

## **Addendum – Librarians at the Rocky Mountain EBHC Workshop** *Response to request for more information by NN/LM Reviewers.*

"Librarians at the Rocky Mountain EBHC Workshop," has been conditionally approved. The reviewers felt that this application is a request for support of professional development. Training, per se, is acceptable but there must be an associated project that measures the impact of training on the RML, the community, and health professionals.

### **1. Outcomes of earlier training at the EBHC Workshop.**

- **Who benefited from the training and what was the impact of that training on access to health care information by professionals and consumers?**

Three librarians have attended this workshop as participants over the past 3 years: Sandi Parker and Martha Burroughs from University of Colorado Health Sciences Center (UCHSC), and Joyce Condon from Exempla St. Joseph's Hospital in Denver. The following table lists outcomes of their participation in this workshop and the impact of that participation on the health care professionals and consumers they serve.

<p>Martha Burroughs Assistant Professor Reference Department Denison Memorial Library UCHSC</p>	<ul style="list-style-type: none"> <li>▪ Increased confidence, improved competence, and new ideas to use in the "Searching for the Evidence" classes I present to faculty, residents and students at the University of Colorado Health Sciences Center.</li> <li>▪ Strategies for facilitating discussions about asking answerable questions and incorporating principles of EBHC into practice.</li> <li>▪ Models of both good and nonproductive techniques of leading small groups in the learning process.</li> <li>▪ Learners in the EBHC classes benefit from the expanded knowledge and understanding of resources as well as practical aspects of evidence-based practice.</li> <li>▪ Better networking with clinical and research faculty and staff all over the country. Outcomes of this networking include:             <ul style="list-style-type: none"> <li>○ An invitation to teach EBHC skills at the opening evening of a Journal Club for Cardiology fellows</li> <li>○ An invitation to serve as a panelist and facilitate two computer lab sessions at a Virginia EBHP Workshop for an international group of physical therapists -- an excellent opportunity to discuss practitioners' concerns about dealing effectively with the variable quality of health information which their patients access on the Web and to direct them towards resources such as MLA's Top Ten Web Sites for Consumers.</li> </ul> </li> </ul>
<p>Sandi Parker Assistant Professor and Head, Reference Department Denison Memorial Library UCHSC</p>	<ul style="list-style-type: none"> <li>▪ In this setting, the health practitioners and librarians learn to respect and appreciate the expertise and the intention of one another to a greater extent than in any other setting that I can recall.</li> <li>▪ Developed a more in-depth understanding of familiar EBM resources, e.g. Cochrane Library and Medline clinical filters -- how these resources serve and, in some cases, don't serve health professionals looking for evidence in the literature.</li> <li>▪ Enabled librarians and health professionals to become interdisciplinary colleagues in the learning process.</li> <li>▪ By working in small groups, I became better acquainted with the clinical information needs of my fellow group members. As collaborators, we learned how to evaluate the pertinent literature and how to relate it to the patient.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Opportunity to improve workshop participants and, afterward, UCHSC patrons, search skills – providing “just in time” database searching instruction.</li> </ul>
<p>Joyce Condon Librarian Exempla St. Joseph's Hospital Denver, CO</p>	<ul style="list-style-type: none"> <li>▪ Provided the librarian with a very strong grounding in EBM theory and techniques</li> <li>▪ Increased her greater credibility with the medical staff and other providers at the institution as being able to contribute to the organization's EBM activities.</li> <li>▪ The CME Committee asked for a presentation on practice guidelines. Two physicians and the librarian presented a one-hour overview that was very well received. Evaluations indicated that the attendees wanted additional presentations by the librarian.</li> <li>▪ GME Internal Medicine faculty requested librarian participation in the EBM curriculum. This included input into the curriculum design and evaluation, and ongoing monthly presentations to 2 groups of residents on rotations.</li> <li>▪ The Neonatologists invited the librarian to participate in their journal club for which they use EBM techniques to evaluate the selected articles. The librarian is given an article to present, and also has been asked to select the articles for review.</li> <li>▪ Articles on EBM search techniques and available resources were published in the Medical Staff Newsletter.</li> <li>▪ Quality Development asked for a presentation on practice guidelines for their journal club.</li> <li>▪ Physicians from our organization who attended the workshop asked the librarian for follow-up to help them reinforce their own learning.</li> <li>▪ The librarian will participate in the organization's data-driven clinical excellence program. The Quality Development department coordinates the program. The Quality Development Department also requested that the librarian evaluate EMB products purchased.</li> <li>▪ Because of the outcomes from the participation in the workshop, the librarian received physician and hospital support to attend the 2002 Oxford Workshop on Teaching Evidence-Based Medicine.</li> <li>▪ The librarian is a co-convener of an EBM study group sponsored by the local medical library consortium.</li> </ul>

