

## Current research

Compiled by Rebecca Zakoor

Peterson MW, Rowat J, Kreiter C, Mandel, J. Medical students' use of information resources: is the digital age dawning? *Acad Med.* 2004 Jan;79(1):89–95. PMID: 14691004 [PubMed – in process].

**Purpose:** One of the many challenges clinicians face is applying growing medical knowledge to specific patients; however, there is an information gap between information needs and delivery. Digital information resources could potentially bridge this gap. Because most medical students are exposed to personal computers throughout their education, this study postulated that students may be more comfortable using computer-based information resources within clinical interactions. **Method:** In 2001, the authors monitored second-year medical students' use of a unique digital textbook, UpToDate, as they transitioned from preclinical to clinical years at the University of Iowa Roy J. and Lucille A. Carver College of Medicine. In 2002, at the end of their third year, students were surveyed about their preferred clinical information resources. **Results:** Medical students rapidly adopted UpToDate as a clinical resource during their clinical clerkship as evidenced by a rapid growth in the electronic textbook's use. Of a possible 154 students, 116 (75%) responded to the survey. More than 85% of respondents identified electronic sources as their primary resource (UpToDate 53%, MDConsult 33%;  $p < 0.001$  when compared with paper resources). They also reported using the information resources on a daily basis and requiring less than 15 minutes to answer most of their clinical questions. **Conclusions:** This study clearly demonstrates that medical students embrace and use electronic information resources much more than has been reported among practising clinicians. The current generation of students may be the leaders in a medical culture shift from paper to electronic resources.

Abels EG, Cogdill KW, Zach L. Identifying and communicating the contributions of library and information services in hospitals and academic health sciences centers. *J Med Libr Assoc.* 2004 Jan;92(1):46–55. Available from: <http://www.pubmedcentral.nih.gov/picrender.fcgi?action=stream&blobtype=pdf&artid=314102>.

**Objective:** This article introduces a systematic approach to identifying and communicating the value of library and information services (LIS) from the perspective of their contributions to achieving organizational goals. **Methods:** The contributions of library and information services (CLIS) approach for identifying and communicating the value of LIS draws on findings from a multimethod study of hospitals and academic health sciences centres. **Results:** The CLIS ap-

proach is based on the concept that an individual unit's value to an organization can be demonstrated by identifying and measuring its contributions to organizational goals. The CLIS approach involves seven steps: (1) selecting appropriate organizational goals that are meaningful in a specific setting; (2) linking LIS contributions to organizational goals; (3) obtaining data from users on the correspondence between LIS contributions and LIS services; (4) selecting measures for LIS services; (5) collecting and analyzing data for the selected measures; (6) planning and sustaining communication with administrators about LIS contributions; and (7) evaluating findings and revising selected goals, contributions, and services as necessary. **Conclusions:** The taxonomy of LIS contributions and the CLIS approach emerged from research conducted in hospitals and academic health sciences centres and reflects the mission and goals common in these organizations. However, both the taxonomy and the CLIS approach may be adapted for communicating the value of LIS in other settings.

Wagner KC, Byrd GD. Evaluating the effectiveness of clinical medical librarian programs: a systematic review of the literature. *J Med Libr Assoc.* 2004 January;92(1):14–33. Available from: <http://www.pubmedcentral.nih.gov/picrender.fcgi?action=stream&blobtype=pdf&artid=314100>.

**Objective:** This study was undertaken to determine if a systematic review of the evidence from 30 years of literature evaluating clinical medical librarian (CML) programs could help clarify the effectiveness of this outreach service model. **Methods:** A descriptive review of the CML literature describes the general characteristics of these services as they have been implemented, primarily in teaching-hospital settings. Comprehensive searches for CML studies using quantitative or qualitative evaluation methods were conducted in the medical, allied health, librarianship, and social sciences literature. **Findings:** Thirty-five studies published between 1974 and 2001 met the review criteria. Most (30) evaluated single, active programs and used descriptive research methods (e.g., use statistics or surveys/questionnaires). A weighted average of 89% of users in twelve studies found CML services useful and of high quality, and 65% of users in another overlapping, but not identical, twelve studies said these services contributed to improved patient care. **Conclusions:** The total amount of research evidence for CML program effectiveness is not great and most of it is descriptive rather than comparative or analytically qualitative. Standards are needed to consistently evaluate CML or informationist programs in the

future. A carefully structured multiprogram study including three to five of the best current programs is needed to define the true value of these services.

Cullen R. Evaluating digital libraries in the health sector. Part 1: measuring inputs and outputs. *Health Inf Libr J.* 2003 Dec;20(4):195-204.

This is the first part of a two-part paper that explores methods that can be used to evaluate digital libraries in the health sector. In this first part, some approaches to evaluation that have been proposed for mainstream digital information services were examined for their suitability to provide models for the health sector. The paper summarizes some major national and collaborative initiatives to develop measures for digital libraries. These approaches are analyzed in terms of their relationship to traditional measures of library performance, which are focused on inputs and outputs, and their relevance to current debates among health information specialists. The second part looks more specifically at evaluative models based on outcomes and models being developed in the health sector.

Atlas MC, Smigielski EM, Wulff JL, Coleman MT. Case studies from morning report: librarians' role in helping residents find evidence-based clinical information. *Med Ref Serv Q.* 2003 Fall; 22(3):1-14. PMID: 14527135.

In primary care specialties, morning report is a traditional vehicle for expanding medical residents' training in diagnosis and treatment. At one academic medical centre, residents and faculty in the Department of Family and Community Medicine use case-based teaching, centered around planning and reviewing patient management, to review intriguing cases from patient encounters in the department's hospital service. Seeking to improve the level of evidence-based information exchanged at morning report, department leaders invited reference librarians from the health sciences library to attend the weekly morning report. The librarians saw this as an opportunity not only to improve residents' information-seeking skills, but also to improve librarians' teaching skills and their understanding of the needs of users in clinical settings. This paper describes the evolution of librarians' involvement in morning report, examples of the kinds of contributions librarians have made in this setting, and changes made in morning report sessions to facilitate this activity.