Using an information needs and uses study to plan and manage social science research collections
—by Mark Janes and Margaret Robb

A key principle of evidence based practice is that we should make full use of relevant research literature to be found in other sectors within the library and information world, and within other disciplines. The following abstract describes a project conducted in a higher education setting, and suggests that we need to challenge the assumptions we make about users, their needs and behaviours. -submitted by Anne Brice, International Research Reviews column editor

Using an information needs and uses study to plan and manage social science research collections

Background and research questions
This research project began with a set of simple questions relating to our collections. In 2004 an extension to the building currently housing the Economics Department in Oxford provided increased library space on the ground floor, allowing for the merging of six departmental library collections previously housed on separate sites (Oxford has over 100 libraries associated with the University) as well as social science material currently housed in the Bodleian Library. The new Social Science Library, opened in September 2004, is intended to cater for the research and teaching needs of six academic departments located in the same building. The transfer of material from the Bodleian in particular means a change in the dynamics of library support for social science research in Oxford and it was up to us to determine which materials should be transferred to support the research needs of the incoming departments, how the new library should be situated within the context of the existing library support system, and how the collections should be developed for future use.

An initial investigation into these questions revealed that we needed much more evidence about the needs and uses of different types of information by our researchers than our own experience, system data (such as loan statistics) or anecdotal evidence could provide. We also realised that despite their general categorization as ‘social scientists’ researchers in different subjects were likely to have very different needs and that we had to determine some method of discovering and predicting these.
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Members of the SCC Research Committee joined with members of the SCC Awards and Scholarship Committee to judge a total of 37 entries (18 contributed papers and 19 posters) in the Research Awards competition, which was held at the SCC/MLA Annual Meeting on October 22-26, 2004 in Houston, TX. Awards for each division were presented at the Business Meeting to the 1st, 2nd, and 3rd place winners, as well as 2 Honorable Mentions. SCAMEL contributed cash awards to the 1st–3rd place winners in each category in the following amounts: Papers: 1st place: $300; 2nd place: $200; 3rd place: $100. Posters: 1st place: $200; 2nd place: $100; 3rd place: $50.00. Here are the results of the competition:

**Contributed Papers—1st Place**

**Strengthening Professionals: A Chapter-level Formative Evaluation of the MLA Mentoring Initiative**

**Pauline O. Fulda**, AHIP, Associate Director, Library, Louisiana State University Health Sciences Center, New Orleans, LA; **Hanna Kwasik**, AHIP, Serials Librarian, Library, Louisiana State University Health Sciences Center, New Orleans, LA.

**Objective:** The main objective was to determine the extent to which the MLA mentoring initiative was implemented in the SCC/MLA chapter and to identify the needs, improvements, and adjustments in mentoring services in the region.

**Methods:** The data was collected by administering an anonymous survey. The majority of questions employed interval levels of measurement using a Likert response scale. Some questions were dichotomous; a few were open-ended. The survey was mailed twice to all chapter members. The data was analyzed using basic statistical methods, which allowed reporting outcomes in descriptive and graphical forms.

**Results:** Detailed results will be available in the paper presentation. The following is a sampling:

- 80% of respondents had a mentor or mentors in their careers, and 74% were either very satisfied or satisfied with the relationship. The majority consider having a mentor a critical part of the professional experience.

- The mentoring activity chosen by respondents as the most important was the improvement of job performance through skills development.

**Conclusions:** The 55% response rate and the wealth of comments document the high level of interest in mentoring by medical librarians in the region. The following mentoring services are equally important to SCC members and are deserving of improvement or development:

- a formalized mentoring program in the region
- web-based mentoring resources on the SCC Website
- continuing education course for mentors

Members are aware of mentoring activities in the region; however, there is a need to increase participation levels in activities that the South Central Chapter provides.

**Contributed Papers—2nd Place**

**Content Overlap of the Elsevier Medicine and Related Life Sciences Backfile Collections**

**Gary Ives**, Texas A&M University Libraries, College Station, TX.

**Purpose:** Measure the content overlap among the Elsevier Subject Backfile Collections.

**Methodology:** Percentage comparison of content overlap, as expressed in “subscription years”.

**Results:** Elsevier made a commitment several years ago to digitize its entire backfile content, and has marketed this content in the form of Backfile Collections on the ScienceDirect platform. As of May 2004, Elsevier has released 21 subject Backfile Collections (as well as 2 title Backfile Collections). To date, Texas A&M University has purchased 17 of the subject Backfile Collections. As part of our review process, we measured the overlap in content between and among the Subject Backfile Collections, as expressed in “subscription years” for the titles that make up the Collections, based on information presented on the ScienceDirect website. Our findings show that the extent of overlap ranges from 25.6% for the Chemistry Collection with all other Collections, to 92.2%
for the Environmental Sciences Collection with all other collections.

**Conclusion:** There is demonstrable extensive overlap in content among the Elsevier Subject Backfile Collections, which a library must take into account when purchasing.

**Contributed Papers—3rd Place**

**Lessons Learned in 15 Years of Outreach**

Julie Gaines, NLM Second Year Associate Fellow; Mary Moore, Director of Libraries, University of Texas Health Sciences Center at San Antonio, San Antonio, TX.

**Purpose:** This paper documents the challenges and successes encountered, and summarizes the lessons learned in 15 years of library outreach to South Texas.

**Setting/Participants/Resources:** The University of Texas Health Science Center at San Antonio provides services to a 33 county service area of South Texas. It includes many rural counties, including economically disadvantaged and underserved populations along the Texas-Mexico border. There are no hospitals in these areas. Outreach services have been provided to clinical practitioners at hospitals and clinics for 15 years by a circuit librarian. Bilingual consumer health services are a more recent addition and have primarily focused on the Lower Rio Grande Valley.