Since the workshop began in 1999, eight Denison Memorial Library faculty librarians have participated in the EBHC workshops as members of the faculty/tutor team. Our initial intent in participating was to provide support to a University sponsored workshop and to be seen as collaborative partners with the faculty involved in planning this workshop. We immediately realized the many other benefits, most of which we did not expect, but which continue to grow as our participation increases.

Benefits and Outcomes include:

- ❖ Improved relationships with UCHSC and Denver-area clinicians and researchers.
  - The workshop participants regularly refer their colleagues to the librarian tutors because they view us as experts in our field and valued colleagues.

OUTCOME: More health care providers gain improved database searching skills. More patients receive improved care because their health care providers are using evidence.
- ❖ Requests for clinical librarian services
  - As a direct result of our participation in the first year of the workshop, Denison librarians were invited to attend clinical rounds with several of the Internal Medicine attending physicians who

had participated in the workshop. Denison now has a Clinical Librarian service with our Garfield Internal Medicine clinic that is proving very popular and valued.

OUTCOME: Health care teams at University of Colorado Hospital are providing more evidence-based care to their patients. Residents are learning skills that they carry on to the health care systems into which they are hired.

- ❖ Increased requests for special classes on searching for the evidence by clerkship directors, attending physicians, and residency directors.

- Denison librarians have been invited to provide training on information seeking skills in venues never before available to us.

OUTCOME: Knowledge about how to find and evaluate the evidence in databases such as PubMed, The Cochrane Library, and Best Evidence is being disseminated earlier and more widely throughout the institutions.

- ❖ Enhanced professional reputation of librarians in the UCHSC community

- The Denver area and campus participants leave the workshop with vastly increased respect for librarians and their skills.

- The tutor librarians have been included in grant proposals, meta-analysis teams, student and resident training sessions, and campus committees – all as a direct result of the networking that occurs at the workshop.

OUTCOME: Librarians are being treated as professional colleagues rather than “handmaidens” by the clinical and research faculty. The expertise of librarians is viewed as a vital part of patient care.

The purpose of this proposal is to “spread the wealth.” By including health sciences librarians from the Midcontinental Region in this workshop, we hope to encourage the same benefits and outcomes to the health care providers and consumers in our region.

## **2. Assessment of need**

Descriptions of evidence-based health care abound with many articles citing Sackett(2;3) and others of the internationally known tutors of the Rocky Mountain EBHC Workshop. The need for librarians to be part of the health care team is also well documented in the literature(1). Scherrer and Dorsch(4) state, “EBM extends the librarians' role beyond identification of the literature to involvement in practicing and teaching quality filtering and critical appraisal of the literature. These activities require librarians to acquire new knowledge and develop new skills.” This project proposes to provide a forum for librarians to acquire that knowledge, while improving their ability to build constructive relationships with clinicians and others in the health care team.

A local needs assessment (Attachment 3) is planned as part of the April Colorado Council of Medical Librarians meeting.

## **3. Evaluation**

Currently, participants fill out a paper evaluation and participate in a verbal feedback session in the last plenary session of the EBHC workshop. The workshop organizers, the Colorado Health Outcomes Program of UCHSC, send out a six-month evaluation, as well. We plan to use the same participant evaluations (see Attachment 1 and 2) that the workshop organizers use. Please note that part of the evaluation includes setting goals for putting what is learned in the workshop into practice. The six-month evaluation asks for results of those goals.

In addition to these evaluation methods, the Principal Investigator will hold daily feedback sessions with the librarian participants and librarian tutors to evaluate the process and how their learning is progressing.

