2			1	1	1			2

- The likelihood that they would attend the class if it was held at a familiar community location was as follows. One commented: "It's good right here at Windsor Gardens."

Not likely at all!	2	3	4	5	6	7	8	9	Very Likely!
4	1			1	2	2			4

- We had comments from one participant that they had hoped for a "more intense" class, and from another that they were wanting to know "how to set margins, move text and access clip art and move it to a text."

Email Basics Classes (surveys done online) –

- Note: Pre-class survey information will not be available until early April. We didn't always collect this survey, either. The email classes just seem more

difficult to work with.

- In the Post-class survey, 13 people or 87% indicated that they had learned what they intended to when they signed up for the class.
- 12 people or 80% said they would use MedlinePlus in the future if they needed reliable health information. 4 people or 27% said they would call DPL. One said they would wait til their next doctor’s appointment, and one said they would call a nurse line.
- 12 or 75% knew someone who would benefit from the class.
- There was a wide range of likelihood as to whether the person they thought of would be apt to come to the library to attend the class.

Not likely at all!	2	3	4	5	6	7	8	9	Very Likely!
1	0	1	1	3	0	1	1	1	4

- The likelihood that they would attend the class if it was held at a familiar community location was as follows.

Not likely at all!	2	3	4	5	6	7	8	9	Very Likely!
1	0	1	1	3	0	2	0	1	2

Staff Classes - Jan. 18<sup>th</sup>, Face to Face Class at the Schlessman Branch. Their colleague had encouraged their participation based on the idea that I promised to tell them what they didn’t need to know and not just give them more to strive toward. We had 3 librarians from Schlessman, 1 Schlessman shelver (promoting to librarian the following week at another location) and 1 Circulation/Security Clerk from another branch.

- In the pre-class survey people either didn’t know or noted the University of Colorado Health Sciences Center library as the nearest medical library for the public. Following the class, they noted the Exempla Saint Joseph’s Gervasini Library, the DPL Reference Desk, or the list of libraries we have posted online (which is now up-dated with the chat reference at UCHSC).
- Before the class they wouldn’t know or would Google for free phone numbers people could use to talk with a medical professional. After the class they were aware of the handout we have posted online at <http://www.denverlibrary.org/research-topics/127> under Quick Reference: Denver Metro Area Health Resources.
- MedlinePlus and KidsHealth were presented in the class as „go to“ sites to know for both English and Spanish health information, and everyone remembered these or mentioned them in addition to others.
- Comments were all positive and included: “Amazing resources we have put together.... I feel more confident in my skills.” A week later, one of the students told me: “I have used the class information already and it worked out well!”

- All 5 indicated they found the class “Absolutely” helpful for both their personal and work lives.
- All 5 indicated they would be interested in participating in the Module 2 process, and 2 said they would like to join the Health Advisory Group, as well.

Staff Classes via Adobe - Combining surveys from three different classes.

- Sixteen participants out of twenty four filled out a pre-class survey and twelve filled out the post-class one. In the pre-class survey, two indicated they helped people with health information on a daily basis, three said it was 2-3 times per week, and 10 said it was now and then.
- Pre-survey participants listed a range of hospitals for referrals, but only one person mentioned „ask-a-nurse“ as a possible free medical phone consultation service for the public. After the class, they listed a variety of hospitals, but all noted the list posted on our website for free local phone consultations.
- All noted MedlinePlus and KidsHealth.org.
- Twelve of twelve said the class was “Absolutely” helpful both personally and for their work.
- Comments included:
  - “I liked being able to go to the „real“ websites and experiment and STILL be able to hear the presentation.”
  - “I came late but the part I attended was very informative and to the point in highlighting resources.”
- Eight of the sixteen indicated they would like to participate in the Module 2 process.

Train the Trainer Classes - Just two participants, one medical and one layperson. Both rated the instructor as excellent. Both indicated that they learned lots (10) re: searching for health information. The lay person invited me to present at his computer club meeting in May, and also visited our training session on March 18<sup>th</sup> to see what was happening with the hands-on training. The medical person went right to the registration desk and signed up for a Denver Public Library card. Both would recommend the class to others.

Training for Leaders at Inner City Health Center 2/14 – Eight participants. Seven rated the trainer as excellent, and one said average. Though we ran out of time, three of the four medical people rated the value of the class as a 10. (one rated it as a 6). Lay people valued the class anywhere from 6 to 9. Only two of these participants had heard of MedlinePlus prior to this class.

Health Advisory Meeting – via Adobe Connect – “You mean I can participate without having to drive to Denver?!” (from Greeley)

We sent surveys to our partner organizations early in the project to help with community

assessment. In the end, these were not that helpful. We wouldn't make much of a dent in their statistics so far as bringing substantial numbers to independence in any of the skills. It took time, and wasn't very useful.

12. Problems or barriers encountered: Provide details on problems encountered in the areas of promotion/marketing; training; equipment/telecommunications; personnel/staffing; and web site development.

We had few problems in terms of promotion and marketing, and had no problem filling almost every class we offered. We didn't set out to do web site development as part of this grant.

Our biggest problems with training arose in the E-mail Basics classes. We initially set out to help people set up a Yahoo account, and to talk through the issues of safety online, but many people already had e-mail accounts. They didn't want to set-up another account, and wanted help with the intricacies of using their accounts effectively. Our volunteers knew how to help with Yahoo, Hotmail, Gmail and more, but weren't familiar with searching on MedlinePlus. Our staff were not equipped to handle the variety of email services involved. Covering all that is involved with email can leave little time for working with MedlinePlus. In the future, we may need to stipulate that our E-mail classes are specifically for people new to email, and refer others to 1:1 volunteer support.

One more problem with the Email Basics classes was our assumption that people who use an email account, even daily, have other basic online skills. Not so. We had several seniors who were active email users but who had minimal skills with the mouse, let alone the Internet. We adjusted by splitting the classes and having one trainer work with email and another work with mouse and internet skills. It might be well to require the Mouse & Internet Class as a pre-requisite to the Email one.

Personnel / staffing problems were discussed in Question 10 above. In addition to that, our whole library system went through major changes during the past year, including a new library website, a new online catalog, and new compensation and personnel review processes. Budgets were cut for 2011, and are on track for further cutting in 2012. Staff are stretched thin and it is very important for any work done with health to find its place within the established strategic initiatives of the library. The major on-going changes offered both opportunity and challenges for our health information work. Sooner or later, everybody needs health information, so I anticipate there will be places for this work to grow throughout the system.

13. Continuation plans: Report on how you plan to continue the project. Will all or some of the project's activities continue? Who will provide the funding and staffing to do so?

- Staff training will continue with the following offerings:
  - CYOA 1-2 times/yr and via online Adobe recorded sessions for ad lib access
  - Module 2 – Collaborative Learning for Health will be initiated 3-4 times per yr.
  - Health information needs of the community and the critical nature of health literacy will be key features of this training, as will MedlinePlus.gov
- Final approval of the core curriculum for health is expected this summer.
- When our Adobe Connect Pro subscription runs out in September, the DPL Training Department will fund this. The training manager is eager to support e-Learning, so those with interest will be encouraged. Health classes will be included.
- We have demonstrated that some form of measurement content learning can take place, so we anticipate this will be part of on-going discussions. We will continue to use our Zoomerang surveys for these classes.
- The grant has allowed us to build a viable and comprehensive approach to health information services for DPL. We will continue efforts to build this vision within the system, within the DPL strategic plan. All activities of the project are needful and will be continued.
- Laptop outreach capability will allow DPL to take training to trainees, whether among staff or within the community. In addition it will raise awareness of this project through flyers and promotion among our managers and senior librarians, particularly as we make them aware not only of the laptops and their portability, but also the curriculum that has been developed for new users.
- We will seek to collaborate with the partners we have worked with during the project for the time being, strengthening communication and effectiveness there, rather than spreading our work too thinly by going in more directions. I anticipate being involved in 1-2 training opportunities per month going forward.

14. Impact: Include information on the perceived and actual impact of the project on the library, institution, or consortium. This can include the effect of the project on the library's image, increased utilization of the library, etc.

The effect of this project on the library includes:

- The ability to begin to document the value we provide to the community in the area of health information and health information literacy.
- The ability to train more staff through core curriculum for health and through

distance learning.

- The ability to reach out to many in the community who have need of our various services and to connect more of them to the expert medical librarians who are happy to serve them through hospital settings.
- The ability to recognize and respond spontaneously when we connect with strong and effective leaders who just don't happen to be in charge of the organizations that they serve. Having these services in place allows a readiness to respond that has not been possible in the past.

15. Recommendations for improvement: Include suggestions for alternative methods, training materials, promotional materials, etc.

For this project, it worked to include development of a broad range of tools and to target a wide range of audiences. In future projects, a tighter focus would be recommended, but for building the structural elements of the „Bridge,“ this was the way to go.

I would change the teaching of E-mail classes (see Question # 12 above.

I would encourage a larger number of committed personnel from the outset, and discussion of succession planning up front.

## **FOLLOW-UP QUESTIONS**

If answers to the follow-up questions are contained elsewhere in your report, indicate where they are located.

1. Were your original project goals and objectives met? Yes, see below.

Each element of the Bridge continues to need support and further development. As we move forward with health information services at DPL, these will remain the goals and objectives we pursue.

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Project Goal: Develop DPL's capacity to provide quality health information to our customers, especially populations with low health literacy.	
Objectives:	Completion:
1. Build a continuous bridge of health information services at the Denver Public Library through core curriculum development and approval, and improved delivery of staff training.	90 % - Core curriculum is developed, with final approval expected this summer. Improved delivery is very nearly in place, requiring minimal work to make the experience of the participant reliably satisfying, and the saved sessions reliably available online.
2. Develop a cadre of DPL staff prepared for more in-depth health information reference, training & outreach.	75% - Though several staff have been engaged in presenting the trainings, there is still need for coaching and support before they will be ready to do the trainings independently. Reference staff have been introduced to critical resources, but appointment services remain to be developed. Four Reference staff have volunteered to take this on, and one of these is Spanish-speaking.
3. Develop an outreach and training service with a suite of laptop computers and core curriculum for hands-on training in the community.	80% - Laptops and curriculum are available and fully serviceable. Promotion of MedlinePlus is integrated into the awareness of other DPL staff who may choose to utilize these laptops and materials. Without the above cadre, this is weakened.
4. Implement health literacy outreach services for seniors and the low-income population close to the a) Central Library and b) seniors near to the Schlessman Family Branch.	a) 85% - Would like to have done more in the downtown area close to the Central Library.  b) 100% - Outstanding response at the Windsor Gardens community near the Schlessman Branch Library.
5. Explore health literacy outreach services for minorities and non-English speakers in the community.	100% - While only a few of our classes had 50% or more minorities, we made meaningful contacts with lots of individuals and groups. We anticipate good progress in this area to come.

2. A) What significant lessons were learned which would be of interest or use to others conducting outreach projects?

For this project, it was useful to have the diversity of goals and target audience groups that we did. However, it was exhausting. In the future, we will continue to strengthen these parts of our Bridge, but future projects should target just one of these groups.

To lead a project like this it is important to decide before you begin if the project is worth doing, if you are personally committed to the outcome. Do you have full administrative and peer support? Things come up, and things will come up. People move on. Chaos happens as library systems develop, and as budgets and staff are cut. Partners have different points of view, even if they work at the same place as you. You'll need to adjust and re-adjust, but you'll do well if you have these things in place.

Hauling 10 laptop PC's around is heavy work, even if they are in Pelican cases that have wheels. You'll need two people and a suitable vehicle any time the laptops go out. They need security, ways to reserve and check them in and out, and there are lots of places that don't have wifi. Work closely with your tech support staff --- and get large size laptops.

Don't do classes for less than 1 ½ hours. Especially re: email. There is just too much to cover. Alert, active seniors can come a long way in 1 ½ hours, and it's not too much time for them. And hands-on is critical.

B) Which strategies were the most effective in implementing the project?

See # 10 above.

3. If you were to start all over again, what, if anything, would you change about your goals, project plans, etc.?

If we started all over again, I would:

- Budget for 4G network access, as there are many places without wifi.
- Budget for MedlinePlus pens in abundance. These are the best outreach materials I have used.
- Build in more time for developing Adobe Connect skills, including better assistance for new participants. I hope to have something put together on this soon.
- Budget for a variety of different mice. We purchased one brand that were said to be good for arthritic hands, but they were hard to use. We learned that roller balls can be a good option, and who knows what else might work.
- Evaluate senior technical support businesses or nonprofit organizations in your community in advance. Any senior with the means to purchase will need reliable support for the computer and Internet in their home. This will be more than you can provide as a library, with your information mission and your limited resources.

- I would accept early on that training staff is not the same as cultivating learners among staff. Much cannot be taught, and it's better to have a small number of engaged learners than lots of people who just show up for a class.
  - Start with a minimum of five people committed to the project from the outset. Changes happen!
4. What advice or recommendations would you give to anyone considering a similar outreach effort?

See # 3 above, as well as.

- Get large-size laptops for ease physically and visually. They are heavier, but worth it.
  - Teach for mastery of essentials. Get the basics solid among our public libraries and don't worry too much about having all your staff knowledgeable with a variety of databases. Knowing who they can refer to is really important. Meanwhile, public libraries do a whole lot that medical libraries can't begin to do, re: basics, literacy of all kinds, and other fundamentals. Build on these things.
  - *Made to Stick: Why Some Ideas Survive and Others Die*, by Chip Heath, is a huge help in thinking through effective ways to identify and convey your message.
5. Please describe plans for disseminating lessons learned and other information about the project, such as through a conference presentation or publication. In accordance with the NIH Public Access Policy (<http://publicaccess.nih.gov>), project directors are asked to submit voluntarily to the NIH manuscript submission (NIHMS) system (<http://www.nihms.nih.gov>) at PubMed Central (PMC) final manuscripts upon acceptance for publication.

As our project goes from vision and development into fuller implementation, we anticipate further learning, as well and clearer evidence of our successes. For example, we will not hold our first instructional class for Spanish-speakers for three more weeks.

Lessons learned will primarily be shared internally and informally for the next several months, as we connect with others who will be using the laptop suite and Adobe Connect Pro to disseminate their messages, or with members of our Health Advisory Group or participants of our Module 2 training process. We are hosting two days of training for the Consumer Health Information Specialization of the Medical Library Association in early April. With participants coming from several front range library

systems, this will be a good venue for informal discussion of our work and lessons learned, too.

We will submit insights from this process to the Library Success Wiki at [www.libsuccess.org](http://www.libsuccess.org) in the near future, and will be considering submitting some sort of article for publication in about 1 year.

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**Attachment 7:  
Subcontractor Final Report**

**Hardrock Council on Substance Abuse  
Hardrock Family Walking Club**

**Reporting Institution:** Hardrock Council on Substance Abuse  
P.O. Box 20  
Kykotsmovi, AZ 86039

**Project Title:** Hardrock Family Walking Club

**Report By:** Mary Robertson-Begay  
[mbegay523@yahoo.com](mailto:mbegay523@yahoo.com)  
(928) 725-3501

**Reporting Period Start Date** – 12/21/2010

**Reporting Period End Date** – ~~03/18/2010~~ – 03/18/2011

**Publicity:**

Three (3) run/walks have taken place at community member's residents. Flyers were posted all over the community and announced at community meetings. For a community such as Hardrock, word of mouth is one of the best methods in getting word out about activities.

**Outreach:**

On February 25, 2011 we had 26 participants with 13 families participate in a 3 mile walk/run. The weather was very cold and windy but these participants came and braved the cold. The hosts were able to provide education on nutrition since the walk was sponsored by a lady who worked in a hospital cafeteria as a cook. Many different types of salads were presented to us along with a very hearty vegetable stew. The traditional teaching included names of areas in the vicinity and what foods can be home grown and stored for later use.

On March 4<sup>th</sup>, 2011 we had 18 participants consisting of 11 families. This particular walk was all a hike of 3 miles out and 3 miles back in. The women who sponsored this activity are very traditional Dine' women. They live without the luxury of neither electricity nor indoor plumbing. Herding sheep and taking care of their livestock is a way of life for them. Each day they walk or ride their horse approximately 10 miles while herding sheep. The meal they gave was very simple. Black beans, brown rice and naturally sweet squash. Traditional Navajo tea was also served. While we were on this walk, again we learned about the names of areas in the Big Mountain area along with the medicinal use of plants.

On March 18<sup>th</sup>, 2011 we had our finale at the Chapter House. We had 44 participants made of 27 families. The cook was a nutritionist from the Pinon Health Center. They provided lasagna with a salad. The presenter broke the meal down into the different food groups and what each person received in terms of calories. That was exciting and the participants really enjoyed that. A young man from Hardrock who goes to Dine' college and runs in their Cross-Country team was able to lead the group through exercises and the run.

**Other Accomplishments:**

Of all the walks we did, 6 families were able to participate in all of the walks. All participants' names were entered into a drawing each time they walked or ran with the group. Prizes were given out at the finale.

The Hardrock Wellness calendar is well underway for publishing. A local husband/wife team has been hired to take the lead in the production of the calendar. The calendar will be a 12-month, July to June issue. It will contain all Navajo Nation holidays and all scheduled meetings and activities in the Hardrock

community. The pictures are all of people and places in the community. Thus, the calendar is Hardrock specific.

Yamila El-Khayat, University of Arizona Health Sciences Librarian, has been very instrumental and helpful in obtaining information from different sources and the internet. Her presentations on MedlinePlus have been referred to over and over again by the participants. We hope to continue to use her as a resource for the community after the programs ends.

**Target audience:**

As indicated in our original proposal, we said that we would serve all ages, very young children to the elderly. With the last three (3) walks, we were able to see the elderly walking with their families. The walking club has been a good program for everyone who became involved.

**Goal, Outcomes, Objectives:**

The book (You on a Diet, by Dr. Oz) was given to 25 families. These families were asked to bring the book to each event for discussion, but most did not. We found that unless one was an avid reader, they were not going to read a book not of their choosing. In the future, should there be another program of this kind; we will not be including a book to read.

Our goals have all been met as we had written them. We have kept track of attendance with a sign-in sheet, the participants kept records of their walks everyday on their own time at home. Each participant was able to record beginning and ending weights and blood pressure.

**Evaluation:**

Participant registration included a submission of personal data such their names, age, and the family group they belonged to. Participants also submitted to having themselves weighted and a blood pressure check.

**Impacts and Observations:**

The impact of this program will be seen months and years from now. We can only hope that children will retain the information presented on fast foods and obesity.

**Planned Activities:**

A family who has participated in the walks has agreed to host a Health Fair at their residence. A horse ride is scheduled along with the walk, run and a hike. Different health providers and service providers for the Hardrock area have been invited and asked to provide health screenings. This will be happening in the next two (2) weeks. Our sustainability plan is that we will continue with fun walks where we can bring the community and family walking club participants together. Our hope is that we will find more grants that can fund these types of activities for the community.

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**Attachment 8:  
Subcontractor Quarterly & Final Reports**

**St. Luke's Hospital of Kansas City  
Hospital Library Advocacy**

**Continuity of Health Information Award  
Hospital Library Advocacy Grant  
Quarterly Report**

**Reporting Institution:**

St. Luke's Hospital of Kansas City  
Health Sciences Library  
4141 Mill Street  
Kansas City, MO 64111

**Name of person submitting report:**

Karen Wiederaenders  
[kwiederaenders@saint-lukes.org](mailto:kwiederaenders@saint-lukes.org)  
816-531-0560

**Reporting Period start date:** January 1, 2011

**Reporting Period end date:** February 28, 2011

**Publicity:**

We have finished with the survey and no longer need to publicize it.

**Other Accomplishments:**

The survey results were collected and analyzed. The final report was delivered March 2, 2011 (see attached)

**Target Audience:**

We are looking at the results of the survey and the recommendations of the consultants to decide how to better serve our target audience.

**Goals, Outcomes, Objectives:**

We have met our objectives for the research portion of the project. We are now in the process of analyzing the results and deciding how to use the knowledge we have gained. Our last objective will be to publish an article or articles on the results.

**Evaluation:**

The project has already had positive results for us. Library usage has gone up since the survey went out, probably because people were made aware that we are here. We are looking for ways to capitalize on the momentum we have created.

**Impacts and Observations:**

Some of what we learned in the survey underscored what we already knew but other results were somewhat surprising. We have learned that our main competitor is not Google, although they are competitive, but unawareness of what we have to offer. We are extremely popular with groups such as the College of Health Sciences students

because they have to take a class on how to use the library. Once they start using us they never stop. We need to bring that same level of awareness to all the groups we serve.

**Planned Activities:**

The consultants made several recommendations that we will be working on. First, we need to upgrade our webpage so that it is more usable. The staff is looking at other library's web pages for good ideas. Once we have decided what we want to do, we will meet with the IT people to see what is possible.

Second, we need to start an advertising and branding campaign to make us more visible in the health system. One of the library aides suggested using "Find it!" as our slogan. We could use it on our web page to lead people to things they need quickly. We could print it on magnets or notepads with our email and phone number and distribute them to departments.

Third, we need to meet with key groups such as nurses and residents and develop stakeholders who will advocate for the library. We also need to discuss how better serve the needs of these groups. We may have an "education summit" this summer in which we bring in the nurse educators from all over the system, show them what we have to offer and familiarize them with our processes, the have them brainstorm about ways we can become more of a learning community. If this works well with nurses, we can do the same with the other groups.

Cathy Perley and I will be submitting an article about our findings.

# St. Luke's Hospital Final Report

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# Executive summary

This report documents a study conducted on behalf of the Saint Luke's Health System Library to 1) identify current and potential library users and their information needs of library users; and, 2) support the creation of a plan to provide exemplary information services that will surpass competing information sources.

Recommendations related to the identity and information needs of current and potential library users include the following:

Recommendation 1. Develop multiple service patterns to address the diversity of current and potential library users.

Recommendation 2. Identify and provide access to additional Web resources in areas of expressed need.

Recommendations related to creating a plan for the provision of exemplary information services include the following:

Recommendation 3. Develop a network of library stakeholders that includes representatives from each of the health system facilities. Draw from that network to create an advisory board and work with board members to articulate the library's mission statement, vision, goals, and objectives.

Recommendation 4. Develop three primary access points to the librarians and library services: a main library, a "virtual branch," and a "traveling" branch.

Recommendation 5. Increase opportunities for instruction in library use, utilizing both face to face and online environments.

Recommendation 6. Use branding and other marketing tools to bolster awareness among both users and non-users about the vital services you offer.

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# Introduction

## **Purpose of the investigation**

The purpose of this information needs assessment is to provide evidence to support the creation of a plan for the Saint Luke's Health Sciences Library—a plan that would ensure the delivery of exemplary information services to the physicians, researchers, nurses, nurse educators, nursing students, and other clinical personnel in the health system. A commitment to exemplary services would also ensure alignment of the Library's activities with the Saint Luke's Health System's mission, that of commitment to “the highest levels of excellence in providing health care and health related services in a caring environment.”

## **Background**

Saint Luke's Hospital, the “flagship” of Saint Luke's Health System, has delivered healthcare services in Kansas City since 1882. A Malcolm Baldrige National Quality Award winner, the hospital is known for its excellence and history of innovation in providing healthcare services. Saint Luke's Health System has grown to include 11 hospitals and related health services in Kansas City and the surrounding region. Those facilities are all served by one health sciences library, which is located at Saint Luke's Hospital in mid-town Kansas City.

As the health system has expanded in recent years, Library Director Karen Wiederaenders attempted to reach out to potential library users at the newly-added facilities. She acknowledges, however, that those efforts have met with varying degrees of success. What factors might account for those disconnects between library outreach efforts and potential users?

One contributing factor may have to do with the diversity of current and potential library users, ranging from those with very sophisticated information seeking skills (many of whom work at the mid-town location) to a growing number of potential users who, lacking previous access to a health sciences library, may not have developed the habit of using a library or the requisite skills to do so. Another contributing factor may be the ubiquity of search systems such as Google, which seem to promise quick and easy access to a world of information. Another, very likely contributing factor may be lack of awareness. Do potential users even know that they have library privileges? Physical proximity might well have something to do with that possible lack of awareness. As indicated on the map in Appendix A, Saint Luke's Health System facilities are spread over a considerable geographic area. But even if they worked at the mid-town Saint Luke's Hospital, potential users might not be aware of the Health Sciences Library, which is located two blocks from the hospital and almost five miles from the College of Nursing, which is also off-campus.

To identify possible disconnects and identify evidence that could be used to address these issues, Library Director Karen Wiederaenders applied for and

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received a Continuity of Health Information Award for Hospital Library Advocacy from the National Network of Libraries of Medicine MidContinental Region/University of Utah. Cathy M. Perley, PhD, was engaged as project consultant. Emporia State University School of Library and Information Management doctoral students Kathy J. Fatkin RN, MLS, AHIP, and Lori L. Franklin, MLS/NBCT, were engaged by the consultant to assist with the project. The study began in January, 2010, and was completed in February, 2011. The final report was submitted March 2, 2011. See Appendix B for a detailed timeline.

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# Methods

This study utilized both quantitative and qualitative methods to collect data from a pool of approximately 3,200 respondents. Three types of data collection instruments were used, including preliminary individual and group interviews; four versions of a Web-based self-reporting survey; and focus groups. Quantitative survey data were displayed and analyzed using Excel spreadsheets and SPSS version 16. Qualitative data from the preliminary interviews, narrative survey responses, and focus group were coded and analyzed to identify key themes.

## Data collection

**Preliminary interviews.** The consultant met with the principal investigator to identify key areas of interest. Following these discussions, the principal investigator arranged for interviews with representatives from stakeholder groups. Twenty-one informants agreed to participate.

Members of the research team interviewed nine individual informants and four groups of two to four informants each. Interview respondents represented eight of the 11 Saint Luke's Health System facilities and services. Ten of the 21 respondents were clinical educators; other positions represented included a training and development manager, an administrative assistant who functioned as an information gatekeeper for a cardiology research team, three pharmacists, and a professor in the Saint Luke's College of Health Sciences.

Findings from the preliminary interviews were analyzed to develop an initial coding scheme. Themes that emerged from initial coding were combined with key areas of interest supplied by the principal investigator to indicate topics that should be represented in the self-reporting surveys. Interview data were also used to enrich interpretations of the survey and focus group findings.

**Self-reporting surveys and informed consent forms.** Conversations with the principal investigator indicated four primary stakeholder groups: 1) physicians, residents and interns, physician assistants, and research fellows; 2) nursing; 3) faculty and students in the Saint Luke's College of Health Sciences; and 4) general (i.e. other potential user groups, including therapists and technicians, chaplains, and pharmacists).

In the same period of time, the research team worked with the principal investigator to create an informed consent document. The principal investigator submitted the study design and informed consent document for IRB approval. Approval was granted and the informed consent content was placed at the beginning of the Web-based survey.

To encourage responses from both users and non-users, potential respondents were informed that upon survey completion they could enter their names into a drawing for a \$100 gift certificate. They were asked to

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complete the survey and then follow directions to email a code word to the library, together with their contact information. Each of the four versions of the survey specified a different code name. This process ensured that survey responses were separated from the identities of respondents. A copy of the informed consent form and the invitation to enter the drawing appears in Appendix C.

Four customized versions of a Web-based self-reported survey were created using Survey Monkey, tested with representative respondents, and revised. Each of the four surveys began with a request for the respondent's profession or position. Three of the surveys continued with a request for the respondent's location; physicians were not asked this question, since many have privileges in multiple locations. The questions that followed asked respondents to identify the types of information they needed to provide health care or health-related services, to indicate the resources they turned to when they had information needs, to identify the criteria they apply to assess information they find, to estimate the time they would spend to find answers to straight-forward and complex information needs, to detail the consequences of not finding answers to information needs within the time allowed, and to rate their perceived level of confidence in searching for information.

At that point, branching was used to separate those who indicated that they had used the library within the past six months from those who indicated that they had not. Those who indicated that they had used the library were asked how they had found out about the library and its services, the means by which they preferred to utilize library services, the types of library services they valued, and what resources and services they considered most essential to their work. Those who indicated that they had not used the library in the past six months were asked why they had not done so. All respondents were asked to provide a narrative description of how library services could be more useful to them.

The principal investigator worked with stakeholder group leaders across the health system to disseminate the four surveys to targeted groups. Each survey was "open" for approximately three weeks. In all, 1,095 individuals from a pool of 3,132 possible respondents completed surveys, for a 35% overall response rate. Survey informant detail is shown in Appendix D.

**Focus group interviews.** The research team conducted three focus groups as a form of member check. The first focus group included five students and five faculty members from the Saint Luke's College of Health Sciences; the second focus group included six nurses and one clinical dietician; and the third focus group included a psychologist, a staff educator, a staff development manager, and two nurse administrators.

During each focus group session, the research team explained the purpose of the information needs assessment and summarized findings related to four themes that emerged from the survey responses: Time (Survey questions 5, 6, 8a, 14a); Quality (Survey questions 4, 8); Ease of use (Survey question 8); and Access (Survey questions 4, 8, 11). Participants were asked

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to respond to these themes. Research team members followed up these responses with open-ended questions to encourage additional input.

### **Data analysis**

**Quantitative data.** Although the four self-reporting surveys were each customized to a particular target group, they were all based on one central framework. This allowed the research team to consider the aggregated data as well as to compare and contrast data received from each survey. Quantitative data from the four Web-based self-reporting surveys were collected online in Survey Monkey and downloaded as Excel files. The data were coded numerically by question. The nursing survey had significantly different questions from the other surveys to identify specific nursing information uses. The questions that were in common on all surveys were combined. Most of these questions included nursing staff with the exception of the section on ranking resources and services from “essential” to “never used”. This series of questions did not appear on the nursing survey. Each type of survey and the combined data were imported into SPSS version 16 for descriptive statistical analysis. Further sorting of responses by library users and non-users, facility location and type of facility was completed and analyzed. The results are displayed as tables with frequencies, percentages or means with standard deviations depending on the type of questions and data collected.

**Qualitative data.** Data from the preliminary interviews, narrative responses in the Web-based self-reporting survey, and focus groups were also analyzed. The initial coding scheme developed during analysis of the preliminary interviews was subjected to ongoing review and revision throughout analysis of the remaining narrative data. Each resulting iteration of the coding scheme served to display the data in meaningful patterns. When the research team achieved consensus on the final coding scheme, data from the interviews, quantitative and narrative survey responses, and focus group responses were aggregated into a central analytic document to ensure consistent grouping.

Following data analysis and discussion, the research team collaborated to arrive at a set of formal recommendations and write the final report. The recommendations were designed to support the development of a plan for the Saint Luke’s Health Sciences Library to provide exemplary information services, both now and in the future. The principal investigator and the research team met to review the report on March 2, 2011.

### **Limitations of the study**

Several factors limit the interpretations that can be drawn from this information needs assessment.

First, informants for this study constitute a convenience sample rather than random sample, since they either volunteered to participate or were specifically recruited by the principal investigator. Furthermore, although there was no link between an informant responses to the survey and having that person’s name entered in a drawing for a \$100 gift certificate, there is

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no doubt that the opportunity to win a prize motivated many individuals to complete surveys. Many, particularly non-users, might have otherwise been unlikely to do so.

Second, as detailed in Appendix D, respondents tended to be from the larger facilities; relatively few surveys were returned from facilities outside the immediate Kansas City area or specialty facilities. For example, of 757 nursing survey responses, 677 (89%) were returned from Saint Luke's Kansas City, Saint Luke's East-Lee's Summit, Saint Luke's Northland Hospital Barry Road, Saint Luke's Northland Hospital Smithville, and Saint Luke's South. Only 80 (11%) were returned from "outlying" facilities. This is somewhat explained by the difference in staffing numbers at those facilities, but it would have been helpful to have more input from the outlying and specialty facilities.

Third, many of the informants from the preliminary interviews were already known to the Saint Luke's librarians, which could indicate bias.

Fourth, although the overall response rate was 35%, the response rate for the physician survey was the lowest of all the surveys, 21%, and no physicians consented to be interviewed or to participate in a focus group.

Finally, a number of respondents reported that they hadn't known about the library and its services until they were involved in one of the three data collection activities. Conducting the needs assessment, particularly since data collection took place over a period of almost seven months, resulted in greater awareness among potential users. Since no attempt was made to identify and query a control group, there is no way to measure the extent of that shift in awareness.

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# Summary of results

This section of the report summarizes key findings from the preliminary interviews, the Web-based self-reporting survey, and the focus groups.

## Preliminary interviews

Many of the informants interviewed were already acquainted with Saint Luke's Health Sciences Library services and the librarians. That being acknowledged, research team members were struck by two consistent findings: informant agreement that the librarians delivered exceptional information services quickly and efficiently and a consensus that others in the health system would benefit from greater awareness of library services.

"The librarians are fabulous, accommodating, timely, and pretty good teachers."

Informants discussed a perceived lack of awareness about library services in different contexts. One questioned the omission of information about library services during orientation sessions for new employees. Two nursing supervisors stated that they needed to increase their own awareness of the library's information services so that they could either advise nurses in their areas or serve as information conduits between the library and the nurses. One informant expressed concern that bedside nurses do not know how the library can support unit-based research. Although she knew that the librarians could conduct searches on users' behalf, she asserted that nurses need to know that conducting the search process themselves can actually lead to new lines of inquiry. Awareness of both available services—librarian as search intermediary and informed user as searcher—was considered important.

A third finding closely linked to the perceived need for greater awareness of library services was an expressed need for consistent, ongoing instruction in how to make effective use of library services and resources. This was deemed particularly important, given the need for best practices and evidence-based information. A number of informants referred positively to library classes in searching for and evaluating information, although several noted that classes were not being offered as often as they had been and those that were did not seem to be well-attended. A College faculty member pointed out that her students needed "just-in-time" instruction in how to do information searching.

Ease of use was a fourth significant finding from the preliminary interviews. Several informants asserted that perceived ease of use was a significant factor in determining utilization of the library's resources. One stated that nurses seem to perceive that retrieving articles is a lot of work, adding that, "We need to make it clear and easy, especially in terms of sorting for quality." An informant from an outlying hospital said that staff at her facility struggled with a computer upgrade and that they were unlikely to take on new challenges until they felt more comfortable with the system. Whatever the situation, she said, ease of use was essential. She indicated that staff members who are in a hurry can be frustrated by the challenges of accessing materials via a system like the Health Sciences Library. She would

"Databases [can be] overwhelming. Sometimes it's easier to Google the information you need."

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like to see a more user-friendly, “Google-like” interface for searchers. “Any time when they stop and have to stare and read and think and it is not intuitive,” she said, “they’ll get out and go somewhere else. Even if they end up doing more clicks on Google visiting hyperlinks, they are at least visiting something instead of staring at a screen they don’t understand.”

A fifth finding had to do with the considerable diversity in technology use and skill levels across the Saint Luke’s Health System. One group of informants in the “flagship hospital” pointed out that they had a “new toy,” a laptop with a wireless connection and CITRIX access, loaded with databases, patient care data, UpToDate, and online journals. They take it on rounds and can use it to access their own personal files. The leader in that group said the laptop is “a real game changer.” This level of expertise stood in strong contrast to informants who noted that people in their facilities had either limited access to computers or limited computer skills.

Other frequently-expressed comments from the preliminary interviews included the critical factor of time available from information need to information use, the need for additional training, user preferences for doing their own searching rather than requesting searches from the librarians, and access to the library facility and to library resources. These findings were echoed in the self-reporting survey and focus group data and will be discussed in those sections.

### **Web-based self-reporting survey**

As previously noted, a common framework provided the foundation for four customized self-reporting surveys. Working within this framework allowed the research team to analyze the aggregated data as well as to compare and contrast data received from each target group. In general, results from the physician, nursing, and general surveys were quite consistent.

Main groupings of survey respondents are displayed in Table 1.

Table 1. Survey respondents by self-reported profession or position.