**Brief Description:** This triangulated study uses a series of interviews with key library providers and recipients of services, and a review and summary of usage statistics. Interviews were coded and categorized using qualitative methods. Results will be reported for services to both consumer health and health care providers.

**Results/Outcome:** There have been few comparative studies of library outreach. We hope to systematically compare and contrast our experiences with others in the future. There will be an opportunity for those in the audience to discuss shared and dissimilar experiences.

**Contributed Paper—Honorable Mention**

**Library Resources for Health Information Retrieval: MeSHing Librarian Instruction into the Equation: Effectiveness Research Study**

Kathryn E. Kerdolff, MLIS, AHIP and Maureen M. Knapp, MA, Louisiana State University Health Sciences Center Library, New Orleans, LA.

**Question:** Does librarian instruction facilitate medical students’ ability to identify library resources to retrieve authoritative health information?

**Design:** 1. Questionnaire where students match the ‘best’ resource for 19 health topics and rate the course instruction on 8 different qualities.

**Resources include:**
- MEDLINE-access
- Evidence-based medicine
- Government-supported public health websites
- In-house resources: library catalog, institutionally licensed databases, books and journals

2. Three course exam questions to measure students’ knowledge of those resources.

**Setting/Participants:** Large, urban, academic health sciences center. 151 second-year medical students enrolled in an interdisciplinary course on clinical problem solving skills and public health awareness. Lecture and small group sessions (clinical forums).

**Intervention:** Library instructors meet with students in 7 of the clinical forums during the year. Librarians provide instruction at each forum on 3 to 4 library resources relevant to the clinical topic.

**Main Results:** 82% of the students identified acceptable resources to locate authoritative health information. Librarian instruction was informative and useful to the students. Correct responses to the three exam questions, however, revealed 60%, 45% and 80% knowledge retention.

**Conclusion:** Library instruction does facilitate students’ ability to identify resources to retrieve authoritative health information, but additional instruction is necessary for students to remain knowledgeable about the resources. Follow-up instruction is already scheduled for these same students during their third year of medical school.

**Contributed Paper—Honorable Mention**

**Contextualizing Health Data for Community Assessment: CHARTing Health Information for Texas**

Helena M. VonVille, Library Director, University of Texas School of Public Health at Houston, Houston, TX.

**Purpose:** This paper will report on an ongoing project to improve access to determinants of health data through a Web site.

(Continued on page 7)
Research Redux, or, What's New in Theses and Dissertations

In the Spring of 2003, this column reported on masters theses and doctoral dissertations (as found in the Digital Dissertations database) that had appeared in the time period for 2000-2002. [1] What follows is an update for items reported in Digital Dissertations for 2003 and the first three quarters of 2004. The keyword search used truncated forms of the words "librar?" and "inform?" and "medic?" and "healt?"; the sorting and classifying of the retrieval is entirely the work of the author, as are the choices of topical areas under which to list these publications. This time, as opposed to 2002, there were NO theses or dissertation with a purely library focus, and many of the items classified as “Theses and Dissertations with an Internet/Web focus” could just as easily be subsumed into the section entitled “Theses and Dissertations with a Patient/Consumer Focus.”

Once again, many of the universities whose students are represented here do not have a graduate program in either Library and Information Science or Medical Informatics, yet their students have obviously found the area to be of research interest. To obtain copies of any of these works or to see the citation/abstract or the 24 page preview sample from them, search the Digital Dissertations database. Simply enter the name of the researcher into the query box to retrieve the citation.

Note: This scan of Digital Dissertations will be an annual feature in Hypothesis, appearing in the Fall (or No. 3) issue each year.

Theses and Dissertations with an Informatics focus


Information synthesis: A mixed-initiative meta-analytic approach to facilitate knowledge discovery from scientific text, by Blake, Catherine Lesley, PhD. UNIVERSITY OF CALIFORNIA, IRVINE, 2003, 259 pp.


Theses and Dissertations with an Information Behavior focus


Examining relationships between health beliefs and medical decisions in the context of medical uncertainty, by Hudson, Matthew Francis, PhD. DARTMOUTH COLLEGE, 2003, 246 pp.

A study of biomedical researchers and the data elements, and queries in interaction with a tissue-centric data warehouse, by Kim, Sujin, PhD. UNIVERSITY OF PITTSBURGH, 2003, 348 pp.


(Continued on page 6)
Using handheld technology to bridge information inequity: An examination of physician information usage in both served and under-served medical regions. A potential effect on elderly care, by Weshler, Jason Lewis, MSc. UNIVERSITY OF TORONTO, 2003, 126 pp.


A usability study and redesign of a website used by health care professionals, by Petruzziello, Christa, MS. GRAND VALLEY STATE UNIVERSITY, 2004, 100 pp.


The physical, behavioral, economic, and psychosocial consequences of adoption of Internet technology among older adults, by Clark, Deborah Jean, Ph.D. GEORGIA STATE UNIVERSITY, 2003, 138 pp.


The helpfulness of health care information sources as perceived by parents participating in Even Start Family Literacy programs in Texas, by Heitzman-Hull, Cheryl Lynn, PhD. TEXAS A&M UNIVERSITY, 2003, 122 pp.


Information needs of informal caregivers of parents and grandparents, by Schmidt, Katherine Ella, PhD. ARIZONA STATE UNIVERSITY, 2003, 84 pp.

Evaluation of the quality of consumer health information web sites: Diabetes tool development and impact of sponsorship characteristics, by Seidman, Joshua Jacob, PhD. THE JOHNS HOPKINS UNIVERSITY, 2003, 125 pp.

Perception Vs. Reality: Effectiveness of Directed Informatics Training as Measured by Students’ Perceived Vs. Actual Skills in Searching MEDLINE

Catherine Rhodes, MLIS, and Daniel E. Burgard, MSLIS, AHIP, Gibson D. Lewis Health Science Library; Jay Shores, PhD, and Jerry Alexander, PhD, Department of Education; and Don Peska, DO, Texas College of Osteopathic Medicine; University of North Texas Health Science Center, Fort Worth, TX.

