

---

# IAIMS and JCAHO: implications for hospital librarians

By Jacqueline Donaldson Doyle, M.S., AHIP  
Director

*Learning Resources*  
Samaritan Health System  
1111 East McDowell Road  
Phoenix, Arizona 85062-2989

---

The roles of hospital librarians have evolved from keeping print materials to serving as a focal point for information services and structures within the hospital. Concepts that emerged from the Integrated Academic Information Management Systems (IAIMS) as described in the Matheson Report and the 1994 Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards have combined to propel hospital libraries into many new roles and functions. This paper will review the relationship of the two frameworks, provide a view of their commonalities, and establish the advantages of both for hospital librarianship as a profession.

---

## INTRODUCTION

The medical library in a hospital is a necessity . . . situated in close association with hospital wards . . . and with the wealth of clinical history contained in patient records at hand, thereby bringing theory and fact into near relation [1].

Grace Whiting Myers, librarian at the Massachusetts General Hospital Treadwell Library, made this statement in 1905. She also noted that hospital librarians should be ready for all emergencies; welcome alike the physician, surgeon, house officer and student; and supply each according to his needs. The hospital library in the early part of this century was a place for study and rest, a place for meetings and consultations, and a "quiet place in the midst of much activity" [2].

Today's hospital librarians would likely agree with many of Myers' opinions, but may find others a bit archaic. The irony is that information technologies available in 1999 provide librarians with the power to indeed bring theory (what is written in the biomedical literature) and fact (what is recorded in patient records) in electronic proximity. While most hospital libraries are no longer housed within the records department, Web-based technologies, intranets, and other internal organizational information systems promise to bring together a great variety of content and features. Additionally, the Internet enables the hospital to create linkages with external knowledge-based information resources and systems.

The power and the potential available to today's hospital librarians are the result of several forces and concepts: The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) *Agenda for Change*

[3], Integrated Advanced Information Management Systems (IAIMS) developments fostered by the National Library of Medicine, and emerging information and communication technologies. Hospitals now have the tools to manage information related to patient care, health education information (including patient education), and clinical research in an integrated fashion.

Health sciences librarians might recall their first excitement upon reading the Matheson Report [4]. Matheson and Cooper encouraged academic health sciences librarians to create a library that would serve as an information focal point for the entire campus, including its clinical components. Hospital librarians felt a similar excitement, albeit with some trepidation, when first reading about the JCAHO *Agenda for Change*, which changed the focus of its survey process from a silo-like departmental examination, to one that looked at key functions and the performance of those functions within the hospital [5]. As the delivery and management of health information was one key function, the *Agenda for Change* likewise empowered hospital librarians to create libraries that could play a role in the delivery of information in the hospital setting. The introduction of what were then called personal computers (PCs) to differentiate them from legacy mainframes was just the beginning of distributed computing enterprise-wide, regardless of the setting. Hospital information systems have gradually become networked and connected to the Internet, enabling an even broader distribution of information and communication. And, within the hospital itself, today's intranets have underscored the importance of hospital libraries as a key component if not a focal point of the hospital information system. Using these concepts and

tools, today's librarians have the power to accomplish what Myers recommended at the beginning of this century.

### THE INTEGRATED ACADEMIC INFORMATION MANAGEMENT SYSTEM (IAIMS)

The IAIMS concept developed by Matheson and Cooper propelled academic health sciences librarians toward the achievement of a new professional vision. The academic medical library and librarian of the future would serve as the information focal point of its parent institution, enabling the linking of disparate information content and systems—systems previously impossible to link, connect, or even relate.

This new vision of librarians' roles was greatly aided by developments that emerged from the IAIMS program begun by the National Library of Medicine (NLM) shortly after the Matheson Report was published. This program funded research efforts to support the development of institution-wide information management. As Lorenzi stated in the 1992 *Bulletin of the Medical Library Association* symposium on IAIMS, "The IAIMS concept has undergone an evolutionary change from earlier days when it concentrated on the library's role in information management to information management in the total organization" [6]. This evolution represented a major change for medical librarians, whose historic focus had been on maximizing access to knowledge-based information within the library, assuming patrons would come to the library because they had no other option.