Profession or position	N=1,095
Nursing	740
Physicians, residents, interns, physicians assistants, or research fellows	161
College of Health Sciences students	66
Occupational, physical, or rehabilitation therapists	41
Pharmacists	27
College of Health Sciences faculty	15
Chaplains	8
Dietitians or nutritionists	5
Other clinical or non-clinical positions (e.g., unit secretaries, technicians, administrators, administrative assistants)	32

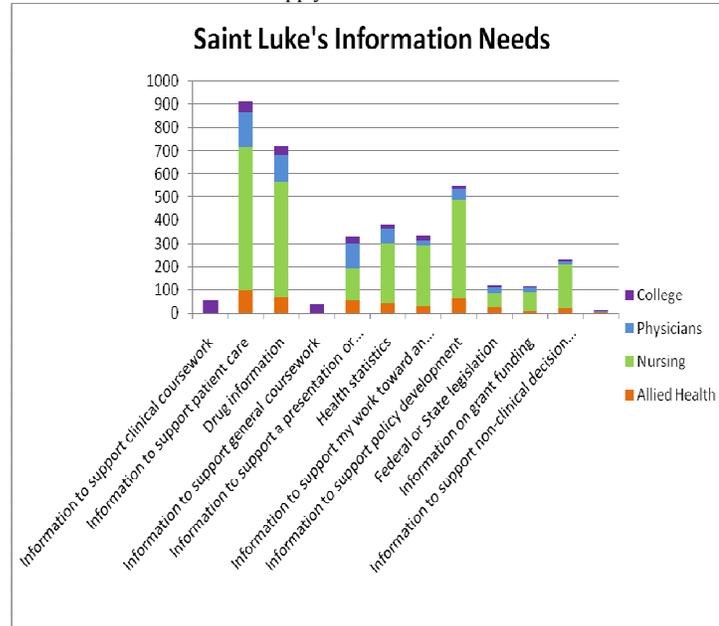
See Appendix D for informant detail, organized by survey, profession or position, and location.

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**Information needs.** Aggregated responses to the question, “What type of information do you need to provide health care or health-related services?” are displayed in Figure 1. (In the College survey, this question was worded “What types of information do you need for your work?”)

Figure 1. What types of information do you need to provide health care or health related services? Please check all that apply. N=999



Informants were given the opportunity to specify “Other types of information needed” in response to this question. An additional set of relevant data were identified by coding narrative responses to the request “Please take just a minute more to let us know how Saint Luke’s Health System Library services could be more useful to you.” The two data sets were combined and organized by survey group. See Appendix E for those responses.

**Informant information seeking, evaluation, and use.** In response to the question, “When you have questions or need information to support your delivery of health care or health-related services, what do you do?” (In the College survey, this was worded, “When you have questions or need information to support your work, what do you do?”), informants were asked to indicate their level of agreement with a number of statements, as shown in Table 2.

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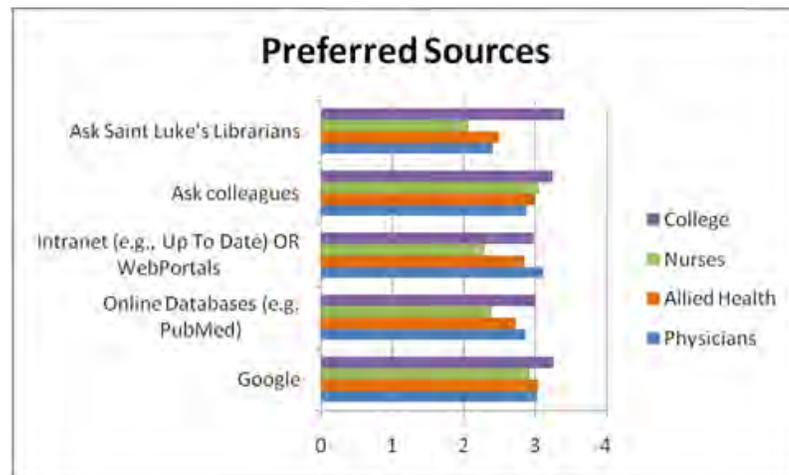
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Table 2. Informant responses to “When you have questions or need information to support your delivery of health care or health-related services, what do you do?” ,Level of agreement ranges from “Agree Strongly” (v=4) to “Disagree Strongly” (v=1). N=996

Statement	Level of agreement
I do not have the resources to answer questions at work.	1.86
When I have a question, I generally ask someone who I think will know the answer.	3.04
When I need information, I generally ask someone else (e.g., a colleague, supervisor, or an assistant) to search for it on my behalf.	2.25
I generally find the information I need in print materials (e.g., books, journals, manuals) available in my work area.	2.52
I generally find the information I need by searching online resources available from the Saint Luke’s Health System Intranet (e.g., UpToDate,) OR WebPortals	2.53
I generally find the information I need by contacting the librarians at the Saint Luke’s Health Sciences Library.	2.27
I generally find the information I need by searching online resources available from the Saint Luke’s Health Sciences Library website (e.g, PubMed/MEDLINE, CINAHL)	2.54
I generally find the information I need by searching general Internet resources (e.g., Google).	2.97
I find quality-filtered information using clinical resources available on the web (e.g., WebMD, MedlinePlus).	2.9

Figure 2 displays another perspective using data extracted from the same data set but broken out by survey group and preferred sources.

Figure 2. Preferred sources of information by survey group. Level of agreement ranges from “Disagree Strongly” (v=1) to “Agree Strongly” (v=4). N=996



Coding used to organize narrative responses to the request, “Please take just a minute more to let us know how Saint Luke’s Health System Library services could be more useful to you,” identified 20 comments having to do

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with the preferences of information seekers. Of these, three had to do with the time it takes to access library services and receive information. For example, a nurse stated that “I think if there was more online instant access to what the library had to offer, or if the literature pulling didn’t take so long then I would use the library more often” and a physician stated that “I have used SLH services and they have been very helpful and provided very helpful timely services in most of the times but sometimes it takes [a]few days to send fulltext articles. I am very pleased with the services but wish they [had] more staff to provide same day service if possible.”

Within the same dataset of 20 narrative responses having to do with preferences of information seekers, 12 had to do with individual preferences in how to search. A College student reported that “I really like knowing I don’t \*have\* to go online. I can go to the library itself and get great help. Maybe I am old school—but I like people and I like having face time.” On the other hand, a nurse reported the following:

First off, I prefer to do my own lit searches. With that being said, I have a difficult time navigating the databases and finding appropriate articles or information to support my search. Sometimes I am just looking for information on a specific diagnosis and can’t find anything. It is frustrating when you find an abstract that might be a good article but the article isn’t available and you have to wait to get it. It would be nice to be able to use the databases on the website from home, not just at work. Many times I don’t have the time to look something up at work so I do it from home and then have [to] filter through all of the info on Google.

How confident were survey informants in terms of the tasks of information seeking, evaluation, and use? See Table 3 for the level of confidence expressed for varied tasks.

Table 3. Informant responses to the request, “For each of the statements below describe your level of confidence in your ability to perform the task using the scale provided.” Level of confidence ranges from “Completely Confident” (v=4) to “No Confidence” (v=0). N=926

Statement	Level of agreement
I can read and utilize evidence-based resources for my work.	2.26
I can find quality-filtered information using clinical resources available on the Web (e.g., WebMD, MedlinePlus).	2.2
I can find quality-filtered information using general Internet search engines (e.g., Google).	2.12
I can search online clinical databases (e.g., PubMed/MEDLINE, CINAHL, UpToDate) for information.	2.1
I can utilize services provided by the Saint Luke’s Health Sciences librarians to locate information I need.	2.07
I can locate evidence-based resources for my work in a timely and efficient manner.	1.93
I can synthesize current research for use in updating or creating facility-wide policies and procedures.	1.69
I can conduct on-site research (individually or as a member of a research team).	1.51
I can publish research findings outside the facility (e.g., in professional journals or in conference proceedings).	0.9

Respondents in all four surveys were asked to indicate their level of agreement with a list of evaluative criteria for the information they use to

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support their work. The list of criteria for the physician, College, and general survey were identical. A more detailed list of criteria was developed for the nursing survey.

Data collected from the physician, College, and general surveys were consistent. Of the 314 informants who answered the question, 200 agreed strongly with the statement that “The information should be based on systematic empirical research.” In response to the statement, “The information should be quality-filtered,” 168 informants strongly agreed; in response to “The information should be based on best practice,” 169 strongly agreed. This emphasis on quality-filtered, evidence based information was noticeably consistent across all locations as well.

In response to the statement, “The information should be readily available from my work site,” 174 of the 314 informants responding to this item strongly agreed. In response to the statement, “The information should be ‘just enough,’ with key information identified and combined into one, synthesized report,” the most frequent rating assigned by informants in all three surveys was “Agree.” Of all the possible criteria listed, however, this statement included the greatest proportion of disagreement, with 77 of the 314 informants indicating Disagree or Disagree Strongly.

The nursing survey listed a more detailed set of evaluative criteria. Responses are displayed in Table 4.

Table 4. Nursing survey responses to the question, “When you need information to support your delivery of nursing care of health-related services, what criteria do you apply?” Informants were asked to respond to each statement. N=656

Statement	Agree Strongly	Agree	Disagree	Disagree Strongly
The information should be identified as evidence-based and in a summary form with nursing levels of evidence described.	42%	55%	3%	0.3%
The information should provide statement of best nursing practice.	41%	56%	2%	0.2%
The information should be a nursing guideline or protocol.	24%	63%	13%	0.5%
The information should be from a nursing professional organization.	24%	60%	16%	0.5%
The information should be comprehensive and include older background materials as well as current research.	21%	66%	12%	0.8%
The information should be a current nursing journal review or meta-analysis.	20%	61%	19%	0.5%
The information should be from all types of current journals that have research.	19%	64%	17%	0.8%
The information should be a listing of current nursing research articles.	18%	60%	22%	0.5%

Survey informants were asked to identify the time they would spend on answering two levels of questions, a fairly straightforward question involving basic information and a more complex question. When faced with a fairly straightforward question 19% of informants reported that they will spend more than 10 minutes, 29% reported that they will spend 6-10

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minutes, and 37% reported that they will spend 1-5 minutes, whereas 3% of informants reported that they have no time at work to search for information. When dealing with a complex question, 34% of informants reported that they will spend more than 20 minutes, 25% reported that they will spend 11-20 minutes, 16% reported that they will spend 6-10 minutes, and 5% reported that they will spend 1-5 minutes, while another 8% said that they do not have time to search for complex information at work.

Responses to those questions, broken down by survey group, are displayed in Figures 3 and 4. (College informants were asked, “When you have a fairly straightforward question or need basic information to support your work, how much time will you take to search for an answer?” and “When you have a complex question or need detailed information to support your work, how much time will you take to search for an answer?”)

Figure 3. “When you have a fairly straightforward question or need basic information to support your delivery of health care or health-related services, how much time will you take to search for an answer? N=962

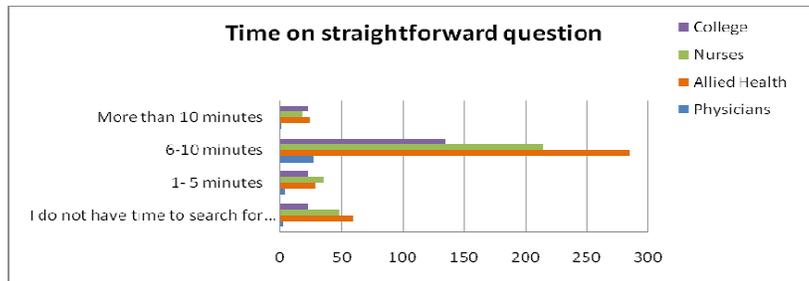
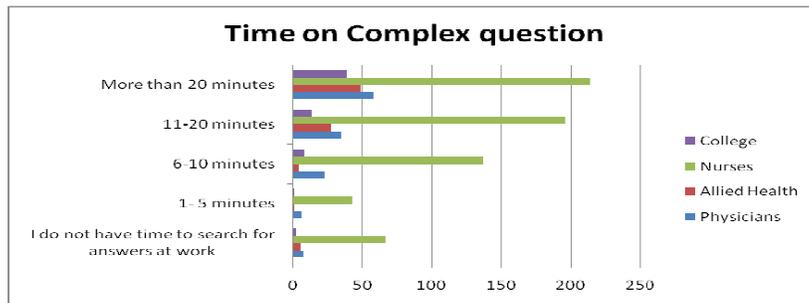


Figure 4. “When you have a complex question or need detailed information to support your delivery of health care or health-related services, how much time will you take to search for an answer? N=959



When asked about the consequences of not being able to find needed information for their work, informants reported the results shown in Tables 5 and 6.

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Table 5. Physician, nursing, and general survey informant responses to the request, "If you are unable to find information needed to support your delivery of health care or health-related services in the time available, what are the consequences? Please check all that apply" N=869

<b>Reported consequence</b>	<b>Informant agreement</b>
A direct impact on the quality of patient care	58%
An indirect impact on the quality of patient care	52%
Loss of time spent in the search for information	76%
Loss of possible revenue	25%
Other impact	2%
No impact	3%

Table 6. College survey informant responses to the request, "If you are unable to find information needed to support your work in the time available, what are the consequences? Please check all that apply" N=82

<b>Reported consequence</b>	<b>Informant agreement</b>
Loss of time spent in the search for information	72%
A direct impact on the quality of your teaching or learning (College survey only)	68%
An indirect impact on the quality of your teaching or learning	34%
A direct impact on the quality of patient care	31%
Loss of possible revenue	7%
Other impact	1%
No impact	1%

**Library users and non-users.** When asked if they had used information resources available from the Saint Luke's Health Sciences Library, either from the library itself or from the library website, within the past six months, 65.1% of general survey informants reported that they had used the library or its resources within that time period; 34.9% reported that they had not. Of the nursing informants who responded to this question, 40.3% reported that they had used the library; 53.8% reported that they had not; and 5.9% reported that they did not recall. Of the physicians responding to this question, 57.9% reported that they had used library resources within the past six months; 37.3% reported that they had not; and 4.8% reported that they did not recall. Of all the groups, College informants reported the greatest percentage of users versus non-users, with 97.5% reporting that they had used the library and only 2.5% reporting that they had not.

At this point in the survey, non-users were branched to a question that asked them why they answered No or Do Not Recall to the question about using the library within the past six months. Their responses are displayed in Table 7.

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Table 7. Informant responses to the request, "You answered no or do not recall using the information resources from the Saint Luke's Health Sciences Library within the past six months. Select all of the responses that apply. N= 438

Reason	Informant agreement
I did not know there was a library website.	51%
I need more information about how to use the library or the library website before I can know if either would help me.	51%
I did not know there was a health sciences library I could use.	36%
I was not aware that most of these services are provided at no cost to me or my department.	31%
I do not have enough time to do so.	29%
Not needed, I find what I need on Internet (e.g. Google).	27%
Not needed, my colleagues have the information I need.	16%
Library resources are not relevant to my needs.	9%
Not needed, I use other libraries or resources available elsewhere.	9%
Other reasons (please specify).	9%

"Other reasons" specified included the following:

From a general survey informant: "I often use the ASHA website (American Speech-Language-Hearing Association) to access research journals for evidence-based research that is related to my profession. I pay for that service as part of my annual certification dues that I must pay. However, I am aware that you have access to other medical journals because I have used your services in the past when I belonged to a journal group (for CEU)."

From four nursing survey informants: "I generally do not use the library primarily because of past experiences when I found the library personnel judgmental and not very helpful. Now, I have other resources at my fingertips;" "It seems like it wouldn't be convenient since the library is at the Plaza and I work at East;" "I work nights and do not live close to hospital so it is highly inconvenient for me to attempt to use the library and its resources. I have only been there one time and it took me 20 minutes driving in circles to find it because it is poorly identified, also found the staff to be less than friendly;" and, "I have used the library resources in the past and the staff is always very helpful and knowledgeable. Need more info on how to do searches and find articles on my own. I know I have been told before but haven't used it so it didn't stick."

From two physician survey informants: "I find most of my needs met through UpToDate or similar services;" and, "Knew of this service long ago, but just do not remember the 'process' and the services that we can utilize through the library. Not well advertised within the system."

Quantitative and narrative data were used to create a representative "snapshot" of the non-user, the user, and a category of user identified as the independent user. See Figure 5.

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Figure 5. A “snapshot” of the non-user, the user, and the independent user.

### The Non-User

- Likes Google searching; not necessarily a preference
- Uses other libraries (university access)
- Isn't aware of what the HSL offers
- Looks for more than “just enough” information on their own
- Prefers to do their own searching
- Not confident using HLS online resources
- May be intimidated by search process
- May be intimidated by the idea of “library”
- Does not have time to contact the HSL
- Says it takes too long to go through CITRIX
- Does not have adequate computer access on site
- Prefers to keep interactions with librarians impersonal
- Only likes to use user-friendly interfaces
- Password changes are a barrier/hassle
- May use intermediaries or gatekeepers

*“If you don't have it in five minutes, I'm gone.”*

*The data statements on this chart come from one-on-one interviews, focus group interviews, and surveys administered to staff. Some statements are direct comments; others are aggregated from data sources that reflect expressed general beliefs or findings.*

### The User

- Likes using HSL
- Understands what HSL can do for them
- Uses a variety of methods to contact HSL
- May use frequently or infrequently
- Attended a class (or two) given by Karen
- Demands quality-filtered information at their fingertips
- Willing to let HSL search, filter, synthesize, and deliver
- May not necessarily visit HSL in person
- Has issues with password barriers, but uses system
- May agree with non-users that CITRIX is slow
- Time pressures dictate quick results
- PDF delivery is important

*“I love the library. The ladies are 100 percent professional.”*

### The Independent User

- Savvy searcher; technologically competent
- May function as gatekeeper/intermediary for dept.
- Performs environmental scanning
- Demands high quality results
- Needs evidence-based, quality-filtered results
- Does not necessarily require synthesizing
- Will always search first on their own
- Contacts HSL as last resort
- Comfortable using sources outside of HSL offerings
- Comfortable using variety of technologies for access
- Time pressures dictate quick results
- Uses specific free web sites
- May view self as expert in the field
- PDF delivery is important

*“I use reliable online sources and can find answers generally in a few minutes or less.”*

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“Is there a quick link on our eLink webpage that we could access that would also have the name of a librarian to contact for further questions?”

**How users first learned about the library.** Informants who reported that they had used library resources within the past six months were asked how they had first learned about the library. Among the 429 self-identified users who answered that question, the two most cited sources of information about the library were an orientation session and a colleague or supervisor, followed by a training session or presentation from a librarian. Other sources in order of responses included the health system website, a health system or hospital newsletter such as e-Rounds, eLink, nursing school, and CITRIX.

**How users prefer to access library services.** Informants who self-identified as library users were asked to identify their preferred means for accessing library services. In every survey group, user responses were the same: a strong preference for searching the library’s website, followed closely by emailing the librarians. Visiting the library and telephoning the library were ranked next in order of preference, followed by Instant Messaging or Chat services (if they were available) and requesting that others access library services on their behalf.

**How users perceive the library and library services.** Informants who identified themselves as library users were asked to respond to statements related to their current use. In response to the statement, “This is the main library I use for my information needs, 64% informants who responded to this statement indicated “Agree Strongly” or “Agree.” Similarly, 61% of informants indicated “Agree Strongly” or “Agree” to the statement, “I depend on library staff to help me locate needed resources.” In response to the statement, “Library staff provide quick and complete service” 76% of informants indicated “Agree Strongly” or “Agree.” Finally, in response to the statement, “I locate my own resources and ask the librarians to deliver articles that I cannot retrieve on my own,” 62% of informants indicated “Agree Strongly” or “Agree.”

**Essential library resources and services.** Informants from the physician, general, and College surveys were asked to indicate the level of importance they placed on various library resources and services. The top five library resources and services for each group are displayed in Table 8.

Table 8. Informant response to the request, “Saint Luke’s Health Sciences Library provides access to a full range of resources and services. Which do you consider most essential to your work? Please indicate the level of importance you place on the resources and services listed below.” Top five responses from each survey group are displayed in order of perceived importance. N=263

Survey Group	Top five responses, in order of perceived importance
Physician	UpToDate Online journals PDF copies of journal articles PubMed/MEDLINE Drug Information Portal
General	Online journals PDF copies of journal articles PubMed/MEDLINE UpToDate Literature searches by librarian

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**Themes that appeared in narrative survey responses.** All survey informants were asked to “Please take just a minute more to let us know how Saint Luke’s Health System Library services could be more useful to you.” Those narrative responses were coded to identify key themes. Responses related to resources and services and information seeker preferences were discussed earlier in this report. Other key themes included 1) issues related to access to library resources and services, including physical access, ease of use, and the need for instruction in how to use the library and its services; 2) the appreciative responses of those who use library services; and 3) the need for greater awareness of what the library has to offer. Responses coded to those themes, organized by survey group, are displayed in Appendix F.

### Focus groups

Informants in each of the three focus groups were asked to review and comment on survey findings related to the themes of time, quality of information, ease of use, accessibility, and resources needed.

“When I need it  
 I need it  
 immediately—  
 full text”

With regard to time, informants verified that they often needed information for use at the bedside almost immediately. A trainer said that, although his time for searching for information varied, he never had more than 15 minutes to search. His search would be interrupted and he would have to move on. Some informants indicated that, because of the immediate information need, they preferred to search themselves, rather than take the time to call the library. For example, a College of Health Sciences faculty member pointed out that students were often required to locate “best practice,” quality filtered information to support their clinical work the next day. Given the situation, they generally conducted those searches in the evening, after class. A nursing student confirmed the need to retrieve information quickly, saying to the principal investigator that, “If you can’t get it [for me] in five minutes, I’m moving on.” A number of students indicated that they could get information faster on Google than from the library. On the other hand, when the information need was not immediate, several informants said they were willing to wait for information to come from the library. A director of patient care services said that the principal investigator Karen was a “huge timesaver,” adding “Hallelujah!” to indicate her appreciation for that service.

With regard to quality of information, a clinical staff person said that she did not need or want “peer-reviewed” information at the bedside. When asked to clarify, she indicated that what she did want was reliable, quality-filtered, highly-synthesized information that she could put to immediate use, such as that available from UpToDate. Other informants described quality information as that which fits the topic, is comprehensive enough to meet the information need, is based on sound research, and is published in a peer-reviewed source. Nursing students and faculty reiterated the notion

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that quality has, in part, to do with information that is relevant to the purpose for which it was sought. Students emphasized that information had to be written in an understandable way. One faculty member indicated that quality information for her students would be “written by nursing” or produced by a collaboration of nursing with another discipline.

Of the focus group informants, the most vocal in terms of the need for ease of use were nursing students and faculty. One faculty member said that students needed readily-accessible, level one evidence, such as that provided in UpToDate, which was easy to use. The only problem was that it was not available off campus, which made it difficult for students to use for their overnight assignments. Students emphasized the need for easy, quick access to full-text resources from the library’s website. One student voiced the opinion that the Saint Luke’s library was not created with students in mind, saying he had better luck searching a local community college’s website. That website is easy to use, he said. There is one search page with a dialog box. He can select the databases he wants, filter for peer-reviewed resources, and enter one search statement. The results, many of which are full-text, are visible in one list. Other comments related to ease of use involved changing passwords, having to use a separate password to access library services off-campus, and having to click more than three times to get to the information needed.

Focus group informants confirmed that accessibility was a serious issue in terms of library use. Individuals in one focus group pointed out that there were no computers on their units. To search the library website, they would need to leave the patient care floor. As a result, they could only search over their meal breaks. Most people in that facility did not have email accounts, so that presented an additional challenge. Individuals in another focus group said that many people in their facility were not comfortable with computer use. Since both of these facilities were located at some distance from the Health Sciences Library, their access to its services was limited.

When asked to review findings about resources needed, informants in two focus groups confirmed that they need both clinical and nonclinical information to do their jobs. On the clinical side, they indicated that they needed information on nursing quality of care websites, environmental issues, patient care materials in multiple formats and languages, and psychology and social work. On the nonclinical side, they expressed a need for information on Six Sigma, process improvement, staff education and development, leadership, HIPPA issues, research methodologies, and healthy lifestyle issues for employee health. This confirmed survey findings indicating that clinical personnel require both clinical and nonclinical information to fulfill their responsibilities.

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## Discussion

I would just say that I have had excellent experience when e-mailing the librarians. They are incredibly helpful and get back to me so fast!! It is because of them that I am able to do nursing research and still take care of my patient at the bedside. Thanks so much for all you do!!! I think that many are not aware of how wonderful it is!!

Conversations preliminary interview informants and focus group participants confirmed survey findings about the rather exceptional degree of satisfaction among those who were familiar with the library and the librarians and utilized their services. Research team members were struck by the number of informants who spoke of contacting the librarians—with the emphasis on speaking with the professional staff. In the world of public and academic libraries, it is far more common for people to speak of “going to the library,” with the emphasis on the building or the collection of materials housed there. This, combined with both quantitative and qualitative data from satisfied users, indicated that when the librarians have an opportunity to interact with their customers they do an outstanding job.

The study did identify consistent themes that suggested possible improvements. The first set of themes involve issues related to access. Those issues include the location of the library facility; access to online resources, including resources like UpToDate; support for independent searchers; ease of use; and the need for additional instructional opportunities in both face-to-face and online formats.

Although library users expressed high praise for the level of service they received from the librarians, they expressed frustration with their access to library resources and services. Some of that involved the library’s current location. For example, a physician wrote the following in response to a narrative survey question:

They need to move the library back on the campus--it's obscene to have it two blocks away. Physicians need a place to congregate [that] focuses on education and knowledge, not just in the lounge to have a donut. The loss of the Spencer Library and its meeting spaces was a huge blow to the intellectual life of this institution and represents just another way in which we are sliding towards being just another urban community hospital.

Other informants pointed out that having the library so far from their hospital or the College made it unlikely that they would be able to go there, particularly for those who work in facilities as much as 100 miles away. “Out of sight, out of mind” seemed to be at work. The relationship between distance from the library and level of involvement might partially explain why only 66 of the 1,095 survey responses came from Anderson County Hospital, Hedrick Medical Center, and Wright Memorial Hospital, the more distant of the Saint Luke’s Health System facilities. Informants also reported that lack of exterior signage make the library difficult to find, and lack of parking made it inconvenient. Others cited the lack of meeting and study space once they got there.

Only a few respondents indicated that the physical library was a “destination” site. There seemed to be little motivation to visit in person,

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particularly since so many voiced a preference for contacting the librarians via e-mail or telephone. A surprising number indicated that they would also use instant messaging or chat reference services if they were available.

Access to online resources was considered essential by a significant number of informants. Informants in each of the four survey groups strongly preferred accessing library resources and services through the library's website, followed closely by contacting the librarians by email. In response to the question, "When you need information to support your delivery of health-related services (or, in the case of the College survey, "support your work"), more than half of the physician, general, and College respondents strongly agreed with the criterion that the information should be readily available from their worksite. Since there are no plans to install branches in each location, that access must be online.

Although many informants voiced satisfaction with being able to request a literature search or PDF copies of article from the librarians and then to wait for a response (most generally a very timely response) a number of informants pointed out that some information needs required immediate answers for bedside care. In those situations, it was unlikely that a literature search and delivery of relevant articles, no matter how timely or authoritative, would satisfy the information need. LIS research on information seeking and use confirms that individuals who require information for the purposes of immediate decision making will satisfice—go with the best information available within the time allowed.

Although satisficing is not ideal, it does reflect the pressures of providing health care services in a fast-paced environment. The need to retrieve "actionable" information quickly may help explain why physician and general survey respondents identified UpToDate as one of their most essential information resources. Clinical decision support systems like UpToDate and Nursing Reference Center (which was not available at Saint Luke's at the time of the study) provide current, comprehensive, peer-reviewed evidence to support patient care decision making. Complicating the use of UpToDate at Saint Luke's Health System, however, were the perceived barriers of multiple, frequently changing passwords and the lack of off-site access due to licensing and cost issues. College faculty and students, for example, cited the need for students to prepare in the evening for their next day's clinical work. Although access to a quality clinical decision support system such as UpToDate would meet a good share of the information needs related to preparation for clinicals, students cannot access it from home.

When it came to searching independently, informants expressed confidence in several tasks related to seeking and evaluating information. For example, when asked to identify their level of confidence in regard to identified tasks, the highest level of confidence had to do with the ability to "read and utilize evidence-based resources for my work." Since most of the informants were clinicians—experts in their field—this degree of confidence is not surprising. Next in statements reflecting level of confidence were "I can find quality-filtered information using clinical resources available on the Web (e.g., WebMD, MedlinePlus)," "I can find quality-filtered information using

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general Internet search engines (e.g., Google),” and “I can search online clinical databases (e.g., PubMed/MEDLINE, CINAHL, UpToDate).” Is that confidence justified? Could the librarians conduct a better search? Possibly, although as one informant pointed out, the process of searching educates the searcher—it’s not just the end product that matters. Here again, we’re dealing with the perceptions of experts in their own subject areas, working within the context of a high-pressured work environment.

From a physician: “I think there needs to be a unified search mechanism across the subject sources (search aggregator). The data sources are too divided and the data contained between ebsco/ovid etc is too hard to use successfully.”

Despite informant confidence that they could find the information they needed, they were less confident that they could “locate evidence-based resources for my work in a timely and efficient manner.” The most efficient use of time, in fact, was a significant finding in this study. As indicated in Figures 3 and 4, the greatest number of informants in all four survey groups will spend 6 to 10 minutes looking for the answer to a basic, fairly straightforward question. When looking for the answer to a complex question, nursing respondents, in particular, indicated that they would spend more than 20 minutes. Given the value of their time and the need to optimize professional staff, there is a significant opportunity cost associated with doing so.

Informant frustrations about access to library resources and services also had to do with ease of use issues. Although some users indicated that they had no difficulty accessing information from the library’s website, a much greater number indicated a need for improvement. A College user requested, “Easier accessibility from the Saint Luke’s Home Page. The times that I have tried to use it, I have found it difficult to navigate through and find what I am looking for.” An example of the type of problems users experience is represented by the website instructions, Medical Knowledge Base (Medical Library). External Access to Databases and Library Holdings (<http://intranet.saintlukeshealthsystem.org/slhs/Services/Common/SaintLukesMedicalLibrary/ExternalAccess.htm>). Although these instructions might seem clear to those familiar with the system, to a novice or a busy clinician looking for information to meet an immediate need they must seem confusing. Given the importance placed on online access, the current library website appears to present a barrier rather than a useful interface to library resources.

Ease of use was closely tied to an expressed need for additional instructional opportunities on how to use library resources and services. A number of informants noted how useful in-service instruction with the librarians had been, but often accompanied that with “but those classes don’t seem to be offered as much anymore.” Others pointed out that it was difficult to attend face to face classes and that online, “just-in-time” library tutorials would be ideal. Several nursing informants said that HealthStream could be used to deliver those tutorials. A physician survey informant suggested that, “It would be helpful to have an in-service presentation on how to access this information--perhaps a personal visit from I.T. or library staff at one of our monthly physician meetings would be helpful. What is available at South? How do I get on line? How do I access UpToDate?”

Other themes that emerged from the data and suggested possible improvements include an expressed need for additional clinical and non-

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clinical information resources, including those in e-book format, and a call for greater awareness of library resources and services.

Informants seemed generally pleased with clinical resources available from the library, although a number of informants expressed a need for psychology resources and resources available as e-books. However, informants in the physician, general, and nursing surveys indicated that they needed resources in non-clinical areas as well. Areas of interest included federal and state legislation, sources of grant funding, staff development, and human resource issues.

Finally, narrative survey responses and the data from the preliminary interviews and focus groups indicated that both users and non-users believed there was a significant need for greater awareness of library resources and services. Informants who reported that they had not used the library in the past six months said they didn't know that there was a library or a library website and that they needed more information about how to use them before they could know if either would help them.

From a nursing survey informant: "Make the library more known to hospital staff and how to access it. It is easy to forget we have an online library or access to it when we are busy and need information quickly or use the resources very few times."

Informants in the physician, general, and nursing survey groups offered a number of suggestions, including email notices on library resources, a guide to library services, more information on the website, library tours, reminders about library services published in the monthly e-newsletter, disseminated lists of resources, and presentations at events like morning report or noon conferences. In short, both users and non-users wanted to hear more about what the library had to offer. A nursing survey informant suggested, "Continue to promote yourself more. Get the Library name out there. The Library promoted itself a lot when I was at Saint Luke's College of Nursing and now I hardly hear about it."

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# Recommendations

This report documents a study conducted on behalf of the Saint Luke's Health System Library to 1) identify current and potential library users and their information needs of library users; and, 2) support the creation of a plan to provide exemplary information services that will surpass competing information sources.

Given their expertise and professionalism, the Saint Luke's librarians are in a good position to redesign library services to address the current and future information needs of their colleagues across the health system. The recommendations that follow have been made to assist in that task.

## **Recommendations related to the identity and information needs of current and potential library users include the following:**

Recommendation 1. Develop multiple service patterns to address the diversity of current and potential library users.

The Saint Luke's library serves a diverse group of users, including those from Saint Luke's Hospital, which is approaching a quaternary care level; tertiary and primary care hospitals; and specialty facilities. A winner of the Malcolm Baldrige Quality Award, Saint Luke's Hospital is a large hospital with 578 active physicians. The hospital has achieved magnet status twice and is working toward a third designation. Other facilities are much smaller and relatively new to the health system. Seven of the facilities are located in the Kansas City metro area; three are located in small towns some distance from Kansas City. Because of these and other factors, organizational culture differs considerably across the system. In some facilities, the library is quite visible, with an active core of library users; in other facilities, it is much less visible.

The term "service pattern" is used here to describe a set of activities designed to address a particular customer need. For example, the Saint Luke's librarians excel at the service pattern of responding to an expressed information need with a comprehensive, quality-filtered search and the delivery of relevant articles. Demand for that service pattern will continue and probably increase as the library increases its visibility within the health system. Conversations with the principal investigator and preliminary interview informants indicated that the Table of Contents and Selective Dissemination of Information (SDI) service patterns might also be well-received once they are better publicized.

Evidence gained from this study suggests that additional service patterns are warranted. Some users will continue to seek out the librarians, either in person or via email or telephone. But a significant number—called "independent searchers" by the research team—indicate that they want to be able to conduct their own searches. In some situations the context of the

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information need requires an immediate answer; in other situations the searcher gains valuable insights by conducting the search independently. Some individuals—particularly those who have grown up using computers—simply prefer to search on their own. Whatever the reason, this information seeking behavior is not likely to change. Viewing it as an anomaly or an error in judgment that can be remedied by increased library training is not a productive response. Certainly, instruction can and should inform information seekers of cases where the librarians should be called in. (Library instruction will be addressed in more detail in Recommendation 5.) But a growing number of users will expect a service pattern that supports their efforts as independent searchers.

It would be a mistake, however, to provide only technology-bound service patterns. For example, conducting the focus group at Crittenton Children's Center resulted in the discovery that computer access in that facility was limited to just a few staff members. To use a computer, nurses needed to leave the floor. Only a few computers were available for their use during break times. Service patterns limited to electronic communication channels will be invisible in this and similar environments. In these cases, stakeholders within those facilities could advise library staff on the best way to share information about library resources and services. Resident stakeholders could also serve as conduits for that information.

Recommendation 2. Identify and provide access to additional Web resources in areas of expressed need.

The presence of quality-filtered information available from credible sources via the Internet makes it unnecessary for the library to purchase and maintain all of the resources it makes available from its website. The current library webpage includes links to the Drug Information Portal and JoCoHealth.net. Links to additional, authoritative sites such as Thomas, legislative information from the Library of Congress, and Grants.gov, information on federal grants provided by the U.S. Department of Health and Human Services, could be used to address expressed needs for resources in these and other areas identified by study informants.

Given the degree of interest in online access and the distance of the library from outlying sites, it would also be useful to identify and acquire e-book formats of frequently requested texts. As with the resource links described above, these should be readily available from the library website.