Purpose: To compare third-year medical students’ perceived levels of MEDLINE search competence with their actual performance. Objectives were to increase the effectiveness of students’ MEDLINE searches and to determine the effectiveness of problem-based learning (PBL) in teaching students to search MEDLINE.

Setting/Subjects: One hundred twenty-three medical students in a required three-week clinical skills course at the beginning of their third year.

Methods: Students completed a patient interaction scenario based on a problem-based learning model, which required them to locate literature pertinent to the case. Students emailed their search histories and selected citations to librarian facilitators in sequenced segments. After the case segments, students attended a review session where they received feedback and search demonstrations. Students completed online pre- and post-surveys and conducted the same sample search, videorecorded by screen-capturing software, at the beginning and end of the course.

Results: Seven skills from the survey were matched to observed performance in recorded searches, scored as either positive or negative. T-tests on pre- and post-surveys showed that students believed that they held a statistically significant amount of searching knowledge before and after the intervention. However, a t-test of perceived (P) vs. observed (O) measures revealed that students’ perceptions of their searching skills were inflated several times above their actual performance abilities (pre-test P/O mean=9.664). Further, the gap between perceived and observed skill levels was more than twice as great after the intervention than before (post-test P/O Mean=1.079).

Conclusion: Students’ ability to judge their own MEDLINE searching skills is limited. Although students believe that they are aware of and can employ good search techniques, they do not use the concepts and tools required to return comprehensive and precise results. However, the PBL approach effectively raises both perceived and actual searching skill levels. The poster illustrates the statistical gap between perceived and actual skills and shows the levels of perceived and observed skills before and after the intervention.

Posters—1st Place

Perception Vs. Reality: Effectiveness of Directed Informatics Training as Measured by Students’ Perceived Vs. Actual Skills in Searching MEDLINE

Building for Tomorrow: A Community Information Needs Assessment

Kathy Hoffman, Executive Director, Research Medical Library, University of Texas M.D. Anderson Cancer Center, Houston, TX.

Objective: To determine the needs of faculty and students to support their work; to determine faculty and student use of online journals and databases; and to identify barriers to acquiring information from the Research Medical Library.

Setting/Participants: Research Medical Library, University of Texas M.D. Anderson Cancer Center; clinical faculty (637), research faculty (480), residents/fellows (180), students in the School of Health Sciences (57) and the Graduate School of Biomedical Sciences (400).

Methodology: Individual user surveys.
Results/Outcomes: Respondents indicated 3 major reasons to need use of the library: research topics (84.4%), preparing a talk or paper proposal (72.1%), or to study (54.3%). The least likely reasons to need the library were: provide patient education (5.2%), research an administrative/managerial subject (8.9%), or attend a library-sponsored class (14.6%). Respondents reported their typical locations for accessing online resources available through the Research Medical Library as in their office (85.3%), at home (50.5%), in their labs (45.7%) or in the library (37.8%). The majority of respondents identified online databases (88.6%) and online journals through the Research Medical Library (85.5%) and colleague/experts/researchers at M.D. Anderson (58.0%) as primary sources of information for a clinical or research projects. Almost 92% personally search online databases. Those accessing MEDLINE usually used the PubMed interface (70.3%) or Ovid MEDLINE (21.5%). The greatest barrier to acquiring information from the Research Medical Library was geographic isolation (25.7%).

Conclusions: Results of the survey suggest that the needs of the users of the Research Medical Library are being met. The results will guide library staff in addressing the issues of its user community.

Poster—3rd Place

Out of the Library - A proactive Approach to Marketing Library Services to Patients’ Families and Staff

Karen Keller, Director; Lynne Harmon, Library Assistant; and Dena Hanson, Librarian: Edwin G. Schwarz Health Sciences Library and the Matusztkz Family Resource Center, Cook Children’s Medical Center, Fort Worth, TX.

Purpose: To determine if proactively visiting all in-patient floors on a weekly schedule would increase the number of consumer health information requests from families, physicians, and staff members. The outcomes may assist other libraries and library resource centers in identifying ways to increase usage of the library’s services. The results of the first six months of outreach are reported.

Methodology: In order to establish a baseline, a one month survey was done of all family members who came to the Matusztkz Family Resource Center. Physician and staff requests for consumer information for families were also tracked. The Library staff was primarily interested in where or how families found out about the Resource Center and where in-patient unit staff and physician requests and referrals came from. The Library staff then began a formal outreach program to eleven in-patient units. Each unit was assigned a visit day and each new admission was personally contacted with information about the Library. The same tracking information was documented (family, physician, and staff requests) on a monthly basis.

Description: Examines the results of the outreach program and the changes in the number of requests for information from families, physicians, and staff. The results will also identify any increase in actual visits to the Resource Center by families. A detailed description of the Library’s approach and documentation will be presented.

Discussion/Conclusions: Library staff findings and insights of what was learned will be presented. Staff thoughts about building relationships with physicians and staff will also be explored.

Poster—Honorable Mention

The Tapestry of Life: Training Public Librarians to Find End-of-Life Resources

Carolyn Hart, Masters Student, Texas Women’s University; Teresa Petrucci-Coley, Gulf Coast Partnership for End-of-Life Care; Deborah Halsted, HAM-TMC Library, Houston, TX.

Introduction: In March 2004, the Gulf Coast Partnership for End-of-Life Care (a chapter of the Texas Partnership for End-of-Life Care) was awarded an Express Consumer Health Outreach Award from the NN/LM SCR. The project goals were to assess the needs of public librarians and to train staff at Harris County Public Library (HCPL) to find resources on end-of-life issues.

