

Advancing the practice of clinical medical librarianship

For years, progressive thinkers have warned that the survival of health sciences libraries depends on harnessing new forms and structures for the capture and delivery of information, and on an active pursuit of roles beyond the library's walls. The availability of easy-to-search, free-access medical databases on the World Wide Web alters the librarian's traditional information-mediator role. In the midst of competition and change, many of us have begun to shift from the traditional work of an information gatekeeper to embrace the crucial new role of a knowledge worker [1, 2]. As knowledge workers, we become involved in the development of information products and services targeted toward individual client needs.

Clinical librarian model

A familiar knowledge-work prototype is the clinical medical librarian (CML) model. By providing a direct link between information and clinical practice, CML programs have been relatively successful in expanding our role to include service as an information consultant for patient care [3, 4]. Unfortunately, in a time of downsizing, it is possible that expensive and labor-intensive programs like CML are in danger of being cut in favor of "safer" and cheaper options for library service. In the current climate, I believe any retreat into safe or traditional territory is misguided. Of all of the activities in which librarians engage, CML programs may have the highest potential for demonstrating to clinicians that librarians are capable of managing information needs in a manner that cannot be duplicated or replaced by any other source. If we forego activities that increase our visibility and importance to the medical center's mission, the library will al-

most certainly fall into the category of a "luxury" and perhaps even become obsolete. I believe we have *no choice* but to migrate into the clinical setting; to avoid doing so is to deny our future in the information age.

Equal voice on health care team

The migration will not be successful, however, unless clinical librarianship can be taken to a level in which librarians share an equal voice with other specialists who support clinical decision-making processes. Librarians must do this by building and sustaining an in-depth clinical knowledge base which will allow them to be truly proactive in clinical settings. Clinical librarians on rounds should be encouraged to project themselves not as information "servers" who trail the team in an auxiliary capacity, but as an integral part of the group with a specialized expertise that can contribute vitally to clinical situations.

Librarians on rounds should share their findings in the same way that residents do: they should step in front of the group and present what they discovered through their research. This mode of presentation—verbal, interactive, eye-to-eye with other members of the team—is crucial for establishing the librarian's credibility not only in terms of understanding the medical issues of the question asked, but also of demonstrating familiarity with and understanding of the information selected and filtered.

In other words, librarians' verbal interaction with the team is a vital step in establishing *trust*—the most important element in a clinical culture. Trust cannot be gained by shrinking into the background during clinical rounds, which is one of the problems with CML programs

where librarians do not receive adequate preparation. The health sciences library community has talked and written about the benefits of CML programs, but we need more information about how to get there—how to help librarians become truly effective in clinical settings.

Cultural shift required

I believe that structuring a successful CML program requires a sustained effort at building and improving the clinical librarian's medical knowledge base in preparation for what is essentially a cultural shift. After all, the movement from the library to clinical rounds is a movement between cultures, each with a different hierarchy, organizational structure and language. Effectiveness in the culture requires an initial period of study followed by an ongoing, lifelong expansion of skills and knowledge in medical specialty areas.

As part of their effort to assimilate the culture, clinical librarians should seek instruction in the techniques of clinical trials, including randomization and blinding techniques; they should study the tenets of evidence-based medicine; they should consult with subject experts and clinicians who can evaluate and support their filtering and interpretation skills; and they should take clinical courses in the medical and nursing schools (possibly by auditing courses for free; otherwise, by drawing on the library's professional development budget). In this manner, not only can librarians gain a knowledge base that will help them to understand the language, interactions, and processes taking place on rounds, but they can also gain a schooled appreciation for the analytical thought processes and demands of the clinical setting. Fur-

thermore, solid professional habits of studying, interacting with colleagues and clinicians, and lifelong learning can be supported by efforts to create a culture of professionalism based on institutional standards for the practice of clinical librarianship.

Yet another component of training for CML should be mentored instruction and practice in searching, retrieving, filtering, and summarizing information. Using evidence-based medicine as their *modus operandi*, clinical librarian trainees can practice mock interviews and retrievals with experienced mentors to hone their searching skills. Mentors should also help clinical librarians analyze, interpret, and dissect complex medical searches to filter and summarize information to match the team's request appropriately. The final information product delivered to the clinical team should not be a mere list of bibliographical references. On the contrary, clinical librarians should read the full text of the most pertinent articles retrieved by their searches, identify and extract the information relevant to the clinical question at hand, and write brief

essays (one paragraph, in most cases) describing their findings. All information should be tailored to the specific patient context, which the clinical librarian should understand from attending rounds. The final essays and references should summarize the most pertinent findings from the medical literature, including conflicting data and opinions when a clear consensus is lacking.

Impacting medical practice

It is our responsibility to teach our constituents that accurate, up-to-date, quality-filtered information provided by CML programs can have a measurable positive impact on the clinical environment. This teaching must be done by actively demonstrating CML's advantages in the field, and conducting our own research showing its value in terms of the quality of patient care, the physicians' trust in the information provided, and the savings made possible. It is not enough to talk about what we can do or hope to do; we must show results. With a truly well-trained corps of librarians undertaking CML activities, I

believe the next steps for the profession will be great ones: our increased visibility and vitality in the medical center, greater pride in our work product, greater impact on the teaching and practice habits of physicians, and improved patient care.

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References

1. MATHESON NW. The idea of the library in the twenty-first century. *Bull Med Libr Assoc* 1995 Jan;83(1):1-7.
2. FLORANCE V, MATHESON NW. The health sciences librarian as knowledge worker. *Libr Trends* 1993 42(1):196-219.
3. ALGERMISSEN V. Biomedical librarians in a patient care setting at the University of Missouri- Kansas City School of Medicine. *Bull Med Libr Assoc* 1974 Oct;62(4):354-8.
4. CIMPL K. Clinical medical librarianship: a review of the literature. *Bull Med Libr Assoc* 1985 Jan;73(1):21-8.