**Recommendations related to creating a plan for the provision of exemplary information services include the following:**

Recommendation 3. Develop a network of library stakeholders that includes representatives from each of the health system facilities. Draw from that network to create an advisory board and work with members of that board to articulate the library's mission, vision, goals, and objectives.

Conducting this study raised awareness of the library and its services. We recommend that the librarians take advantage of this heightened awareness to expand their network of stakeholders—interested representatives from

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each of the facilities in the Saint Luke's Health System. Once developed, the stakeholder network should be mined to identify those persons willing to meet with library staff to discuss and articulate the library's mission, vision, goals, and objectives. "Identifying and Communicating the Contributions of Library and Information Services in Hospitals and Academic Health Sciences Centers," authored by Abels, Cogdill, and Zach and published in the *Journal of the Medical Library Association*, January, 2004, could serve as a useful springboard for productive advisory board discussion. See in particular Appendix A.

The library's mission statement should be aligned with that of Saint Luke's Health System: "Saint Luke's Health System is a faith-based, not-for-profit aligned health system committed to the highest levels of excellence in providing health care and health related services in a caring environment. We are dedicated to enhancing the physical, mental and spiritual health of the communities we serve." It should be constructed for internal use--defining the library's purpose, identifying how it stands out from competing information sources, and establishing the means by which success should be measured.

The library's vision statement should also be aligned with that of Saint Luke's Health System: "The best place to get care. The best place to give care." The purpose of the library's vision statement should be to energize current and potential library users—to motivate them to take advantage of the library's services. For example, what do library stakeholders and customers value? What unique contributions can the library make to their work in the organization?

Once drafted and approved, the mission and vision statements should drive the creation of goals and objectives. Goals should identify general intentions—intangibles; objectives should identify precise, concrete activities that can be measured. For example, a goal might be to assist colleagues across the health system to optimize their time on task. An objective might be to document the opportunity costs when users with complex information take time away from their clinical and administrative work to search themselves rather than contacting the librarians to assist them—either by conducting the search or advising them on "just in time" search strategy if they prefer to search independently.

Recommendation 4. Develop three primary access points to the librarians and library services: a main library, a "virtual branch," and a "traveling branch."

The Saint Luke's Library is located in a beautiful, historic building. It offers a quiet atmosphere conducive to study and research as well as wireless access, a small computer lab, and convenient access to books and journals. Close by are the Westport and Plaza areas of Kansas City. Despite these attractive features, the library facility is not used by many people. This situation could be remedied by increasing its visibility. Photographs of the library exterior and interior could be included on the website and in print and electronic publications. More prominent exterior signage could make the library easier to find.

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Given the diversity of current and potential library customers and the pressures of the health care workplace, it is unlikely that the library—at least in its current location—will become a frequent “destination” site for those outside the metro area. This situation can be addressed by the “construction” of two other “branches”—a virtual library and a traveling branch—a circuit librarian.

For most of the library’s customers, the website IS the library—a virtual library. The existing website is a beginning, but much more could be done to create an attractive, easy to find, easy to use information portal. Working in collaboration with the Saint Luke’s information technology team, the library could accomplish this goal.

LibGuides offers a viable option for constructing a more substantial virtual library. A number of libraries use LibGuides as the foundation for their library webpages, giving library staff more control over content, features, and web design. The learning curve for this product is relatively short when compared to HTML or Java editing software used to create Web pages. It is easily updated from any online location, yet also offers a secure way to provide vital information for users in a pleasing and familiar web environment. The LibGuide product is also unique in that it is a shared resource—users may “borrow” successful electronic instructional elements for use in their own library web LibGuides.

These guides also are prevalent in colleges and universities throughout the United States, including the University of Kansas, Kansas State University, Emporia State University, University of Missouri – Kansas City, Missouri State University, Fort Hays State University, Johnson County Community College, Pittsburgh State University, Washburn University, Missouri State Western University, St. Louis University, and Washington University.

A number of medical libraries also use this product. Some examples of current health sciences library LibGuides include:

- Duke University Medical Center Library  
<http://guides.mclibrary.duke.edu/>
- Harvard Medical School – Countway Library of Medicine  
<http://hms.harvard.libguides.com/>
- George Washington University Medical Center – Himmelfarb Health Sciences Library  
<http://libguides.gwumc.edu/browse.php?o=s>
- Bernard Becker Medical Library <http://beckerguides.wustl.edu/>
- Florida International Medical University Library  
<http://libguides.medlib.fiu.edu/>
- Norris Medical Library <http://norris.usc.libguides.com/>

As these sites demonstrate, LibGuides can be developed to share frequently requested information and customize portals for particular user groups. For example, informants in the preliminary interviews, surveys, and focus groups expressed a need for graphics to support their professional presentations. Moody Medical Library at the University of Texas offers

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instruction online for accessing clip art and graphics that are copyright-free at <http://guides.utmb.edu/images>. Collaboration with colleagues in areas like clinical education could also be undertaken to create customized search portals, which would both save time and provide links to pre-filtered, authoritative resources.

Whatever the approach to constructing a more substantial website, the virtual library should be easier to find. The lack of a direct link from the main Saint Luke's Hospital System page presents a major stumbling block to use of the current library website. Conversations with information technology staff would be helpful to establish a more visible link from this and other electronic venues. Another way to accomplish more convenient access to the library website would be to create a shortened URL—an alias—such as [hsl.org](http://hsl.org) instead of the current address, [http://intranet.saintlukeshealthsystem.org/slhs/services/common/saint\\_lukes\\_medical\\_library/medical\\_knowledge\\_base.htm](http://intranet.saintlukeshealthsystem.org/slhs/services/common/saint_lukes_medical_library/medical_knowledge_base.htm). Although it is necessary to require a username and password for advanced entry into the commercial databases, having a simpler alias should not cause conflicts with database subscription licensing agreements.

Collaboration with the information technology team could also be helpful in creating RSS feeds, which can “push” webpage news items about resources added to the collection, helpful hints on how to search specific databases or locate information on timely topics, and instructional opportunities.

Basic usability tests should be conducted with representative target groups to ensure that the renovated virtual library is organized in a manner that makes sense to users. Like most professional groups, librarians and information technology specialists use word choices and organizational patterns that make sense to them, but may not be clearly understood by those in other fields. For that reason, it is essential to put the website to the test before it is fully implemented. One possible test involves categorization. Representative users are given cards, each of which represents one concept or item. Users are then asked to organize the cards into categories and to label the categories. Are there common elements to the users' categories and category labels? Do they reflect the way the website is organized? If not, might the users' input be used to make changes?

Students participating in the College focus group suggested yet another option for increasing library outreach efforts: a Facebook presence. Using this social networking tool, librarians could provide an interactive environment to share contact information, call attention to library resources, and publicize upcoming classes and events. Because it is free and has a pervasive presence in contemporary culture, a Facebook presence would be cost-effective investment in increasing library awareness among users working from their home computers.

The third suggested library “branch” is actually a variation on circuit librarianship. Given existing staffing levels, it should be possible for one of the librarians to develop a circuit of facilities to visit in person and at regularly-scheduled times. Conversations within the library's stakeholder network and advisory board should be used to identify events such as

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regularly scheduled meetings, optimum timeframes, and relevant topics at each of the health system's facilities. The purpose of these visits would not only be to raise awareness of library resources and services, but also to create a relationship by offering "on the spot" library consultation.

Recommendation 5. Increase opportunities for instruction in library use, utilizing both face to face and online environments.

Informants expressed a significant need for instruction in how to optimize their use of library resources and services. Existing library classes can be used to address these needs. Members of the advisory board should be consulted for their advice on how to schedule them for greater attendance. In addition, online tutorials should be developed and readily available from the library website. More formal instructional packages should also be created, utilizing existing educational channels like HealthStream.

Recommendation 6. Market the library and its services.

The Health Sciences Library's current base of loyal users is a testament to the services provided by the librarians and staff. Improvements in marketing should be considered as a way to raise awareness of what the library and the librarians have to offer.

To begin, the mission, vision, goals, and objectives discussed in Recommendation 3 should drive the creation of the library's brand—a consistent name, slogan, and design scheme. For example, is the name of the library the Saint Luke's Health Sciences Library or the Medical Knowledge Base, which appears on the library's webpage? Is there a slogan or tagline that keeps the library in its customers' minds? (One possibility: magnets or pads of paper with the slogan, "If it's going to take more than 10 minutes, call a librarian!" and the library's telephone number and email address). Is there a consistent design scheme to all print and online information about the library and its services? Does every literature search and emailed message from the library communicate its brand? These and other measures can be both powerful and cost-effective marketing tools.

Marketing also includes pushing information out to existing and potential library users. For example, the heightened awareness brought about by conducting this study provides a window of opportunity for librarians to identify and publicize their resources and services. See Table 9 for an example of how this might be displayed.

Table 9. Display of available library resources and services.

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Information Resources	Access	Instruction
Electronic <ul style="list-style-type: none"> <li>•Subscription databases</li> <li>•RSS Feeds</li> <li>•General Links</li> <li>•eBooks</li> <li>•Clip art library</li> </ul>	Electronic <ul style="list-style-type: none"> <li>•Health Sciences Library web site</li> <li>•Direct access through URLs</li> <li>•Username/password access</li> <li>•Computers - on site at HSL</li> <li>•E-mail requests/delivery</li> </ul>	In Person <ul style="list-style-type: none"> <li>•Scheduled</li> <li>•Orientation to HSL</li> <li>•Database searching</li> <li>•Advanced database searching</li> <li>•Presentations "how to"</li> <li>•New Hires</li> </ul>
Print <ul style="list-style-type: none"> <li>•Journals/ periodicals</li> <li>•Books</li> <li>•Textbooks</li> <li>•Current awareness service (photocopied table of contents, etc.)</li> </ul>	Print <ul style="list-style-type: none"> <li>•Check out procedures</li> <li>•Books/journals/periodicals</li> <li>•ILL</li> </ul>	Online <ul style="list-style-type: none"> <li>•Self help</li> <li>•Specified and short</li> <li>•As-needed/just in time</li> <li>•Same topics as for "in person" category above</li> </ul>

This information should be published in as many communication venues as possible and as often as possible. Additional ideas for effective promotions, advertising, direct marketing, and public relations efforts are available in Doucett's *Creating Your Library Brand: Communicating Your Relevance and Value to Your Patrons*, 2008.

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**Attachment 9:  
Subcontractor Final Report**

**Spanish Peaks Library  
Spanish Peaks Library Health & Wellness Initiative**



## **SPANISH PEAKS LIBRARY HEALTH & WELLNESS INITIATIVE FINAL REPORT**

### **Executive Summary**

The Spanish Peaks Library in conjunction with the Las Animas-Huerfano Counties District Health Department (LAHCDHD) intended to implement a health & wellness initiative program for the citizens of Huerfano County. This program included a health station at the library which would facilitate access for the public to healthcare related issues in order to become better educated about their own health and well being. The use of a variety of media was implemented, including healthcare books, magazines, educational videos, posters and anatomical models. These materials continue to be available for use, and a new health topic is displayed monthly. Through these materials being available for public use, we hoped that the community of Huerfano County might be empowered to take charge of their health and to be more attentive at healthcare visits and ask questions of healthcare providers. Most importantly, it would enable the population to have a better understanding of their individual disease processes and treatment, so they could live a longer, healthier life and contribute to this community.

Although the original intent of the project was for the public health nurse to make short public presentations periodically on specific topics, this did not happen due to short staffing at the Health Department. The proposal suggested that a count would be kept of patrons using the health station; this sign-in was not implemented. A survey was available for health station users, but seldom completed. During December of 2010 and January of 2011, a recent CNA graduate was hired to “man” the Health Station several hours each day, change materials, show video presentations, and ask visitors to complete the surveys. She was able to have 72 surveys completed and spent 97 hours in 6 weeks changing displays, playing videos and interacting with the public. In general reactions were very positive.

### **Geographic Regions**

The population served encompassed Huerfano County. The most recent 2010 Census figures has shown a decrease in population to 6711 citizens, a 16% decrease in population since the 2000 Census. This population is predominantly of a lower socioeconomic class with a 32% of children living in poverty according to a recent study by the Wisconsin Population Health Institute and the Robert Wood Johnson Foundation. The majority race is Caucasian with the second largest ethnic group being Hispanic. There is some small representation of African Americans, Asian, and Indian culture. Huerfano County includes the small towns Walsenburg, La Veta, Cuchara, Gardner, and Red Wing.

## **Collaborations/Partnerships**

Input from the RN at LAHCDHD was instrumental in preparing the grant proposal, planning monthly topics and selecting appropriate materials for the display but the major partner in this project. Once the Health Station was set up, she came on a couple of occasions to check the displays, but her primary office was in another County and her days in the area were limited by lack of local staffing. A short term staff person assigned to work at the Library through a special Workforce program took the Health Station on as a project (she had a Nutrition degree) and contacted a number of local healthcare and health education agencies to tell them about the Health Station and programs she planned to host. We were excited that the promotion of the Health Station was finally underway and other agencies were interested in collaborating with us. After about three weeks, this person simply did not return to the job. Her contact with the new Outreach Clinic coordinator did produce a couple of bulletin board displays that were changed at least twice, but Library programs were not advertised because there was no one on staff to actually carry them out.

## **Trainings/Training Sites**

The Library did not host formal trainings. The Health Station which included a large screen TV with DVD player and access to the Internet was used to play health videos and to find specific health information requested by patrons. The wall on either side of the TV screen was used to display large *posters* displaying particular topics, changed each month (see list attached) along with corresponding anatomical models illustrating particular body parts such as a heart, brain, uterus, etc. On the opposite side of the central “Curiosity Room” was a pamphlet display area including a number of health publications from both national and regional health organizations as well as local health agency flyers. A large 4 foot high “body” with removable parts was placed next to the pamphlets causing people of all ages to stop and look. Sometimes they would try to replace/rearrange body parts; occasionally someone with a health background who actually knew where everything belonged would put the body back together; school classes who visited were always taken to this area and shown the body and other materials.

## **Exhibits/Presentations**

Exhibits of materials (as described above) were available to library visitors during all the hours the Library was open to the public (currently 48 hours/week). When staff had time, or during the last few months when a person was hired to “staff” the Health Station, videos of interest were shown. Generally these presentations were found using MedLinePlus and other links on NLM sites. The local Outreach Clinic staff person held wellness checks on at least two occasions for Library staff as well as the public.

As a small rural public library, with very few professional staff, the materials were used in house and not part of conference presentations. The Library has a meeting room that is used by a large number of local and regional groups of all kinds so additional visitors to the building frequently stop to view the Health Station. The Library does staff a table every year at the local Health Fair where handouts from NLM are given out and library material on a variety of topics is available for the public to peruse and learn about resources at their Library.

## **Resource Materials**

The Health Station has prompted the Library to purchase new materials for circulation, a number of videos, a couple of free medical newsletter subscriptions and a number of pamphlets, bookmarks, etc. for the public to take home. These items are highlighted at the Health Station as the topics change monthly.

## **Web Sites**

Our Library recently acquired a new web site using Plinkit, a template based website authoring software developed specifically for Public Libraries. One of the online topic links now available there is Health and Medicine which includes health and safety topics from the CDC; Consumer Links, the best sites for non-medical people, selected by the librarians at the Denison Memorial Library of the University of Colorado Health Sciences Center; MedlinePlus, health information from the National Library of Medicine; NIH – Health Information, health topics from the National Institutes of Health; and Nutrition.gov, Nutrition information and topics.

## **Document Delivery and Reference Services**

As a small public library we do not do Document Delivery; we are a part of a system in Colorado that supports a strong Inter Library Loan service so almost any material requested by a patron can be borrowed from elsewhere in the State. Through our contacts with the medical librarian at Denison, we also became aware this year of a service called Loansome Doc which we have used on occasion to borrow material for local medical practitioners who do not have access to other professional resources, even through their affiliations with the University Medical School. The Library provides very limited professional reference services, but the Health Station reminds staff that there are valuable resources in the Library and a number of reliable medical resources available online to answer patron questions.

## **Approaches and Interventions Used**

About half way through the project the Library served as a placement site for two people through a Workforce program; one of these was a woman with a degree in Nutrition. She adopted the Health Station as her project, made a number of contacts in the community with the High School Science Teacher, the Hospital Outreach Clinic, and others to coordinate their services with the Health Station. We were quite excited to begin planning more activities and have someone interested in promoting the Health Station. Three weeks later she just stopped coming to work. Although more organizations in the community were informed about the Health Station, no new partnerships were solidified. This is a community where everyone is stretched to the limit and focused on their own programs and priorities. One of the Library regular staff members tried to find time to turn on the TV and play videos from reliable health sites. She has continued to change the large poster displays and the materials from the collection pertinent to the particular topic of the month.

The Library has recently received 20 new laptops and other computer resources as part of a major grant awarded to the Colorado State Library to implement 76 Public Computing Centers across the State. Part of the award includes staff as well as public training for the next two years.

It is my hope that our staff will be trained well enough to conduct trainings including sessions showing the public where to find reliable health information.

## Evaluation

Having the Health Station in the Library is a great resource for the patrons and the staff as well. Small should not mean Less and that can be true of resources, especially when the “hardware” acquisitions are supported by grant funding. Unfortunately, this experience has shown us that the lack of staffing can prevent optimal use of these resources. The large wall posters draw attention from passersby and the anatomical models pique the curiosity of everyone. The large model would be more useful if there were easier to understand directions – or an expert interested in teaching staff and the public how to manipulate the parts. Volunteers could be utilized to provide programming, but in a small economically depressed area like ours where staff and volunteers are stretched thin and a high percentage of the population is aging and the percentage of the population with mental health needs is great, human resources are limited.

A short one page 10 question survey was prepared at the beginning of the project and was available at the Health Station along with a sign-in sheet. Without a staff person neither of these was actually use. Occasionally someone would scribble on the questionnaire and only one or two people ever signed the clipboard. We were ready to give up but with strong encouragement from NN/LM staff we agreed to try to find someone to staff the Health Station and work on completing the questionnaires. Seventy-two surveys were completed in a period of six weeks from December 20, 2010 through January 27, 2011. During this time a young woman who had just completed her CNA program was hired to work at the Health Station, change displays, play videos, search web sites for useful information and hand out surveys.

A summary of the survey results follows: (survey instrument in the appendix)

- Patrons were asked how they felt about the topic; 66% were satisfied or delighted; 30% had mixed feelings and 3 persons did not answer.
- 83% of respondents answered that they were able to relate to the topic; 15% said they were not.
- There were 132 responses to the question what did you do at the Health Station; about half responded that they watched a video, looked at the models and/or read material available; 16 replied that they checked out reading material and 18 said they asked questions of the staff person.
- Less than 10% of persons completing the survey responded that the topic did not really meet their needs although 14% did not answer this question, with 68% responding positively.
- When asked to what extent the topic helped them feel more confident about their healthcare or that of their families, 61% answered 4 or 5 (5 being Very Much, 1 being Not at all); 26% answered a 3; 2 respondents did not answer the question at all and almost 10% responded 2, or 1.
- About 60% of respondents said they were likely to come back to view other topics. Of the 20% who answered 3 on a scale of 5, it compares to the 68% of respondents who said they visit this Library 5+ times per year. 15% of respondents said this was their first visit to the Library – it is reasonable to think that a number of these first visits might be persons from out of the area. Considering these percentages, it is interesting that 83% answered that they would recommend the Health Station to friends and family.

- The open ended questions are always interesting; we asked what would encourage respondent to return to the Health Station. Less than half of the survey respondents answered this question but of those that did their answers included \*particular health topics, e.g. allergies, sex prevention, Celiac, health food, \*more information, more models, more staff, \*knowing that it will continue to be available and \*workshops where one could spend more time.

No actual statistical analysis was completed. Obviously such a small response rate may not be significant. The average daily door count at the Library is 22.5 patrons per hour. The surveys were completed by less than 1 person per hour. However, the overall positive response provides encouragement to continue trying to provide services at the Health Station.

### **Problems or Barriers Encountered**

As has been described elsewhere, the major problem we encountered was lack of staffing resources. We did very little advertising because we could not guarantee that a staff person would be available to carry out a program. Recently our Library along with 75 others in Colorado has been the recipient of a large BTOP (Broadband Technology Opportunities Program) award that has provided funding to set up Public Computing Centers for the purpose of bridging the digital divide in rural areas in Colorado. This grant includes training for staff as well as the public so our plan is to include classes for the public on using the health databases once we all become skilled trainers.

### **Continuation Plans**

The Health Station is a permanent part of our new Library and we are able to change out the health topics on a regular basis, usually monthly. As mentioned above we intend to provide classes for the public in the next year. The materials and hardware purchases that were made with the grant funds will be available to the public for several years to come – hardware and information that is up to date and accessible to people of all ages and abilities. It is a great resource for this community. I think it is fair to say that it is also a great resource for library staff who are untrained and now have the materials to help them learn in order to help their patrons.

### **Impact**

The Health Station at the Spanish Peaks Library can only have a positive impact on the residents of Huerfano County. According to an article in The Pueblo Chieftain, March 30, 2011, a new study by the Wisconsin Population Health Institute and the Robert Wood Johnson Foundation ranks Huerfano County last in healthy counties in Colorado. “Residents of Huerfano County, the report claims, are more than three times as likely to die a premature death than people in Douglas County, which was listed as the healthiest. They’re also three times as likely to contract a sexually transmitted disease and teen girls four times as likely to become pregnant.”

### **Recommendations for Improvement**

We would certainly appreciate feedback from anyone who reviews this report. It appears that the original plan was a good one; finding staffing within the library and from collaborating

organizations was very difficult. Even with funding for staff, coordination, supervision, assessment all require trained staff that often don't exist in small communities like ours. The closest community college is almost 40 miles away, there are no service clubs in the community, an active volunteer organization was begun last year and is stretched across two counties and a number of communities all in need of their services. It would be worthwhile to consider providing programs like this one to communities in need but the scope of the projects need to include salary for a qualified staff person.

## **FOLLOW-UP QUESTIONS**

### **1. Were your original project goals and objectives met? If not, why not?**

In the greater scheme of things one might say our goals were met – more health information is available in an interactive, engaging way to the Huerfano County community. The Library has a permanent exhibit of health information resources easily accessible to anyone who comes into the building. However, we did not have any advertised public programming to bring in other members of the public who might have been interested but do not regularly visit the Library.

So, we met the objective of creating a Health Station with regularly changing health care topics on display. We made healthcare literature available to everyone who came into the building as well as those who participated in the annual hospital health fair and one focused specifically for children and families supported by the Outreach Clinic. With all of the new material we added for this project we will continue to participate in community events that allow us to show the public that we can assist them in finding reliable healthcare information geared to their needs and interests. Using a large screen TV connected to an Internet-enabled computer and a DVD player we were/are able to use current technologies to demonstrate and educate people about health issues. In addition we purchased several anatomical models for hands-on learning and several large laminated posters and charts to promote visual learning. These models and posters are also available in the Library Catalog for checkout to persons doing health education in the community. All of these efforts will certainly help to educate our patrons about their health.

We probably did very little to empower our patrons to use this knowledge in a positive way because the Health Station was not staffed with trained library or medical personnel. The public health nurse who was to help with this project seldom had time in her schedule to be at the Library. Because the Health Station occupies a permanent spot in the Library and the models, posters and materials, including a few monthly subscriptions to health material, will continue to be maintained, the possibility of doing more formal education exists – staffing will continue to be an issue, even staffing to just plan programs, but we will continue to look for volunteers to help with this effort.

### **2. What significant lessons were learned which would be of interest or use to others conducting outreach projects? Which strategies were the most effective in implementing the project?**

If it were not for our collaboration with the local Health Department, the grant would not have been written and we would not have this dedicated Health Station in the public library. As

the Library Director and only trained librarian I thought I would have time to conduct regular programs for the public and at least be available a few hours a week to show interested persons what was available at the Health Station, make referrals to other healthcare providers in the community and train some of my staff to learn to use more reliable health resources. The grant actually began just as the Library was moving into a new space (3 times the size of our original facility) and I am still working on making the new space work.

On at least two occasions we had volunteers or Workforce trainees skilled in the healthcare field take on the project only to quit abruptly in a short number of days or weeks. Programming really needs paid staff whose responsibilities include a project like this; it can't just be "something else" they do because they are interested.

### **3. If you were to start all over again, what, if anything, would you change about your goals, project plans, etc.?**

Of course it is always nice to be able to ask for hardware that can be devoted to a project like this. Library staff did our own research on anatomical models and posters, but there might be better ones, models with better directions on their use, maybe with talking parts. I would highly recommend that purchasing new up to date health materials include major book purchases as well. Small public libraries know about the CREW guidelines, but many of us don't have the budget to keep a broad collection up to date.

I would suggest a question on the survey be added asking which topic was being highlighted at the time the survey was completed and possibly a few demographic questions, in particular sex and age. I feel strongly from some responses on the surveys that these things likely influenced the answers given, but the data was not available to verify these assumptions. Obviously a more sophisticated analysis would have looked at responses from frequent library users compared to first time visitors as well as other comparisons. This survey was not designed to answer such questions, but additional information would suggest topics of special interest, specific needs of the community, etc.

I would encourage previous collaborations with a partner in order to better predict their ability to participate – how much time, staffing, expertise they would actually make available. Taking on a project like this requires time and commitment from both partners for the duration of the project.

The original goal was to provide more direct education to the community; this is a valuable goal, but just having the Health Station in the Library with great material included can be a catalyst for conversation, inquiry, and programming by experts in the area. A commitment to provide programs requires staff with time assigned to the project.

### **4. What advice or recommendations would you give to anyone considering a similar outreach effort?**

The Health Station is a great idea; ordering materials, setting it up and changing topics is fairly simple. When school groups come to the Library we always introduce them to the Health Station. When organizations meet in the building they can't miss the Health Station. The true outreach efforts depend upon your community and the degree to which you are already collaborating with other agencies. The possibilities are almost endless, but dependent on people

devoted to planning, coordinating, and if necessary carrying out programs. Incentives for watching a video or completing a survey might increase participation of the public.

**5. Please describe plans for disseminating lessons learned and other information about the project, such as through a conference presentation or publication.**

When I first became the Library Director at Spanish Peaks Library there was an article in Library Journal, the premise of which was that “small is not less” – I have quoted this and believed it with all my heart for seven years. This year, in a beautiful new facility operating on the same budget with the same staff, I am beginning to doubt the veracity of this statement. I want our Library to be everything a Library can be for its community, but without Librarians some things are just not possible. You know that phrase “I didn’t learn that in Library School” – the thing I didn’t learn was how to limit the goals and programs when we truly have less, fewer dollars, fewer community resources, fewer trained staff. The Health Station would never have been a possibility – or even an idea – without this grant. I believe it is a great asset to the Library and our patrons/visitors and one that will continue to promote health and education for years to come. The possibility that any one of us will have time to “tell the story” in a public forum is unlikely, but we would be happy to have visitors or help someone else tell our story.

**Attachments**

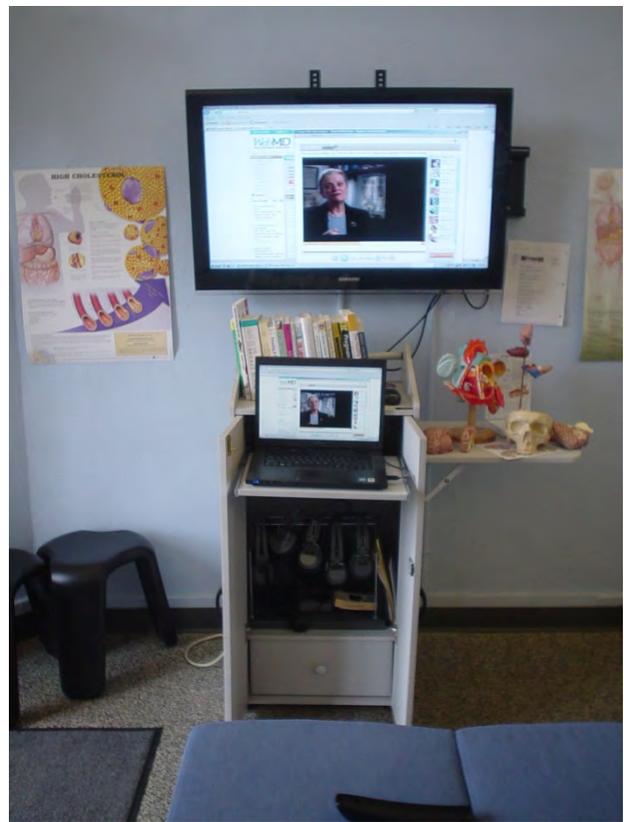
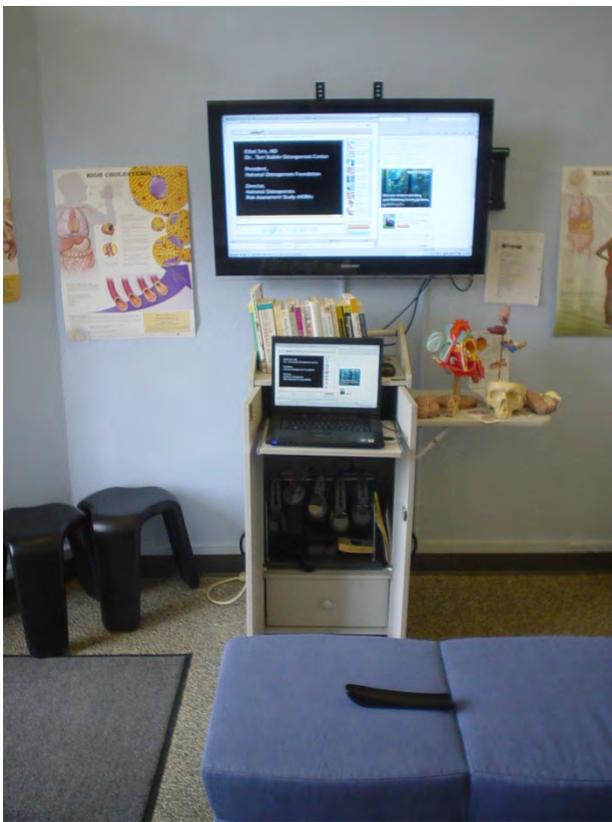
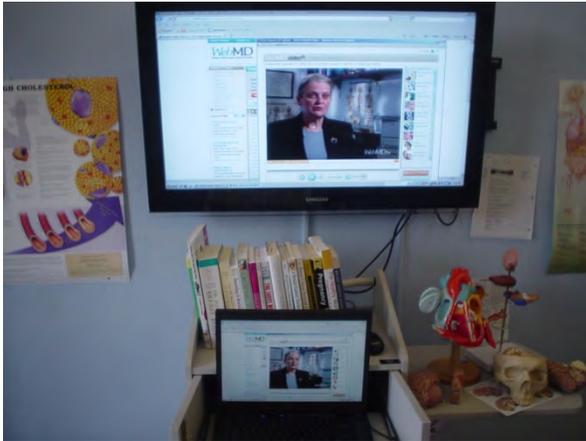
- List of monthly topics
- Photos of the Health Station
- Copy of Survey
- List of anatomical models, laminated posters and handouts

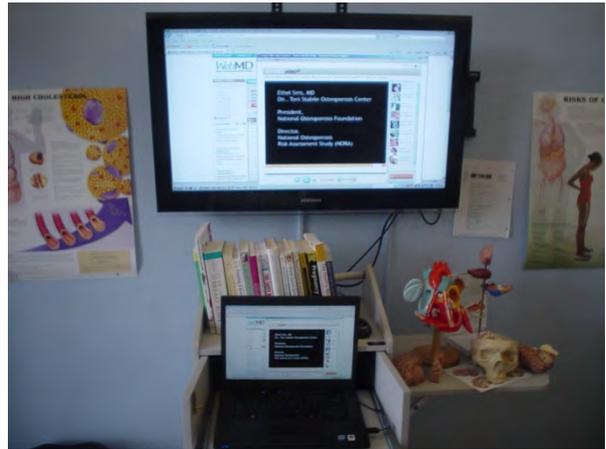
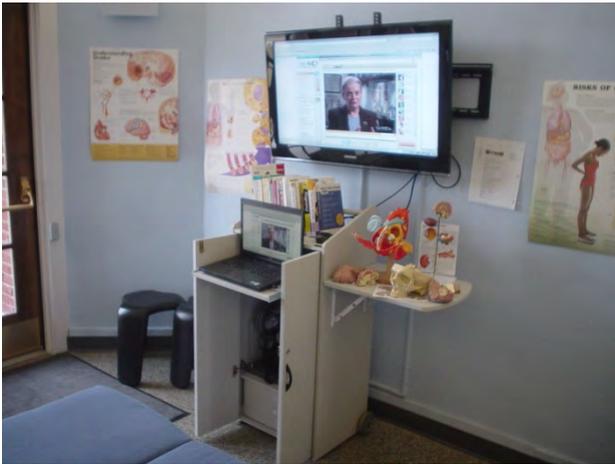
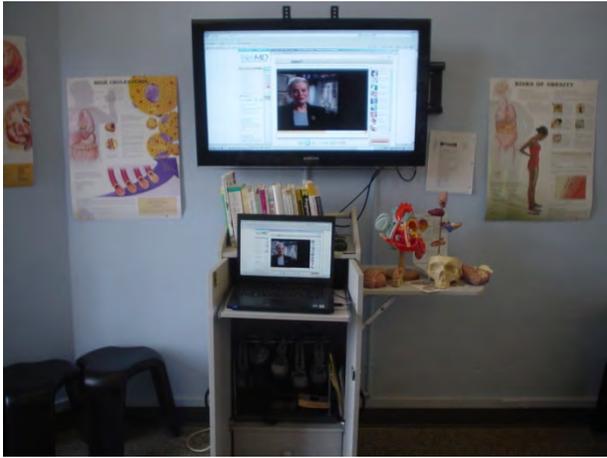
**List of Monthly Topics**

Each month the topics displayed at the Health Station are changed. The anatomical models, the large laminated posters, handouts, and library material on the subject are added to the display. Occasionally a change is made depending on local needs/issues, but these are the topics for which materials were purchased:

- |           |                                       |
|-----------|---------------------------------------|
| January   | Cervical Health Awareness Month       |
| February  | American Heart Month                  |
| March     | Colorectal Cancer Month               |
| April     | STD Awareness Month                   |
| May       | American Stroke Month                 |
| June      | Sun Safety Week                       |
| July      | Juvenile Arthritis Awareness Month    |
| August    | National Immunization Awareness Month |
| September | National Cholesterol Education Month  |
| October   | National Breast Cancer Awareness      |
| November  | American Diabetes Month               |
| December  | National Hand Washing Awareness       |

Photographs of the Spanish Peaks Library Healthcare Station





## Library Survey Questions

**How do you feel about this month's healthcare station topic?**

- Delighted
- Satisfied
- Mixed
- Disappointed

**Were you able to relate to the topic presented?**

- Yes  No

**What did you do today while at the healthcare station?**

- Viewed the video on display (if applicable)
- Looked at or worked with the model (if applicable)
- Read materials at hand
- Checked out reading material on topic
- Asked questions to library staff about referral to public health nurse

**To what extent did this month's healthcare topic meet your needs?**

- Not at all Very Much
- 1            2            3            4            5

**To what extent did this month's healthcare topic help you feel more confident about your personal healthcare and that of your family?**

- Not at all Very Much
- 1            2            3            4            5

**How likely are you to come back to view other healthcare topics presented?**

- Not at all likely Highly likely
- 1            2            3            4            5

**Is this your first visit to the library?**

- Yes  No

**How many times do you visit us each year?**

- Less than once a year     2 or 3 times     4 or 5 times     More than 5 times

**Would you recommend this healthcare station to a friend or relative?**

- Yes  No

What would encourage you to come back to visit our healthcare station?