Methods: Train-the-Trainer courses were taught at four HCPL facilities. Pre-tests were mounted on the HCPL course registration intranet so that baseline data could be established. The Pre-test included: demographic data on the librarians themselves, information on the number of end-of-life questions asked in public libraries, current awareness of resources, understanding of issues & terminology, personal biases about talking about death, and understanding of cultural differences on this topic. The GCPEC team was interested in determining if public librarians might be hesitant to encourage such questions, due to a fear of talking about death. The same survey was administered as a post-test immediately following each class, and a follow-up interview was conducted with some of the participants a month later.

Results: This poster will compare results of the pre- and post-test surveys, including both the attitudinal aspects and information seeking skills. Assessment will include analysis on the effectiveness of the program.
Honorable Mention

A New Recipe for Project Management: Mixing Up a New Matrix

Nancy Burford and Heather Goetz, Texas A&M University, Medical Sciences Library, College Station, TX.

Purpose: Maintenance of an online collection requires a substantially higher level of technical expertise than do traditional print collection management activities. The move to "online only" for nearly a third of our journal subscriptions greatly reduces the workloads of staff responsible for serials check-in, claiming and binding. These staff, however, lack the skills or expertise necessary for managing electronic resources and their records. At the same time, the bibliographic and electronic resource staff are overwhelmed and need assistance. This poster demonstrates an approach to project management that is effective in an environment where limited technical skill sets are available.

Setting/subjects: Academic medical library with a Resources Management department with 5 staff and 2 faculty.

Brief Description: In this situation, it was impossible to continue the customary approach to project management, that of identifying available staff and assigning them to the project. In the past when specific technical skills or knowledge was required, we often worked in 2 person teams, one member with the needed expertise and the other as a helper. We needed a solution to the chasm that existed between available skills and those needed for the project. Our answer was to re-engineer the matrix so that instead of matrixing staff resources to the project, we matrixed elements of the project work to the available staff. We analyzed the work needed, grouped similar project elements together, segmented the bibliographic and complex record management tasks into small groupings, and developed sets of pre-programmed function keys to simplify record management work.

Results: Available staff as well as student assistants are quickly trained to work on projects. Productivity is impressive. In a project to add classification to online journals, they edited almost 2200 bibliographic records in about 60 hours over a period of three weeks. We believe this method of project breakdown and element assignment will work for other workflows in Resources Management Services in the future.

Evaluation Method: Quality control for this approach to project management involves record review by experienced bibliographers. Total error rates were less than 10%, and critical errors were less than 2%.

MLA 2005—Preliminary Program

The following programs will be on the schedule for MLA 2005. The Research Section is either sponsoring or co-sponsoring the following sessions:

Practicing Evidence-based Health Care (Sponsor)
Researchers, clinicians, and librarians today practice evidence-based health care. More and more of us are framing searchable questions, preparing clinical trials, and systematic reviews. What are your contributions to the practice of evidence-based health care?

Research Methodology 101 (Part I): Yes, You Can Do Research! (Sponsor)
How to find a research topic and take it through to finding an answer you can publish. Part I covers why and how to do research.

Research Methodology 101 (Part II): Yes, You Can Do Research! (Sponsor)
How to find a research topic and take it through to finding an answer you can publish. Part II covers turning the data into an article and how to get it published.

Establishing Best Practice (Co-Sponsor)
Clinical medicine has modeled the use of scientific evidence to support professional decision making. But how do you locate, organize, and analyze the existing data in nonclinical medicine fields like librarianship, oral health, and public health?

Oral Research (Co-Sponsor)
Describes the current trends in oral research, the effect of evidence-based medicine, and the role of the librarian in the research process.
Literature Review
—submitted by Ruth Fenske, Ph.D.


Here we have two articles about consumers looking for health information and two articles about pitfalls consumers could meet when searching the Internet for health information.

Warner and Procaccino studied the health information seeking behavior of women looking for information for themselves or their family. Using Kuhlthau’s Information Search Process Model and the epistemological development model for women of Belenky et al, the authors developed four research questions and a ten-page questionnaire, which is included at the end. Most questions were adapted from three previously used professional surveys of health information seeking.

The surveys were distributed by mail and in person in public libraries, churches, retirement centers, and via women’s organizations. One hundred thirty-three surveys were returned for a 44% response rate. The basis of the analysis is 119 responses in which women indicated they had looked for health information. Respondents were predominately white, well-educated, suburban women, who use the Internet on a regular basis. Hence, these results cannot be generalized to all women. All of these women indicated that they would be likely to ask a doctor for health information. However, they also were eager to find information to supplement what the doctor told them. Most had used the Internet to look for health information. Most knew to be skeptical about information found on the Internet. Although they thought searching was easy and indicated that they usually found the information they needed, only half thought the information they found to be very useful. Women did use the information they found.

From a list of fourteen print resources, most respondents were aware of the PDR. Many knew about the Mayo Clinic, CDC, and FDA web sites. Only 30.8% were aware of MEDLINEplus. Most were aware of the information resources of the major voluntary health organizations such as the American Cancer Society. Most knew about Prevention Magazine and Consumer Reports but only half about the Harvard Health Letter.

Because of the seeming ambivalence about how useful the information found on the Internet is and the lack of awareness of some important resources, the authors suggest that there is a certain level of uncertainty in the search process. Kuhlthau also found this in her work with undergraduates when developing her model. Kuhlthau suggests a mediator or counselor is needed to move the process along. Warner and Procaccino suggest that librarians should reach out to their communities, perhaps through support groups or women’s organizations, to provide this kind of service. However, although the respondents recognized that people with the same condition could be sources of help, very few had actually participated in a support group. It seems to me women’s organizations, in general, would be more likely to sponsor preventive health programs than programs for those already having specific conditions. Although the authors believe in person mediation is more useful than electronic mediation, the logistics of librarians’ connecting with health information seekers such as these seem to be more straight-forward electronically than in person.

