Advisors to the NN/LM MidContinental Region

The Regional Advisory Board serves as an additional source for the staff of the NN/LM MidContinental Region to hear from our constituency. We usually have some non-librarians on our board, but this year we decide to jump out of the library box and heavily recruit from among library and information users. Five of the members represent schools (pre-school to higher education) and a non-governmental organization. Their professional interests include patient safety, online education, bio-informatics, and electronic health records. We still have two librarians on our board. Lori Phillips, from the University of Wyoming Libraries, represents our Resource Libraries and Darrel Willoughby, Library Manager for the VA in Nebraska, represents the Midcontinental Chapter of the Medical Library Association.

During their orientation session at the end of June, members identified the challenges that they have with information. They will sound familiar to librarians. Their challenges range from gathering, formatting, inputting, and distributing information. In future meetings MCR staff will be discussing with them similar challenges that we have in carrying out the mission of the NN/LM.

We appreciate the commitment of the following Regional Advisory Members in sharing their time and their expertise:

- Eric Jones, Associate Vice President, Virtual Campus of Central Community College (NE)
- E. LaVerne Manos, Clinical Assistant Professor, University of Kansas School of Nursing (KS)
- Becky Miller, Executive Director, Center for Patient Safety (MO)
- Nancy Nickman, Professor and Presidential Teaching Scholar, University of Utah College of Pharmacy (UT)
- Lori Phillips, Associate Dean, University of Wyoming Libraries (WY)
As part of the MidContinental Region’s contract negotiation with the National Library of Medicine, we develop a list of objectives for the year. We want you to know what to expect from us too! The following is a list of our intended objectives for 2014-2015. The objectives encompass services to our Network members as well as our outreach services. These objectives are also on our web site.

**Assessment and Evaluation**

1. Respond to NLM questions and share ideas and information from the Region.
2. Work with Resource Libraries to carry out RML programs, including signing and monitoring implementation of subcontracts for basic services, and assess Resource Library and coordinator experiences.
3. Reconstitute the Regional Advisory Board and assess the impact of the Board on RML programming and the experience of Board members.
4. Gather and assess needs of health sciences librarians and other organizations in the Region to ensure access to health information.
5. Increase the capacity of Network members to do assessment.
6. Monitor and evaluate NN/LM MCR programs to assess their effectiveness in improving access to health information.

**Education**

1. Identify and promote history of medicine collections in the MCR.
2. Develop, promote, and provide training on resources and tools, especially from NLM and NN/LM, which increase Network member skills to develop projects and programs (includes ClinicalTrials.gov Results and MedlinePlus Connect).
3. Submit program proposals at local, regional, state, or national events.
4. Write and distribute articles about health information resources.

**Health Information Literacy**

1. Exhibit at local, regional, state, or national events (including conferences where the target audience is affiliated with national initiatives).
2. Manage and contribute to Bringing Health Information to the Community blog.
3. Inform those who work with limited English proficiency (LEP) populations about multiple language resources.
4. Encourage and/or support health information literacy collaborations that reach other networks and relevant organizations.
5. Maintain State Library collaborations (includes Affordable Care Act (ACA) outreach).

**Library Advocacy**

1. Investigate the value of librarian services in the cost of patient care.
2. Support member librarians and access to health information during and after organizational restructuring.
3. Support librarians to become involved in patient safety activities in their institutions.
4. Support inclusion of librarians in team practice by highlighting their contributions to achieving value driven outcomes.

**Member Services**
1. Conduct drills or exercises to test the continuity of service plans on a regular basis.
2. Involve Network members in RML infrastructure and outreach.
3. Manage portions of the NN/LM Resource Sharing Plan (includes membership recruitment among K-12 and community college libraries).

**Technology**

1. Develop/enhance and maintain MCR communication methods for accessing MCR program offerings.
2. Research Lifecycle Class Members, and any other Network members interested in e-science, learn and share current e-science practices for librarians.
3. Regularly monitor and disseminate technology developments.
4. Lead four sandbox sessions per year.
5. Create at least one Just Enough Learning vignette per project area.
6. Provide consultations and assist Network members who cannot access NLM and NN/LM resources and services.
7. Develop, enhance, and maintain the MCR game.
8. Share effective practices from Network members via videos.
9. Encourage Network members and community based organizations to explore the use of tablet apps.

---

**Whoooo Says...**

**Dear Whooo,**

Because of the budget cuts at my hospital, I was unable to attend MLA this year. I really missed seeing all of my hospital library colleagues and hearing the new things that others are doing. However, what I really wanted to hear about is what MLA is doing to help hospital librarians. We really need someone to help save our jobs. I am too busy doing my daily work! I can't add anything else.