# AnatomyWarehouse.com

8120 Monticello Ave.  
Skokie IL 60076

## Quote

CUST. ID	QUOTE NO.	DATE	QUOTE ID
24870	1546	7/7/2009	

SOLD TO
<b>Beth Harper</b> <b>Spanish Peaks Library District</b> <b>415 Walsen Ave</b> <b>Walsenburg CO 81089</b> <b>United States</b>

SHIP TO
<b>Beth Harper</b> <b>Spanish Peaks Library District</b> <b>415 Walsen Ave</b> <b>Walsenburg CO 81089</b> <b>United States</b>

Ship via:	Ground
-----------	--------

SKU	Description	Ordered	Unit Price	Total
AW-110	4 Stage Osteoarthritis Knee Set	1	\$76.50	\$76.50
AW-L40	AIDS Virus Model	1	\$70.00	\$70.00
AW-345	Breast Cross Section Model	1	\$57.00	\$57.00
AW-CMT32	Budget Functional Francis Torso	1	\$320.00	\$320.00
AW-290	Diseased Brain in Skull	1	\$111.00	\$111.00
AW-E10	Giant Inner Middle and Outer Ear Part 3D Model	1	\$107.50	\$107.50
AW-400	Hypertension Model Set	1	\$101.50	\$101.50
AW-380	Skin Burn and Normal Skin Model	1	\$67.00	\$67.00
348	Uterus and Ovary Model with Pathologies	1	\$59.50	\$59.50
AW-265	4 Piece Artery Model	1	\$48.00	\$48.00
AW-312	4 Piece Bronchus Model	1	\$48.00	\$48.00
AW-DG140	Giant Heart of America Model	1	\$386.50	\$386.50
AW-286	Diseased Teeth and Gums Model	1	\$71.00	\$71.00
AW-DG950	Human Sinuses Model	1	\$278.50	\$278.50
AW-VR1283L	7 Piece Skin Laminated Poster	1	\$18.95	\$18.95
AW-VR1556L	The Female Breast - Anatomy Pathology and Self-Examination Laminated Poster	1	\$18.95	\$18.95
IACC-0781786304	Understanding the Common Cold Anatomical Chart	1	\$8.95	\$8.95
IACC-1587798859	Understanding Influenza Anatomical Chart	1	\$8.95	\$8.95
IACC-1587798522	Understanding HIV and AIDS Anatomical Chart	1	\$8.95	\$8.95
IACC-0781773334	Understanding Colorectal Cancer Anatomical Chart	1	\$8.95	\$8.95
IACC-1587793792	Risks of Obesity Anatomical Chart	1	\$8.95	\$8.95

**Thanks for the opportunity to serve you!**

# AnatomyWarehouse.com

8120 Monticello Ave.  
Skokie IL 60076

## Quote

CUST. ID	QUOTE NO.	DATE	QUOTE ID
24870	1546	7/7/2009	

SOLD TO
Beth Harper Spanish Peaks Library District 415 Walsen Ave Walsenburg CO 81089 United States

SHIP TO
Beth Harper Spanish Peaks Library District 415 Walsen Ave Walsenburg CO 81089 United States

IACC-0781773504	Common Gynecological Disorders Anatomical Chart	1	\$8.95	\$8.95
IACC-1587796155	Hypertension Anatomical Chart	1	\$8.95	\$8.95
ACC1-1587792583	Heart Disease Anatomical Chart	1	\$8.95	\$8.95
IACC-1587794810	Understanding Bacterial Infections Anatomical Chart	1	\$8.95	\$8.95
IACC-0781776546	Understanding Cervical Cancer Anatomical Chart	1	\$8.95	\$8.95
IACC-1587799871	Understanding Stroke Anatomical Chart	1	\$8.95	\$8.95
IACC-1587799103	High Cholesterol Anatomical Chart	1	\$8.95	\$8.95
IACC-1587799553	Understanding Type 2 Diabetes Anatomical Chart 2nd Edition	1	\$8.95	\$8.95
IACC-0781776619	Understanding Type 1 Diabetes	1	\$8.95	\$8.95
IACC-158779828X	Internal Organs of the Human Body Anatomical Chart	1	\$8.95	\$8.95
334	Colon Model with Pathologies	1	\$59.50	\$59.50
			<b>Subtotal</b>	<b>\$2,033.65</b>
			<b>Discount</b>	<b>\$0.00</b>
			<b>Shipping</b>	<b>\$61.03</b>
			<b>Sales Tax</b>	<b>\$0.00</b>
			<b>Total</b>	<b>\$2,094.68</b>

**Thanks for the opportunity to serve you!**

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100		FTC	579A	Basik Lasik: Tips on Lasik Eye Surgery	0.00	0.00	0.00
25		FTC	636A	Who Cares: Sources of Information About	0.00	0.00	0.00
100		FTC	644A	Sunscreens and Sun-Protective Clothing	0.00	0.00	0.00
100		FTC	659A	Sound Advice on Hearing Aids	0.00	0.00	0.00
100		FTC	755A	Cure-ious Bookmark	0.00	0.00	0.00
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					-----ORDER TOTAL-----		\$0.00
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Sept. 2009

**October (Breast Cancer Awareness Month)**

**Initial reproducibles**

Questions to Ask Your Doctor: If Someone You Love Has Breast Cancer – You Are a Co-Survivor

<http://www.shopkomen.com/PDF/KOMEED066000.pdf>

10 (double-sided, BW) \$1.50

Questions to Ask Your Doctor: Before Breast Surgery

<http://www.shopkomen.com/PDF/KOMEED052000.pdf>

10 (double-sided, BW) \$1.50

Questions to Ask Your Doctor: About Treatment Choices

<http://www.shopkomen.com/PDF/KOMEED050000.pdf>

10 (double-sided, BW) \$1.50

Breast Health Basics

<http://www.shopkomen.com/PDF/KOMEED070000.pdf>

10 (double-sided, color) \$15.00

Breast Self-Awareness card

<http://www.shopkomen.com/PDF/KOMEED000400.pdf>

10 (double-sided, color) \$15.00

Understanding Mammograms

[http://www.cdc.gov/cancer/breast/pdf/cdc\\_mammography\\_fact\\_sheet.pdf](http://www.cdc.gov/cancer/breast/pdf/cdc_mammography_fact_sheet.pdf)

10 (double-sided, bw) \$1.50

---

\$36.00

9

Amy Harper  
415 Walsen Ave.  
Walsenburg, CO 81089  
USA

Amy Harper  
415 Walsen Ave.  
Walsenburg, CO 81089  
USA



**National Institute of Neurological Disorders and Stroke**

**P.O. Box 5801**  
**Bethesda, MD 20824**  
www.ninds.nih.gov

**Telephone:**(800) 352-9424 **Fax:**(301) 402-2186 **Email:** braininfo@ninds.nih.gov

<b>Publication #</b>	<b>Publication Title</b>	<b>Quantity Ordered</b>
NDS-553	Stroke--Stroke bookmark 2008 (Warning Signs of a Stroke)	10
99-2222	Stroke--Stroke HTR 1999	10
NDS-519	Stroke--Stroke HTR insert (April 2007 NINDS-Sponsored Stroke Clinical Trials)	10
NDS-556	Stroke--Stroke HTR insert (August 2008 Information Resources)	10
09-6451	Stroke--Stroke: Challenges, Progress, and Promise	3
NDS-414	Stroke--Wallet card--Know the Sudden Signs of Stroke	10
04-5517	Stroke--What You Need to Know About Stroke	10

IS: 0

Amy Harper  
415 Walsen Ave.  
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**Order Date** 04/05/10

**Order #** 173664

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Publication #	Publication Title	Quantity Ordered
NDS-428	NINDS web site bookmark 2005	1
NDS-573	Publications list (May 2009)	1
08-4872	Stroke--Know Stroke . Know the Signs. Act in Time. 2008	10
09-4846	Stroke--Post-Stroke Rehabilitation (FS) (August 2009)	10
NDS-63	Stroke--Poster--Know Stroke poster 1 (plain)	1
04-3440b	Stroke--Preventing Stroke (Brain Basics) 2005	10

IS: 0

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**Attachment 10:  
Subcontractor Quarterly & Final Reports**

**University of Colorado - Denver Health Sciences Library  
Development and Marketing of an Online Community-  
Building Resource for Information Professionals  
Interested in Library-based CTSA Initiatives**

# Quarterly Report

**Name and address of reporting institution:**

UC Anschutz Medical Campus – Health Sciences Library  
12950 E. Montview Blvd.  
Aurora, CO 80045

**Project Title:**

Development and Marketing of an Online Community-Building Resource for Information Professionals Interested in Library-based CTSA Initiatives

**Name of person submitting report:** Adelaide Fletcher

**Email address:** Adelaide.Fletcher@ucdenver.edu

**Telephone number:** 307-710-8080

**Reporting Period start date:** November 15, 2010

**Reporting Period end date:** February 15, 2010

**Publicity:**

None during this quarter.

**Outreach:**

- Poster proposal to MLA 2011: “Bringing the Power to the People: An Online Community for Library Based Translational Science Initiatives” (Accepted December 15, 2010).

**Other accomplishments:**

- Received approval from COMIRB to complete the survey (February 9, 2011)

**Target audience:**

No changes in regards to the target audience.

**Goals, Outcomes, Objectives:**

According to the project logic model, Q3 should have been spent building on tasks that were not completed in Q2 which were: compiling a list of known platforms and their features, creating and conducting a web based survey to focus selection of an online platform; rating different platforms based on to be determined criteria; conducting an online web meeting with a handful of selected IP’s to discuss further goals. As the web based survey was designed in Q1 containing a list of known platforms, it was decided not to duplicate the list until the survey results were in. A web survey was already created in Q1. Only part of one of the goals of Q2 was completed in Q3: COMIRB approval of the survey was obtained, so now the survey can be sent (and actually was sent during the first part of Q4). The COMRIB approval process delayed our project significantly. I am not sure whether we will be able to complete the project on time. If so, Q4 will have to be spent completing the tasks that now remain from Q2-4 (see Planned Activities, below).

**Evaluation:**

A survey of CTSA librarians is complete, but it was not possible to send it during Q3. It will be sent during the first days of Q4.

**Impacts and Observations:**

None during this quarter.

**Planned Activities:**

- Evaluate and analyze responses from the web based survey
- Compile a list of known platforms and their features (based on the results of the survey)
- Rate different platforms based on criteria identified as important to potential users in the survey
- Conduct an online web meeting with a handful of selected IP's to discuss further goals
- Create platform and invite known participants to contribute
- Promote to others
- Continue to promote the platform
- Evaluate use and document project for presentation at various forums (ideally at MLA 2011)

# Quarterly Report

**Name and address of reporting institution:**

UC Anschutz Medical Campus – Health Sciences Library  
12950 E. Montview Blvd.  
Aurora, CO 80045

**Project Title:**

Development and Marketing of an Online Community-Building Resource for Information Professionals Interested in Library-based CTSA Initiatives

**Name of person submitting report:** Adelaide Fletcher

**Email address:** Adelaide.Fletcher@ucdenver.edu

**Telephone number:** 307-710-8080

**Reporting Period start date:** February 16, 2011

**Reporting Period end date:** March 30, 2011

**Publicity:**

- Email (see ListservInvitation.doc) to AAHSL-L, MOLBIO-L, and MEDLIB-L to promote the new list: [CTSA-LIB@lists.ucdenver.edu](mailto:CTSA-LIB@lists.ucdenver.edu).

**Outreach:**

- Poster to be presented at MLA 2011: “Bringing the Library to the CTSA: An Online Community for Library-based Translational Science Initiatives” (see BringingLibraryToCTSA.ppt).

**Other accomplishments:**

- Completed survey (see CTSA\_Librarian\_Survey\_Analysis.doc)
- Created a new listserv: [CTSA-LIB@lists.ucdenver.edu](mailto:CTSA-LIB@lists.ucdenver.edu)
  - 177 members as of May 2, 2011
  - 100 joined on the first day, 150 in the first week

**Target audience:**

No changes in regards to the target audience.

### **Goals, Outcomes, Objectives:**

According to the project logic model, Q4 should have been spent continuing to support the platform, evaluating its' use, and documenting the project for presentation. In reality, some of the Q2 and Q3 tasks and all of the Q4 tasks were completed:

- Creating and conducting a web based survey to focus selection of an online platform
- Evaluate and analyze responses from the web based survey
- Rating different platforms based on the criteria deemed most important to survey respondents
- Create platform (listserv) and invite known participants to contribute
- Promote to known outlets
- Evaluate use and document project for presentation at MLA 2011

### **Evaluation:**

When creating the logic model to guide this project, we decided the best indicator of success would be that information professionals from at least nine of the established CTSA's (38 institutions from 2006-2008), and one of the 2009 institutions will participate in the online community. By examining the email address domains of the member list and cross-referencing the member's institution (if apparent) with the list of institutions on [www.ctsaweb.org](http://www.ctsaweb.org), we discovered that membership represents at least:

44 CSAAs or CSAA Affiliates, including:

- 5 "2010" awardees (because a year has gone by, the website doesn't indicate who was awarded a grant in 2009, only those that are new in 2010).

46 Non-CSAA institutions, including:

- 34 Academic non-affiliates
- 6 Clinical non-affiliates
- 3 Corporate
- 2 Professional
- 1 Government

Some of those identified as "Non-CSAA" may be in some way affiliated with a nearby CSA. This listing was based simply on the institutions listed on [www.ctsaweb.org](http://www.ctsaweb.org). See the full list in the Final Report. Our project exceeded the success indicator almost by a factor of five. (44 versus 9 established CSAAs, and 5 versus 1 new).

**Impacts and Observations:**

Response to the survey and the listserv itself show overwhelming support among information professionals who are or want to be involved in CTSA work. As of May 5, there have been 18 posts on 8 different threads. Topics range from recommended reading on CTSA's to individual technologies used by CTSA's, to methods to track a CTSA's publications.

**Planned Activities:**

- Present project summary at MLA 2011 with a poster
- Continue to support list as listserv manager
- Explore possible collaborations with similar projects:
  - NIH plans a listserv for CTSA librarians that would also be open to anyone
  - MLA plans a SIG for Translational Sciences
- Consider creating a wiki or white paper that helps explain CTSA librarianship

Final Report:

Development and Marketing of an Online Community-Building Resource for Information Professionals Interested in Library-based CTSA Initiatives

This project has been funded in whole or in part with Federal funds from the Department of Health and Human Services, National Institutes of Health, National Library of Medicine, under Contract No NO1-LM-6-3504 with the University of Utah.

University of Colorado  
Health Sciences Library  
Anschutz Medical Campus  
Mail Stop A003  
12950 E. Montview Blvd.  
Aurora, CO 80045

Submitted May 6, 2011 by:

Adelaide Fletcher, Project Coordinator  
PO Box 1142  
Saratoga, WY 82331  
[Adelaide.Fletcher@ucdenver.edu](mailto:Adelaide.Fletcher@ucdenver.edu) | 307-710-8080

Project dates: May 1, 2010 - April 30, 2011

## **Executive Summary:**

“Development and Marketing of an Online Community-Building Resource for Information Professionals Interested in Library-based CTSA Initiatives” was a project intended to develop and market an online resource intended to foster collaboration, idea-sharing, role investigation and networking among information workers with an interest in Clinical and Translational Science Awards (CTSAs). The primary investigator was Jerry Perry and the coordinator was Adelaide Fletcher. Dana Abbey of the MCR-RML and Lisa Traditi both provided support for the project as well. Between May 1, 2010 and April 30, 2010, the coordinator performed an environmental scan of existing and potential online collaboration platforms for CTSA information professionals; conducted a survey of potential users on AAHSL-L, MOLBIO-L, and MEDLIB-L; spoke informally and sought advice from known CTSA librarians including Kristi Holmes at Washington University in St. Louis and Michelle Tennant at University of Florida in Gainesville; set up an email discussion list; and presented the project at the MCMLA 2010 Annual Meeting in Wichita and submitted a poster to MLA 2011 in Minneapolis. The listserv, CTSA-LIB is hosted by the University of Colorado Anschutz Medical Campus and is managed by Fletcher. There are currently 177 members who have posted a total of 18 messages on 8 threads in the first month. Members are from all over the United States and Canada, approximately half are at CTSA or CTSA affiliated institutions, and at least five are from institutions awarded a CTSA grant in 2010. The project ended April 30, 2011, but the listserv continues and Fletcher will continue to manage it until it ends or she no longer works for UC-AMC, whichever comes first. There are at least two similar efforts, one by the NIH to start a similar listserv, and one by MLA to start a Translational Sciences SIG. It may benefit the different entities to collaborate in the future, though the direction of that collaboration should be determined by its members.

### **1. Geographic region/number of counties:**

The project’s official home is in Aurora, CO (Adams County), but it was carried out there, in Carbon County, WY and in Salt Lake County, UT. Participants of the CTSA listserv represent 62 counties, 34 states, and four Canadian provinces, see Table 1 for a list of institutions represented on the CTSA-LIB list.

### **2. Collaborations/Partnerships:**

No official collaborations or partnerships were formed during the project other than the existing one between UC Health Sciences Library, and the NN/LM - MCRML. During the course of the project, the coordinator did form relationships with two people working on similar projects: Kristi Holmes of Washington University St. Louis, and Jonathan Eldridge of University of New Mexico. Holmes is working on a very similar project - an NIH sponsored listserv for librarians involved in CTSAs. That listserv was approved by the NIH the day before our listserv was formally announced. Eldridge is working to

establish a Special Interest Group within the Medical Library Association on Translational Sciences.

Both Holmes' listserv and the MLA SIG will be open to anyone, and will not require any kind of formal membership within a larger organization to join. Because of overlapping goals and structures, it is possible that we will form a more formal partnership with both efforts as we move forward.

### **3. Training:**

The project did not involve training.

### **4. Training sites:**

N/A

### **5. Exhibits:**

- a. Paper: "Bringing the Power of Information to the People: An Online Community for Translational Science Research Initiatives" Adelaide Fletcher and Dana Abbey. MCMLA Annual Meeting, Wichita, October 8, 2010. Estimated attendance: 15 (See MCMLA2010\_BringingThePower.pptx)
- b. Poster: "Bringing the Library to the CTSA: An Online Community for Library based Translational Science Initiatives" Adelaide Fletcher, Dana Abbey and Jerry Perry. MLA Annual Meeting, Minneapolis, May 15, 2010. Estimated attendance: TBD (See MLA2011\_BringingLibraryToCTSA.ppt)

### **6. Resource materials:**

- a. Promotion/Marketing:
  - i. Emailed survey announcement (See SurveyAdvertisement.doc)
  - ii. Emailed listserv announcement (See ListservInvitation.doc)

### **7. Web sites:**

CTSA-LIB signup and archives page: (See <https://lists.ucdenver.edu/cgi-bin/wa?A0=CTSA-LIB>)

### **8. Document delivery and reference services:**

N/A

## 9. Approaches and Interventions used:

- a. Discussed project, sought advice and ideas from two well known CTSA Librarians: Kristi Holmes, Bioinformatics Specialist, Washington University, St. Louis, Bernard Becker Memorial Library (June 3, 2010); and Michele Tennant, Bioinformatics Librarian, University of Florida Health Sciences Center Libraries (July 13, 2010).
- b. Completed an Environmental Scan (See EnviroScan.doc) of existing and potential communication methods and their functions for CTSA librarians
- c. Compiled a list of known CTSA librarians (from the list of CTSA awards at [www.ctsaweb.org](http://www.ctsaweb.org), the library websites of each institution were searched for liaison appointments) (See CTSA Librarians.xls). There are very few CTSA librarians explicitly identified as such, however the listserv shows there are many more than it would appear.
- d. Sought and obtained exemption from review from the Colorado Multiple Institutional Review Board to conduct a survey of potential CTSA information professionals. (Application submitted Oct. 26, 2010, Approval received Feb. 9, 2011)
- e. Issued a survey to determine the best platform for online communication for CTSA information professionals (Feb. 17-21, 68 responses, see CTSA\_Librarian\_Survey\_Analysis.doc)
- f. Created the listserv: [CTSA-LIB@lists.ucdenver.edu](mailto:CTSA-LIB@lists.ucdenver.edu) and invited participants (April 11, 2011, 100 members in the first 24 hours, 177 members as of May 5, 2011).

## 10. Evaluation:

When creating the logic model to guide this project, we decided the best indicator of success would be that information professionals from at least nine of the established CTSA's (38 institutions from 2006-2008), and one of the 2009 institutions participate in the online community. By the time the project was complete, ctsaweb.org no longer listed 2009 institutions, but lumped 46 2006-2009 institutions together with a separate list of 9 2010 institutions, so the evaluation criteria used instead is nine 2006-2009 institutions and one 2010 institution. By examining the email address domains of the member list and cross-referencing the member's institution (if apparent) with the list of institutions on [www.ctsaweb.org](http://www.ctsaweb.org), we discovered that membership represents at least:

- 44 CTSA's or CTSA Affiliates, including:
  - 5 "2010" awardees
- 46 Non-CTSA institutions, including:
  - 34 Academic
  - 6 Clinical
  - 3 Corporate
  - 2 Professional
  - 1 Government

Some of those identified as “Non-CTSA” may be in some way affiliated with a nearby CTSA. This listing was based simply on the institutions listed on [www.ctsaweb.org](http://www.ctsaweb.org). See the full list in Table 1. Our project exceeded the success indicator almost by a factor of five. (44 versus 9 established CTSA’s, and 5 versus 1 new).

**11. Problems or barriers encountered:**

The one major barrier to this project was obtaining IRB approval of the survey. The IRB application for exempted review requires grant funded projects provide a contract number from the funding agency. That contract number was not received until October 21, 2011, nearly six months into a 12 month project. The IRB application was submitted on October 26, but was returned with a request for minor modifications Dec. 3. The application was resubmitted with the requested modifications Jan 7, 2011, and final approval was given Feb. 9, 2011.

**12. Continuation plans:**

Adelaide Fletcher has volunteered to continue the project as list administrator for CTSA-LIB until the list either is closed or Fletcher no longer works for UC-AMC, whichever comes first. Fletcher will also present the poster listed in section 6 on May 15th, 2011.

As for the project itself, Jerry Perry, Adelaide Fletcher and Kristi Holmes met by phone May 4 and discussed the possibility of joining CTSA-LIB with the NIH sponsored listserv for CTSA librarians. Also discussed were aligning efforts with Jon Eldredge and the MLA Translational Sciences SIG, to be formed May 15 at the 2011 MLA annual meeting. It was agreed it would be best to let the future direction of any collaborations be at the discretion of its members as a group.

**13. Impact:**

The perceived impact is that the NN/LM MCR and the UC-AMC Health Sciences Library have a higher profile in the CTSA information professional community, and the CTSA community at large. That perception is supported by the number of list members and the fact that both institutions were named in materials promoting it. All comments received by Fletcher have been generally positive and supportive of the project.

**14. Recommendations for improvement:**

Continue to communicate with Holmes and Eldridge and others at MLA Annual; seek collaboration with them so that the different efforts do not duplicate one another unnecessarily.

## **FOLLOW-UP Questions**

### **1. Were the original project goals and objectives met? If not, why not?**

The goal of the project was to develop and market an online resource intended to foster collaboration, idea-sharing, role investigation and networking among information workers with an interest in Clinical and Translational Science Awards (CTSAs). The project was linked to the CTSA goals of: improving the conduct of biomedical research; engaging communities in clinical research; and training the next generation of clinical and translational investigators. It is believed that the project goals were met and that the CTSA goals will be aided by the project in the future.

### **2. What significant lessons were learned which would be of interest or use to others conducting outreach projects? Which strategies were the most effective in implementing the project?**

Learn the IRB process before applying and have all the needed documentation and training completed as early as possible.

This project used a coordinator that telecommutes to the Health Sciences Library from over 200 miles away. This was a successful strategy in that the project was a virtual one anyway and the coordinator was well supported by colleagues at the Health Sciences Library and the RML.

### **3. If you were to start all over again, what, if anything, would you change about your goals, project plans, etc.?**

Reconsider applying for IRB exemption from review for a web based survey. It certainly was not necessary, but it was helpful for the library to learn about that aspect of research and gain insight into the lives of the researchers it supports. If the IRB approval is deemed necessary, have all documentation and training completed sooner.

### **4. What advice or recommendations would you give to anyone considering a similar outreach effort?**

See #3, above.

### **5. Please describe plans for disseminating lessons learned and other information about the project, such as through a conference presentation or publication. In accordance with the NIH Public Access Policy (<http://publicaccess.nih.gov>), project directors are asked to submit voluntarily to the NIH manuscript submission (NIHMS) system (<http://www.nihms.nih.gov>) at PubMed Central (PMC) final manuscripts upon acceptance for publication.**

- a. Poster presentation at MLA 2011, May 15, Minneapolis, MN (See [BringingLibraryToCTSA.ppt](#))
- b. A paper has not been planned, but is possible.

**Table 1: Some of the institutions known to be represented on CTSA-LIB**

<b>Institution</b>	<b>TYPE</b>	<b>State/Province</b>	<b>County</b>
University of Colorado - Denver	CTSA	CO	Adams
University of Rochester Medical Center	CTSA	NY	Monroe
University of New Mexico	CTSA	NM	Bernalillo
Arizona Health Sciences Center - Health Sciences Library	Academic	AZ	Maricopa
University of Kentucky	Academic	KY	Fayette
University of Washington	CTSA	WA	King
Virginia Commonwealth University	CTSA - 2010	VA	N/A
University of Southern California	CTSA - 2010	CA	Los Angeles
Medical Library Association	Professional Organization	IL	Cook
McGill University	Academic	Quebec	N/A
University of Missouri	Academic	MO	Boone
Northwestern University	CTSA	IL	Cook
UCLA	Academic	CA	Los Angeles
Medical College of Wisconsin	CTSA-2010	WI	Milwaukee
University of Utah	CTSA	UT	Salt Lake

<b>Institution</b>	<b>TYPE</b>	<b>State/Province</b>	<b>County</b>
UCSD	CTSA-2010	CA	San Diego
Oregon Health Sciences University	CTSA	OR	Multnomah
University of Chicago	CTSA	IL	Cook
Emory University	CTSA	GA	Fulton
University of Alabama - Birmingham	CTSA	AL	Jefferson
University of Wisconsin - Madison	CTSA	WI	Dane
Medical University of South Carolina	CTSA	SC	Charleston
Memorial University	Academic	Newfoundland	N/A
Wayne State University	Academic	MI	Wayne
The Commonwealth Medical College	Academic	VA	N/A
University of Maryland	Academic	MD	Anne Arundel
Drexel University	Academic	PA	Philadelphia
New York University School of Medicine	CTSA	NY	New York
University of Michigan - Ann Arbor	CTSA	MI	Washtenaw
Northeastern Ohio Universities Colleges of Medicine and Pharmacy	Academic	OH	Portage
Meharry Medical College	CTSA Affiliate	TN	Davidson

<b>Institution</b>	<b>TYPE</b>	<b>State/Province</b>	<b>County</b>
University of Illinois at Chicago	CTSA	IL	Cook
Duke University	CTSA	NC	Durham
University of Florida	CTSA	FL	Alachua
Yale University	CTSA	CT	New Haven
Albert Einstein College of Medicine of Yeshiva University	CTSA	NY	New York
University of Iowa	CTSA	IA	Johnson
New England College of Optometry	Academic	MA	Middlesex
University of Virginia	Academic	VA	Albemarle
Nathan S. Kline Institute	Academic	NY	Rockland
Stanford University	CTSA	CA	Santa Clara
National Library of Medicine	Academic	MD	Montgomery
Elsevier	Corporate	NY	New York
Navy Medicine	Academic	N/A	District of Columbia
Quebec Government	Government	Quebec	N/A
Texas Tech University Health Sciences Center	Academic	TX	Lubbock
American College of Physicians	Professional Organization	N/A	District of Columbia
Cook Children's Healthcare System	Clinical	TX	Tarrant
Lehigh Valley Health Network	Clinical	PA	Lehigh

<b>Institution</b>	<b>TYPE</b>	<b>State/Province</b>	<b>County</b>
University of Texas Medical Branch	CTSA	TX	Galveston
Informa USA	Corporate	FL	Sarasota
Texas Biomedical Research Institute	Academic	TX	Bexar
Roger Williams Medical Center	Clinical	RI	Providence
Vanderbilt University	CTSA	TN	Davidson
University Health Network - Toronto	Clinical	Ontario	N/A
Washington University - St. Louis	CTSA	MO	St. Louis
New York State Department of Health	Government	NY	New York
Oregon State University	Academic	OR	Benton
Weill Cornell Medical College	CTSA	NY	New York
University of North Dakota School of Medicine	Academic	ND	Grand Forks
George Washington University	CTSA Affiliate	N/A	District of Columbia
Western University	Academic	CA	Los Angeles
UC Berkeley	Academic	CA	Alameda
UC Davis	CTSA	CA	Yolo
Fletcher Technical Community College	Academic	LA	Terrebonne
University of Massachusetts Medical School	CTSA-2010	MA	Worcester

<b>Institution</b>	<b>TYPE</b>	<b>State/Province</b>	<b>County</b>
Anna Jacques Hospital	Clinical	MA	Essex
Dalhousie University	Academic	Nova Scotia	N/A
Universite De Montreal	Academic	Quebec	N/A
University of Pennsylvania	CTSA	PA	Philadelphia
Texas A&M University School of Pharmacy	Academic	TX	Brazos
Howard University	CTSA	N/A	District of Columbia
Iowa State University	Academic	IA	Story
Alcon Laboratories	Corporate	TX	Tarrant
Kaiser Permanente Center for Health Research	CTSA Affiliate	OR	Multnomah
Saint Louis University	CTSA Affiliate	CA	San Diego
University of Illinois at Urbana-Champaign	CTSA Affiliate	IL	Champaign
University of Medicine and Dentistry of New Jersey	Academic	NJ	Essex
University of Pittsburgh	CTSA	PA	Allegheny
Berkeley Electronic Press	Corporate	CA	Alameda
University of Texas - Austin	Academic	TX	Travis

<b>Institution</b>	<b>TYPE</b>	<b>State/Province</b>	<b>County</b>
Tufts University	CTSA	MA	Middlesex
University of Texas Southwestern	CTSA	TX	Dallas
University of Vermont	Academic	VT	Chittenden
Texas Medical Center	CTSA Affiliate	TX	Harris
University of Minnesota	Academic	MN	Ramsey
Creighton University	Academic	NE	Douglas
New York Academy of Medicine	Academic	NY	New York
ECRI Institute	Corporate	PA	Montgomery
Cedars-Sinai	Clinical	CA	Los Angeles
University of Wisconsin - Milwaukee	CTSA	WI	Milwaukee

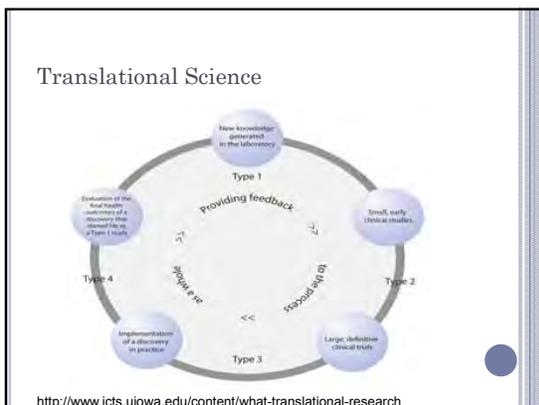
**MCMLA 2010 - BRINGING THE POWER OF INFORMATION TO THE PEOPLE**

*AN ONLINE COMMUNITY FOR LIBRARY BASED TRANSLATIONAL SCIENCE INITIATIVES*

Addie Fletcher, MLIS  
Dana Abbey, MLS

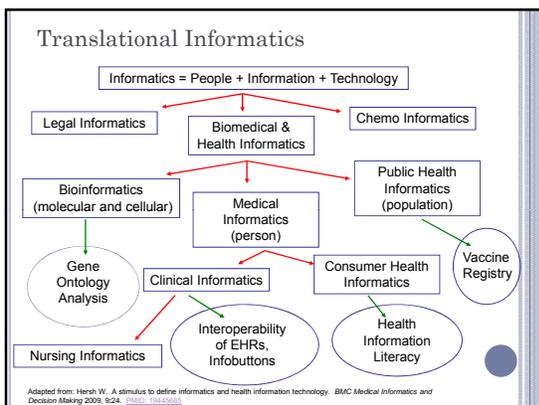
**THINK GLOBALLY**

- o Clinical and Translational Science Awards (CTSA)
- o Translational Science and Translational Informatics
- o T1 and T2 levels of CTSA



**Informatics**

Friedman CP. A "fundamental theorem" of biomedical informatics. *J Am Med Inform Assoc* 2009; 16:169-70. PMID: 19074294

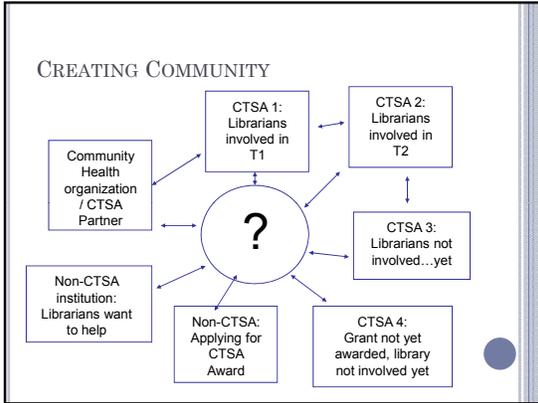


**SO WHAT?**

- o Why should libraries care?
- o What is the librarian's role in all this?
  - Regulatory compliance
  - Scholarly publishing
  - Database design and searching
  - Health Information Literacy
  - Structured vocabulary/terminology/ontologies
  - Social Networking (Reference)
  - Infobuttons / EHR support
  - Literature searching
  - More?

### ACT LOCALLY

- Colorado Clinical and Translational Sciences Institute (CCTSI)
  - Bioinformatics in the cycle of research
  - [CCTSI Informatics Education Resources](#)
  - [Colorado Translational Informatics Community on Facebook](#)
- Regional medical library support



### DESIDERATA of a CTSA Librarian Community

- What does it look like?
- Who should use it? Who should be invited? Allowed?
- What are the functional requirements?
- What platform?