**4. Expected outcomes of providing funding for training and how success or failure will be measured**

- ❖ Improved knowledge and experience in finding and evaluating the evidence in the health care literature.
- ❖ Increased awareness of how librarians can partner with clinicians, policy makers, and journalists in evidence-based practice.
- ❖ Increased visibility for health sciences librarians in their institutions, brought about by participation in the workshop and the resultant training and information provided within their home institutions and library consortiums.

Success or failure will be measured by participant evaluations; fulfillment of stated goals; and reporting of new EBHC related projects or programs delivered at the local and regional level. These reports will be shared with the EBHC organizers, the NN/LM Regional Office, and MCMLA.

**5. Describe the regional benefit of this training including how other librarians and health professionals in the region will be impacted.**

This training will impact librarians and health professionals in the region in many ways. Anticipated products of this training include, but are not limited to:

- ❖ MCMLA programming – contributed papers, posters presented by the librarian participants
- ❖ Classes and seminars on finding the evidence in PubMed and other databases, led by librarian participants at their local institutions and library consortiums
- ❖ Improved service to patrons at local institutions in the area of finding and evaluating the evidence using PubMed and other database resources.
- ❖ Increased visibility of the medical library profession within the health care community
- ❖ Improved ability to base clinical decisions on the evidence after working with expert librarians.

**6. Assessment and evaluation costs**

Denison Memorial Library is willing to directly support all costs associated with assessment and evaluation of this project.

### Timeline (UPDATED)

April	<ul style="list-style-type: none"> <li>Finalize Application process (see draft Application below)</li> <li>Send out email and U.S. Mail notice of application process and instructions</li> </ul>
May	<ul style="list-style-type: none"> <li>Applications due by May 31</li> </ul>
June	<ul style="list-style-type: none"> <li>Review board narrows candidates to top 10 and selects final participants Review Board – Lisa Traditi, Marla Graber, Sandi Parker, Claire Hamasu (or other RML representative)</li> <li>Finalists selected by June 15 and notified by telephone</li> <li>Notices sent to all applicants by June 30</li> <li>Travel arrangements started</li> </ul>
July	<ul style="list-style-type: none"> <li>Preparatory information sent to participants</li> <li>Travel and lodging arrangements finalized</li> </ul>
August	<ul style="list-style-type: none"> <li>Transport from Airport to Keystone arranged</li> <li>EBHC Workshop held August 10-15</li> <li>Feedback meeting with participants August 15</li> </ul>
September	<ul style="list-style-type: none"> <li>Data compiled</li> </ul>
October	<ul style="list-style-type: none"> <li>Report to NN/LM Regional Office</li> <li>Final Expenses</li> </ul>
January 2003	<ul style="list-style-type: none"> <li>6 month follow-up questionnaire mailed to participants.</li> </ul>
February 2003	<ul style="list-style-type: none"> <li>Feedback compiled and reported to NN/LM Regional Office</li> </ul>

Attachment 1.

## PARTICIPANT EVALUATION OF TUTORS

How competent were your tutors with respect to group process (problem-based learning) and content (evidence-based health care)? *Please use one side of this form for each tutor.*

Name of tutor:

Group process

Bad	Not so good		Good		Excellent	
0	1	2	3	4	5	6

Content

Bad	Not so good		Good		Excellent	
0	1	2	3	4	5	6

COMMENTS:

Name of tutor:

Group process

Bad	Not so good		Good		Excellent	
0	1	2	3	4	5	6

Content

Bad	Not so good		Good		Excellent	
0	1	2	3	4	5	6

COMMENTS:

# EVALUATION FORM PART TWO

List three things you plan on doing within the next three months as a consequence of this workshop. *We will be contacting you in 3-6 months to ask about your progress.*

1.

2.

3.

Database Update:

Your name: \_\_\_\_\_

Email address: \_\_\_\_\_

Mailing address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Preferred Phone Number: \_\_\_\_\_

**Attachment 2**

Thank you for taking time out to complete this questionnaire. It should take less than 10 minutes to complete. We appreciate your willingness to help us improve the Rocky Mountain Workshops on How to Practice Evidence-Based Health Care.