*Sincerely,*

Shakin' in my shoes

Dear Shakin’,

I’m so glad to hear from you! I’m sorry you missed MLA this year. Hearing about all the new programs and changes in other libraries is so helpful in planning your own library focus and operations.

I think you will be excited to hear about the new Values2 Initiative that the Hospital Library Section is developing. Under the leadership of helen-ann brown epstein, MLA Rising Star Roy Brown will be working with section members to create the HLS Values2 Initiative. The initiative is dedicated to “keeping the Hospital Library doors open” and “keeping the Hospital Librarian in place.” It will focus on three key areas: the Hospital Administrator, the Library as the Center of the Hospital, and Making the Hospital Librarian the Very Best Possible. (Kudos to MCR members Jerry Carlson, Brenda Pfannenstiel, and Barb Jones who are involved with this project!) Also as part of this effort, the Vital Pathways bibliography will be updated.

I anticipate that this initiative, combined with the wisdom of the Vital Pathways Project will provide hospital librarians with a wide variety of needed tools to promote their skills, libraries, and impact on the hospital operations. Watch for the iniative’s release in the next year!

I’m a bit concerned about your comment that MLA needs to be doing something to save your job. As our professional organization, MLA does a great job advocating for our profession and organizing the work of the members. In terms of library advocacy and marketing issues, I think of MLA as a manufacturer of life preservers. The MLA staff members take the contributions of members and make them available to all. These contributions are the life preservers: policy statements, initiatives, classes, listservs, etc. After that it is our responsibility as professionals to use those life preservers in any way appropriate to save our jobs. We can all find great wisdom in the collection of documents and programs donated by our peers.

In your question, you mention that you are too busy with your daily work to take on any other activities. As
a hospital librarian, I know that you are very busy and involved in many different types of activities. However, the marketing and promotion of the librarian (YOU) and your library are activities that you CANNOT ignore. On those extremely busy days, you may only be able to smile and offer your elevator speech to someone you pass in the hallway or even the parking lot. On other days you may be able to get out onto the various floors and introduce yourself and your services. You may be able to network about how your services can be useful with members of various committees that you serve on. You may be able to post information on your hospital’s intranet. There are as many ways to advocate for your services and library as there are ideas in your head.

Take a moment or two, Shakin’ and think about your overall program. What are you accomplishing with your work? What is the impact of your work on the individual patients, the physicians, nurses, departments, and administrators? What do you want others to know about your contributions? Think carefully about these questions, and then start to plan the various ways you can communicate your value to those making decisions about your survival. Some items that you should definitely include are an annual report (complete with an interpretation of the statistics you collect) and a budget proposal. Otherwise, you have a wide variety of choices for your time and creativity.

Remember that repetition will help make your case! Think about how many times you see the same ads on television, in magazines, and on billboards. The more you tell others how you can help them, the more likely they are to remember you favorably. In fact, there is a common adage stating that a person needs to hear something at least three times before they remember it, and up to seven times if they read it!

I hope to see you at MLA in Austin in 2015, Shakin’. I’m eager to hear how your advocacy efforts have paid off.

Sincerely,

Whoooo

MCR Membership Update

Through the years NN/LM MidContinental Region has had a diverse institutional membership including hospitals; academic health sciences institutions; special and public libraries; and information centers. More recently we’ve had a surge in K-12 school and community college libraries joining the Network.

We currently have 371 member institutions including both Affiliate members and Full members. What’s the difference between the two? The primary difference is that Full members use the DOCLINE System http://www.nlm.nih.gov/docline and follow the NN/LM Resource Sharing Plan http://nnlm.gov/rsdd/docline/docdelplan.html. For more detailed information on each membership category please click here http://nnlm.gov/mcr/services/network.

We can think of membership numbers in several ways, so here’s a simple breakdown of the current membership:

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Membership</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>Full</td>
<td>40</td>
</tr>
<tr>
<td>Academic</td>
<td>Affiliate</td>
<td>56</td>
</tr>
<tr>
<td>Hospital</td>
<td>Full</td>
<td>83</td>
</tr>
<tr>
<td>Hospital</td>
<td>Affiliate</td>
<td>43</td>
</tr>
<tr>
<td>Public</td>
<td>Affiliate</td>
<td>98</td>
</tr>
<tr>
<td>Other</td>
<td>Full</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>Affiliate</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>371</strong></td>
</tr>
</tbody>
</table>

State libraries from every state in our region are also NN/LM members. They all fall in the public library membership category and all are Affiliate members. State coordinators are working with their state libraries...
to make health information more accessible to the public. Activities have included co-presenting on the Affordable Care Act, posting NN/LM sponsored instructional videos on state libraries’ websites, submitting articles to state library newsletters and/or blogs, sending announcements about upcoming NN/LM activities, funding, or training via their state libraries’ email discussion lists.