Case et al surveyed the general population of Kentucky about how they would look for information on genetic predisposition to cancer. This is different from the previous study in that all the women in the previous study actually had looked for some kind of health information. These authors review previous research that suggests that people’s preference for interpersonal sources of information may be more a case of accessibility than of preferring to ask someone they know. For those who have Internet access, the Internet may be just as accessible as other people.

Trained interviewers from the University of Kentucky Survey Research Center contacted 2454 randomly chosen potential respondents. One hundred twenty-five were ineligible. They tell us 41% of the remaining households agreed to participate. This should be 955 households. However, only 882 households did participate, making about 38% of the eligible households. The sample under represents African Americans and males, but is “otherwise a fair representation.” When respondents were asked where they look for information about inherited cancer, 46.5% said, without prompting, they would

(Continued on page 11)
probably first go to the Internet. Public libraries and doctors were popular second and third choices. Friends and family were not as frequently chosen, probably because cancer genetics is not perceived as being a subject most friends and family know much about. Wealthy and better-educated respondents seemed to be more aware they would need help in understanding the information. Those who felt they already had some understanding of the topic were more likely to say they would turn to the Internet.

The authors did a logistic regression analysis to determine which variables would predict who would first consult a medical professional and who would first go to the Internet. They found that those with higher income, education, and self-reported understanding of genetics tended to say they would go first to the Internet or a public library. The older the person, the more likely they would first go to a medical professional.

The authors view these results with alarm, because, in their opinion, the Internet is not a good source of information on cancer genetics for laypeople. They speculate that respondents said they would first go to the Internet because it is readily available. It could also be because having a genetic predisposition to cancer may be a sensitive issue that they did not want to discuss with the usual friends and family. Possibly, they do not think friends and family are sufficiently informed on this subject to be of help.

The authors themselves acknowledge the limitations of the study. Since they were asking people what they would do in the future, rather than what they had done in the past, it would be easy for respondents to predict they would do one thing but do something else if they were actually in the situation. They need more information about exactly how the respondents would use the Internet. Would they attempt to and be able to understand the most authoritative sources? Would they also consult a medical professional?

Comparing the two studies, Case et al came closer to achieving a random sample of their population. However, they asked respondents about what they would do in a particular situation, rather than what they had done. Warner and Procaccino reported data from people who had actually looked for health information. Although some of the questions ask what the women actually had done, the ones about where they would look ask where they are “likely” to look and where they “prefer” to look. Although the women were asked about how they had actually looked for health information on the Internet, they were not asked if they had actually used each of thirty-one suggested generic sources of health information. Therefore, the reader has to be careful to note when they are discussing actual behavior versus hypothetical behavior. The authors do not always make this clear. They do refer to the specific questions in their questionnaire as they give results and discuss them. The reader has to look for herself to see what type of question is being discussed. Another point is that women who had already looked for health information for herself or a family member would be more motivated both to answer survey questions and to find good information on their particular real topic. The women’s questionnaire is ten pages long whereas the cancer genetics telephone survey was only ten questions, providing further evidence that the women who responded were probably highly motivated, whereas the general population who answered the telephone survey were probably less motivated.

These two studies do serve as further documentation that laypeople are increasingly turning to the Internet for health information. Next, we look at two studies on common pitfalls consumers meet when searching on the Internet. Crowell et al do a laboratory study on spell-checking tools for medical terms. They determined from MEDLINEplus log data that possibly as many as fourteen percent of queries contain a misspelling. The focus of this work is to try to improve on two existing spell-checking programs—ASpell and GSpell, using both a medical dictionary and a comprehensive dictionary. Their idea is that rather than just presenting the suggestions ASpell and GSpell present, to instead re-sort the list of suggestions according to the frequency of use of each term in the database being used. Frequencies were generated, both from queries against MEDLINEplus and words in the database itself. Then they generated misspelled words by submitting a random selection of the list of correctly spelled terms to a program which generated common spelling errors, e.g. by transposing adjacent letters. The list of misspelled words was then run against the default configuration of ASpell and GSpell. They then re-sorted the suggestions in the order of frequency they occur in the MEDLINEplus database and queries, using a frequency score formula they developed. Then they determined if the correct word was ranked number one, if it was ranked in the top ten, and if the correct word was found at all. They then made a chart showing the percent of misspelled words for which the correct word was listed first, in the top ten, or at all on the suggested list for each of the eight possible combinations of ASpell-GSpell, normal configuration vs. re-sorted configuration, and medical vs. comprehensive dictionary. The combination of ASpell checked against the comprehensive dictionary and re-sorted using their frequency score, worked the best. Over ninety-six percent of the time, the correct word was listed first; 91.2% of the time, it was in the top ten; and 92.3% of the time the correct word was somewhere in the suggested list. Looking at length of word, the longer the word the higher the probability of success. Multivariate logistic regression showed use of ASpell and re-sorting most affected the odds of putting the correct word first. Re-sorting also affected the odds of the correct term being in the top ten and using ASpell affected all three possible outcomes. GSpell is a spell-checker being developed by NLM. Since it does not appear to work as well
as ASpell, NLM should consider these results and probably already has.

The final article considers indicators of accuracy for web sites. The authors cite literature which questions the validity of common indicators of accuracy for web sites. Some researchers have tried to evaluate web sites based on the number of links that have been set up from other web sites to the web site being evaluated. This is analogous to citation counts. Google has taken this idea one step further by also evaluating the web site making the link. If the one making the link itself has many links to it, it could be considered “important,” and web sites linked from “important” sites might also be of higher quality than those with links from lesser sites. Google has trademarked the term PageRank for the resulting evaluative score. Just as an aside, this latter wrinkle probably downplays the importance of web sites created by libraries. Library web sites probably do not have the high number of links to them needed to be classified as “important” by the Google PageRank system. Hence, even though links from library web sites usually represent links to evaluated resources, it could very well be that the value of library web site links to other resources is undervalued in the Google system.