**Please fax this questionnaire to (303) 315-1010, attn: Judy Baxter**

Or send in the enclosed self-addressed, stamped envelope

«MailingListID»

	We want to know how you are progressing with the goals you set for yourself at the end of the workshop. If the fields below are blank, please list three goals you may have had in mind when you left the EBHC workshop.	Have you initiated <u>any</u> activities to meet this goal?	If yes, are you able to accomplish or maintain these activities?				
1.	«Goal1»	1 <input type="radio"/> No      2 <input type="radio"/> Yes →	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
			Not at all	Some of the time		Most of the time	
2.	«Goal2»	1 <input type="radio"/> No      2 <input type="radio"/> Yes →	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
			Not at all	Some of the time		Most of the time	
3.	«Goal3»	1 <input type="radio"/> No      2 <input type="radio"/> Yes →	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
			Not at all	Some of the time		Most of the time	
4.	Overall, did your EBHC Workshop training help you in meeting these goals?		<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
			Not at all	A little	Some	Moderately	Very much
5.	Comparing your practice style and approach before and after the EBHC Workshop: In the months since the workshop have you:						
	a. Applied EBHC techniques in clinical practice		<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
			Less than before the workshop			More than before the workshop	



**Attachment 3**

**Skills, Knowledge, and Experience Needs Assessment  
Librarians at the EBHC Workshop Proposal**

1. In the past year, how often have you done literature searches looking for evidence to solve a clinical question?

- 0                       1 – 2 times                       3 – 4 times                       5 or more times

2. How often did you find evidence to answer the clinical questions?

- 0                       1 – 2 times                       3 – 4 times                       5 or more times

3. How comfortable are you with your ability to critically appraise evidence that you have identified and used in the past year?

- Not very comfortable                       Somewhat comfortable                       Fairly comfortable                       Very comfortable

4. How comfortable are you with your ability to teach individuals or groups how to search for the evidence?

- Not very comfortable                       Somewhat comfortable                       Fairly comfortable                       Very comfortable

5. How comfortable are you with your ability to teach individuals or groups to critically appraise evidence?

- Not very comfortable                       Somewhat comfortable                       Fairly comfortable                       Very comfortable

6. Have you taken a class on evidence based health care in the past?

- No                       Yes                      If yes, please list where and the title of the class:

7. If you have done searches for evidence in the past year, what databases have you used?

- I've not done a search in the past year
- 1<sup>st</sup> most used \_\_\_\_\_
- 2<sup>nd</sup> most used \_\_\_\_\_
- 3<sup>rd</sup> most used \_\_\_\_\_

**Over, please**



8. Please rate your familiarity with each of the following databases or database searching topics:

	<u>Not very familiar</u>	<u>Somewhat familiar</u>	<u>Fairly familiar</u>	<u>Very familiar</u>
The Cochrane Library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Best Evidence or ACP Journal Club	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Critical Appraisal of the Evidence Literature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using "expert search" techniques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using "clinical queries" in PubMed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using MeSH (Medical Subject Headings)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exploding MeSH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using Boolean Operators (And, Or, Not)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using Publication Types	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using Age Limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The difference between subheadings and subject headings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Please rate your familiarity with each of the following epidemiology topics:

	<u>Not very familiar</u>	<u>Somewhat familiar</u>	<u>Fairly familiar</u>	<u>Very familiar</u>
Study design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Basic statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical trial design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical trial interpretation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sources of bias in literature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design of screening programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluation of diagnostic tests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prospective study design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retrospective study design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confounding & adjustment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economics in clinical studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calculation of odds ratios, relative & attributable risk, number needed to treat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Would you be interested in attending a workshop on evidence based health care?

- No       Yes, I would pay for it myself       Yes, if my institution would pay

#### Reference List

1. Rader T, Gagnon AJ. Expediting the transfer of evidence into practice: building clinical partnerships. *Bulletin of the Medical Library Association* 2000 Jul; 88(3): 247-50.
2. Rosenberg WM, Deeks J, Lusher A, Snowball R, Dooley G, Sackett. Improving searching skills and evidence retrieval. *Journal of the Royal College of Physicians of London* 1998 Nov-1998 Dec 31; 32(6): 557-63.
3. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. *BMJ* 1996 Jan 13; 312(7023): 71-2.
4. Scherrer CS, Dorsch JL. The evolving role of the librarian in evidence-based medicine. *Bulletin of the Medical Library Association* 1999 Jul; 87(3): 322-8.