In the last few years the NN/LM has implemented new outreach initiatives to K-12 schools and community colleges. K-12 schools are included in the “Other” membership category. We currently have nine K-12 schools as Affiliate members. The NLM Specialized Information Services has developed several excellent resources for schools and a goal is to have schools use those resources in their curricula. In 2012, the NN/LM setup a task force to support community college outreach for “improved health information access in community colleges...” with the ultimate outcome of more students and faculty using NLM resources. In response, to the K-12 and community college initiatives, one of the MCR’s goals has been to enroll at least four libraries in each of those categories every contract year. During the past two years, we have met that goal and will continue that pace of recruitment.

During the 2013-2014 contract year, we had 18 new members enroll in the NN/LM MidContinental Region:

<table>
<thead>
<tr>
<th>Library</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mancos Public Library</td>
<td>Colorado</td>
</tr>
<tr>
<td>Pueblo Community College</td>
<td>Colorado</td>
</tr>
<tr>
<td>Pikes Peak Community College</td>
<td>Colorado</td>
</tr>
<tr>
<td>Standley Lake Library</td>
<td>Colorado</td>
</tr>
<tr>
<td>Otero Junior College</td>
<td>Colorado</td>
</tr>
<tr>
<td>Lamar Community College</td>
<td>Colorado</td>
</tr>
<tr>
<td>Baden Branch Library</td>
<td>Missouri</td>
</tr>
<tr>
<td>North Central Missouri College</td>
<td>Missouri</td>
</tr>
<tr>
<td>Southwest Baptist University</td>
<td>Missouri</td>
</tr>
<tr>
<td>Vatterott College – Omaha</td>
<td>Nebraska</td>
</tr>
<tr>
<td>Providence Medical Center</td>
<td>Nebraska</td>
</tr>
<tr>
<td>Central Nebraska Community</td>
<td>Nebraska</td>
</tr>
<tr>
<td>Central Health Center</td>
<td>Nebraska</td>
</tr>
<tr>
<td>Mountain Crest High School</td>
<td>Utah</td>
</tr>
<tr>
<td>Wilson Elementary School</td>
<td>Utah</td>
</tr>
<tr>
<td>Clearfield Job Corps</td>
<td>Utah</td>
</tr>
<tr>
<td>Ben Lomond High School Library</td>
<td>Utah</td>
</tr>
<tr>
<td>White Mountain Library</td>
<td>Wyoming</td>
</tr>
</tbody>
</table>

Congratulations to all these new members! If you would like to see your library’s listing in the NN/LM Member Directory, or are curious about local members, click here [http://nnlm.gov/members](http://nnlm.gov/members).

Is all your contact information correct? Please review your library's information and let us know if a name or address needs an update!

- Jim Honour, Member Services/Wyoming Coordinator

Wearable Technology Trends:

From Fitness Tracking to Clinical Applications

The phrase “wearable technology” may bring to mind fitness trackers, smart watches or Google Glass, but it includes a wide variety of devices for both consumers and health care. The wearable technology industry is an increasingly lucrative market and experts predict it will continue to grow. A new market research report "Wearable Electronics Market and Technology Analysis (2013 – 2018)," expects the global wearable electronics market revenue to reach $8 billion by 2018 with the total number of devices shipped to exceed
130 million units. This includes all types of wearable technology such as gadgets, headgear, wristbands, and smart textiles.

The most popular consumer wearable devices are fitness wristbands equipped with sensors that track a user's physical activities. These self-tracking devices gained popularity with the quantified-self movement which employs technology to increase self-awareness by tracking data related to exercise, diet, and health and then using that information to encourage behavior modification to improve the quality of life. The fitness bands track activities such as the number of steps taken, stairs climbed, distance achieved, calories burned, sleep patterns, and heart rate. Some devices include motivational messages or feedback to help the user reach his or her goal, others display notifications of texts and emails. All of them sync with mobile phones or web sites. Users of the same device can share data with friends, thus combining fitness activities with social networking. Some of the top rated fitness bands include: Nike Fuelband, Jawbone UP, Samsung Gear Fit, Razer Nabu, LG Lifeband Touch, Garmin Vivofit, Jaybird Reign, Fitbit Flex, and Larklife. Most of these bands have the same basic functions, employing an accelerometer and altimeter to track steps and climbing stairs, but additional features (such as heart rate monitors), display modes, design, and price vary. You can easily find reviews online, but when comparing the highest-rated devices the difference is usually based on personal preference, for both design and which metrics you feel are most important.