The underlying concepts of IAIMS have evolved since their inception, and have encouraged and supported health sciences librarians, whether they are working in educational or clinical settings, to view library services and resources on a much broader level than they have been historically. Hospital librarians, especially, have learned that what they have to offer their organizations was broader than simply providing book- or journal-based information within the confines of a library department. New information technology tools, especially Web-based products, including the Internet, intranets, and extranets will enable librarians in clinical settings to expand services and take on exciting new roles external to the library.

### THE JOINT COMMISSION ON ACCREDITATION OF HEALTHCARE ORGANIZATION'S (JCAHO) AGENDA FOR CHANGE

The 1994 edition of the *Accreditation Manual for Hospitals* [7] contained an IAIMS-like mandate for librarians working in hospitals and other clinical settings. The 1994 *Manual* was a result of the *Agenda for Change*, specifically, the first of a two-phase transition from standards organized around hospital departments and ser-

vices, to a set of standards organized around the functions the JCAHO deemed the most critical to patient care. Four aspects critical to the hospital's ability to ensure quality health care were recognized: leadership, management of human resources, improvement of organizational performance, and management of information (IM). At that time, the most relevant portion of the *Manual* for hospital librarians was the latter. The IM chapter described the standards for the overall management of information and focused on four types of information: patient-specific, aggregate, knowledge-based, and comparative. What was new, exciting, and even a bit threatening was that these four types of information were to be managed as one integrated information system and that this integrated function was to be considered a key process of the hospital.

It is important to note that the mandate for the existence of a hospital library (or librarian, for that matter) was no longer specified. What was required was that knowledge-based information (also referred to as KBI or the "literature") was to be managed so that it supported the effective operation of the hospital [8]. The KBI section, IM.9, described standards for the organization of this one type of information. With this change, the standards clearly increased the value of what hospital librarians did (provide access to knowledge-based information) to the same level of importance as the other information functions required.

The 1998 *Manual* describes information management as a function that supports patient outcomes and individual and hospital performance in patient care, governance, management, and support processes. The definition of KBI is "a collection of stored facts, models, and information found in the clinical, scientific, and management literature that can be used for designing and redesigning processes and for problem-solving" [9]. IM.9 now requires that "the hospital provides systems, resources, and services to meet its needs for knowledge-based information in patient care, education, research, and management" [10].

As the standards have evolved, the specificity related to library processes has diminished, but the opportunities for the librarian have actually expanded. The first response of the hospital librarian community was to focus on the IM chapter, but recent changes in the *Manual*, and in the JCAHO's perspective on organizational competence, have encouraged librarians to find other venues for contribution. As Schardt [11] noted, the most current *Manual* points at more than the information management (IM) chapter as one that offered opportunities for growth, change, and greater perceived value of the library and librarian.

Other reasons for looking beyond the IM chapter include recent environmental and technological changes. Schardt notes that other sections of the standards bearing investigation include the education of patients and families (PF), performance or quality improve-

ment (PI), leadership (LD), environment of care (EC), human resources (HR), and infection control (IC) chapters. Hospital-based librarians can play a more critical role in the design and implementation of a truly integrated organization-wide information system. And the new Web-based technologies and systems provide the ideal tool.