### WHEN YOU'RE READY FOR MORE

<b>Addie Fletcher</b> Online Education Services Librarian University of Colorado - Anschutz Medical Campus, Health Sciences Library 12950 E. Montview Blvd., A003 Aurora, CO 80045 <a href="mailto:Adelaide.Fletcher@ucdenver.edu">Adelaide.Fletcher@ucdenver.edu</a> 307-710-8080	<b>Dana Abbey</b> Consumer Health Coordinator National Network of Libraries of Medicine, MidContinental Region University of Colorado - Anschutz Medical Campus, Health Sciences Library 12950 E. Montview Blvd., A003 Aurora, CO 80045 <a href="mailto:dana.abbey@ucdenver.edu">dana.abbey@ucdenver.edu</a> 303-724-2110
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**We want your ideas!**



# Bringing the Library to the CTSA:

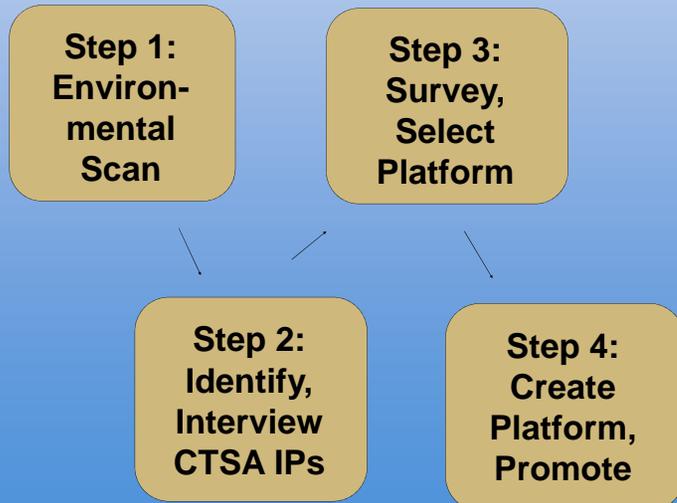
## An Online Community for Library-based Translational Science Initiatives

**Adelaide M. Fletcher, Dana Abbey, and Jerry Perry**, (Primary Investigator)

This project has been funded in whole or in part with Federal funds from the Department of Health and Human Services, National Institutes of Health, National Library of Medicine, under Contract No. NO1-LM-6-3504 with the University of Utah. Contact: [Adelaide.Fletcher@ucdenver.edu](mailto:Adelaide.Fletcher@ucdenver.edu)

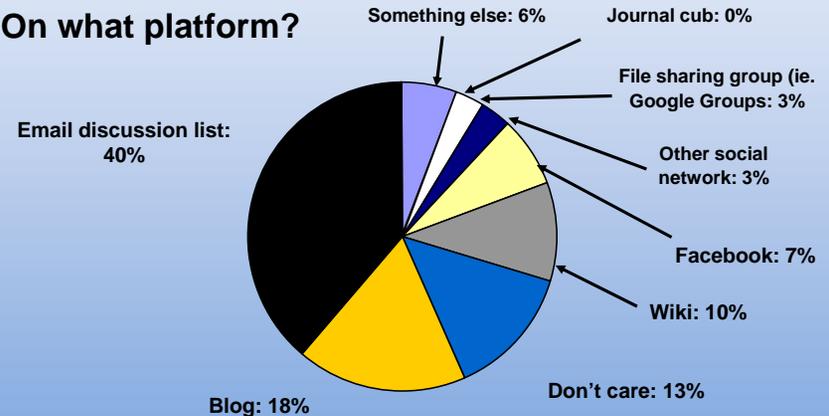
**Goal:** Advance the role of library and information science professionals in Clinical and Translational Science Award (CTSA) - related initiatives through the creation of a robust, freely available online community for interaction.

**Methods:** Research and develop an online community:



**Results:** Do Information Professionals want to network with each other about CTSA related efforts?  
**80% said Yes** in our survey (67 responses).

**On what platform?**



**Conclusions:** An email listserv was opened April 11, 2011. There were 102 members as of April 12. To join CTSA-LIB, go to <https://lists.ucdenver.edu>.

**Possible future goals:** Create a companion wiki or blog to collect and organize CTSA-Library related information, knowledge, and best practices; work with MLA Translational Sciences SIG and/or other groups in other organizations.

## Survey Advertisement to be sent via Email

Dear Colleagues,

If you have an interest in Clinical and Translational Science Awards (CTSAs) and how they are involved with libraries, please fill out this seven question survey. The University of Colorado Health Sciences Library **is conducting a research project to explore setting up a community for librarians and information professionals interested in or involved with CTSAs, and your opinion is needed.** Please forward the survey link to colleagues you think appropriate. We apologize if you have already received it. Your response is critical to the success of this project. No personal information will be collected in this survey. **This survey is voluntary and will take approximately five minutes to complete.**

<Link>

Thank you for your input!

Adelaide Fletcher, Primary Contact and Jerry Perry, Principal Investigator:

“Development and Marketing of an Online Community-Building Resource for Information Professionals Interested in Library-based CTSA Initiatives”

– A project of the University of Colorado Health Sciences Library, with funding from the National Network of Libraries of Medicine, MidContinental Region under Contract No. 2567710.

Jerry Perry, Principal Investigator

Dana Abbey, Supporting Investigator

Adelaide Fletcher, Project Coordinator

Health Sciences Library at the University of Colorado - Anschutz Medical Campus

12950 E. Montview Blvd. / Aurora, CO 80045 / 307-710-8080 / [Adelaide.Fletcher@ucdenver.edu](mailto:Adelaide.Fletcher@ucdenver.edu)

**This instrument has been approved by the Colorado Multiple Institutional Review Board (COMIRB): Phone: 303-72401055.**

## ListServ Invitation

Dear Colleagues,

Join the discussion on Clinical and Translational Science and Libraries! A new listserv (CTSA-LIB@lists.ucdenver) has been created for librarians, information professionals, and anyone interested in how libraries support Clinical and Translational Science, specifically Clinical and Translational Science Awards (CTSAs).

One need not be a member of a CTSA funded institution or any professional organization to join. This is completely independent of institutional bounds because: (1) Those whose institutions are applying for CTSA funding need to know how to get their library involved, and (2) Those who support translational science come from a variety of professional organizations, such as MLA, AMIA, and SLA to name a few.

Why should you join this list?

- It is free and easy!
- It is a place to ask and answer questions about Clinical and Translational Science Awards, how they work, how libraries can get involved, and get funding!
- It is an easy way to find out who's who at a specific institution, and who has expertise in a particular area of Translational Science.
- It is an informal place to share information, articles, and news about Clinical and Translational Science.
- It is a way to find out about other groups e.g., MLA's emerging Translational Sciences SIG.
- It is a way to show stakeholders at your institution what kinds of value your library can add to the CTSA process.

This listserv was created as part of the NN/LM – MCR Project “Development and Marketing of an Online Community-Building Resource for Information Professionals Interested in Library-based CTSA Initiatives”, Primary Investigator, Jerry Perry, and Project Coordinator, Adelaide Fletcher, Health Sciences Library / Colorado Clinical and Translational Sciences Institute, University of Colorado – AMC

The listserv is hosted by the University of Colorado Anschutz Medical Campus, and is moderated by Adelaide Fletcher

To subscribe go to: <https://lists.ucdenver.edu/cgi-bin/wa?A0=CTSA-LIB>

Or send a request to Adelaide.Fletcher@ucdenver and she will add you.

Thanks!

Adelaide Fletcher & Jerry Perry

This project has been funded in whole or in part with Federal funds from the Department of Health and Human Services, National Institutes of Health, National Library of Medicine, under Contract No. NO1-LM-6-3504 with the University of Utah.

PS. If you would like to know more about why a listserv was chosen instead of another platform, please email Adelaide and she will send you an analysis of the “CTSAs and Libraries Survey”, issued in February via AAHSL-L, molbio-L, and MEDLIB-L.

# Results and Analysis of the CTSA Librarian Survey

Issued as part of the MCR-RML project: “Development and Marketing of an Online Community-Building Resource for Information Professionals Interested in Library-based CTSA Initiatives”. This project has been funded in whole or in part with Federal funds from the Department of Health and Human Services, National Institutes of Health, National Library of Medicine, under Contract No. NO1-LM-6-3504 with the University of Utah.

Adelaide Fletcher, Project Coordinator, March 10, 2011

## Executive Summary:

The CTSA Librarian/Information Professional (henceforth “IP”) survey was very successful, gathering input from 68 people – far more than were expected. Results show an overwhelming desire among CTSA IPs and potential CTSA IPs to network with one another. The survey indicates users prefer to network via an email listserv, although there are several networking demands (such as a structured, collaborative body of information) that a listserv won’t answer. A listserv would, however, be the perfect place to discuss developing static but editable platform, such as a wiki or a blog, which users can consult for factual information.

Slightly more users indicated they prefer a network to be independent of professional organizations. Those who did feel an organization should “own” the group didn’t agree on which one. It is probably best to start off with an independent platform that could, eventually, be adopted by MLA, AMIA, or SLA, if users feel it necessary to do so. Responders felt that the platform should be open to anyone to join and generally open to the public to view, but some content should be reserved for members only.

## Results:

### *Who took the survey:*

The survey was distributed via the AAHSL Director’s list, MLA’s Molecular Biology SIG list, and MEDLIB-L, in that order. 67 people took the survey, mostly from the AAHSL dissemination. 95% (64) completed it. Not all questions were required and the survey could have been answered by more than one person at a given institution, so answers cannot be construed to mean anything about the institutions themselves, just the IPs who answered the questions.

A simple majority (44.8%, n30) are *unofficially* affiliated with their institution’s CTSA. The second largest group (31.3%, n21) is affiliated *officially*, meaning they were named in the grant. We did not ask whether that means they get funding from a CTSA grant, or just that they are an officially recognized part of the institution. Nine responded that they are not involved at all. To better understand this group, we asked if they are working independently, outside of a library, and none are, but there may be individuals who fit this category but did not receive the survey because of the way it was distributed. Those who are not involved with a CTSA in any way could either be in an institution that doesn’t have or isn’t applying for a CTSA, or they may be left out of the process entirely. Seven responded that they fit into an “other” category. After

examining the comments, six of them *are* affiliated (with an existing CTSA or with an institution that is applying for a grant). In some of those cases, respondents may have answered “other” because their library does not or will not receive funds from the CTSA. The one “other” who was not affiliated with the CTSA application did try to keep current with his or her institution’s application process.

If re-code the “other” answers, one would go into the “unaffiliated” category and six would go into the “affiliated” category, bringing those totals from 30 and 21 to 31 and 27, respectively, or 46% unaffiliated and 40% affiliated. Either way, 57 of 67 respondents are in some way affiliated with their institution’s CTSA, before, during, or after the funding process.

#### *Desire to network:*

Participants of the survey overwhelmingly desire to network with other IPs who are concerned with CTSA. 80.3% or 53 respondents said they do want to network with other CTSA IPs, but that doesn’t mean they aren’t already doing so. Twelve of those who want to network already are, formally (3), or informally (8), and 12 said they know someone else who might be interested. Curiously, nobody answered that they *don’t* want to network, but of the 14 who didn’t answer “yes”, six said they “don’t know right now”, and four said that someone else they know might want to. Of those who did not say “yes”, three are already networking informally, and one said he/she is already networking formally, but commented “My personal involvement is oversight rather than hands-on; I can gather most of the info and networking I need from the AAHSL listserv.”

Assuming no overlap, if we add those who are interested in networking to the total who said they knew someone else who might, we have as many as 69 potential participants in a CTSA librarian/IP network.

#### *Platform preference:*

Respondents were given a list of possible platforms to choose from and were instructed to check boxes for the ones they would want to use. There is considerable overlap since participants were allowed to check as many as they wanted. 58.5% (n39) indicated they would use an email listserv, but 38.8% (n26) said it doesn’t matter. A close third was a blog (34.3%, n23), followed by a wiki (19.4%, n13). Less popular are a file sharing group such as Google Groups (17.9%, n12), a Facebook page or group (13.4%, n9), an online journal club (11.9%, n8), another social network (4.5%, n3), or “something else” (6%, n4). We asked that those who chose another social network (besides Facebook), an online journal club, a file sharing group, or “something else” to elaborate in comments. Eleven comments emphasized the importance of file sharing (3), the need for an in-person component (3), and the incompatibility with social networks at one person’s institution. Two specific suggestions were a *Diigo* group for sharing discoveries, and a collaborative suite of tools, such as *Confluence*.

Simply looking at the answers to this question, one could conclude that 98% (the email listserv plus those who don’t care), would be satisfied with an email listserv, but the next question forced the respondents to select their favorite of all the choices. An email discussion list was still the favorite, with 42.6% (n23). The second choice was a blog (22.2%), followed by a wiki (13%). Next we asked respondents to list what they would do on such a network, which may better determine what platform is most suitable.

### *Functional preferences:*

While no majority was “very likely” to do anything, if we add the “likely” and “very likely” numbers together, a list of criteria begins to form:

Users would:

- Discuss CTSA issues with and post questions for other Info Pros (asynchronously): 92.3%
- Post information about what their CTSA is doing (with or without them): 63.1%
- Post information about what they are doing with their CTSA: 78.5%
- Post links to articles they think others would like: 75.4%
- Post articles or other documents they and their colleagues have created: 64.6%
- Show stakeholders at their institution how other libraries are collaborating with their CTSA's: 83.3%
- Find out who's who at a particular CTSA or library: 81.8%
- Just lurk and learn about CTSA's and libraries: 66.6%
- Look for learning tools they can share with scientists at their institution: 92.2%

Users would be less likely to:

- Help maintain an encyclopedia-type page about CTSA's for newbies: only 33.3% were likely or very likely to do so.
- Chat informally online (synchronously) with other CTSA Info Pros: only 42.9% are likely or very likely to do so.

### *Openness:*

In terms of openness, respondents felt a platform should be:

- Semi-private: 53.1% (n34) (allowing non-members to view most content, but only members to access certain content, like discussions and files).
- Completely open to all: 32.8% (n21)
- Closed to anyone except members: 10.9% (n7)

### *Organizational alignment:*

Respondents have mixed feelings about whether or not the platform should be aligned with any particular organization:

- 15.6% (n10) feel it should be freestanding, or “Affiliated with relevant organizations as members see fit, but controlled only by members of the group”.
- 10.9% (n7) feel it should be officially aligned and/or controlled by an organization such as MLA, SLA, or AMIA, but the comments show little agreement on which:
  - o AAHSL (1)

- o AMIA (2)
- o MLA (2)

Relevant comments:

- o “No do not align PLEASE! We will get nothing done”
- o “I would love to see a librarian section of AMIA I would definitely join AMIA and that section if it existed.”
- o “I would like to here what colleagues see as advantages and disadvantages with the community ideas in question 6.”
- o “I wouldn't align this to an organization.”
- o “can often serve as conduit into other relevant groups”
- o “This would be ideal since it would give more credibility - AMIA might be best in that respect.”
- o “Establish a MLA section or SIG or join CTSA’s”

### Summary:

In sum, three quarters or more users agree, it is important that this platform:

- Allow asynchronous discussion.
- Help users find learning tools to share with scientists at their institution.
- Give users information about how other libraries are collaborating with their CTSA’s so they can show that information to stakeholders.
- Contain some sort of directory of who’s who at a particular institution.
- Allow users to post information about what they are doing with their CTSA.
- Allow users to post links to articles they think others might like.
- 

It is desirable, but not critical that this platform:

- Allow users to share information about what their CTSA is doing (with or without them)
- Allow users to share articles and other documents they have created
- Allow users to lurk and learn about CTSA’s and libraries

It is not necessary that a platform:

- Contain an encyclopedia-like article on CTSA’s
- Allow chat

Some comments worth noting:

- “Our institution has not been awarded a CTSA grant, but I would like to keep current with library involvement with their CTSA’s to help with future grant applications.”
- “extremely interested”
- “We are just getting started with our CTSA grant and would value collaboration with other institutions. We are collaborating locally with our local partner institutions.”

- “One concern I have here is the possible overlap with early efforts started at U XXXXXXX. I advise contacting XXXXXXX to see where his efforts are going re: CTSA librarians.”
- “I'd love to learn more about how librarians can support translational research, whether as part of a CTSA or not.”
- “My institution hasn't gotten the grant yet. 5th time the charm? We have a very active CTS education program PHD and MA empahsizing reserach methods and informatics. I am involved in the program and Librarians are written into the grant proposal. I think this would be a useful group.”
- “I would like to be more actively involved w/my institution's CTSA, but it's not really working out. They are aware of our services and contact us when needed, have meetings, but I think there's SO much more the library could do for them and I don't know how to make that clear.”
- “I'm not quite sure how open or closed I would want this to be. Part of me is thinking about a twitter group, but that may also be more public than people would like. So mostly I don't know what I want :)--but something more coherent than what currently exists would be great.”
- “I and my institution will not participate in this if this is a facebook, goggle entity or similar. They are not private and this must be a private, secure, independent environment where content is not captured.”
- “I think CTSA is TOO narrow and is just the most recent hot craze to be replaced in the future by something equally hot. I would rather have a group that focuses on research support in a broad sense -- CTSA is too limiting -- I am from a CTSA institution and there is far more than just CTSA that concerns our library in the research world”
- “My institution has not achieved CTSA but is working toward it. I am especially interested in the Community Engagement Research Resources.”
- “Some documents might not have permission from their institutional CTSA reps to share openly.”
- “Please share thoughts or comments with us: - Open-Ended Response

### Discussion:

#### *Listservs:*

There are hundreds of free collaboration [tools available](#) on the web. New ones appear and disappear each day. Some try to include as many functions as possible, while others focus on one aspect of collaboration, such as social bookmarking. Nonetheless, it appears an email listserv is most preferable to this group, though the reasons are not clear. It could be that librarians are simply used to communicating via a time tested technology and are not eager to go to another new venue, especially if it has a learning curve and a possibility of going under. Listservs require very little effort, but they have many limitations. It is not an ideal place for a body of knowledge to be collected for users to consult when in need of a certain piece of information. One can certainly query the list for an answer to a specific question, but it is also easy to see the need for a place to “read up” before asking colleagues for help. As regards sharing documents, tools, tips, etc., a listserv makes a poor house for a collection. Organization and browsing are nearly impossible because one is required to search the list archives – if that is even possible.

Furthermore, non-members of the list are unlikely to have access to such an archive, or find it easy to navigate if they do have access. That being said, a listserv has a low barrier of entry. Another benefit is that a listserv eliminates the need for the user to visit a certain page periodically to check for updates. All new posts come to them. It should be noted blogs and wikis have ways around this too, either through RSS feeds, or automatic email alerts.

#### *Face to Face component:*

Responses indicated a desire for an in-person component; the kind that is typically served by professional organization meetings. It doesn't seem likely that this platform will evolve into its own organization with face to face meetings, but members who share an affiliation could at least use the platform to set up a rendezvous at an annual meeting of a professional organization. One possible way for users to feel more connected to each other is to set up an occasional web meeting that anyone with a phone and/or video connection can join.

#### *Social networks:*

Although social networking among colleagues is a tacit goal of this community, it will not be served well by an existing social networking site, such as Facebook. The primary reason is that such sites are blocked by many hospitals and some academic institutions.

#### *Blogs and wikis:*

A blog is preferred over a wiki page, which is surprising, since a CTSA Librarian blog was started in 2008 and appears to have been abandoned after a few months < <http://ctsa-lib.blogspot.com/> >. One can only speculate why it fizzled. A blog, like a listserv, is organized chronologically, though tagging facilitates searching and browsing. Much of the information desired by respondents is going to be arduous to find and assemble from a listserv. It may be better to consider a hybrid listserv/wiki or listserv/blog model. This method will allow users to communicate however casually they wish on the list, but when something is worth noting for posterity, it can find a logical home on a blog or wiki.

#### *Diigo, Confluence:*

Two platforms mentioned in comments are Diigo and Confluence. We were unable to identify Confluence through a web search, possibly because the word is so common in so many contexts. Diigo is a neat, all-in-one social bookmarking platform that has many exciting features, such as highlights, sticky notes, and document storage. It just doesn't facilitate the day-to-day communication that will make this community stick.

#### *Other CTSA networking efforts:*

As this project has evolved, so have other networks that are officially recognized by the CTSA consortium. One is VIVO, an open source ontology framework that organizes data about scientists and helps them identify one another using a front end such as Harvard Profiles. Unfortunately, these networks don't appear to be open to non-CTSA affiliates at this time, but

may be later. Another network appeared at the time of writing which seems to be sort of a meta-network for discovering research partners. It is currently called [DIRECT](#), but that may change as there is some confusion with another project by the same name. It is open to all, including institutions that do not have a CTSA. It does not require individuals to sign up as it searches information that is already there, but participation is likely initiated at the institutional level. A search for “librarian” finds dozens of hits, sometimes from one institution – indicating the platform crawls institutional websites for information about people, in this case picking up all librarians at a given institution.

#### *Credibility:*

One respondent noted that organizational alignment would lend credibility to this community. It will help this project’s credibility to note whenever possible that it is supported both by the MCR-RML and the UC-AMC Health Sciences Library, which is affiliated with the CCTSI. An MLA Translational Sciences SIG is in the early stages of formation at the time of writing. There is potential for that SIG to adopt and/or be facilitated by this listserv. The purposes of both projects are very similar and one can benefit greatly from the other. Similar efforts at AMIA, SLA could be afoot. An independent listserv can serve as a conduit between like minded individuals from all three organizations.

#### Conclusions:

It’s clear that there is a desire, if not need, for cohesion between a currently amorphous class of librarians and information professionals who serve, or want to serve Clinical and Translational Science Award institutions. A listserv seems to be the place to start. It could either be owned by the UC-AMC Health Sciences Library or the RML. Because the Health Sciences Library is already connected with a CTSA institution, the Colorado Clinical and Translational Sciences Institute, it would be better recognized by other CTSA librarians. Jeff Kuntzman and Steve Weaver at UC-AMC have indicated it will be easy to set up a listserv that Adelaide Fletcher could manage. After starting such a listserv and collecting members, the members themselves can discuss forming a wiki or blog if they feel it is merited. The basic need to communicate will be served by a listserv and future needs such as an organized collection of relevant knowledge and best practices can be addressed with additional tools as the fledgling community sees fit. If and when the listserv ceases to be useful to its members, it can be decommissioned or adopted by an organization.

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**Attachment 11:  
Subcontractor Final Report**

**University of Kansas Medical Center  
Información de Salud para Promotoras**

# Información de Salud para Promotoras

February 15, 2010 — February 28, 2011

Dykes Library at the University of Kansas Medical Center

2100 W 39<sup>th</sup> Ave

Kansas City, KS 66160

Amy Ritterskamp, Community Health Librarian

Phone: (913) 588-7168; Fax: (913) 588-8675

[aritterskamp@kumc.edu](mailto:aritterskamp@kumc.edu)

Submitted: June 3, 2011



## **Executive Summary**

Through a series of five training sessions created and taught by librarians from Kansas City, Kansas Public Library and Dykes Library at The University of Kansas Medical Center, the lay-health advisors in the Promotoras program at El Centro, Inc. were taught basic computer skills followed by instruction on finding reliable health information online in Spanish. The Promotoras were then supplied laptops to use when doing health promotion in their community. Through ongoing training sessions, the Promotoras continue to gain confidence in their technology skills and will use the laptops in future projects, such as facilitating a weight loss group or providing point-of-need information at health fairs.

## **Geographic region**

The program impacted Wyandotte County, Kansas, with most participants living in the urban core of Kansas City, KS.

## **Collaborations/Partnerships**

El Centro, Inc. is a community-based organization in Kansas City, KS with a mission to create and sustain opportunities that empower families. They have recently begun a Promotoras program where approximately 30 lay-health advisors attend regular training sessions about health-related topics then take what they've learned out to their communities; they act as a point of contact in the community for health information and resources.

The Main Kansas City, Kansas Public Library is located in downtown Kansas City, KS. The Library strives to fill the need for accessible health information by maintaining a consumer health collection for its patrons, including books and health-related databases. The library also maintains physical and online community information centers where patrons may acquire information about free and affordable health-related services in the community.

Dykes Library is located in Kansas City, KS. It sits on the campus of The University of Kansas Medical Center serving students faculty and staff in the Schools of Medicine, Nursing, and Allied Health as well as doctors, nurses, and health care providers at The University of Kansas Hospital. Dykes Library also serves as the Resource Library for the NN/LM, promoting the use of resources made available by the National Library of Medicine. The library is also involved in several statewide health information initiatives encouraging Kansans to take charge of their health.

These partnerships aren't currently active but are ongoing; any group could approach the other and receive support in a future project. As with any collaboration, communication was a challenge. The language barrier and cultural differences added a layer of complexity that required more effort to overcome.

## **Training**

- Total number of sessions conducted as part of the project: 5

- Total number of sessions in which half or more than half of participants were from minority populations: 5
- Total number of participants in the project's sessions: 32
- Breakdown of participants by:
  - Health care or service provider, with a subtotal for public health personnel: 0
  - Health sciences library staff member: 0
  - Public/other library staff member: 0
  - Member of the general public: 32

## **Training sites**

All trainings were conducted at El Centro's Administration Center in downtown Kansas City, KS, which offers a computer lab with 25 PCs with Internet connectivity. This is location for the weekly Promotoras meetings.

## **Exhibits**

No exhibits were connected to this project.

## **Resource Materials**

The librarians from KCKPL used training materials previously created for sessions at their own libraries. The handout used for the basic computing lesson is attached.

Promotional materials included business cards and notepads. These were given in place of the \$50 incentive, as the program director at El Centro is moving away from monetary rewards in hopes of driving participation through volunteerism and the desire to change one's community. Generic business cards were designed and printed in hopes of lending some professionalism to the program and to increase visibility in the community. Notepads like the Information RX pads were created for the Promotoras to use when working with their peers. The URL for MedlinePlus in Spanish was included. Samples of the materials are attached.

## **Web Sites**

No web sites were created for this project.

## **Document Delivery and Reference Services**

Not applicable.

## **Approaches and Interventions Used**

Training sessions were planned according to the established Promotoras meeting schedule. They regularly meet on Tuesday afternoons at El Centro. Working with the librarians at KCKPL, sessions were planned once or twice a month during the summer months during this Tuesday meeting time. The topics

of these sessions were determined by the previous experience of the public librarians. Each librarian volunteered to teach a subject she regularly taught and with which she was comfortable. Having the trainings conducted by Spanish-speaking public librarians was crucial due to the language barriers but also became a great promotional opportunity. The Promotoras responded well when the librarians shared information about their ongoing classes and opportunities at the public library.

## **Evaluation**

Data from the pre- and post-tests is still being collected. The program director at El Centro is administering the test and compiling interaction logs. A Connect-to-Care form was created for the Promotoras to use for documenting interactions with peers but these forms have not yet been collected for evaluation. The form is attached.

Although there is no hard data, based on anecdotal evidence, the Promotoras have increased computer competency skills. Through the initial five trainings, then ongoing sessions and one-on-one instruction with the laptops, many have become much more comfortable typing, using the mouse, navigating the Internet, and using the Microsoft Office suite.

While not as a direct result of this project, the Promotoras program is part of a community-wide initiative to improve Wyandotte County's continual health ranking as last in the state of Kansas. The Promotoras are featured in this video by the Robert Wood Johnson Foundation:

<http://www.youtube.com/rwjfvideo#p/u/7/AODzy7ORhgY>

Providing resources and training for the Promotoras can only strengthen the program and lead to a healthier, more informed Latino population.

## **Problems or Barriers Encountered**

Clearly, the language barrier presented problems. Not speaking Spanish made it difficult for me to communicate and connect with the Promotoras directly. I couldn't understand the delivery of instruction or their feedback and questions. As a result, I was forced to leave many tasks to the program director, who could sometimes be unreliable. Regular communication with her was often frustrating and things could be stuck in limbo for long periods.

Attendance at the training sessions was lower than expected and sporadic. Participants would show up late and come and go throughout the session. This was a frustration shared by the program director, as she's continually trying to sustain existing participants and drawn new ones. Although we had arranged for childcare, the participants' children would often interrupt and become a distraction.

The instruction plan was far too ambitious and the format wasn't ideal. During the sessions, some attendees seemed disengaged and intimidated. Many of these women had never touched a mouse and were too shy to ask for help. Others were very comfortable with technology and needed no instruction. After the initial five trainings, the program director continued to engage the Promotoras, making the laptops available in a common area during meeting times. They also received one-on-one instruction from El Centro staff. This shorter, ongoing, just-in-time instruction seemed to prove more successful, as

it put no one on the spot and gave participants time to practice on their own and based on their individual skill level.

## **Continuation Plans**

At this time, there are no plans for the continuation of instruction. The Promotoras will have access to the laptops to use with their peers indefinitely. The program director has arranged for ongoing computer training sessions to be incorporated into the schedule as they accept new cohorts. There are also plans for the Promotoras to use the laptops in future projects, such as facilitating a weight loss support group and acting as advocates during the annual Celebrating Healthy Families health fair.

## **Impact**

Simply having access to laptops has empowered many of the Promotoras. The built-in computer time on the training schedule proves a commitment to technology. As the Promotoras expand and increase their visibility in the community, they will already have the tools to provide information and connect peers with appropriate resources. Every few years, El Centro conducts an assessment of the Latino community; there was early discussion of the Promotoras using the laptops to collect data in the field instead of recording information on paper for data entry later. It has been a first step in empowering these Latino women to advocate for change in their community.

## **Recommendations for Improvement**

See Problems or Barriers Encountered section concerning the instruction plan.

While using three librarians from different branches expanded the exposure for the libraries, having one consistent instructor would have allowed for a better rapport to be built with the Promotoras. It would have also given the instructor a sense of ownership of the program. Three instructors made communication and logistics more difficult than they needed to be when scheduling the sessions.

The training sessions were conducted in the computer lab at El Centro on older machines. The laptops arrived with the newest version on Windows. Ideally, the Promotoras would have been trained on machines with the same image as those they would be using. Unfortunately, the timeframe and quantity needed didn't allow for us to use the laptops originally, but doing so would have reduced the need for machine-specific training.

## **Follow-up Questions**

1. Were your original project goals and objectives met? If not, why not?

Yes, for the most part. The Promotoras have access to laptops and have increased their computer literacy skills; that is the most important piece. I would have liked to have been more connected during the process, creating a lasting relationship with the Promotoras and the program. These collaborations take time and energy to build and I hope to work with the program again to continue this relationship.

2. What significant lessons were learned which would be of interest or use to others conducting outreach projects? Which strategies were the most effective in implementing the project?

See Follow-up Questions #3, #4, and Recommendations for Improvement

3. If you were to start all over again, what, if anything, would you change about your goals, project plans, etc.?

As stated above, I would have lengthened the instruction period. Practically, it takes closer to three months just for participants to become comfortable with technology before they could move on to evaluating search results, let alone facing the sometimes-daunting task of finding health information. Instead of one-to-many instruction, one-on-one sessions would have been more meaningful, meeting each person at his or her level.

4. What advice or recommendations would you give to anyone considering a similar outreach effort?

I would suggest creating a more thorough evaluation plan. Not only have I struggled with collecting the data, I'm unsure how much meaning it will have if it's ever presented.

5. Please describe plans for disseminating lessons learned and other information about the project, such as through a conference presentation or publication. In accordance with the NIH Public Access Policy (<http://publicaccess.nih.gov>), project directors are asked to submit voluntarily to the NIH manuscript submission (NIHMS) system (<http://www.nihms.nih.gov>) at PubMed Central (PMC) final manuscripts upon acceptance for publication.

Aside from posting on the Library Best Practices wiki, at this time there are no plans for the dissemination of information about this project.

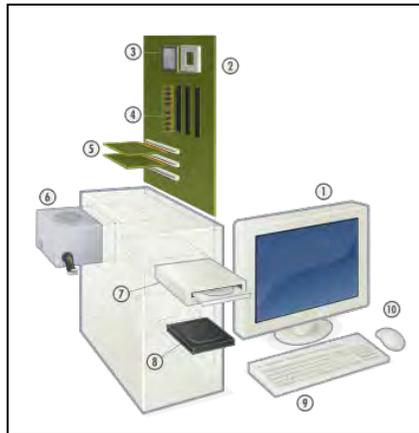
## Computación Básica.

**Las computadoras:** Son aparatos electrónicos capaces de interpretar y ejecutar instrucciones programadas, que consisten básicamente en operaciones aritmético-lógicas y de entrada/salida; reciben las entradas (datos para su procesamiento), producen salidas (resultados del procesamiento), procesan y almacenan información.

**Software:** La información que la computadora es capaz de manejar (programas, documentos, páginas de Internet,...)  
El software es lo fundamental en la computadora.

### Hardware de un computadora de escritorio:

1. Monitor
2. Placa base
3. CPU
4. Memoria de computadora (RAM)
5. Tarjeta de expansión
6. Fuente de alimentación
7. Disco óptico
8. Disco duro
9. Teclado
10. Mouse



### Computadora portátil:



**Ratón:** sirven para seleccionar y utilizar los objetos de la pantalla

#### Tipos de ratones:

**De rueda.** Son los normales, una rueda interna hace que el movimiento que realiza el ratón se traslade a un cursor de la pantalla. Requieren alfombrilla para trabajar  
**Inalámbricos.** No requieren cable (normalmente van a pilas).

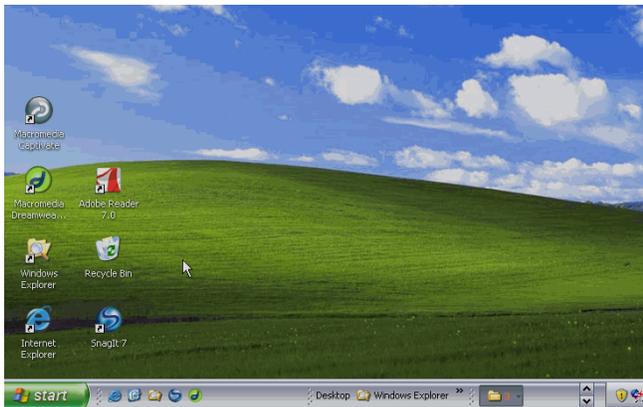
**Para portátiles.** Utilizan una pantalla en la que el propio dedo hace de ratón.

**Movimiento de ratón:** Clicking, doble click, click con botón derecho, arrastrando.

#### Versiones de Windows:

Windows 3.1, Windows 95, Windows 98, windows xp, windows vista.

## Pantalla de escritorio Windows XP y sus componentes:

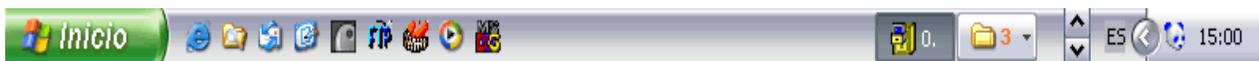


En el escritorio tenemos:

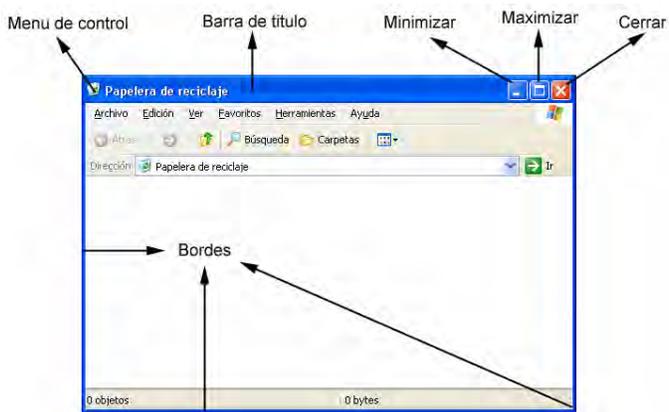


Los iconos y los accesos directos **Mi PC** son pequeñas imágenes situadas en el escritorio de Windows XP. Al igual que los botones, los iconos tienen como objetivo ejecutar de forma inmediata algún programa.

**Barra de Estado:**



**Ventanas:** Una ventana es un rectángulo que aparece en la pantalla al ejecutar una aplicación o ver el contenido de un icono. a través de su ventana.



**Partes de una ventana:**

**Barra de títulos.** Muestra el título de la ventana. Además, sirve para mover la ventana.

**Menú de control.** Contiene todas las operaciones que se pueden hacer con la ventana.

Boton para minimizar .

Boton para maximizar o ampliar la ventana en toda la pantalla .

Boton para restaurar el tamaño original de la ventana .

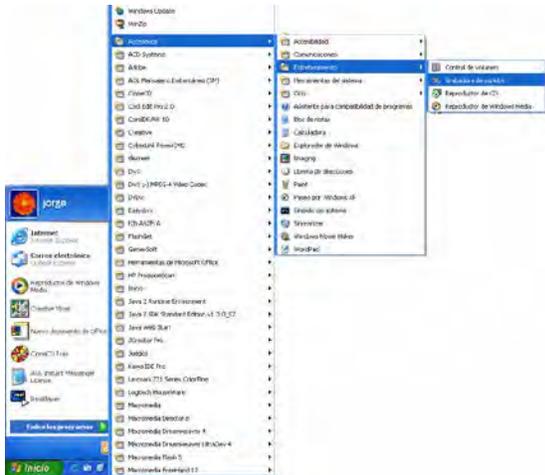
Boton para cerrar la ventana en funcion. .

**Bordes.** Permiten reducir el tamaño de la ventana.

**Área de trabajo.** Es la zona de la ventana en la cual podemos trabajar.

**Barra de menús.** Accede a todos los comandos propios de la ventana.

**Estructura de los archivos:** un grupo de programas no es más que una carpeta que contiene más aplicaciones y otros grupos de programas.



