The Library and the Department of Medical Informatics:
Collaboration or Conflict

Submitted by

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ABSTRACT

The publication of <u>Medical Education in the Information Age</u> clearly defines Medical Informatics as an academic discipline and presents recommendations for future support and development. The recommendations for areas of investigation are wide ranging and include topics like literature databases and computer-based education that are traditional areas of library interest. At the University of Utah, the Library and the Department of Medical Informatics were both formally established in the early 1960's. For twenty years, the Library and the Department of Medical Informatics were cordial but pursued very separate interests. However, the IAIMS initiative at the University of Utah has resulted in a dramatic new partnership between the Library and the Department of Medical Informatics. The objective of this paper is to describe the development of this partnership, the obstacles and the opportunities that have been encountered and the challenges that lie ahead in the development of IAIMS at the University at the Utah.

The emergence of Medical Informatics as a recognized academic discipline pursuing interests that have been, and are now, in the domain of libraries, is viewed with very mixed feelings by libraries. The objectives of this paper are to describe the working relationship that has developed between the Spencer S. Eccles Health Sciences Library and the Department of Medical Informatics at the University of Utah and to explore areas of very constructive collaboration and the potential for conflict.

What is now the Department of Medical Informatics was formed in 1963 as the Department of Biophysics and Bioengineering. Its principle focus for almost a quarter of a century has been the development of the Health Evaluation through Logical Processing (HELP) system. The HELP system is a comprehensive, hospital-based computer system for acquiring medical information and implementing medical logic. The most exceptional feature of this system is its expert component, which provides assistance in clinical decision making. Currently, the Department of Medical Informatics has 13 faculty and 45 graduate students.

The Spencer S. Eccles Health Sciences Library began its adventures in automation in 1969 when it was the first library to join the PHILSOM Network. Like other health sciences libraries during the 1970's, the Library made use of online cataloging (OCLC), online circulation systems (CLSI) and computer assisted instruction. The Library's most notable effort was the development and publication of MEDOC, a computer generated index to U.S. government publications in the health sciences.

For nearly two decades, the Library and the Department pursued very productive endeavors and while the relations between the two areas were always cordial, their efforts were distinctly separate. This all changed with the publication of the Matheson Report, which mandated a vision beyond the traditional organizational boundaries. For the University of Utah, short on resources, long on distance, to compete in the IAIMS environment, it was essential that a truly collaborative effort be mobilized. Initially, the Library was cautious about being swamped in an IAIMS tide, particularly because the Matheson Report strongly urged the creation of a senior administrative position that would be responsible for information management - The Information Czar. The Library had survived a very bitter fight to be independent within the University. In fact, reporting directly to the Vice President for Health Sciences as do the other colleges and the School of Medicine, the Library's independent administrative position has proved to be a significant advantage in the IAIMS process. As independent and neutral territory, many concerns could be addressed in the Library without the complicating problem of turf. For the Library and the Department, true cooperation was required since neither organization had direct administrative leverage on the other.

The resulting cooperative approach to the development of IAIMS was certainly less efficient, but the end result was a greater level of commitment to the effort. The best example of the results of this cooperation is the current IAIMS development project that is exploring linkages between the expert component of the HELP system and the medical literature. In this project, a framework is being developed for documenting the expert judgments

that are offered by the HELP system. While the issues relating to documenting expert systems are of great interest, the project illustrated the value of collaborative efforts and as important, the necessity of formalizing lines of communication between the Library and the Department. Last September, a very significant step was taken to link the Department and the Library with the appointment of a member of the Library faculty to an adjunct faculty position in the Department. While the role of a librarian in the Department is evolving, it is clear that this joint appointment benefits both areas. The Department clearly added to its pool of expertise, particularly in the management of and access to information from the literature. In areas of collaborative development, a librarian's experience is a major resource in the design of the user interface, user evaluation tools, intelligent front end software and database utilization. For the Library, there is access to technical expertise that is essential for the development and installation of information systems. The Library faculty member, and the Library, are in a position to compete for graduate students. This is a major opportunity for the Library. Librarians in general have always been at a disadvantage in pursuing research since they are excluded from a crucial source of personnel - the graduate student and time. Recognizing this opportunity, the library faculty member with a joint appointment must be allowed take on the responsibilities of teaching, research and publication that go hand in hand with the opportunities.

Libraries and departments of medical informatics appear to share the some of the same territory and there is a clear potential for conflict. From an administrative perspective, it can be confusing as to who is exactly

responsible for what. A good example of this problem can be seen in instruction. For example, does the library teach bibliographic database utilization or does the department? While territoriality can cause confusion, competition for funding can result in the most fundamental conflict. For a generation, the National Library of Medicine has been viewed by medical libraries as the preeminent source of support for research and the development of library services. Now, Medical Informatics, as a discipline, is calling on the National Library of Medicine to support its agenda, and clearly the National Library of Medicine is responding. The recent Unified Medical Language initiative is a good example of this response. New directions and priorities at the National Library of Medicine are essential, but libraries and departments of medical informatics are now, more than ever, competing for limited funding.

At the University of Utah, the Library and the Department have collided over issues of turf and funding. However, these problems have been substantially minimized through the ongoing IAIMS strategic planning process. Questions of territory have been clarified through the development of an IAIMS mission statement and a close examination of the missions of the Library and the Department. Clearly, the Department focuses on research and education. The Library also is concerned with research and education, but its primary mission is service. The combination of education, research and service is essential to a successful IAIMS. From this perspective, the Library and the Department are no longer competitive but complementary. As allies instead of competitors, the Library and the Department at the University of Utah have found that joint efforts in the pursuit of funding have proved to be very successful.

The developing partnership between the Library and the Department is still very much an exploration of new territory. The Department is still learning what contributions librarians are capable of making to the development of new systems. New expert sectors of the HELP system now include a bibliographic component, but the contributions of a librarian as part of the development team are not yet fully understood. The Library is discovering the art and science of expert systems. Certainly, the joint appointment of a librarian is major step. Opening up communications has proved to be very important, but exactly how the librarian fits into the research and teaching efforts is just beginning to develop. However, the experience at the University of Utah does demonstrate that the combined efforts of the Department and the Library will yield far more than either could ever accomplish alone.