Health Sciences Libraries have also become involved in the self-tracking fitness movement. MLA News had an article in their February 2014 issue, Getting Fit with the Fitbit: Exploring the Library’s Role in Wearable Technology and Workplace Wellness, that describes the one-year study by the Harriet F. Ginsburg Health Sciences Library at the University of Central Florida College of Medicine (UCF COM) on the use of wearable technology for workplace wellness and exploring the library’s role in introducing new technology of this type.

As part of a workplace wellness initiative, the library purchased thirty Fitbit One activity trackers and developed a study group to use them. The library also created two LibGuides on workplace wellness and consumer health information to complement the study and provide quality resources for the participants.

**Clinical Applications**

There are also numerous exciting new wearable technologies designed specifically for clinical uses. Medical devices such as glucose monitors, ECG monitors, pulse oximeters, and blood pressure monitors are all becoming wearable technology and are being used in managing chronic diseases and monitoring patients’ post-hospitalization. Much of the technology being used isn’t new, but it is now being focused on making it more readily accessible, usable, and in some cases, fashionable. Here are some of the latest devices including some still in development.

Probably one of the most familiar devices, Google Glass has been worn by surgeons to give other physicians and medical students the perfect point of view during surgical and medical procedures, and Glass has already been implemented in training.

The BodyGuardian Remote Monitoring System (RMS), was developed in collaboration with the Mayo Clinic to support remote monitoring for patients with cardiac arrhythmias. The system has been FDA-cleared for the monitoring of non-lethal arrhythmias in ambulatory patients. It lets doctors monitor key biometrics allowing patients to follow their normal daily activities. A small sensor attached to the patient’s chest collects data, including ECG, heart rate, respiration rate, and activity level. The device transmits the data to physicians via mobile phone technology providing a continual connection between patients and their care teams.
The Mimo baby monitor is a "onesie," called the Mimo Kimono that monitors baby movement, respiration and skin temperature and then sends the data to a smartphone. According to the company’s web site, the app allows parents to see their baby’s data in real-time; set alerts to let them know if anything changes; and to view trends and analytics about their baby’s sleep as time progresses. Two green stripes across the chest of the kimono are sensors that record respiratory rate. Potentially signaling breathing difficulty, this data could be valuable in the management of patients with asthma or croup. An additional removable turtle shaped device clipped on the front of the kimono allows the monitoring of body temperature, heart rate, and activity level.

Moticon is the world’s first fully integrated and wireless sensor insole, according to the company. The insole can be used in any shoe to measure the distribution and motion parameters for patients and athletes. It’s currently used for everyday patient monitoring, rehabilitation measures, and for training analysis in sports.

Another aspect being explored is the use of wearable technology in clinical trials. The PRO-Diary has an OLED (organic light-emitting diode) screen and can be loaded with survey questions the patient can then answer right on the wrist. The device can also be set up with alarms that will prompt patients to answer questions at a specific time. The company said the technology has been validated against both paper and Palm Pilot-based surveys and tested favorably.

Health Technology in Development

The IntellivueMX40 is a compact wearable patient monitor that can be used with ambulatory patients and during patient transport. (Follow the link to see photos.) The MX40 allows patients to walk around care settings and has a touchscreen display that lets clinicians see ECG, oxygen saturation (SpO2), and other vital signs in real time with just a push of a button. The device is also watertight to withstand patient showering, accidental immersion into water, and disinfectantcleaning.

The Zoll LifeVest wearable defibrillator monitors heart patients at risk for sudden cardiac arrest. If a life-threatening heart rhythm is detected, the device delivers a shock to restore normal heart rhythm. The Zoll LifeVest can be used to monitor patients before or after bypass surgery or as a temporary safeguard while a patient is being evaluated for arrhythmic risk. (Follow the link to see photos.)

Nuubo is a new-generation wireless and remote cardiac monitoring platform. The company designs, manufactures and sells a portfolio of wearable medical technologies for cardiac prevention, diagnostics, and rehabilitation solutions. The tools use textile sensors and are based on a wireless ECG remote monitoring platform using proprietary technology. Nuubo is commercially available, but distribution in the U.S. is yet to be determined.

For nutrition information, Tellspec is working on a device that you can wave over your meal and get an instant yes-no readout to questions about your food or beverage’s allergen, chemical, calories, and ingredient properties on your smartphone.

I’d love to know what is happening in your library or institution regarding wearable technology or wellness activities. Have you or your colleagues used any of the fitness bands? Which ones? What was your experience? Would you recommend it to others? Regarding wellness activities, is there a role for the library as participant, a support group, or the host of an activity? Have any of your institutions been involved in developing, testing, or implementing new wearable technologies? Has the library been involved or provided research support? If so, please share your experiences with me so I can share it with rest of the region.

- Rachel Vukas, Technology/Kansas Coordinator