# **Librarians at the Rocky Mountain EBHC Workshop Statement of Work**

The intention of this project is to encourage medical librarians from the Midcontinental Region of the National Network of Libraries of Medicine to participate and learn about the practice and teaching of evidence based health care. This project will make available 3 stipends for librarians to attend the 2002 Rocky Mountain Evidence Based Health Care (EBHC) Workshop in Keystone, Colorado. Network members will benefit by improving their knowledge and experience in locating and evaluating evidence in the health care literature; increasing their awareness of how librarians can partner with clinicians, policy makers, and journalists in evidence-based practice; and increasing their visibility in their institutions by training and information provided by them within their home institutions and library consortia.

The Librarians at the Rocky Mountain EBHC Workshop is a one-year project. Faculty librarians from Denison Memorial Library have participated as instructors in the workshop since 1999.

Denison will begin the project by sending notice of the application process to network members, by email and US Mail services, with applications due May 31, 2002.

Between May and August 2002, Denison will:

## **June**

- Create a Review Board with representatives from Denison Library and the RML
- Select finalists by June 15, and notify by telephone
- Send notices to all applicants by June 30
- Set plans for August Feedback meeting

## **July**

- Send preparatory information to participants
- Arrange for travel from Airport to Keystone for workshop
- Ensure that travel and lodging arrangements are made by participants by July 10

## **August**

- Participants attend workshop August 10-15, and participate in daily feedback sessions
- Feedback meeting conducted (see Evaluation below) August 15
- Quarterly activity report due to Education Liaison, August 2, 2002

Between September 2002 and February 2003, Denison will:

## **September**

- Compile data collected during Feedback meeting

## **October**

- Send Denison expenses for reimbursement

## **November**

- Quarterly activity report due to Education Liaison, November 1, 2002

## **January**

- Mail and email six-month follow-up questionnaire to participants

## **February**

- Feedback compiled and Final report sent to Education Liaison, February 3, 2003
- Final Denison expenses sent for reimbursement

## **Evaluation**

Evaluation methods will include a paper evaluation and verbal evaluation meeting in the last plenary session of the EBHC workshop. There will also be a six-month evaluation sent out by the workshop organizers that Denison plans to use. Participants are asked to set goals for putting what is learned in the workshop into practice, then asked at the six month period for the results of the goals.

At the end of the workshop users will be asked to complete a participant evaluation of tutors (copy attached). The questionnaire is designed to assess tutor competency and effectiveness of the small group process for adult learners.

In addition to the tutor evaluation, participants will be asked to list three things they plan on doing within the next three months as a consequence of the workshop, with the understanding that they will be contacted within 6 months to assess progress towards meeting the goals set. This instrument (copy attached) is designed to:

Help participants to set goals

To provide a point of contact for future evaluations

To encourage EBHC activity at the local level

To encourage the use of problem-based small group process at the local level

In addition to these tools, Denison will conduct daily feedback sessions with the project participants to evaluate the learning process and progress.

The survey (copy attached) sent to participants at 6 months includes the goals they set for themselves after the workshop, and is designed to:

Encourage follow-through on goals set

Discover local activities and outcomes

Identify educational materials that were created that can be shared and/or replicated in the region

### **Deliverables**

Deliverables to be submitted to the NN/LM-Midcontinental Region in Salt Lake City, Utah:

Quarterly reports

A final report including the final evaluation

Promotional materials developed for the project

Participant information materials developed for the project

Education materials gathered from participants and/or created by Denison

Reviewers' comments:

**EBHC**

What are the expectations/outcomes of this training?

As written this is not an impact project. There is no indication of who will be impacted by this training

What is the payback to the RML, community, health professionals

Training per se is acceptable but there should be a project associated with the training

Recommend: Fund

Additional Requirements:

Provide background on the outcomes of earlier training – who benefitted and how

Describe what the expected outcomes will be and how the success/failure will be measured

Describe the regional benefit of this training – how can other librarians and health professionals benefit from funding this project

Use grant funds to support two librarians attending. Use remaining 1/3 of funds for costs associated with assessing the need for this type of training and evaluating the outcomes