**Teclado:** El teclado es un dispositivo que sirve para introducir texto



### Combinación de teclas:

ALT + 130 = é  
ALT + 160 = á  
ALT + 161 = í  
ALT + 162 = ó  
ALT + 163 = ú  
ALT + 164 = ñ  
ALT + 165 = Ñ  
ALT + 168 = ¿  
ALT + 173 = ¡

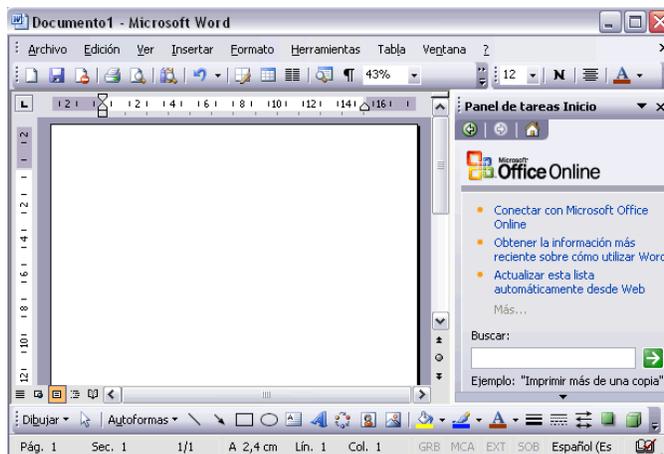
**Pagina de internet para practicar con el teclado:**

**[www.freotypinggame.net](http://www.freotypinggame.net)**

**Pagina de internet para practicar con el mouse:**

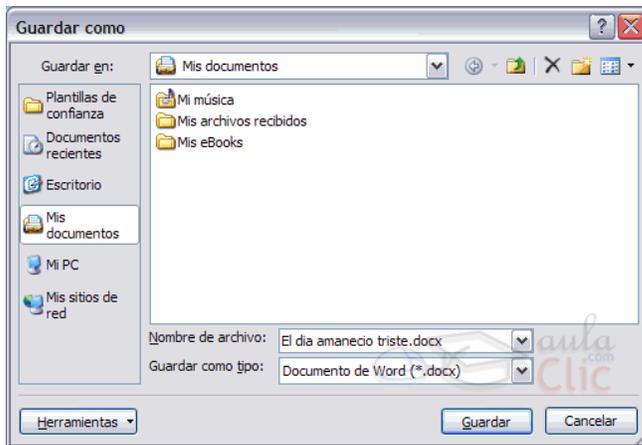
**[http://www.mesalibrary.org/research/mouse\\_espanol/page01.htm](http://www.mesalibrary.org/research/mouse_espanol/page01.htm)**

**El primer texto:**

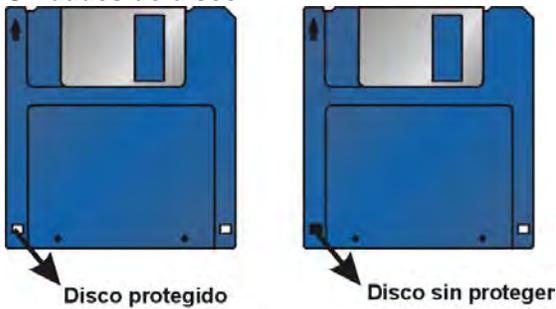


**Guardar. Guardar como:** Lo que se escribe se va almacenado en la memoria de tu ordenador; si apagases el ordenador, se perdería y no lo podrías recuperar. Con el comando **Guardar** quedará **grabado en el disco** duro del ordenador ( o en un disquete) de forma permanente.

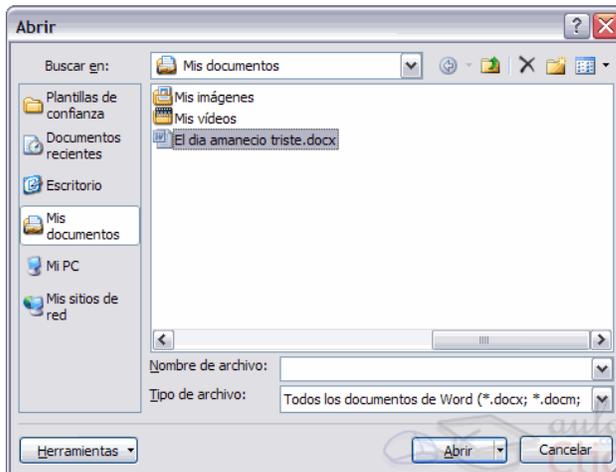
Pulsa en el icono **Guardar**  y aparecerá una ventana como ésta.



### Unidades de disco



### Abrir

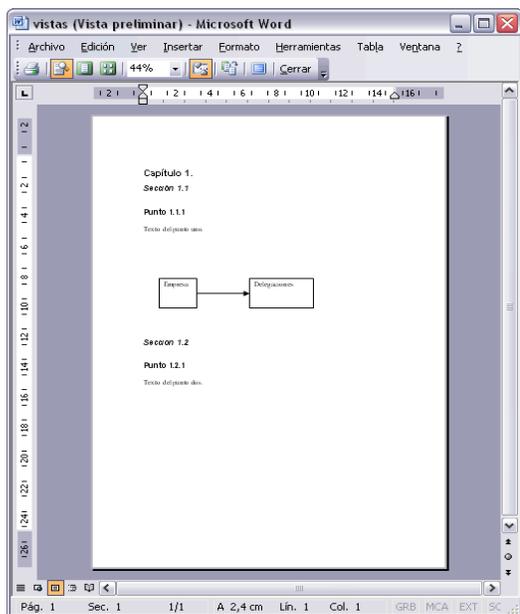


**Vista preliminar:** La vista preliminar permite visualizar la página tal y como se imprimirá, con

gráficos, imágenes, encabezados y pies de página, etc.

Para desplegar la vista preliminar ir al menú Archivo y elegir **Vista preliminar**. Aunque la forma más fácil de ir a la vista preliminar es con el icono vista preliminar  de la barra estándar.

### **Pantalla de Vista Preliminar:**

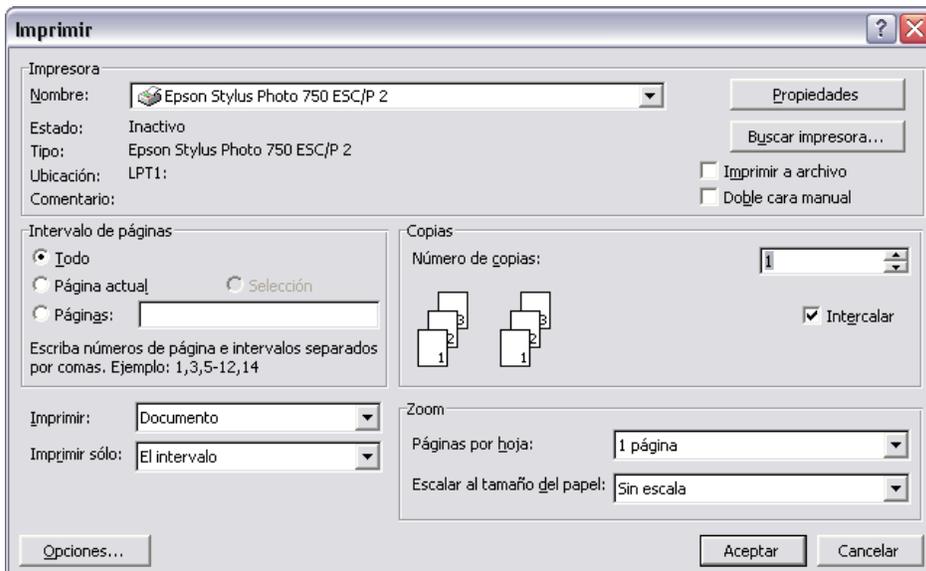


### **Impresión:**

a) Desde el **icono**  imprimir de la barra estándar. Se utiliza cuando no queremos cambiar ninguna característica de impresión.

b) Desde el menú **Archivo, Imprimir** ( CTRL + P ) . Cuando queremos cambiar alguna característica de impresión. Por ejemplo, el número de copias, imprimir sólo alguna página del documento, etc...

Rellenamos las opciones deseadas y pulsamos el botón **Aceptar**.



**Salir de Windows. Apagar el ordenador:** El ordenador no se puede apagar en cualquier momento, se debe indicar a Windows que deseamos apagar el ordenador, ya que si no, podrían producirse fallos en nuestro ordenador.

En cualquier caso, para apagar de manera correcta el ordenador hay que hacer lo siguiente:

- 1.-Hacer clic en el menú inicio.
- 2.-Hacer clic sobre **Apagar el sistema**.
- 3.-Elegir la opción **Apagar el equipo**



# Promotores de Salud Comunitaria

Nos preocupamos por su salud

Nombre:

Tel:



## Promotores de Salud Comunitaria

- Apoyo
- Información
- Conexión
- Prevención
- Educación

# Información:

Recomendación para información de salud  
[www.medlineplus.gov/espanol](http://www.medlineplus.gov/espanol)

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**Promotores de Salud**  
El Centro, Inc., Kansas City, KS

# PROMOTORES “CONNECT-TO-CARE” FORM

## SPANISH

<b>HABLE CON :</b>		<b>FECHA</b>
<b>TELEFONO CASA:</b>	<b>TRABAJO:</b>	<b>CELULAR:</b>
<b>SERVICIO/INFORMACION QUE SE PROPORCIONO:</b>		
DEJAR DE FUMAR <input type="checkbox"/>	VACUNA VPH <input type="checkbox"/>	PROGRAMA DE PROMOTORAS <input type="checkbox"/>
CONTROL DE PESO <input type="checkbox"/>	MAMOGRAFIA <input type="checkbox"/>	ACADEMIA PARA NIÑOS <input type="checkbox"/>
SEGURO MEDICO <input type="checkbox"/>	SALUD <input type="checkbox"/>	NAVEGADOR KS <input type="checkbox"/> / OLATHE <input type="checkbox"/>
SEGURO NIÑOS <input type="checkbox"/>		PROGRAMA DE EL CENTRO <input type="checkbox"/> cual? _____
<b>HAY ALGUIEN MAS EN LA CASA QUE NECESITE AYUDA/INFORMACION? NO <input type="checkbox"/> SI <input type="checkbox"/></b>		
<b>SEGUIMIENTO:</b>		
LLAMAR POR TELEFONO <input type="checkbox"/>		
DAR INFORMACION <input type="checkbox"/>		
REGISTRO A PROGRAMA <input type="checkbox"/> cual? _____		
_____		
_____		
_____		

## ENGLISH

<b>NAME OF THE PERSON :</b>		<b>DATE</b>
<b>TELEPHONE HOME:</b>	<b>TEL WORK:</b>	<b>CELL:</b>
<b>SERVICE/INFORMATION THAT WAS GIVEN:</b>		
SMOKING CESSATION <input type="checkbox"/>	VPH VACCINE <input type="checkbox"/>	PROMOTORAS PROGRAM <input type="checkbox"/>
WEIGHT MANAGEMENT <input type="checkbox"/>	MAMMOGRAM <input type="checkbox"/>	ACADEMY FOR CHILDREN <input type="checkbox"/>
MEDICAL INSURANCE <input type="checkbox"/>	HEALTH <input type="checkbox"/>	HEALTH NAVIGATOR KS <input type="checkbox"/> / OLATHE <input type="checkbox"/>
INSURANCE FOR KIDS <input type="checkbox"/>		ANOTHER PROGRAM <input type="checkbox"/> WHICH ONE _____
<b>IS THERE SOMEBODY ELSE AT HOME THAT NEEDS HELP/INFORMATION? NO <input type="checkbox"/> YES <input type="checkbox"/></b>		
<b>FOLLOW-UP:</b>		
I WILL CALL THEM <input type="checkbox"/>		
I WILL GIVE INFORMATION <input type="checkbox"/>		
REGISTER TO A PROGRAM <input type="checkbox"/>		
WHICH ONE? _____		
_____		
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**Attachment 12:  
Subcontractor Quarterly & Final Reports**

**University of Utah - Eccles Health Sciences Library  
Development of an Open Source Research Process Assistance  
Template that Supports CTSA and Research Initiatives**

# Quarterly Report

**Name and address of reporting institution:**

University of Utah, Spencer S. Eccles Health Sciences Library

10 North 1900 East, Building 589, Salt Lake City, UT 84112-5890

**Project Title:** Development of an Open Source Research Process Assistance Template that Supports CTSA and Research Initiatives

**Name of person submitting report:** Jean P. Shipman

**Email address:** jean.shipman@utah.edu

**Telephone number:** 801-581-8771

**Reporting Period start date:** January 1, 2011

**Reporting Period end date:** March 31, 2011

**Publicity:**

Work has commenced on a professional publication about the needs assessment process and outcomes conducted for MyRA.

Jean Shipman will be presenting about MyRA and the other MCR, NN/LM funded CTSA-support projects at the RML Directors' Meeting on May 12, 2011. She also was invited to speak as part of a panel at the Group for Information Resources, AAMC meeting on June 7<sup>th</sup> in Miami, FL. The topic is "Building a Sustainable Research Enterprise" and will feature both MyRA and the physical space for research support being constructed in the Eccles Health Sciences Library.

**Outreach:**

None to report.

**Other accomplishments:**

A computer professional, Dustin Schultz, had been assigned to work on MyRA development starting in March (see attached resume). Architectural design documents for MyRA v 2.0 have been completed and will be used to develop this version. Other development items for this quarter from Dustin include:

- Created bug, issue, and project tracking for MyRA using JIRA
- Translated requirements gathering documents into user stories and technical tasks by utilizing JIRA Greenhopper, an agile development tool.
- Evaluated and decided on a scalable and loosely coupled architecture involving Drupal WCM, Alfresco ECM, and some custom development that meets the requirements and needs of assisting researchers.
- Upgraded and transitioned documentation wiki to new version to better support development tasks and integration with bug tracking software.
- Creation of development environment is in progress

- A version control management system has been installed (Gitorious)
- Tools for developing MyRA are being decided on
  - Eclipse with PHP Plugin for PHP development
  - Eclipse with EGit for version control
  - Drush, Drush Make, Drupal Installation Profiles, and XAMPP for creating a portable and reproducible instance of MyRA as well as setting up a quick development environment
- A strategy was developed and documented for managing external (vendor) code like Drupal and Alfresco versus managing custom code
- Shared resources for the MyRA Team have been created
  - A shared drive for storing documents and presentations
  - Three emailing lists
    - [myra@lists.utah.edu](mailto:myra@lists.utah.edu)
    - [myra-software-dev@lists.utah.edu](mailto:myra-software-dev@lists.utah.edu)
    - [myra-technical@lists.utah.edu](mailto:myra-technical@lists.utah.edu)
- Three development servers have been requested to begin prototyping the new MyRA architecture
  - A database server
  - A repository server
  - A web server
- A new 50K foot architecture document was created for low/non-technical audiences to understand the technology (attached).

### *MyRA 1.0 - Static Web site Progress*

More content has been added to the MyRA v 1.0 Web site – see <http://www.cts.utah.edu/myra/>.

Design plans for a physical research support center within the lower level of the Spencer S. Eccles Health Sciences Library are under review and should go to bid soon. Within this space, the administration for the University's CTSA Award will be housed and hopefully support staff for researchers including a concierge. A presentation to determine if funding is available for a concierge and for further technical support for MyRA's virtual presence has been scheduled with the University of Utah Office of Research for April 25, 2011.

### **Target audience:**

None to report.

### **Goals, Outcomes, Objectives:**

The subcommittee of the MyRA committee to storyboard the advanced version (version 2) of the virtual MyRA will convene since the new computer professional has been assigned.

**Evaluation:**

Feedback sessions regarding the static MyRA web site was given to two internal University of Utah groups from the University of Utah Clinical Research Committee on March 14<sup>th</sup> and 23<sup>rd</sup>. Jean Shipman spoke with the Four Corner Directors on March 25<sup>th</sup> and they agreed to have their staff review the web site to identify missing content and to determine applicability to and relevance for their local needs.

Great suggestions for additional web site was gathered from these sessions. As a result, a “For Patients” tab was added to include information about available University of Utah Health System clinical trials – listed by department. Also, several additional funding sources and collaboration sites were added. Placement of key links were rearranged for easier navigation and discovery. Also some discovery links were renamed for clarity. We also included several sample grants from NIH sites as well as a video and information about the scientific grant review process. For grant writing, information about citation management software was added.

**Impacts and Observations:**

The desire for a robust MyRA has been expressed repeatedly by many at the University of Utah. The complementary support it offers to current university resources has been discussed and parameters established with the Office of Research. Many features that are highly desired by researchers take time to develop as far as their featured content – for example, how can you create a site that is personalized to your specific research needs if the desired information has not yet been gathered or easily identified. A tool can be developed to house such information but it has to exist.

**Planned Activities:**

Additional content will be added to MyRA 1.0 and identified for inclusion in MyRA 2.0. A template will be produced to be shared with other libraries for local customization.

1. Four Corner librarians will review the MyRA 1.0 website for content gaps and relevance to local needs.
2. A subcommittee of the University’s MyRA Committee will work with technical staff to storyboard the design of MyRA 2.0.
3. The MyRA needs assessment publication outline will be further fleshed out and shared with all authors.
4. Additional information architecture work on MyRA 2.0 will be completed.
5. Design of a physical research support center within the Spencer S. Eccles Health Sciences Library will be completed and construction of the center will begin.
6. A final report will be written at the end of April.

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## NICHOLAS DUSTIN SCHULTZ

11541 S. Lampton View Dr.  
South Jordan, UT 84095  
(801) 712-1007  
schultz.dustin@gmail.com  
<http://www.cs.utah.edu/~schultzd/>

### BACKGROUND

I am a well-qualified IT professional with a proven track record of being committed, loyal, hardworking and respected. I have over four years of practical software development experience and possess exceptional communication and interpersonal skills. I have been a key contributor in designing, developing and implementing an innovative and cutting edge application at the Center for Clinical and Translational Science (CCTS) at the University of Utah that allows clinical researchers the ability to query real-live clinical data from multiple disparate data sources. I have excellent abilities to learn quickly, work effectively in a team environment, motivate others, and consistently complete successful projects.

### PROFESSIONAL EXPERIENCE

University of Utah, Office of the AVP for Health Sciences IT, Salt Lake City, Utah ,  
2009 – Present

#### **Software Engineer**

- Technologies used included Java SE 5, Java SE 6, Java Annotations, Spring Framework 2.5.6, Hibernate 3.4, JUnit, AspectJ, Spring AOP, JAXB 2.0, Apache CXF, XML, W3C XML Schema, Schematron, XPath, XQuery, XSLT, HTML, XHTML, AJAX, SOAP, REST, JAXRS, JAXWS, SQL.
- Engineered cutting edge software to federate health data from multiple heterogeneous data sources including the University of Utah's Enterprise Data Warehouse and the Utah Population Database utilizing open source and Web 2.0 technologies.
- Implemented core data source processing functionality responsible for invoking query initialization, query translation, query execution, result translation, and result persistence.
- Implemented generic components to retrieve data from varying types of data sources including databases and web services.
- Assisted in the development of a logical XML query structure based on Hibernate Criteria with specializations for health care domain queries.
- Developed custom integrations for interfacing Informatics for Integrating Biology & the Bedside (i2b2) user interface and backend.
- Interfaced with Senior Content Engineer to assist with the design and development of medical terminology translation web services for data interoperability.
- Worked closely with Project Coordinator to develop requirements and give time estimates for implementation.

- Interfaced with Senior Data Architect to assist with the design and development of logical query translation and federated result set querying.
- Collaborated with other developers in a fast paced and highly fluid environment to design and implement project requirements.
- Developed loosely coupled, highly modular code utilizing Maven 3.0 and OSGi
- Wrote highly tested code using unit tests and integration tests.
- Made strong use of design patterns and industry recommended development practices.
- Practiced strict rules for code quality and code documentation.
- Followed test driven and agile development methodologies.
- Used Hudson for continuous integration and automated testing of project.
- Deployed modules to OSGi based FUSE Enterprise Service Bus (ESB) (EAI) 4.0 to facilitate a Service Oriented Architecture (SOA).
- Used Atlassian JIRA for bug tracking and release development.
- Utilized Eclipse IDE 3.4 & 3.5, Subversion 1.6, Subclipse, M2Eclipse, and Spring IDE 2.2 as daily development environment.
- Constructed complex SQL queries against Oracle 10g/11g, HyperSQL (HSQLDB), and MySQL databases.

Yale University, Technology & Planning, New Haven, Connecticut, 2008 – 2009

#### **Web Systems Analyst**

- Technologies used included Java SE 5, Java SE 6, Spring Framework 2.5.5, Spring MVC, Spring Portlet MVC, Spring Security 2.0, JUnit 4.4/4.5, Java Servlet 2.4, Axis 1.4 Web Services, EhCache 1.4, AJAX, jQuery, Dojo, Javascript, HTML, XHTML, XSLT, JSTL, JSP, and CSS.
- Work closely with project manager to plan and create business requirements needed for a significant upgrade from open source portal framework which included evaluating and analyzing over 50+ customizations, development of data migration methods, exporting, cleaning, and migrating thousands of user's layouts and preferences, customizing and upgrading of JSR-168 portlets, and architecting a new portal environment.
- Developed custom Model-View-Controller (MVC) based JSR-168 portlet which used Yale's Central Authentication Service (CAS) to proxy authenticate and make SOAP Web Service calls to retrieve user work tasks from BPM software Lombardi Teamworks 6.1.
- Customized portal framework to reset all user modifications to the demo user's layout using Quartz Enterprise Job Scheduler and the Spring Framework.
- Built portal and portlet projects using Maven 2.0 and Ant.
- Deployed portal framework and portlets to Apache Tomcat 5.5 and Apache Tomcat 6.
- Maintained portal, portlets, and content using Subversion 1.5, Eclipse IDE 3.3, MyEclipse 6.1, Eclipse IDE 3.4 Ganymede, and Spring IDE 2.2.
- Used Oracle SQL Developer 1.5.1 as well as JDBC to query, insert, and update Oracle 10g and 11g RDBMS.

- Introduced and administered Maven 2 repository for entire department using enterprise Maven 2 repository, Artifactory 2.0.1.
- Worked from Microsoft Project plan during the upgrade of the portal framework.
- Assisted in establishing best practices for source control (SCM), Java development, content development, release management, and application and portlet deployment.
- Issued bug fixes and improvements to portal and portlets using issue tracking software, Atlassian JIRA.
- Deprecated old content and worked to establish clear functional and technical owners of content within portal.
- Configured, built, and maintained university portal, portlets, content, and resources in 4 instances of the portal.
- Documented upgrade process, portlet development, and helpful tips for team members using Microsoft Visio and Atlassian Confluence wiki.
- Reported bugs, improvements, and committed bug fixes to the open source uPortal project.

Southern Utah University, Cedar City, Utah, 2005 – 2008

#### **Portal Developer**

- Created, managed, and implemented JSR-168 compliant portlets.
- Delivered visual customizations and bug fixes to portal framework.
- Technologies used to generate portlets included Spring Framework 2.0, Spring MVC, Struts 2, Hibernate, AJAX, jQuery, Dojo, Javascript, HTML, XHTML, XSLT, and CSS.
- Maintained portlet projects with Subversion, Eclipse IDE, and MyEclipse add-on.
- Interfaced with Oracle 10 RDBMS and Oracle 11g RDBMS to retrieve data from SCT Banner.
- Assisted in the development of an internal campus wide help request and task management system which allowed clients to submit technical support requests and IT staff to create and assign tasks for work management.
- Used Ant and Maven to publish and deploy portlets to uPortal and Tomcat.
- Documented development and best practices to enterprise wiki Atlassian Confluence.
- Participated in code reviews using Atlassian Crucible.

#### **ASP.NET Web Developer**

- Planned, programmed, developed, and maintained several effective and user friendly web applications for Southern Utah University through ASP.NET 1.1/2.0, C#, and IIS 5.5/6.0.
- Designed and implemented a main events calendar for displaying current university events and an administrative interface which used LDAP authentication and allowed calendar administrators to add, edit, or delete events.
- Programmed reusable LDAP authentication library for authenticating web system users against Novell eDirectory.

- Developed University Relations News and Information system which displays and offers RSS feeds for current and archived news as well as an administrative system for input of new articles.
- Built highly used and popular university auctioning system titled “T-Bay” which allowed students, faculty, and staff to sell or post need of textbooks, apartment contracts, rides, or general items.
- Implemented student electronic voting system used by the entire university to elect student body officials.
- Built applications with Visual Studio 2003 and Visual Studio 2005
- Met timely deadlines with quality and assurance.

## PROFESSIONAL DEVELOPMENT

### **SpringOne Americas, Hollywood, Florida, December 2008**

## VOLUNTEER AND COMMUNITY SERVICE

### International Coastal Cleanup

#### **Coastal Cleanup Day, Long Wharf Beach, New Haven, Connecticut, 2008**

- Cleaned up the New Haven Long Wharf beach by picking up and itemizing trash and recyclables. This provided the Ocean Conservancy with the types and amounts of trash collected so they could analyze the cause of the trash and determine a solution.

### Edgerton Park Conservancy

#### **Community Greenhouse Cleanup, New Haven/Hamden, Connecticut, 2008**

- Repotted several plants which had outgrown their current pots, cleaned greenhouse doors and windows, trimmed dead leaves from plants and trees, swept floors of debris, and brought in plants to greenhouse from the community garden for the winter.

## COMPUTER SKILLS

### **Operating Systems**

Windows XP/Vista/7, Ubuntu Linux, Mac OS X, Red Hat Linux

### **Applications**

Microsoft Outlook 2003/2007, Microsoft Office 2003/2007, Altova XMLSpy, Enterprise Architect, Adobe Photoshop CS 4

## EDUCATION

### **Master of Science in Computer Science, May 2011**

University of Utah, Salt Lake City, Utah

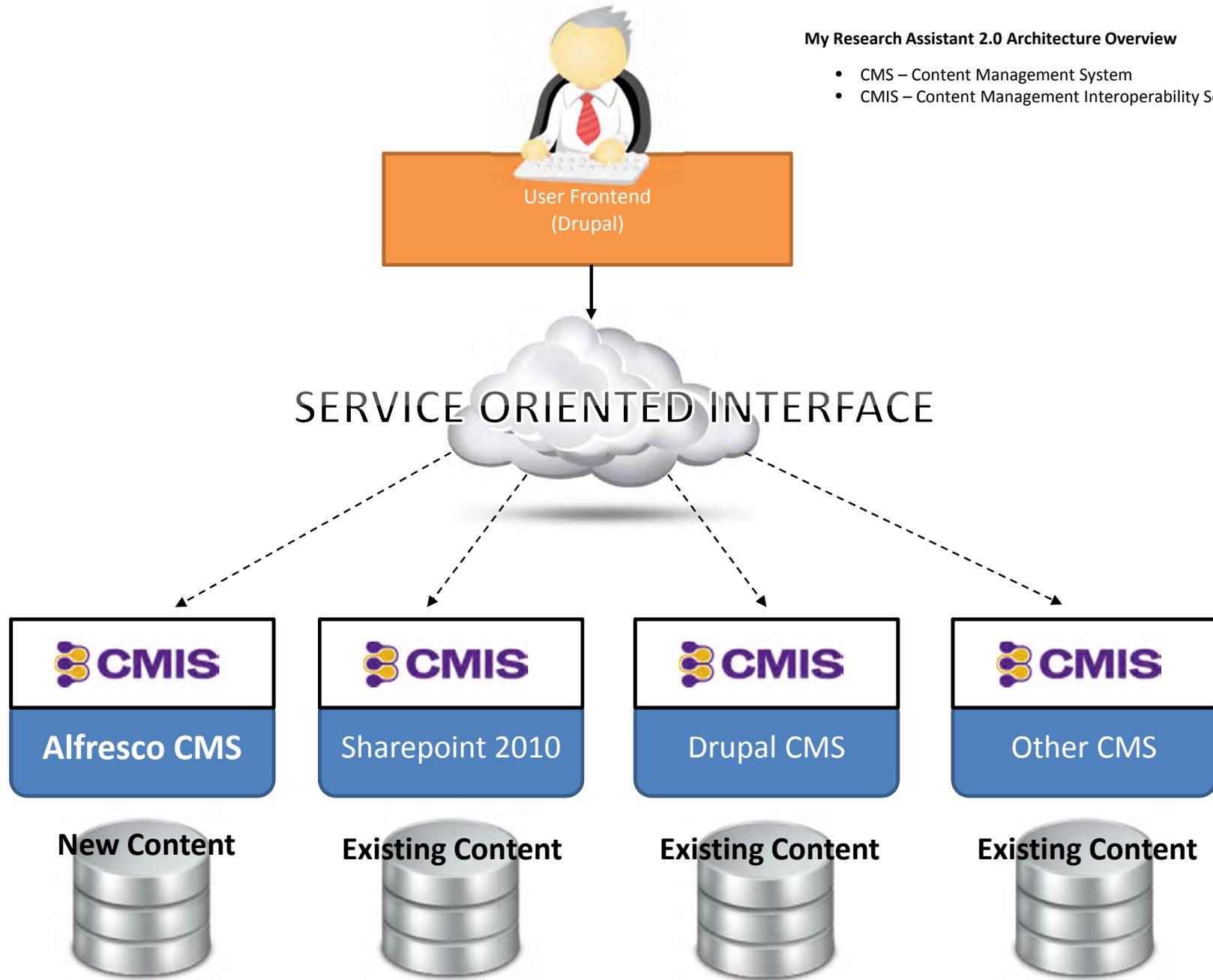
Focus: Computer Security

### **Bachelor of Science in Computer Science, Major GPA 4.0, May 2008**

Southern Utah University, Cedar City, Utah

**My Research Assistant 2.0 Architecture Overview**

- CMS – Content Management System
- CMIS – Content Management Interoperability Services



# Quarterly Report

**Name and address of reporting institution:**

University of Utah, Spencer S. Eccles Health Sciences Library  
10 North 1900 East, Building 589, Salt Lake City, UT 84112-5890

**Project Title:** Development of an Open Source Research Process Assistance Template that Supports CTSA and Research Initiatives

**Name of person submitting report:**

Jean P. Shipman

**Email address:** jean.shipman@utah.edu

**Telephone number:** 801-581-8771

**Reporting Period start date:** April 1, 2011

**Reporting Period end date:** April 30, 2011

**Publicity:**

None to report.

**Outreach:**

None to report.

**Other accomplishments:**

Setup and development of the MyRA 2.0 infrastructure continued. Screenshots of the MyRA 2.0 base infrastructure are attached. Other development items for this quarter include:

- Initial MyRA 2.0 infrastructure is up and available for demo on development servers
  - Alfresco server (backend) set up at <http://myra-dev-repo.bmi.utah.edu/alfresco> & <http://myra-dev-repo.bmi.utah.edu/share>
  - Drupal server (frontend) set up at <http://myra-dev-web.bmi.utah.edu/>
  - MySQL server set up at myra-dev-db.bmi.utah.edu
  - Drupal and Alfresco are connected utilizing the Content Management Interoperability Services (CMIS)
- Completion of local development environment
- Created automated scripts for the whole MyRA 2.0 architecture. These scripts greatly simplify the process of installing MyRA 2.0 or setting up a local development environment for MyRA 2.0
- Fixed and contributed 3 patches to the CMIS Drupal API project. All patches were accepted into the codebase
- Developed a process for applying MyRA 2.0 customizations to the default Alfresco distribution
  - Involves overlaying any custom configuration and repacking the Web Application Archive file (WAR)

- Theming and styling of the Drupal frontend with a University look and feel is currently being discussed.
  - Researched options for Drupal themes which include purchasing pre-made and entirely custom designs.

Also, future updating of MyRA 2.0 content will be assumed by the Library faculty starting May 1. In addition, we have determined a distribution method for the templates to deliver them to other libraries upon request. We are also in discussion with the Office of Research about future financial support for developing more functionalities for MyRA and for incorporating at least part of it into the Office of Research offered tools as well.

**Target audience:**

None to report.

**Goals, Outcomes, Objectives:**

None to report.

**Evaluation:**

MyRA 2.0 Sprint 2 which included setting up a local development environment was completed. MyRA 2.0 Sprint 3 is currently in progress and involves setting up demo servers on the provided infrastructure.

The Four Corner Directors were asked to share MyRA 1.0 with their staff to have them review the content, not the appearance, for local application potential. Feedback was received which included the suggestion to add more training information, including a designation of required training versus elective.

**Impacts and Observations:**

Jean Shipman was asked to serve on a panel for the AAMC/GIR June 2011 meeting to review how libraries are supporting CTSAs. While unknown why the meeting planner invited Jean to participate on the panel, word about MyRA may have been one reason.

**Planned Activities:**

1. Theming for the Drupal front-end will be decided on and we will work with the University to create an acceptable look and feel.
2. Jean will present about MyRA at the AAMC GIR June 2011 annual meeting. She will also present at the RML Directors' Meeting in May.
3. Libraries will be informed about the templates availability and can request such for local application.

THE UNIVERSITY OF UTAH My Research Assistant

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**Collaborations**

published by Anonymous (not verified) on Mon, 04/25/2011 - 2:28pm

**Collaborations**

**Community Engagement**

The Community Engagement core of the University's Center for Clinical and Translational Science (CCTS) mission is establish a pre-eminent program of participatory research that involves the exchange of knowledge, experience, and values through community and organizational partnerships in order to benefit the health of individuals and populations at local, regional, and national levels.

**Intermountain Healthcare Patient Information**

Intermountain Healthcare provides research opportunities to our patients, with the voluntary option to participate. Supporting research furthers knowledge and advances medical discovery.

Before you are identified as a potential research participant, Intermountain Healthcare's Office of Research reviews and approves the project.

**DIRECT**

Discovery of potential collaborators is a priority of the Clinical and Translational Science Awards (CTSA) Consortium. At the new DIRECT site (<http://directexperts.org>), you can search multiple institutions simultaneously and then easily explore the results at each institution on their individual sites. This pilot project of the CTSA Research Networking group takes advantage of the availability of researcher profile tools at many CTSA and other institutions. The next stage of project is to provide an integrated search across all participating institutions.