Fricke and Fallis decided to replicate part of a 1999 study by Connell and Tipple concerning the accuracy of ready reference information on the Internet. The original study was done with AltaVista. These authors used AltaVista and the now popular Google. They also sought to determine which traditional indicators of accuracy are valid for ready reference and if the new indicators, utilizing information on links, are valid indicators of accuracy.

Forty-nine of the original 60 actual public library ready reference questions were used in the replication. Each question was searched in both AltaVista and Google. The top twenty sites were examined, in order, for relevant information. The first five, or fewer, web sites addressing the question were selected for further study. Each answer was assigned a four-point scale accuracy score. They also evaluated the web page using six traditional and three more recent indicators having to do with links. Interobserver reliability was calculated. They then did correlations and likelihood ratios. They also tried to determine if each indicator of accuracy was independent of all the other tested indicators.

Three hundred web sites answer one of the 49 ready reference questions, either accurately or inaccurately. Two hundred seventy-five of the answers were completely or partially accurate. Only 25 gave inaccurate answers. Of the traditional indicators of accuracy, only currency and copyright were correlated with accuracy. All three indicators having to do with links were correlated with accuracy. These authors did a 2002 study on indicators of accuracy for a specific subset of health information, published in the Journal of the American Medical Informatics Association, and found that traditional indicators also were invalid for the health web sites they studied. However, the number of links to each health web site also was not an indicator of accuracy.

This study does not add much new information to the literature. It does confirm some earlier findings.

What should we take from these four studies? Women searching for health information on the Internet usually could find relevant, but not always useful, information. It would be interesting to know about why they did not know if the information was useful. Did they question the accuracy, the completeness, the level, the currency, or what? The Kentucky cancer genetics people also did not consider the Internet to be a good source of information on cancer genetics for the layperson. Again, exactly why is this? Considering results of the Fricke and Fallis accuracy study, it may be time for some new case studies of how laypeople judge health information found on the Internet. We should also try to document the librarian’s intuition when looking at Internet results. How do we decide what to look at and what to believe? The spell-checker study reminds us the importance of checking with a dictionary if results are other than what was expected.


Tamara Lee, representing the Association of Academic Health Sciences Libraries (AAHSL) Task Force on Quality Assessment, provides an overview of the pilot participation of thirty-six AAHSL members in the spring 2002 administration of the Association of Research Libraries’ LibQUAL+™ survey. In order to make the survey more suitable for health sciences libraries, five questions which were omitted or insufficiently covered in the original survey, were added to the original survey.

In general, AAHSL respondents showed both higher expectations and higher levels of satisfaction than ARL respondents.

Future plans call for comparison of these results with quantitative benchmarking data long collected by AAHSL, to see if correlations exist between the qualitative and quantitative data.

It is interesting that Ms. Lee notes that AAHSL encountered more difficulties with human subjects review than ARL members did. (See also two articles on Institutional Review Boards in medical schools in the July 2004 issue of Academic Medicine.)

The remainder of the health sciences section of the report presents four case studies of AAHSL participants’ administration of the survey and use of the results.
Research Section’s Program Chair for the 2005 conference is Molly Harris.

Research Section selected six potential candidates for MLA’s Nominating Committee, and the following persons were elected at Section Council – Laura Barrett, Catherine Burroughs, Jonquile Feldman, Susan Murray, Ruth Riley, and Linda Walton.

Research Section nominated Janna Lawrence for the position of Chair-elect of Section Council. Tovah Reis was elected by Section Council.

A Marketing SIG is in the process of organizing, and an Internet SIG has been disbanded.

The Credentialing Committee reported that the process for renewing accreditation at the same level has been streamlined. The cost is $275 for renewing members and $140 USD for international members. Brochures are being prepared to include new procedures for renewal. AHIP points are awarded for such activities as participating in CE, acting as facilitators or recorders for Chapter Council Round Tables, and maintaining mailing lists. There were 1128 AHIP members in 2003 and 1155 in 2004 (the increase is in the provisional section).

The Task Force on Website Hosting for Sections and SIGs ends its term in May 2005. Section Council disagreed with the Task Force decision to limit access to Section and SIG sites to members only.

The Standards Committee created a bibliography for Sections that wish to create standards. Standards-related information is available at mlanet.org under Section Council.

The new chair of the Section Program Issues Committee is Laura Osegueda. Section Council suggested that Program Chairs should be appointed, and start planning two years before their meeting.

NPC 2004 reported there were 138 contributed papers, 59 of which were selected by peer review. Thirty-nine speakers were invited with one student paper selected out of 6 submitted. There was no count of posters.

NPC 2005 reported the overall meeting theme of Futuro Magnifico – Celebrating our Diversity. Program themes include education/outreach, clinical, research, technology, and diversity. The meeting starts on Sunday, May 14, 2005 and runs until Thursday, May 19. There will be three slots each of 90 minutes for programming. Each theme will be represented daily in programming.

Section activities should relate to President Joanne Marshall’s priorities for 2004/2005:
   ➢ Embrace diversity locally and globally
   ➢ Advocate for the profession
   ➢ Enable lifelong learning
   ➢ Build and share our knowledge base
   ➢ Recruit and retain the best

MLA 2006    Phoenix
MLA 2007    Philadelphia
MLA 2008    Chicago
MLA 2009    Hawaii (under consideration)

Membership cut-off is March 31st, and there is a grace period. The membership year is February 1 – January 31. There is one paper reminder and two e-mail reminders. Members are expected to verify and update their own membership records. A Membership Chair can request an updated membership list at any time. Section Council suggested that the fiscal year be changed to coincide with the conference and that selected members be allowed access to the membership database.

Jill Crawley-Low
Research Section Representative to Section Council
Methods

An information needs and uses study was our chosen format for obtaining evidence that would help us in the selection and development of the research collections for the new library. Needs and uses studies were popular in the 1960s and 70s, only to fall out of favour due to their over ambitious aims and often contradictory results. In order to avoid these pitfalls we restricted ourselves to the needs and uses of Oxford researchers only and prepared ourselves for very different responses and preferences.

Another strategy for improving on the older style of study was to use a combination of qualitative and quantitative methods (a ‘triangulated’ study). Focus groups conducted in departmental offices emphasised the fact that we were keen to discuss information and research materials generally (rather than just library use) and provided an in-depth picture of information need and use across small groups of researchers. The technique of semi-structured interviewing encouraged researchers to talk about their approach to their subject and its relationship to their information behaviour, as well as providing questions for further quantitative investigation. A larger, quantitative, survey targeted at academic staff in the departments then insured a broader picture of information use, including the age and type of materials typically consulted and the use of libraries. Results from both aspects of the study were combined and written into a report describing general and subject-specific information need and use.

Results

The various subjects (economics, politics and international relations, sociology, social work, social policy, criminology, socio-legal studies) varied greatly in their needs and preferences for different types of material. There were also marked differences within these subjects (for example, between econometricians and economic historians). The survey mainly focused upon material formats and revealed, for example, that 88% of journal articles consulted are not older than 50 years and that 61% of our social scientists read material not older than 10 years. This was particularly useful in determining the length of journal runs likely to be moved from the Bodleian. Further information was provided by the fact that most economists are happy to read only working papers and journal articles, whilst the majority of political scientists obtained their information from books supplemented by one or two key journals.

How and where information was accessed was also a key finding. Despite the improved provision of online resources 83% of respondents used a library on a regular basis (at least once a month), although 60% of these would not sit and work in a library. The results on information seeking behaviour showed that the use of citations in journal articles and books were the most popular methods, followed by asking colleagues. Databases subscribed to by the library just about held their own against search engines (although, most respondents considered electronic journal services such as JSTOR to be ‘databases’ in answering this question).

Findings on electronic journals, access to and usage of data, official publications, and the reading of non-English language material similarly provided us with a sufficiently rich portrayal of information use to enable specific planning of the new library collections. In addition, qualitative results on communication within research fields, attitudes towards peer review, and the relative status of publications and sources of information gave us important background information on issues such as open access, institutional repositories, and developments in the communication structure of fields.

Conclusions

This research project started out with a set of basic questions about the management and development of research collections in a new library. It was clear from the outset, though, that the evidence needed to answer these questions was far more in-depth than that derived from normal library practice and so it was necessary to actively research the information needs and uses of our research community. Many of the results, such as the statement from econometricians that they never read books, the political scientists who hardly read journals, and the contrasting time-span of reading in research fields will have longer term implications for the allocation of resources and the development of our collections. We have also learnt that we must take full account of the Library’s specific role in the larger information world of the academic researcher, especially the fact that experienced researchers have access to information from within their many social and professional networks (and will often send their research assistants to the Library), whilst junior researchers are much more likely to make use of the bibliographic databases that we provide.

The investigation of information needs requires a degree of experience in using qualitative methods and running focus group sessions in order to deal with the subjective nature of need. However, combined with more conventional quantitative techniques such as a survey this rich information can be used to feed into a general study of use that provides a more complete picture of information behaviour across different disciplines and research fields. The academic staff appeared responsive to this approach and appreciated the goals we were trying to achieve in mapping out information needs for the new library and in giving them a direct say in the development of collections.

Hypothesis archives available online:
http://gain.mercer.edu/mla/research/hypothesis.html
Letter to the Editor

It is hoped that Hypothesis does more than update you on the research activities of the Section, MLA and our colleagues around the world. Hypothesis should stimulate ideas, encourage research and fuel discussion. The Editorial Board has worked hard over the past couple of years to bring this publication to maturity: it is now a journal instead of a newsletter; it has expanded circulation to over a dozen countries; and, with this issue, it brings thoughtful debate to the table. Enjoy.

-Andrea L. Ball, Editor

Dear Ms Ball,

I would like to comment on assumptions in the poster that recently received an honorable mention, as reported in Hypothesis 18 (2) page 13 "End user empowerment: selecting and integrating a clinical electronic reference based on clinician choice: the numbers speak volumes" which states as part of its objective "To identify an electronic resource that would synthesize the most current evidence-based medical practices available" ...

While the resource mentioned, UpToDate, is very popular with clinicians it is NOT evidence based, as the reviews its presents are not based on any explicit principles of evidence based practice, in fact information from the provider's site indicates that it is "expert opinion", generally accepted to be the lowest level of evidence:

"Our topic reviews are written exclusively for UpToDate by physician experts in each specialty and are specifically designed to make it quick and easy for clinicians to find the answers they need." [http://www.uptodate.com/topics/index.asp accessed 11 October 2004]

Thus the stated conclusions of the reported research are not valid: ..."affording the provider the opportunity to incorporate evidence-based medical literature into realtime patient care situations" ...

It is a shame that the journal of the research section of MLA is perpetuating the misconception that UpToDate is evidence-based, when librarians should be in a position to provide sound advice on selection of reliable, not just popular, resources.