**Research Portal**

THE UNIVERSITY OF UTAH My Research Assistant

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**Quick access to your research information needs**

published by Anonymous (not verified) on Mon, 04/25/2011 - 2:11pm

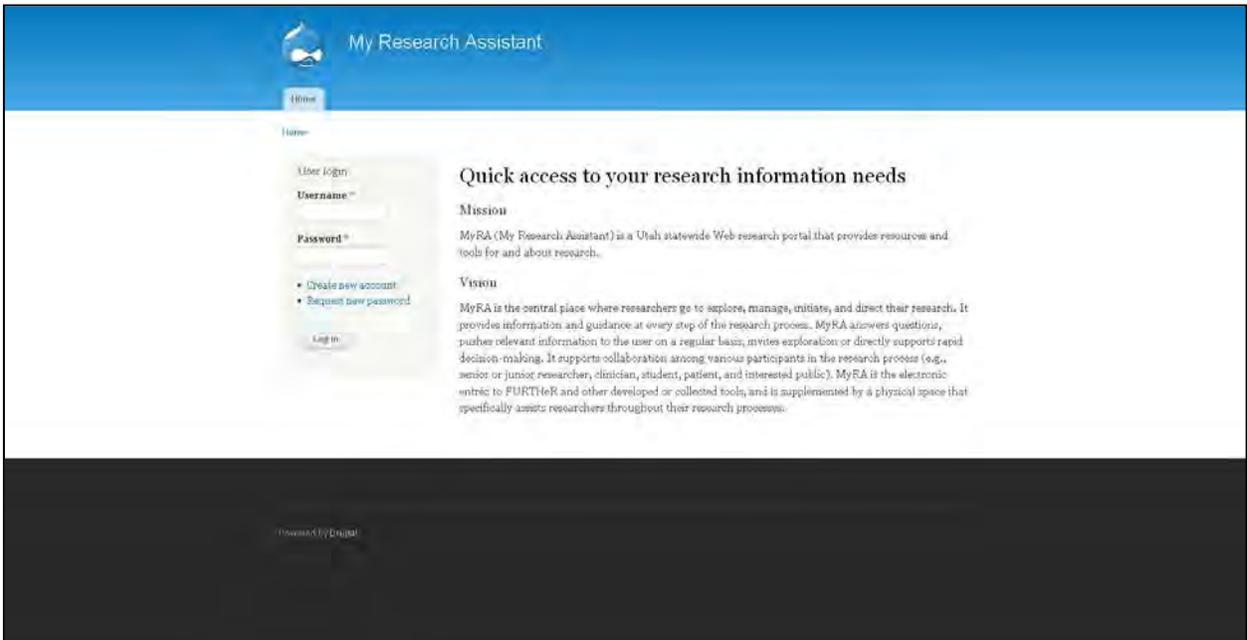
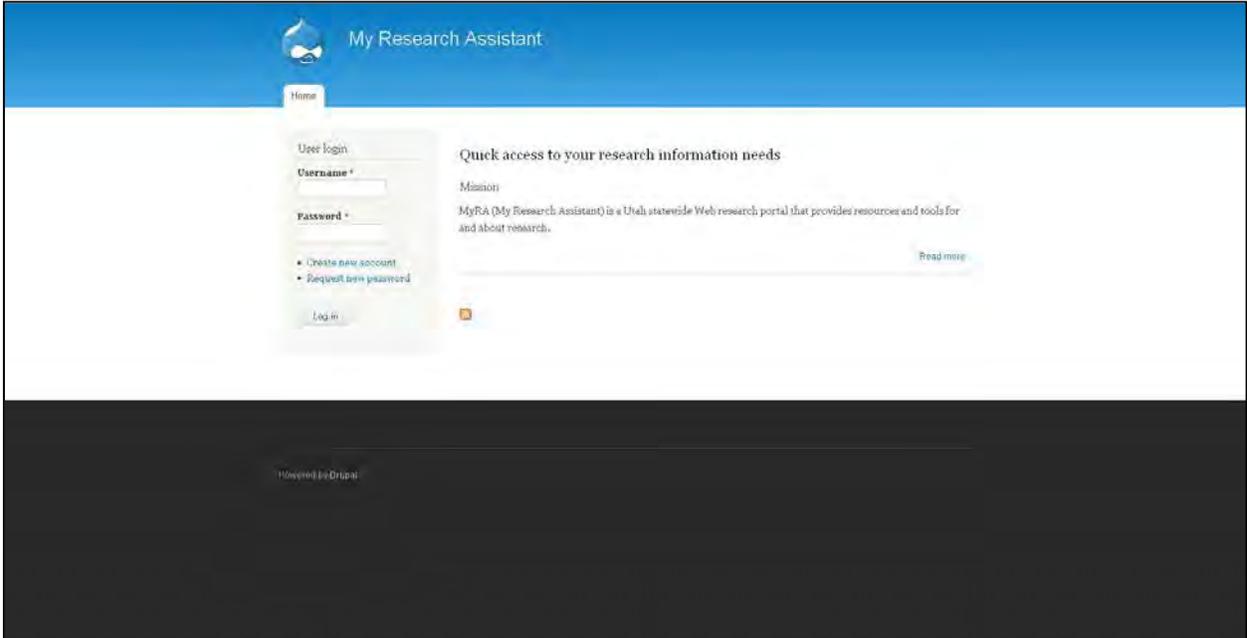
**Mission**

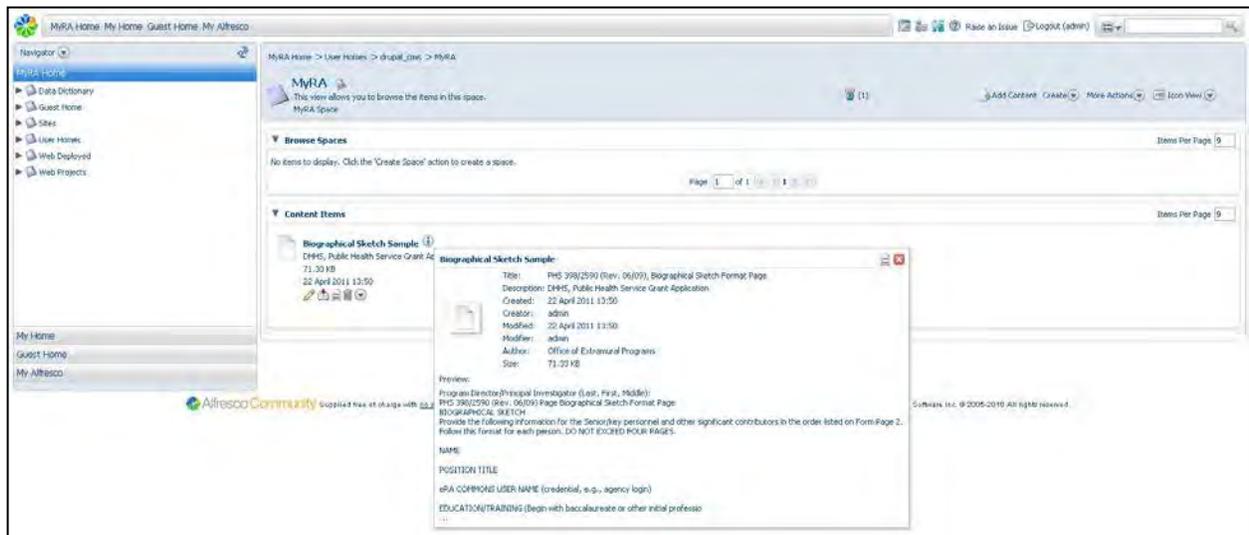
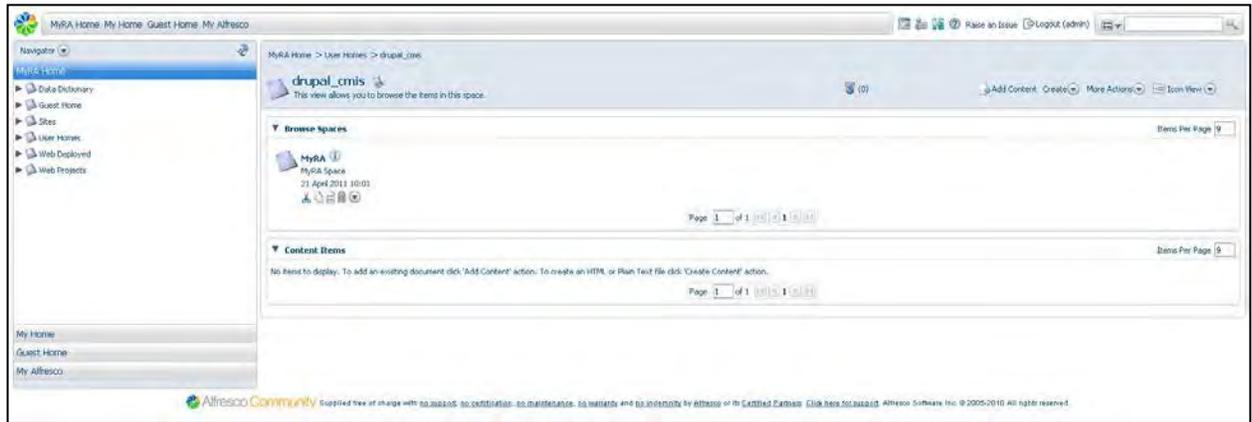
MyRA (My Research Assistant) is a Utah statewide Web research portal that provides resources and tools for and about research.

**Vision**

MyRA is the central place where researchers go to explore, manage, initiate, and direct their research. It provides information and guidance at every step of the research process. MyRA answers questions, pushes relevant information to the user on a regular basis, invites exploration or directly supports rapid decision-making. It supports collaboration among various participants in the research process (e.g., senior or junior researcher, clinician, student, patient, and interested public). MyRA is the electronic entrance to FURTHAR and other developed or collected tools, and is supplemented by a physical space that specifically assists researchers throughout their research processes.

[Read more](#)





**Project Title:**

Development of an Open Source Research Process Assistance  
Template that Supports CTSA and Research Initiatives

**Reporting Institution:**

University of Utah,  
Spencer S. Eccles Health Sciences Library  
10 North 1900 East, Building 589,  
Salt Lake City, UT 84112-5890

**Name of person submitting report:** Jean P. Shipman

**Email address:** jean.shipman@utah.edu

**Telephone number:** 801-581-8771

**Fax number:** 801-581-3632

**Reporting Period:** June 15, 2010 -April 30, 2011

**Submission date:** May 5, 2011

1. *Executive Summary:*

Two different templates were created for librarians across the region (and nation) to implement locally to support their institutional CTSA personnel or other research initiatives. Both templates are simple static web sites that can be easily deployed to any web server and updated to meet the needs of others. One template is a simple web site backbone exported from an internal Content Management System developed at the University of Utah, and the other is an export of a more sophisticated information architecture, including the use of open source software Drupal Content Management System and Alfresco Enterprise Content Management System (CMS). Due to timing and funding, the internal CMS and Alfresco and Drupal infrastructures are not included in the templates, only the website backbones are provided. Some user interface studies were conducted to assist with content contained within the templates.

2. *Geographic region/number of counties:*

The project was limited to the University of Utah in the city of Salt Lake City, UT. However, other libraries across the country can now adopt the developed templates for local use.

3. *Collaborations/Partnerships:*

The Spencer S. Eccles Health Sciences Library and the Biomedical Informatics Department at the University of Utah were the two partners who worked on this subcontract. They will continue to work on developing MyRA 2.0 beyond the subcontract funding period.

The main challenge encountered was being able to find the right computer technicians to develop MyRA beyond a basic web site. Due to other demands, the original technician had to remove himself from the project and a period of time was needed to assign a new one. The main lesson learned is that development work of this nature requires time, especially when one adopts a process by which feedback from constituencies needs to be incorporated along the way.

Another challenge was with creating a great idea that others within the University wanted to adopt, the Office of Research. We are now working with them to determine how to sustain MyRA 2.0 and to determine how many different flavors of it need to exist to search direct University of Utah needs versus the outside partners that are part of the CTSA; the original audience for MyRA.

4. *Training:*

There was no training sessions planned for this subcontract, so none were reported to the OARS. Due to the development delay, only some of the proposed user testing got accomplished. These are reported under the “evaluation” section of this report.

5. *Training sites:*

NA

6. *Exhibits:*

NA

7. *Resource materials:*

The only training materials that were developed are for internal personnel who will be updating and adding to the MyRA content. The instructions for updating are housed within in internal wiki for easy and universal access.

8. *Web sites:*

There are two web sites that point to MyRA 1.0 (the basic web site) and MyRA 2.0, the more developed information architecture site. MyRA 2.0 has architecture perfectly in place to be significantly extended to meet a lot of the needs of researchers. Plans are for librarians from the Eccles Library to maintain and add content to the MyRA 2.0 site. Discussions are underway with the Office to Research to find funding to further add technical functionality to the MyRA 2.0 site and/or to adopt many of the developed template within the University of Utah website. MyRA 2.0 is on a development server at this time. The current sites are:

MyRA 1.0

<http://www.ccts.utah.edu/myra/>

MyRA 2.0

Web Front End - <http://myra-dev-web.bmi.utah.edu/>

Repository Back End Administrative Interface - <http://myra-dev-repo.bmi.utah.edu/alfresco>

Repository Back End Administrative Interface- <http://myra-dev-repo.bmi.utah.edu/share>

Distribution plans for sharing the two templates with other institutions, especially libraries, have been created. Anyone in the country can ask for the templates which will be accompanied with basic installation instructions. Those with Drupal and Alfresco instances, can easily alter the template to create local customizations. As the University advances it version, it is willing to share further enhancements as is the philosophy behind CTSA's – to collaborate and share developed tools. We anticipate the adoption to take some time but hope that as we speak at different professional meetings and publish journal articles, that word will get around about the template availability so that all don't need to start from scratch. We will track how many times the template is accessed and hit counts for the content.

9. *Document delivery and reference services:*

NA

10. *Approaches and interventions used:*

For MyRA 1.0, a collaborative space was created within a University licensed software program. The Office of Research then sent out a university-wide announcement asking all to populate this space with resources, tools, information they thought would be relevant to a one-stop-shopping research information portal. A lot of relevant content from this social

media site was transferred to the basic website. This content was then used to populate the MyRA 2.0 system. For testing MyRA 1.0, a clinical research team helped to review the contents and to suggest gaps or arrangement for ease of use.

MyRA 2.0 was architected from the ground up to support a wide array of functionality to meet researchers' needs. This includes the ability to manage existing content, create new content, and maintain versions of content. It was also built to be extended to add functionality for social media, project management, tracking services provision, etc.

#### 11. *Evaluation:*

Feedback sessions regarding the static MyRA web site was conducted with two internal University of Utah groups from the University of Utah Clinical Research Information Committee on March 14<sup>th</sup> and 23<sup>rd</sup>. Jean Shipman spoke with the Four Corner Directors on March 25<sup>th</sup> and they agreed to have their staff review the web site to identify missing content and to determine applicability to and relevance for their local needs.

Great suggestions for additional web site was gathered from these sessions. As a result, a "For Patients" tab was added to include information about available University of Utah Health System clinical trials – listed by department. Also, several additional funding sources and collaboration sites were added. Placement of key links were rearranged for easier navigation and discovery. Also some discovery links were renamed for clarity. We also included several sample grants from NIH sites as well as a video and information about the scientific grant review process. For grant writing, information about citation management software was added.

The Four Corner Directors were asked to share MyRA 1.0 with their staff to have them review the content, not the appearance, for local application potential. Feedback was received which included the suggestion to add more training information, including a designation of required training versus elective.

#### 12. *Problems or barriers encountered:*

Staff availability with the needed skill set was the main barrier to the project's completion. However, once someone was identified, he was able to achieve the deliverables indicated. Other issues included working with all University units who wanted to lay claim to the concept and also who wanted to extend it beyond the CTSA intended audience.

#### 13. *Continuation plans:*

This is stated in more detail above. We are talking with the Office of Research about future funding potential for further development of MyRA 2.0

#### 14. *Impact:*

From the interest of the Office of Research and from the campus adoption of the concept, it appears that MyRA will have a large impact on the effectiveness and efficiency of CTSA researchers and others. The Office of Research really loves the idea and wants to partner with

us on future developments and directions. The CRIC – Clinical Research Information Council of the University of Utah also is interested in MyRA’s development and assigned a subcommittee to help test it. The School of Medicine wanted to include MyRA in its LCME self-study report. There is interest in MyRA also from the Intermountain Health Care institution, one of the CTSA partners with the University.

As more libraries get involved with supporting CTSA’s and institutional research throughout the entire research process (versus just in research dissemination), the core philosophy behind MyRA will expand and adoption of the templates created by this project are anticipated. These templates will serve as a starting point for many institutions to develop a one stop shop for researchers and students interested in such.

The support offered by this subcontract assisted the library and BMI faculty to illustrate to the University of Utah how information tools can help to make researchers jobs easier and hopefully to enable them to spend less time administrating their grants and contracts and more time performing real research which will advance the institution, through reputation as well as more research funding coming into the University.

15. *Recommendations for improvement:*

In hind sight, we didn’t realize how much time it would take to create a robust information architecture and product. Another year of development is needed to make a truly remarkable tool that could incorporate social media aspects, entry via different persona and push technologies based upon those personas. Also as we discussed MyRA with different groups, more ideas for development were obtained and many are convinced that MyRA will solve many research problems. We would like to see MyRA be developed further and will be working on including project management tools, a tracking system for CTSA core support usage and social media components soon if additional support is acquired.

## ***FOLLOW-UP QUESTIONS***

*If answers to the follow-up questions are contained elsewhere in your report, indicate where they are located.*

1. *Were your original project goals and objectives met? If not, why not?*

Yes, not only was one template created but two (one basic and one more complex) to meet the various technology support levels at institutions.

2. *What significant lessons were learned which would be of interest or use to others conducting outreach projects? Which strategies were the most effective in implementing the project?*

For the PI, the main lesson learned was gaining an understanding of how far reaching research is within an institution and how many players feel they have a role in supporting such. This topic permeates a health sciences university as much as information technology does. The other interesting insight was how hungry people are for tools and solutions that make research easier as many PIs are now spending more time administrating their funded support than they are conducting actual research. And while we know research happens everywhere, there are many unique differences in how it is conducted among institutions of higher education and hospitals.

3. *If you were to start all over again, what, if anything, would you change about your goals, project plans, etc.?*

Allow for more time to develop and test the developed tools.

4. *What advice or recommendations would you give to anyone considering a similar outreach effort?*

Work with your Office of Research from the beginning and any other institutional units you feel might be interested, including academic libraries that are part of your university.

5. *Please describe plans for disseminating lessons learned and other information about the project, such as through a conference presentation or publication. In accordance with the NIH Public Access Policy (<http://publicaccess.nih.gov>), project directors are asked to submit voluntarily to the NIH manuscript submission (NIHMS) system (<http://www.nihms.nih.gov>) at PubMed Central (PMC) final manuscripts upon acceptance for publication.*

A presentation about MyRA was given at the Midcontinental Chapter, MLA meeting in October, 2010. Jean also talked about efforts at the University of

Utah and the RML at an open forum about CTSA and library support at the AAMC/AAHSL annual meeting in November 2010. She will be providing an update and lessons learned session as part of the RML Directors' meeting prior to MLA 2011. She has also been asked to speak as part of a panel on research sustainability for the AAMC/GIR June 2011 annual meeting. Jean has also been sharing progress with the Four Corners Directors and asked for their staff's assistance with testing the MyRA 1.0 template.

In addition to these presentations, a *Plains to Peaks* newsletter article will announce the availability of the project deliverables. Other NN/LM regions will be asked to reprint the article in their newsletters. The MyRA development team is also preparing a *JMLA* article on the needs assessment activities that supported the MyRA concept development. They also plan on publishing more articles about the development of the tool in AMIA-related journals. Published journal articles will be deposited within PubMed Central.

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**Attachment 13:  
Subcontractor Quarterly & Final Reports**

**Utah Navajo Health System  
Patient Education in Navajo Country**

# Quarterly Report

Email completed report to reports@rml4.utah.edu

**Name and address of reporting institution:**

Utah Navajo Health System,  
East Highway 262  
Montezuma Creek, UT 84534

**Project Title:**

RML/TC4C Utah Navajo Health Inc. Community Partnership

**Name of person submitting report:** Stephanie Makihele

**Email address:** smakihele@unhsinc.org

**Telephone number:** 435.651.3773

**Reporting Period start date:** September 28, 2010

**Reporting Period end date:** February 10, 2011

**Publicity:**

No publicity to report.

**Outreach:**

No demonstrations or trainings took place during reporting period.

**Other accomplishments:**

UNHS collaborated with Brenda Ralls, epidemiologist, at the Utah State Department of Health to acquire appropriate, culturally sensitive cardiovascular care materials for translation into Navajo. These materials have been translated and arrangements have been made with the University of Utah Eccles Health Sciences Library to have these materials recorded for audio CDs.

**Target audience:**

No changes have been noted in the target audience. Needs have not changed since initial assessment nor has original audience changed. We have noted that administering the post-test to assess patient understanding of education received via the CD has proven somewhat challenging. Often, patients do not return for follow-up visits for several months which has resulted in incomplete results for many patients pending their post-test.

**Goals, Outcomes, Objectives:**

Thus far the needs of the audience at still the needs we initially anticipated and we believe the outcomes are still feasible. However, the timeframe to accomplish the outcomes and goals has proven to be shortsighted; we did not initially anticipate the length of time necessary to capture post-test results from patients who received education via the audio CDs. Therefore, we have not

necessarily modified the objectives themselves we have simply lengthened the timeframe necessary to complete these objectives.

**Evaluation:**

Pre-tests and some post-tests have been administered with the Diabetes Program Coordinator tracking these results.

**Impacts and Observations:**

The main lesson learned has been the importance of an appropriate timeframe to accomplish the goals and outcomes for the project. Initially we believed the timeframe we had set forth in the grant would be appropriate to accomplish the objectives of the grant but we have learned that we should have provided a longer amount of time for certain activities, specifically the post-test administration.

**Planned Activities:**

For the final months of the project we will be recording the translation of the cardiovascular materials provided by Brenda Ralls, epidemiologist, from the State of Utah Department of Health. The translation will be recorded at the Eccles Health Sciences Library and prepared for duplication. Additionally, possible training will be explored for feasibility and suitability.

## FINAL REPORT

1. “Sweet Success in Navajo Country”
2. This project is not part of a special funding initiative
3. Utah Navajo Health System, Inc.
4. Montezuma Creek, Utah
5. Stephanie Makihele  
PO Box 130  
Montezuma Creek, UT 84534  
[smakihele@unhsinc.org](mailto:smakihele@unhsinc.org)  
435.651.3773; 435.651.3189
6. 06/2009 – 04/2011
7. May 3, 2011

## NARRATIVE DESCRIPTION

### 1. Executive Summary:

- A short survey was designed to assess patient understanding of diabetes and cardiovascular disease before patient education modules were introduced.
- Diabetes and cardiovascular education resources that were most appropriate for UNHS patients were chosen for translation into the Navajo language. The majority of this information came from the State of Utah Department of Health Diabetes Prevention and Control Program.
- A script was developed for the education module in English and Navajo from the education resources that were determined to be most appropriate for UNHS patients.
- An audio CD and written modules were produced in English and Navajo for diabetes and cardiovascular education.
- Audio CDs and written modules in English and Navajo were utilized by staff in the health centers, during home visits by UNHS Diabetes Outreach staff, and were given to patients to share with their families.
- Laptop computers were purchased to display CD education modules in the health centers and during home visits to patients.
- Results from the short survey developed at the outset of the project are now being collected to be analyzed in order to determine the overall effectiveness of the project in improving the comprehension of the patients regarding diabetes and cardiovascular disease.

### 2. Geographic region/number of counties:

This project was designed specifically for patients in the San Juan County, Utah area; however, some UNHS patients reside outside San Juan County, Utah in the neighboring counties of Apache and Navajo in Arizona; San Juan County in New Mexico; and Montezuma County in Colorado.

### 3. Collaborations/Partnerships:

Other organizations that collaborated in this project include the State of Utah Department of Health Diabetes Prevention and Control Program, Eccles Health Sciences Library, and Healthy Roads.

### 4. Training:

- Staff training will be scheduled for CD education module; Trainings for CD module demonstrations to patients will be scheduled upon receipt of the final CD.
- Most if not all sessions will be sessions in which half or more than half of participants are from minority populations as the UNHS diabetes patient population is 75% Native American.

- Total number of participants in the project training sessions will be reported as soon as data is available.
- Total number of Health care or service providers and total number of members of the general public receiving training on the CD module will be reported as soon as the data is available.

5. Training sites:

Training sites will include three of the four Utah Navajo Health System health centers (specifically, Montezuma Creek CHC, Blanding Family Practice CHC, and Monument Valley CHC), and numerous homes of UNHS patients. Most of these patient homes do not have running water, electricity, or home telephone service.

6. Exhibits:

N/A

7. Resource materials:

An audio CD was developed and recorded in the Navajo Language and provides basic education for patients with a diagnosis of diabetes or cardiovascular disease.

8. Web sites:

N/A

9. Document delivery and reference services:

N/A

10. Approaches and interventions used:

Training sessions for healthcare providers will be held during regularly scheduled monthly department meetings. Demonstration sessions for patients will be held during the patient's scheduled appointment at the health center or during regular home visits provided by Diabetes Outreach staff.

11. Evaluation:

How was the project evaluated? What results were achieved based on the objectives of the project? A short survey was developed at the outset of the project that is being utilized to determine the effectiveness of the CD education module. Specifically, this survey will be administered pre- and post-utilization of the CD by the patient and patient's results will be analyzed to determine if their comprehension of the education provided through the CD has increased.

12. Problems or barriers encountered:

The greatest challenge encountered was obtaining IRB approval from the Navajo Nation. This process lasted approximately 18 months and, in the end, IRB approval from the Navajo Nation was never obtained. The project was slightly tweaked but the core purpose of the project did not need to change in response to the non-approval by the Navajo Nation IRB.

13. Continuation plans:

This project will continue as more diabetes patients are provided education through the use of the CD module. The CDs will continue to be utilized in the UNHS health centers and during home visits by Diabetes Outreach staff. As the need for more CDs arises, more CDs will be duplicated for distribution at a minimal cost through collaboration with the media services department of the San Juan School District in Blanding, Utah.

14. Impact:

This project will improve the ability of UNHS to educate patients dealing with diabetes and cardiovascular disease. By providing this education in a different medium (audio CD) that patients will be able to take home and listen to with family members or by themselves on a continual basis, the patient comprehension level will increase and patients will better manage their disease state.

15. Recommendations for improvement:

We do not have any real recommendations for improvement. Obtaining approval from the Navajo Nation IRB is becoming increasingly challenging and may not always be necessary depending on the nature of the project. For this project Navajo Nation IRB approval was really not necessary due to the manner in which information was collected and maintained.

## **FOLLOW-UP QUESTIONS**

If answers to the follow-up questions are contained elsewhere in your report, indicate where they are located.

1. Were your original project goals and objectives met? If not, why not?

All of the original project goals and objectives were met save the objective to “administer the short survey after 1 year to diabetic/ cardiovascular patients who used education modules to assess improved comprehension”. However, once the CDs are available for utilization by the Diabetes Program staff with patients, this survey will

be used to determine the effectiveness of the CD in increasing the comprehension of the patient.

2. What significant lessons were learned which would be of interest or use to others conducting outreach projects? Which strategies were the most effective in implementing the project?

As our project was specific to the Navajo population with whom we work on a daily basis, significant time and effort was spent to obtain Navajo Nation IRB approval. However, due to the nature of the project and the type of information that would be collected and maintained, IRB approval from the Navajo Nation was really not necessary and only delayed to implementation of the project.

3. If you were to start all over again, what, if anything, would you change about your goals, project plans, etc.?

Our project goals and plans would not change except to exclude the time and effort spent to obtain Navajo Nation IRB approval.

4. What advice or recommendations would you give to anyone considering a similar outreach effort?

We would recommend that anyone considering a similar outreach project closely scrutinize their project to determine if IRB approval is truly necessary.

5. Please describe plans for disseminating lessons learned and other information about the project, such as through a conference presentation or publication. In accordance with the NIH Public Access Policy (<http://publicaccess.nih.gov>), project directors are asked to submit voluntarily to the NIH manuscript submission (NIHMS) system (<http://www.nihms.nih.gov>) at PubMed Central (PMC) final manuscripts upon acceptance for publication.

At this time we have no plans for disseminating lessons learned or other information about the project. As UNHS collaborates with many different agencies and organizations, should the opportunity arise to share lessons learned or other information about this project we will be certain to do so.

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**Attachment 14:  
Subcontractor Quarterly & Final Reports**

**Washington University  
Integrating the Medical Library into Hospital Emergency  
Planning**

## Quarterly Report

St. Louis Children's Hospital in partnership with Becker Medical Library  
One Children's Place  
St. Louis, MO 63110

### Continuity of health Information: Integrating the Medical Library into Hospital Emergency Planning

Betsy Kelly and Lauren Yaeger

[kellyb@wusm.wustl.edu](mailto:kellyb@wusm.wustl.edu) 314-362-2783

[yaegerl@wusm.wustl.edu](mailto:yaegerl@wusm.wustl.edu) 314-454-2768

Reporting period end date: April 22, 2011

#### Publicity:

The culmination of the past year's project is in Lauren attending Unit Based Joint Practice Team meetings with a new laptop, rolling cart and projector all purchased for emergency library use to give a brief informative presentation to make staff aware the medical library has been wired for emergency power, now has a red power fail phone and is integrated into the hospital's emergency plan.

The response has been overwhelmingly good. Not only are the UBJPT's happy to invite me to present, people are impressed with my rolling cart/ projector set up and often times when presenting I see the 'light bulb' go on in people's faces indicating they never thought to make use of the library in this manner but it makes sense.

This has also given me the opportunity to reiterate the resources offered in the library. Usually at the end of each presentation I get a few questions that lead to at least one teaching session being scheduled.

Two posters have been displayed. One large poster is in front of the medical library 3N34 and one in front of the SLCH cafeteria. Each unit gets a single page sized laminated copy of the poster to hang on their unit to remind everyone of the library's emergency services and bookmarks with the library's information are being handed out as well.

#### Goals, Outcomes, Objectives:

The main objective of integrating the medical library and librarian into St. Louis Children's Hospital's emergency plan has been met. The medical librarian, Lauren Yaeger, is an active member of the SLCH

Emergency Preparedness Workgroup and an active participant in emergency drills where the library's resources are mentioned in command center during drills because of her presence.

Because of the new emergency lights and power that have been run to the physical library both print and internet resources are now available to clinical teams during periods the SLCH Emergency Operations Plan is activated. A red power fail phone has been installed in the medical library and the cost is being covered by the hospital's emergency budget. This will allow staff members to contact family in the event of non-emergency phone service failure.

The medical librarian is familiar with and able to educate hospital staff about WISER (<http://wiser.nlm.nih.gov/>) and CAMIO (<http://cameochemicals.noaa.gov/>), both of which are available from the medical library.

No official statement has been made outside of SLCH but the proposal to post something in BERRT - Bi-State Emergency Resource/Response Tool will be discussed at the next meeting of the Emergency Preparedness Workgroup.

Two laptops have been purchased as well as two mobile carts so they can be made available and easily move in the instance of an emergency. A projector has been purchased as well to enable the medical librarian to teach in almost any location.

Mention of the medical library as a resource in the event of an emergency is being added to the online and print Emergency Preparedness Manual at the next update. There is also discussion about adding a plastic clipboard type manual with very basic emergency information to each fire extinguisher station. This would provide immediate and concise information throughout the hospital. The library would be on a map in that manual as a staff station with power and information resources.

Lauren completed the NN/LM 10-Step Approach to Service Continuity Planning and created an emergency toolkit for St Louis Children's Hospital Library.

#### **Evaluation:**

No formal evaluation activities were carried out during this quarter, however, observations during presentations have indicated very positive impacts both in the area of information access during emergencies and during regular day to day patient care.

#### **Impacts and Observations:**

The hardest part of integrating the medical library into St. Louis Children's Hospital's Emergency Preparedness Plan was getting the physical work such as wiring and lighting completed on time. The

Emergency Preparedness Workgroup is more than happy to have the addition of a medical librarian and the team that runs drills and command center feel the same way.

I've found things change slowly in the hospital. While at this point the concept of the library being an emergency resource is well received it will take ongoing education and work on my part to truly change the culture to think of the library especially in times of distress.

In spite of the difficulties the effort has been worthwhile. The library and the librarian are more visible throughout the hospital and the librarian has made connections with groups that would not otherwise have been among her regular contacts. The opportunities to present to the Unit Based Joint Practice Teams has both raised awareness of information access during emergencies and also of basic library services.

**Ongoing involvement:**

Lauren will remain a member of the SLCH Emergency Planning group. The results of this project will be shared with the members of BERRT and her work will be included in emergency planning documents going forward. Lauren will continue to present to UBJPTs, work with Residents and other hospital staff and will promote both her regular and emergency services.

## NN/LM 10-Step Approach to Service continuity Planning

### 1. Assess Risks

Stories about emergencies/disasters at SLCH:

Fire in the atrium resulted in a building evacuation. Sprinkler system in that area went off, killed the fish in the fish tank. In that instance I'd be used as manual labor to move and transport patients.

A volunteer fainted in the hallway outside the library and a code had to be called. In that case if I was the first to see her I'd call the code.

A pipe broke in the volunteer office and flooded the office. It had to be gutted and rebuilt. At the time all they could do was call maintenance.

There was a salmonella outbreak in the hospital. It took weeks of taking health histories, culturing feces, and dietary history to find the source was the cafeteria. FRC handed out specific patient care information to this outbreak, answered phones in the command center. The cafeteria was shut down for a few days.

When there are severe weather warnings they announce it throughout the hospital over the loud speaker. Patients are moved away from windows depending on the type of weather threat.

Once there was a huge blizzard and everyone was snowed in the hospital so anyone in the building had to help others complete whatever task is needed. There was limited food and sleeping areas.

Water and phone outages happen occasionally then the hospital goes to water limitations and using foam to sanitize.

Once a man with a gun ran off of Kingshighway and into the hospital. Everyone takes a position and keeps watch until the threat is neutralized.

Occasionally (usually) due to construction phones and pagers go down. Announcements are made over the loud speaker.

There was an oxygen fire in an operating room where a child died. Being in the library I have nothing to do with this kind of emergency.

### 2. Protect yourself, your staff, and your patrons

- a. The emergency manual covers our emergency procedures, meeting places and we run drills from time to time.

### 3. My major services would center on gathering pediatric specific information and then disseminating it to the proper people. Also, manning the library and maintaining our emergency

services. Keeping working computers open to staff to communicate with home if needed or keep abreast of the unfolding event. If man power is needed I'm also available as needed.

#### *4. Create procedures for remote access to core services*

As an example, a school bus of grade school aged children crashes on its way to school at 7am with multiple injuries to the kids. I'm not in the library and because it was such a large accident outside help is being brought into the EU to admit the injured children. Some of the first responders aren't comfortable writing up pediatric pain medication dosages and setting pediatric bone injuries. In this instance I am available by phone and I can either walk someone through getting the needed information online (Redbook) or come in to the hospital. At this point I will have educated enough staff in the hospital someone will be able go to the library, pull up the needed information and distribute. Or I can do the search myself at home and email links to command center where someone can then send the needed information to the correct people. The most important element to getting the information to those that need it is someone identifying the need and asking for help.

A "Tips and Tricks" card with database information and searching tips has been created and distributed with extra copies available in the library. When the librarian is not available this is basic information made available to any hospital library user.

#### *5. Determine your core electronic resources.*

The Becker Medical Library homepage is a gateway to library resources [www.becker.wustl.edu](http://www.becker.wustl.edu). From there, the user can access all the online resources available. Because Becker provides so many resources for students, physicians and faculty a 'clinical portal' is available to guide the user to the best resource for his or her need. I teach PubMed, CINAHL, SCOPUS, Stat!Ref, Nursing Reference Center, how to use the catalogue and UpToDate to my community. These are general skills and databases from which one can easily search and obtain literature. I would probably recommend UpToDate or First Consult in the event of an emergency because it has direct medical information about conditions and etiology that is more point of care clinically applicable than PubMed or SCOPUS. Stat!Ref or Access Medicine are good point of care resources because they house resources such as text books and MedCalc 3000 as well as a medical dictionary. Most likely in the event of an emergency frontline staff aren't looking for an excess of information, just what they need to know to get the job done.

In the event that the internet is compromised the library is now wired for emergency power so there is enough light to use the hard copy texts. The first place information seekers should go is the reference shelf. Housed there are drug dosage handbook, pediatric resuscitation handbooks, information on poisoning and medical dictionaries. It is not likely my patrons even use the catalog in the best of circumstances, and if then they use the online version. My library has labeled sections to help one find what they are looking for as well as the SLM classification chart on the wall.

Develop a continuity of access plan for your essential electronic resources.

The library is equipped with emergency power, it is also equipped with a red power fail phone and two lap top computers with back up batteries and satellite cards. If a situation arises where a floor needs/ patient care area needs power and it's a limited resource the library will be one of the first areas shut down. There is ongoing education throughout the hospital teaching resources, use and access of databases and library resources.

The library door automatically locks after 5pm until 8:30am with a magnetized lock. In the event of a power failure this lock is disabled and the library is accessible to everyone.

*6. Identify your core print collection.*

Since St. Louis Children's Hospital is a pediatric hospital our print collection is pediatric focused which makes it an invaluable resource in the event of an emergency because children are the most vulnerable population to harm.

The print collection at SLCH is mostly made up of back issues of journals. The text book collection is a wonderful resource if the internet is down. Some of the most important texts would be the pediatric dosage handbooks, drug interaction information, general medicine and the rest would be determined by the nature of the disaster.

**Core Print Collection**

Nursing 2009 Drug Handbook

Poisoning & Drug Overdose *edited by Kent R. Olson*

Pediatric Dosage Handbook

Redbook

Nelson's Pediatrics

*7. Identify your unique or highly valued resources.*

All of our resources specifically for pediatrics are the most highly valued and unique. SLCH's library also carries more nursing focused materials than Washington University's Becker Medical Library making those resources are unique and valuable.

Our computers are much needed and used on a daily basis. Depending on the nature of emergency or disaster, the computers may become our more highly valued resource. Access and communication hold a very high value.

The SLCH library is more functional than anything and devoid of costly artwork, historical treasures or other unique and valuable items.

8. *Proactively plan for the recovery of your unique and highly valued resources.*

Due to the location of the physical library the most likely destruction of property would come from fire or flood damage. Because the hardcopy collection is elevated from the floor by shelf design, it would have to be a significant amount of water to damage more than the lower level of books. If the sprinkler system is activated the damage will be more widespread. In that case we will recover what we can and probably only purchase core pediatric medical texts and slowly assess what's needed and rebuild the collection as needed. In the event of having the library's print collection completely destroyed key library stakeholders would meet and discuss print vs. online collections.

The loss of computers would be a resource we would immediately find the money to replace. We might not be able to replace all nine computers at once, but there will most likely 2-4 up and running within a week of the loss. Our computers are gateways to our online resources. Much of what is in print in the library can be found online. The computers also provide access to real time information that in the event of an emergency or disaster is necessary. Getting our computer network back up and running would be first priority after cleaning up.

If something were to happen to our texts the reference section would be the first to be replaced. Some of the core texts are online hence the importance of the computers.

One of the most valued resources is the librarian. No one knows the collection better than the librarian nor can many rival her ability to find and disseminate information swiftly. In the event something happens while she is not in the hospital and she is needed efforts will be made to contact and bring her in. If she is at the hospital and is injured she will be attended to, then hopefully can return to her post. It is important that the medical research librarian focus on teaching the hospital staff HOW to get to the information and where to find it because if she isn't there someone else needs to be able to use the library resources knowledgably.

9. Know how to obtain outside assistance

Becker Medical Library and librarians are available to give advice and the library houses a much larger collection and is within walking distance of SLCH.

Emergency paper clean up service in the area

**NN/LM (National Network of Libraries of Medicine):** (800) DEV-ROKS or 1-800-338-7657 (business hours): DOCLINE, coordination of emergency response among members, resource sharing in emergency, possible funding for replacement equipment.

**Lyrisis:** (800) 999-8558 (24/7): Territory: southeastern/northeastern/mid-Atlantic states—advice about saving collections, health and safety measures in an emergency, referrals to commercial salvage companies, etc. Onsite assistance available through volunteer network

10. *Be Prepared at Home*

As the medical librarian the best I can to prepare myself at home is to have a Go Kit and a charged laptop so I can communicate with the hospital and proxy into the Washington University network if my search services are needed.

# **SLCH Medical Library Emergency Toolkit**

## ***Resources***

### **Medical Librarian**

### **Physical textbooks**

### **Online databases**

PubMed

Ovid (if you have an account)

Access medicine

UpToDate

MDConsult

CINAHL

Nursing Reference Center (SLCH computers)

Scopus

### **Computers**

2 rolling cart laptops (emergency powered)

4 Washington University line computers (emergency powered)

4 SLCH line computers (emergency powered)

### **Tables/chairs/space**

### **Copy machine/printers**

### **Librarian contact information**

Lauren Yaeger, MA, MLIS

Medical Librarian

SLCH Medical Library

St. Louis Children's Hospital in partnership with Washington University School of Medicine

Phone: 314-454-2768

Pager: 294-BOOK (2665)

Fax: 314-454-2340

[yaegerl@wustl.edu](mailto:yaegerl@wustl.edu)

### **How to access/location**

The medical library is located on the third floor of St. Louis Children's Hospital at the north end next to the auditorium which becomes the labor pool in the event of an emergency. Command headquarters is also located on this floor and near the medical library.

The SLCH computer log-in and password is 'library' 'library'

The WU computer log-in is 'mcgust', the password is 'Visitor1'

### **Emergency Resources**

Laptops/ rolling carts

Emergency lighting

Emergency power

Red phone

## ***LIBRARY DISASTER TEAM***

Lauren Yaeger: Librarian

Kim Hume: Manager of the FRC

St. Louis Children's Hospital Medical Library is designed to serve its patrons whether or not a librarian is present. In the event of an emergency the hospital staff is able to access the library even after hours with use of their badge. All materials are easily accessible and a self check out plan is clearly displayed so patron's can take and use materials even when the librarian is not present.

## ***COMMUNICATION PLAN***

In the event of an emergency or disaster the librarian (if she is present) will report to command center and when it is appropriate a text page will be sent to the hospital's emergency contacts stating the

medical library is open for information purposes as well as a space provided for staff to communicate home and take a break.

Depending on the length of the situation, notifications can be posted on the SLCH blog or emails sent to key personnel.

The librarian does not have authorization to comment to the media.

## ***SERVICE CONTINUITY***

The library is equipped with backup power and emergency phone lines.

The online resources are maintained by outside vendors and their accessibility is dependent on that vendor's status depending on the emergency event.

Inter-library loans go through Becker Medical Library and continuity of service is dependent on their situation.

Access to the library print collection is openly available 24/7 to hospital staff

## ***GETTING HELP***

**[NN/LM](#) (National Network of Libraries of Medicine):** (800) DEV-ROKS or 1-800-338-7657

Contact Barb Mathieu, head of Becker Medical Library's Inter-Library Loan department (314-362-2780) with regard to lending requests in DOCLINE, coordination of emergency response among members, resource sharing in emergency and possible funding for replacement equipment.

**NN/LM Emergency Preparedness & Response Toolkit:**

<http://nnlm.gov/ep>

### **Local Preservation Librarian or Partner Conservator**

Becker Medical Library Archives and Rare Books Department

Location: 7<sup>th</sup> Floor Becker Medical Library

Phone: 314-362-4236

E-mail: [arb@wusm.wustl.edu](mailto:arb@wusm.wustl.edu)

Hours: 9 am – 5 pm, M-F, or by appointment

Web page: [becker.wustl.edu/libdept/arb](http://becker.wustl.edu/libdept/arb)

**Northeast Document Conservation Center (NEDCC):** (978) 470-1010 (24/7): will provide telephone advice to anyone about response to and recovery from a disaster that impacts library collections.

**SALVAGE & RECOVERY COMPANIES:**

See the NN/LM Emergency Preparedness & Response Toolkit for links to commercial salvage companies

***LIBRARIAN RESPONSE***

Make sure emergency power, lights and phones are in proper working order.

Secure access to the library for incoming patrons.

Provide support to the command center and remind them of the support the medical library provides non-clinical space, internet access, and print materials.

Remain available to conduct literature searches and get information provided at the point of care.

BOMB THREAT

EARTHQUAKE

FIRE

SEVERE WEATHER

MASS CASUALTY

CHEMICAL OR RADIOACTIVE SPILL

INTERNAL EMERGENCY

SARS

ANTHRAX

# Continuity of Health Information: Integrating the Medical Library into Hospital Emergency Planning

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## 1. Executive Summary:

Emergency planning is a complex and ongoing effort in hospitals today. Significant resources are devoted to planning, practicing, educating and promoting awareness of staff roles in the event of an emergency. There is awareness at St. Louis Children's Hospital (SLCH) of the need for planning for access to health information during an emergency and for formally incorporating information access into the SLCH Emergency Operations Plan.

Documenting the process of integrating the library into the SLCH Emergency Operations Plan, providing materials and programs to inform clinical staff and requesting feedback from the targeted audience will enable the investigators to clearly describe the process for identifying need, developing documents and programs to address that need and understanding the effectiveness of the process so that other hospitals and health sciences libraries have a model for how to approach this issue and ensure access to health information for their populations.

As they began this project, the investigators believed it was important to understand the current role of libraries in emergency planning in hospitals in the St. Louis region. Therefore, one of the first activities was to work with the SLCH Emergency Preparedness Director to send a link to an online survey to members of BERRT (Bi-State Emergency Resource/Response Tool), now Esponder. This instrument solicited opinions and feedback from respondents about the role of the library in supporting information needs in their institutions during an emergency. Thirty-five respondents provided answers.

In response to the first question, *Where do you/would you go for medical information during an emergency at your hospital* (q1), 24 of 33 of respondents said "the internet" or online or mentioned a resource, such as PubMed, that is available online. Four specifically mentioned the library. Thirty of thirty-five respondents didn't know or were unsure if their *library or librarian was involved in emergency preparedness* (q2) at their hospital. Several added comments, including three that reported they had no library, one that the library provided literature searches to support the basis for the emergency plan, one that the librarian is an integral part of our process; excellent resource and lit search capability", one that the Director of Health Information Management also oversees physician library services and one related to research from FEMA course material. One said "I don't think they need to be. I sure hope they're not. There are already too many incompetents and/or unnecessary folks involved."

Only two respondents indicated that the library and librarian had a designated role in emergency preparedness (q3) as follows:

- Assists in the configuration of HCC (*sic*) standup; documentation and lit search
- Our system is a little different than others....since I have done Emergency Mgmt for over 20 years in the community I help with ICS and overall planning, direct the HIM department and am involved in community emergency planning...

Question 5 asked *how might a medical library and/or librarian be used in the instance of an emergency or disaster*. Five respondents each suggested searching the literature and identifying resources. One expanded to describe resources “to identify agents, course of treatment, diseases, etc.”

When asked *what benefits the institution might realize from librarian involvement* (q5) fifteen mentioned access to information or resources and two the skills the librarian has to find information.

Of the sixteen respondents who indicated that their institution *has a designated location in or near [the] hospital where employees can go to contact family/friends in the event of an emergency* (q6) only one said that location was the medical library.

The goal of this project was to understand the process and possibilities of involving the medical library and librarian in the institutional emergency planning process and plan. It is clear from the responses to our survey that many involved in emergency planning are aware of the value of access to information but that few actively involve the library and librarian in their planning.

Because she asked to be involved, the medical librarian became a formal member of the emergency planning workforce at SLCH. Her presence at meetings raised awareness of her skills and services and the resources available from the library. The hospital agreed to pay the ongoing costs of providing uninterruptable power and telephone in the library as a gathering spot for staff in the event of emergency. St. Louis Children’s Hospital Medical Library is located on the 3rd floor next to the auditorium which serves as a gathering place in the event of an emergency for available volunteers. The medical library is also across the hall from where command center is set up in the event of an emergency and will provide easily accessible communications capability, computers and respite space.

The library has been wired for emergency power and lighting and has a power fail red phone. There are eight existing desktop computers, four on the Washington University network and four on the SLCH network. If needed, there are two new laptop computers on rolling carts fully powered with extra batteries. Hardcopy texts of basic pediatric medical information have been purchased such as Redbook and The Pediatric Dosage Handbook. All changes have been completed to the library space and the medical librarian will maintain her position on the Emergency Preparedness Workgroup and continue providing both the medical library space and her skills in the event of an emergency.

## **2. Geographic region:**

SLCH services the St. Louis, Missouri metro area and the Metro East region of Illinois.

## **3. Collaborations/Partnerships**

The medical librarian is fully embedded in the Emergency Preparedness Workgroup and acts as the liaison between the Ethics Committee and Emergency Preparedness Workgroup

as needed. The medical librarian also participates in all emergency drills and is present at command center as needed. By being part of command center she is part of the Barnes Jewish Hospital and Washington University School of Medicine collaboration. While her first loyalty is to SLCH, through BERRT local hospitals can request support and information if needed.

#### **4. Training:**

The medical librarian attended a Critical Employee Emergency Planning (CEEP) daylong seminar put on by FEMA, the Missouri Office of Homeland Security, and the Gulf States Regional Center for Public Safety Innovations (GSRCPPI).

“GSPCPI was created in 1997 by the COPS Office to provide federally funded training and technical assistance to Public Safety professionals and their communities in our region. Since then we have grown to include DHS, BJA, State Contracts, national projects and more. Our areas of specialty include:

- Increasing partnerships and networking to improve Public Safety
- Leadership, ethics and other training which enhances Public Safety Professionalism
- Quality of life issues which affect first responders and their families”

CEEP training made the librarian aware that the most important resources during an emergency are the first responders. If they are more concerned with their own loved ones and family they are likely, as happened in Katrina, to abandon post leaving those requiring rescue and help in need. Part of the reason the medical library is such a good emergency resource is that it provides a non-clinical space for the hospital clinicians to gather, contact family members and access information. The SLCH medical librarian was the only librarian in attendance and when introducing herself was greeted by the other participants with murmurs of interest and approval. One of the police officers in attendance worked part time evenings at SLCH as part of the transport team and thanked the librarian for supporting first responders and the hospital.

#### **5. Resource Materials:**

A 30x24” poster was created by WU MedPic and one is on a stand outside the medical library in front of the auditorium and the other is outside the staff and visitors’ cafeteria, both highly traveled areas in the hospital, to make staff aware the medical library provides support in the event of an emergency as well as for continuing information. The librarian attended nine different Unit Joint Practice Team (UBJPT) meetings using one of the new lap top computers rolling cart units, She presented a brief power point presentation and handed out bookmarks also created for this project. She supplied the units with laminated miniature versions of the poster to be posted in the nursing stations.

#### **6. Exhibits**

Not applicable

## **7. Resource materials:**

A poster and bookmark were developed and distributed. Two posters are displayed, one outside the library and the other outside the cafeteria. Letter size copies of the poster have been laminated and distributed to each of the ten Unit Based Joint Practice Team areas in the hospital. 1000 bookmarks were printed and handed out by the librarian at meetings and are available in the library.

## **8. Web sites**

Not applicable

## **9. Document delivery and reference services**

None provided relating to this project. While it was anticipated that reference services would be available during emergency drills none were requested. Information requests have resulted from presentations to various Unit Based Joint Practice Teams.

## **10. Approaches and interventions used:**

In order to best reach the most diverse teams of clinicians at SLCH the medical librarian identified, using the hospital's intranet webpage, the Unit Based Joint Practice Team leaders and sent each an email requesting a five minute slot in their next meeting. This was mostly met with invitations to present, although a few have yet to respond. Some allowed the librarian to stay and participate and others, like the Operating Room and Same Day Surgery units, politely thanked her for her time and information. At these meetings both book marks and laminated small posters are disseminated.

## **11. Evaluation**

This project had three desired outcomes:

1. Information services and resources of the Medical Library are available to clinical team members and first responders during periods that the SLCH Emergency Operations Plan is activated
2. Staff have access to internet resources for personal support during a hospital emergency
3. Best practices entry provides information for hospitals and medical libraries about integration of libraries in emergency plans

We articulated four indicators as measures of successfully achieving the outcomes:

Outcome 1:

- Measurable Indicator: Requests for clinical information are filled by the Medical Librarian during emergency drills

- Target: 2 requests for clinical information are filled within 2 hours of request being submitted

Outcome 2:

- Measurable Indicator: Hospital designated emergency personnel are able to contact family members using Library based communications resources during an emergency drill
  - a. Target: 80% of 10 staff members successfully make contact with family members

Outcome 3:

- Measurable Indicator 3a: Best Practices entry provides useful information
  - a. Target: 40% of 10 medical libraries reporting, of 30 queried, report that the Best Practices entry was useful to their institution
- Measurable Indicator 3b: Hospitals on BERRT - Bi-State Emergency Resource/Response Tool - report information posted by SLCH on library integration in emergency planning is useful or very useful to their institution
  - a. Target: 40% of 10 medical libraries reporting, of 30 queried, report that the information posted by SLCH on library integration in emergency planning is useful or very useful to their institution

*Outcomes 1 and 2* were met, although the articulated indicators and their specific targets were not. We found that, although the librarian participated in emergency drills, the drills do not lend themselves to information seeing. Other activities, including creating and displaying posters, distributing bookmarks and giving presentations at each of the Unit Based Joint Practice Team meetings increased awareness of the librarian and the resources available to staff, both during normal work periods and during emergencies. *Outcome 2* ensured that staff have access to internet resources for personal support. This outcome was met. Eight computers are available in the medical library where uninterruptable power was installed. The eight computers plus two notebook computers with battery backup were available during drills and will be available during a real emergency situation. *Outcome 3* has not yet been met. An entry in the Library Success Wiki is planned but has not been completed. In addition, a poster is being developed for presentation at library meetings in the region and nationally. The investigators will also prepare a message to be sent by the Emergency Preparedness Director to the Esponder listserv announcing the Library Success Wiki entry.

The project's evaluation plan indicated that data would be collected from a number of sources over the length of the project.

- Preliminary data will be sought through a survey of peer hospitals and health sciences libraries asking whether and how the library is incorporated into emergency planning. The results will provide SLCH with an idea of how the medical library's usefulness in the event of a disaster is perceived throughout the region and will highlight needs SLCH's program should address.

The survey of peer pediatric hospitals in the St. Louis and Illinois metropolitan region was completed and results were analyzed. We concluded that staff dealing with emergency

preparedness at peer institutions value access to information, expect to find it online, and to some extent are aware of the librarian as a resource. For the most part information access was not part of any emergency preparedness plan.

- Once the library has been outfitted with backup power, lights and phones, the resources will be tested and the process documented.

Backup power and phone were installed. The process took much longer than anticipated. The hospital is supporting any ongoing costs of these emergency resources

- The librarian will be trained and included in the Emergency Operations Plan and when drills are run the success or failure of the integration will be documented.

The librarian is integrated in the Emergency Operations Plan and is included in drills and has noted that information resources were not sought during the drill process. However, during an emergency quake drill the librarian delivered an elevator speech about the library to the float pool of workers during the earthquake drill. The staff member who heard it mentioned having the library as an employee space to contact family should be mentioned as a benefit to employment.

- Key people trained in emergency planning and awareness will be interviewed at the beginning of the process and after each drill. These individuals will be identified by the safety manager, collaborating organizations within the Medical Center, and by members of the Workgroup.

The Emergency Preparedness Director was interviewed before and after drills and at the conclusion of the project. She values the inclusion of the librarian and information resource access will be included in emergency card manuals that will hang next to the fire extinguishers throughout the hospital

- Feedback about the usefulness of content made available and the effectiveness with which it is provided will be solicited from the Emergency Preparedness Workgroup, from participants in information orientation sessions and after drills.

Participants in orientation sessions among the Unit Based Joint Practice Teams were pleased to learn about resources available from the library and the librarian, both during normal and emergency operations.

- Formal classes that include a section on health information during emergencies will be evaluated to measure the level of increased awareness of and knowledge about resources and processes gained by class participants.

No formal classes were taught. Informal presentations were made to UBJPTs.

- At the conclusion of the project a survey will be conducted to solicit feedback from those who were involved or affected by the changes in the Emergency Operations Plan. All data collected during the project will be analyzed and included in the final report.

A final survey was not done. Final steps are in the hands of the Emergency Preparedness Workgroup, including creation of emergency card manuals that will hang next to the fire

extinguishers throughout the hospital. In these 'go to' manuals the library will be highlighted as an emergency resource. The medical library as an emergency resource and non-clinical location with power, light and red phone will be added to the hospital's emergency manual at the next update. The response from hospital staff has been overwhelmingly positive.

- Documents developed, and on approval by the Emergency Preparedness Workgroup, will be formally integrated into the Emergency Operations Plan. This is being done in conjunction with the Emergency Preparedness Workgroup.

## **12. Problems or barriers encountered:**

SLCH is a very open community to staff support and welcomed the integration of the medical library into the Emergency Operations Plan. The biggest obstacle was getting the facilities department to install the emergency power and lightening in a timely manner. Despite delays, the team that did the physical work on the library made sure intrusive work was done during evening and weekend hours as to not disrupt the use of the library.

## **13. Continuation:**

The librarian will continue to be involved with emergency planning at St. Louis Children's Hospital as well as continue to educate staff about the library as a resource in the event of an emergency. Plans are in the works to create emergency card manuals that will hang next to the fire extinguishers throughout the hospital. In these 'go to' manuals the library will be highlighted as an emergency resource. The medical library as an emergency resource and non-clinical location with power, light and red phone will be added to the hospital's emergency manual at the next update. The response from hospital staff has been overwhelmingly positive.

Once the Library Success Wiki entry is completed a link will be sent to the emergency preparedness groups in Esponder.

Wrapping up this project and reporting on emergency services in the hospital is particularly timely as so many weather disasters have recently struck the Midwest and close to home in Joplin, Missouri. The media images of Joplin's hospital are an all too real reminder that hospitals are not infallible and are, in fact, vulnerable to disaster. Due to location, resources, and the nationwide movement to use libraries as resources in the event of a disaster St. Louis Children's Hospital medical library is now fully integrated into the hospital's emergency plan.

## **14. Impact**

The medical library at St. Louis Children's Hospital has become an integral part of the Emergency Preparedness Plan. Her work with the Workgroup, presentations to Unit Based Joint Practice Teams, display of posters and distribution of bookmarks and smaller

versions of the poster have increased awareness of her role in access to information, of her skills in assisting information seekers in finding what they need, and of the breadth of resources available to the SLCH community during both routine and emergency events.

# Follow-up Questions

1. *Were your original project goals and objectives met? If not, why not?*

The objective of this project is to integrate the Medical Library into the Emergency Operations Plan of the St. Louis Children's Hospital. Yes, this has been accomplished.

The library is wired for emergency power, lights and has a power fail red phone available. The librarian is integrated into the SLCH Emergency Preparedness Workgroup and is an active member of Command Center when needed. She has also created, presented and disseminated marketing materials to educate the clinical staff at SLCH that the library is now part of the Emergency Operations Plan.

Attending a conference and presenting the poster did not happen because of timing. The wiring of the library took much longer than anticipated slowing the completion of the project and therefore creation of the poster. We are planning on submitting a poster for the St. Louis MCMLA meeting in September, 2011 and for MLA, May 2012.

2. *What significant lessons were learned which would be of interest or use to others conducting outreach projects? Which strategies were the most effective in implementing the project?*

By being part of the Emergency Preparedness Workgroup I was privy to the frustrations of trying to inform and educate the hospital staff about emergency planning. Every area of the hospital has an Emergency Manual and it is online and accessible to every employee, yet most of them don't know how to access it nor have ever looked at their own emergency plan. Drills are conducted and half the hospital doesn't know they are happening, how to participate, or are just too busy to take a moment and be aware of what drill is being run and why. It seems no one has time to prepare for an emergency until it is too late. The lesson here is that everyone struggles to adequately disseminate information to the large and extremely busy population that makes up St. Louis Children's Hospital.

I've found integrating mention of the library being part of the emergency plan into my elevator speech is a good way to inform a lot of people about this project. I have the brightly colored bookmarks out in the library and I have gotten a surprising amount of inquiries just from people picking them up and asking me what they are about. Thus far, I have not had one person mention either poster even though they are displayed in two highly trafficked areas in the hospital.

My advice it to keep repeating yourself at every meeting, whenever talking about the library and its services and to have something to hand out as a reminder of ways to inform as many people as possible.

3. *If you were to start all over again, what, if anything, would you change about your goals, project plans, etc.?*

I wouldn't have made such a stringent timeline. There are things I can control, such as going to meetings and participating in drills, and things I can't, such as when facilities starts a project, how long equipment takes to order and arrive. Just because I had a timeline in my head didn't mean it was going to magically make other departments adhere to it.

4. *What advice or recommendations would you give to anyone considering a similar outreach effort?*

Contacting and connecting with the head of SLCH's emergency planning was the best move I made. She was welcoming, supportive and my inroad to becoming embedded in the hospital inner emergency workings. My advice is to identify and befriend key people immediately and do everything you can to work with them. If not for Jennifer (head of SLCH's emergency planning), facilities might still be installing the emergency power in the library. She was the one to introduce me at command center and validate my presence. She was also my connection to the emergency planning community outside the hospital and integral in collecting data.

5. *Please describe plans for disseminating lessons learned and other information about the project, such as through a conference presentation or publication. In accordance with the NIH Public Access Policy project directors are asked to submit voluntarily to the NIH manuscript submission system at PubMed Central final manuscripts upon acceptance for publication.*

We plan to present a poster at the MCMLA chapter meeting in St. Louis in September, 2011 and will submit the poster for presentation at MLA, May 2012. We also plan to make an entry in the Library Success Wiki. As we continue this work, we will look for an opportunity to publish a brief study in an appropriate library or hospital administration journal.

## Addendum 1

### NN/LM 10-Step Approach to Service continuity Planning

#### 1. *Assess Risks*

Stories about emergencies/disasters at SLCH:

- Fire in the atrium resulted in a building evacuation. Sprinkler system in that area went off, killed the fish in the fish tank. In that instance I'd be used as manual labor to move and transport patients.
- A volunteer fainted in the hallway outside the library and a code had to be called. In that case if I was the first to see her I'd call the code.
- A pipe broke in the volunteer office and flooded the office. It had to be gutted and rebuilt. At the time all they could do was call maintenance.
- There was a salmonella outbreak in the hospital. It took weeks of taking health histories, culturing feces, and dietary history to find the source was the cafeteria. FRC handed out specific patient care information to this outbreak, answered phones in the command center. The cafeteria was shut down for a few days.
- When there are severe weather warnings they announce it throughout the hospital over the loud speaker. Patients are moved away from windows depending on the type of weather threat.
- Once there was a huge blizzard and everyone was snowed in the hospital so anyone in the building had to help others complete whatever task is needed. There was limited food and sleeping areas.
- Water and phone outages happen occasionally then the hospital goes to water limitations and using foam to sanitize.
- Once a man with a gun ran off of Kingshighway and into the hospital. Everyone takes a position and keeps watch until the threat is neutralized.
- Occasionally (usually) due to construction phones and pagers go down. Announcements are made over the loud speaker.
- There was an oxygen fire in an operating room where a child died. Being in the library I have nothing to do with this kind of emergency.

#### 2. *Protect yourself, your staff, and your patrons*

The emergency manual covers our emergency procedures, meeting places and we run drills from time to time.

3. *My major services* would center on gathering pediatric specific information and then disseminating it to the proper people. Also, manning the library and maintaining our emergency services. Keeping working computers open to staff to communicate with home if needed or keep abreast of the unfolding event. If man power is needed I'm also available as needed.

#### 4. *Create procedures for remote access to core services*

- As an example, a school bus of grade school aged children crashes on its way to school at 7am with multiple injuries to the kids. I'm not in the library and because it was such a large accident outside help is being brought into the EU to admit the injured children. Some of the first responders aren't comfortable writing up pediatric pain medication dosages and setting pediatric bone injuries. In this instance I am available by phone and I can either

walk someone through getting the needed information online (Redbook) or come in to the hospital. At this point I will have educated enough staff in the hospital someone will be able go to the library, pull up the needed information and distribute. Or I can do the search myself at home and email links to command center where someone can then send the needed information to the correct people. The most important element to getting the information to those that need it is someone identifying the need and asking for help.

- A “Tips and Tricks” card with database information and searching tips has been created and distributed with extra copies available in the library. When the librarian is not available this is basic information made available to any hospital library user.

5. *Determine your core electronic resources.*

- The Becker Medical Library homepage is a gateway to library resources [www.becker.wustl.edu](http://www.becker.wustl.edu). From there, the user can access all the online resources available. Because Becker provides so many resources for students, physicians and faculty a ‘clinical portal’ is available to guide the user to the best resource for his or her need. I teach PubMed, CINAHL, SCOPUS, Stat!Ref, Nursing Reference Center, how to use the catalogue and UpToDate to my community. These are general skills and databases from which one can easily search and obtain literature. I would probably recommend UpToDate or First Consult in the event of an emergency because it has direct medical information about conditions and etiology that is more point of care clinically applicable than PubMed or SCOPUS. Stat!Ref or Access Medicine are good point of care resources because they house resources such as text books and MedCalc 3000 as well as a medical dictionary. Most likely in the event of an emergency frontline staff aren’t looking for an excess of information, just what they need to know to get the job done.
- In the event that the internet is compromised the library is now wired for emergency power so there is enough light to use the hard copy texts. The first place information seekers should go is the reference shelf. Housed there are drug dosage handbook, pediatric resuscitation handbooks, information on poisoning and medical dictionaries. It is not likely my patrons even use the catalog in the best of circumstances, and if then they use the online version. My library has labeled sections to help one find what they are looking for as well as the SLM classification chart on the wall.
- Develop a continuity of access plan for your essential electronic resources.
- The library is equipped with emergency power, it is also equipped with a red power fail phone and two lap top computers with back up batteries and satellite cards. If a situation arises where a floor needs/ patient care area needs power and it’s a limited resource the library will be one of the first areas shut down. There is ongoing education throughout the hospital teaching resources, use and access of databases and library resources.
- The library door automatically locks after 5pm until 8:30am with a magnetized lock. In the event of a power failure this lock is disabled and the library is accessible to everyone.

6. *Identify your core print collection.*

- Since St. Louis Children’s Hospital is a pediatric hospital our print collection is pediatric focused which makes it an invaluable resource in the event of an emergency because

children are the most vulnerable population to harm.

- The print collection at SLCH is mostly made up of back issues of journals. The text book collection is a wonderful resource if the internet is down. Some of the most important texts would be the pediatric dosage handbooks, drug interaction information, general medicine and the rest would be determined by the nature of the disaster.

**Core Print Collection**

Nursing 2009 Drug Handbook  
Poisoning & Drug Overdose *edited by Kent R. Olson*  
Pediatric Dosage Handbook  
Redbook  
Nelson's Pediatrics

7. *Identify your unique or highly valued resources.*

- All of our resources specifically for pediatrics are the most highly valued and unique. SLCH's library also carries more nursing focused materials than Washington University's Becker Medical Library making those resources are unique and valuable.
- Our computers are much needed and used on a daily basis. Depending on the nature of emergency or disaster, the computers may become our more highly valued resource. Access and communication hold a very high value.
- The SLCH library is more functional than anything and devoid of costly artwork, historical treasures or other unique and valuable items.

8. *Proactively plan for the recovery of your unique and highly valued resources.*

- Due to the location of the physical library the most likely destruction of property would come from fire or flood damage. Because the hardcopy collection is elevated from the floor by shelf design, it would have to be a significant amount of water to damage more than the lower level of books. If the sprinkler system is activated the damage will be more widespread. In that case we will recover what we can and probably only purchase core pediatric medical texts and slowly assess what's needed and rebuild the collection as needed. In the event of having the library's print collection completely destroyed key library stakeholders would meet and discuss print vs. online collections.
- The loss of computers would be a resource we would immediately find the money to replace. We might not be able to replace all nine computers at once, but there will most likely 2-4 up and running within a week of the loss. Our computers are gateways to our online resources. Much of what is in print in the library can be found online. The computers also provide access to real time information that in the event of an emergency or disaster is necessary. Getting our computer network back up and running would be first priority after cleaning up.
- If something were to happen to our texts the reference section would be the first to be replaced. Some of the core texts are online hence the importance of the computers.
- One of the most valued resources is the librarian. No one knows the collection better than

the librarian nor can many rival her ability to find and disseminate information swiftly. In the event something happens while she is not in the hospital and she is needed efforts will be made to contact and bring her in. If she is at the hospital and is injured she will be attended to, then hopefully can return to her post. It is important that the medical research librarian focus on teaching the hospital staff HOW to get to the information and where to find it because if she isn't there someone else needs to be able to use the library resources knowledgably.

9. *Know how to obtain outside assistance*

- Becker Medical Library and librarians are available to give advice and the library houses a much larger collection and is within walking distance of SLCH.
- Emergency paper clean up service in the area
- **NN/LM (National Network of Libraries of Medicine):** (800) DEV-ROKS or 1-800-338-7657 (business hours): DOCLINE, coordination of emergency response among members, resource sharing in emergency, possible funding for replacement equipment.
- **Lyrasis:** (800) 999-8558 (24/7): Territory: southeastern/northeastern/mid-Atlantic states—advice about saving collections, health and safety measures in an emergency, referrals to commercial salvage companies, etc. Onsite assistance available through volunteer network

10. *Be Prepared at Home*

As the medical librarian the best I can to prepare myself at home is to have a Go Kit and a charged laptop so I can communicate with the hospital and proxy into the Washington University network if my search services are needed.

**ADDENDUM 2:**  
Survey

The St. Louis Children's Hospital Medical Library and the Washington University School of Medicine Becker Medical Library are investigating the integration of medical libraries into emergency planning in hospitals. We would appreciate your responding to a few questions about integration of the medical library into emergency planning efforts in your hospital.

All responses will be kept strictly confidential and no identifying information will be included in any reports that arise from this work.

**Where do you/would you go for medical information during an emergency at your hospital?**

\_\_\_\_\_

**Are the library and/or librarian involved in your emergency planning process?**

Yes

No/Don't Know/Unsure

Comment:

\_\_\_\_\_

**In what ways are the library and/or librarian involved in your emergency planning?**

\_\_\_\_\_

**Do the library and/or librarian have a designated role in your emergency plan?**

Yes

No

**Please describe the role of your library and/or librarian in your emergency plan.**

\_\_\_\_\_  
\_\_\_\_\_

**Whether or not your library is part of your emergency planning, how might a medical library and/or librarian be used in the instance of an emergency or disaster?**

\_\_\_\_\_  
\_\_\_\_\_

**What benefits might arise from integrating a library space and librarian into the existing emergency plan for your hospital?**

\_\_\_\_\_  
\_\_\_\_\_

**Do you have a designated location in or near your hospital where employees can go to contact family/friends in the event of an emergency?**

Yes

No

## Emergency Planning Integration

The St. Louis Children's Hospital Medical Library and the Washington University School of Medicine Becker Medical Library are investigating the integration of medical libraries into emergency planning in hospitals. We would appreciate your responding to a few questions about integration of the medical library into emergency planning efforts in your hospital.

All responses will be kept strictly confidential and no identifying information will be included in any reports that arise from this work.

**Where do you/would you go for medical information during an emergency at your hospital?**

\_\_\_\_\_

**Are the library and/or librarian involved in your emergency planning process?**

Yes

No/Don't Know/Unsure

Comment

\_\_\_\_\_

**In what ways are the library and/or librarian involved in your emergency planning?**

\_\_\_\_\_

**Do the library and/or librarian have a designated role in your emergency plan?**

Yes

No

**Please describe the role of your library and/or librarian in your emergency plan.**

\_\_\_\_\_

\_\_\_\_\_

**Whether or not your library is part of your emergency planning, how might a medical library and/or librarian be used in the instance of an emergency or disaster?**

\_\_\_\_\_

\_\_\_\_\_

**What benefits might arise from integrating a library space and librarian into the existing emergency plan for your hospital?**

\_\_\_\_\_

\_\_\_\_\_

**Do you have a designated location in or near your hospital where employees can go to contact family/friends in the event of an emergency?**

Yes

No

The poster features a vertical red bar on the left with four icons: a red phone, a lightbulb, an open book, and a laptop. Each icon is set against a starburst background and has a label below it: 'Red phone', 'Power', 'Print resources', and 'Computer/Internet'. The main body of the poster is orange and contains the following text:

# EMERGENCY?

St. Louis Children's Hospital Medical Library can support your information needs in any circumstance.

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**Washington** University in St. Louis  
SCHOOL OF MEDICINE

**Lauren Yaeger, MA, MLIS**  
Medical Librarian, SLCH Medical Library  
St. Louis Children's Hospital in partnership with  
Washington University School of Medicine  
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Fax: 314-454-2340  
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ADDENDUM 4:  
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**Washington University in St. Louis  
School of Medicine**

**Children's Hospital of Washington University School of Medicine**

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**Red phone**

**Power**

**Print resources**

**Computer/Internet**

St. Louis Children's Hospital Medical Library can support your information needs in any circumstance.