Best wishes

Vivienne Bernath
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Author’s Response

Dear Ms. Ball,

In response to the letter to the editor received from Ms. Bernath, I would like to make the following observations: David Sackett et al. describe UpToDate in their book Evidence-Based Medicine: How to Practice and Teach EBM, 2nd edition, 2000 as follows: "There are other evidence-based textbook contenders. In the field of general medicine, UpToDate, only a CD at present [now a web portal], is updated quarterly, extensively referenced and provides MEDLINE abstracts for key evidence."¹

To introduce their readers to evidence-based information resources, Sackett et. al. include this statement in a section discussing such. The following is their criteria for a dependable textbook in the modern era:

- "it should be revised frequently (at least once a year)
- it should be heavily referenced, at least for declarations about diagnosis and management (so readers can get to original sources for details and can also easily determine the date of a given claim)
- the evidence in support of a statement should be selected according to explicit principles of evidence"¹

UpToDate clearly meets the first two criteria above, and its authors utilize evidence-based literature to support their cards whenever evidence is available. For example, take the case of the card written for UpToDate on perioperative medication management. On May 5 a retrospective cohort study of 780,591 patients appeared in JAMA, and showed that treatment with lipid lowering agents may reduce the risk of death following major non-cardiac surgery. The editors of UpToDate contacted the author on May 4, and suggested that this study provided the evidence necessary to now recommend that patients undergoing surgery be continued on statins. Previously only high risk patients were recommended this therapy due to lack of evidence that statins were really beneficial. The author reviewed the evidence that day and agreed, and the card was updated May 4, one day before the study was released.

The Evidence Based Working Group who wrote Users’ Guides to the Medical Literature: Essentials of Evidence-Based Clinical Practice lists UpToDate as a “suitable database” for answering each of the four types of clinical questions: diagnosis, harm, prognosis and treatment in Table 1A-4 on page 43². (Only 3 or in one case 4 data-

(Continued on page 16 )
bases was recommended for each type.) They note that “Our own experience suggests that UpToDate and Clinical Evidence are already well along the path to becoming evidence-based sources to answer foreground questions”\(^2\). They further note that “although UpToDate, unlike Best Evidence and the Cochrane Database of Systematic Reviews, does not have a set of explicit methodologic quality criteria that included articles must meet, it does reference many high-quality studies chosen by its section authors”\(^2\). While lack of this set of criteria may be what prompted this letter, the words of the Evidence Based Medicine leaders regarding UpToDate do cause us to consider UpToDate as “an evidence-based textbook contender”\(^3\).

We have begun offering an Evidence Based Medicine module for our second year residents. We currently train residents in how to search PubMed using special search criteria, as well as Cochrane, Database of Reviews of Effectiveness (DARE) and Clinical Evidence when taking this course. While we are giving the providers of tomorrow evidence-based searching skills, we find that while seeing patients, UpToDate is a practical compendium for practicing clinicians at the bedside and in busy clinics. As a librarian, my first responsibility is to my clinicians and our patients. Knowing that our residents are consulting UpToDate even while they learn to do evidence-based searches themselves assures me that we are providing our patients with the highest quality care, and our providers with a “suitable database” of information and evidence.

1. Sackett DL; Straus SE; Richardson WS; Rosenberg W; Haynes RB. Evidence-Based Medicine: How to Practice and Teach EBM, Churchill Livingstone, 2nd ed, 2000.

Kindest Regards,

Terrie R. Wheeler, M.L.S.
Program Manager, Library and Medical Media Services
VA Pittsburgh Healthcare System
University Drive
Pittsburgh, PA 15240

Addendum to letter to the editor response, dated 10/28/04:

Dear Ms. Ball,

Please share with your readers that today (11/2/04) the UpToDate newsletter announced that the company has established an Evidence-Based Advisory Board. Their statement in part notes the following: “We believe the establishment of an EBM Advisory Board is an important step in strengthening UpToDate as a leading clinical in-

formative resource. The EBM Advisory Board is comprised of thought leaders in evidence-based medicine, including Gordon Guyatt, MD, McMaster University, Roman Jaeschke, MD, McMaster University, Victor Montori, MD, The Mayo Clinic, and Holger Schunemann, MD, University of Buffalo.”

There is a lengthy discussion of how UpToDate handles evidence in its newly revised editorial policy. Please specifically note paragraphs under the subheadings Evidence and Recommendations. http://www.uptodate.com/service/editorial_policy.asp

Kindest regards,

Terrie R. Wheeler, M.L.S.
Program Manager, Library and Medical Media Services
VA Pittsburgh Healthcare System
University Drive
Pittsburgh, PA 15240

Awards Committee Response

Dear Ms. Ball,

In response to Ms. Bernath’s letter concerning her dismay at the awarding of an honorable mention prize to the authors of “End user empowerment: selecting and integrating a clinical electronic reference based on clinician choice: the numbers speak volumes” the Awards Committee provides this response.

The letter writer has a very good point. There is a great deal of confusion over what evidence-based medicine really is and people misuse the term often. However, we do not believe that the Research Section Awards Committee is responsible for the confusion nor are they required to interpret how the term is used.

In your letter you quote from the UpToDate web site “Our topic reviews are written exclusively for UpToDate by physician experts and are specifically designed to make it quick and easy for clinicians to find the answers they need”. However, you apparently missed the first sentence on that page which described UpToDate as a “comprehensive evidence-based clinical information resource”. Elsewhere on their site it states “UpToDate” follows a hierarchy of evidence consistent with most evidence-based resources. At the top of the hierarchy are randomized trials of high methodological quality, followed by randomized trials with methodological limitations, observational studies, and unsystematic clinical observations. Inferences are stronger when the evidence is summarized in systematic reviews of the literature that present all relevant data.” Furthermore, UpToDate has established an Evidence-based Medicine Advisory Board comprised of leaders in EBM whose goal is to strengthen UTD’s value as an evidence-based medicine resource.

(Continued on page 17)
Evidence-based medicine Internet sites and the literature refer to UTD as an evidence-based clinical information resource. It is an official educational program of or produced in cooperation with seven professional organizations (American College of Obstetrics and Gynecology, American Gastrointestinal Association, Society of General Internal Medicine, etc.) and recommended by the American Academy of Family Practice.

So though UpToDate may not match everyone’s strict definition of evidence-based medicine, it appears that it is acceptable to call UTD evidence-based.

Sincerely,

Carole M. Gilbert
Research Section
Awards Committee Chair

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"There's two possible outcomes: if the result confirms the hypothesis, then you've made a discovery. If the result is contrary to the hypothesis, then you've made a discovery."

-Enrico Fermi