#### WHERE IAIMS AND JCAHO MEET

The author suggests, based on an examination of both IAIMS concepts and JCAHO's standards for information management, hospital librarians will find that:

- Organizational information (patient-specific, knowledge-based, financial/organizational, and comparative) should be linked or at least linkable within the organization and, externally, between organizations.
- The organization's manager of knowledge-based information (the librarian) has the potential to become a key component, or focal point, of the organization's information systems.
- New Internet, intranet, and Web technologies enable the librarian to offer integration solutions to previously incompatible systems and platforms.
- New information systems and technologies can be used together to support clinical, educational, administrative, and research or continuous improvement activities.
- Librarians are finding opportunities to work with other health and information professionals, such as the directors of health information management services (formerly known as medical or health records), information systems or services, and quality management.
- Barriers to connectivity exist, and may include the conflict between ease of access and security, interdepartmental competition, and clashing of professional cultures and value systems, but can be overcome.
- Hospitals have deeply entrenched and distinct information systems that are at first inflexible and not amenable to integration or external linkages.
- Networking is not as technically simple as it at first appears.
- Some hospitals, especially those not affiliated with medical schools, may not have recognized the need for integration of information systems and structures, and if they have, the barriers are seen as too great, too costly, and too overwhelming to overcome.
- Hospital librarians may need to become a catalyst for change within their organizations.
- IAIMS goals and JCAHO standards will require a new set of skills, knowledge, interpersonal, and informal network connections, even new job descriptions and reporting structures for librarians.
- IAIMS goals and JCAHO standards have potential for elevating and demonstrating the value a professional librarian adds to the organization.
- IAIMS goals and JCAHO standards are perfectly

suited to take advantage of the growing array of electronic information resources that can be mounted locally or accessed remotely.

Paralleling the JCAHO standards modifications, the 1990s have seen an acceleration in the changing nature of hospital librarianship from the management of a distinct physical facility (the hospital library) to the management of a function (access to knowledge-based information). This change in emphasis on the functions performed by hospital librarians has slowly been evolving since NLM's introduction of MEDLINE in the late 1960s. As librarians' abilities to electronically access information located outside of their facilities has increased, the need to shift emphasis from the selection, maintenance, and access to the information in library collections to the incorporation of these collections and access to them, into the wider range of knowledge-based information has increased. This increase has required hospital librarians to reemphasize the real job—providing the best possible access to knowledge-based information, enabling health professionals of all types to meet the needs of the institution's employees, patients, and communities more effectively.

#### IMPLICATIONS FOR LIBRARIAN ROLES IN THE NETWORKED ENVIRONMENT

Granted, not all hospitals have entirely integrated information systems, nor are they all connected to the Internet. While this reality may be viewed as a negative, it also provides an opportunity for librarians to act as catalysts for change. By understanding some of the basics of networking, excelling at Internet navigation and quality filtering, acquiring some Web site design capabilities, and becoming familiar with the breadth of electronic knowledge-based resources, librarians can provide new knowledge to their organizations. The finer points of electronic resource licensing and negotiation are knowledge areas new to information systems personnel, but not to medical librarians. Librarians can appropriately integrate electronic resources with traditional paper or microform-based collections, and possibly save budget dollars while enhancing access. These knowledge areas are needed by health care organizations just embarking on internal and external networking activities, and the profession can provide what is needed, especially if done in partnership with other information and health professionals, as encouraged by the JCAHO standards. Partnerships and consortia with other regional libraries and health care or educational institutions are also enhanced with the use of Web technologies, and can improve the buying power of an individual hospital library.

## CONCLUSION

Myers' vision of the hospital library as a place for learning must now be interpreted in a more conceptual way. The goal of a hospital librarian is now to acquire the necessary skills and knowledge to take full advantage of current electronic information technologies. Hospital-based librarians should work to ensure that the right information is available, in the right format, as speedily as possible, so that it can be fully integrated into the patient care experience. IAIMS, JCAHO, and Web-based technologies can provide the profession with the appropriate leadership tools for developing truly integrated systems.

## REFERENCES

1. MYERS GW. Medical libraries in hospitals. *Bull Med Libr Assoc* 1998 Apr;86(2):267-9. (Reprinted from Myers GW. *Med Libr Hist J* 1905 Oct;3(4):282-7.)
2. IBID.
3. KOSKA MT. JCAHO: pilot hospitals' input updates Agenda for Change. *Hospitals* 1990 Jan 5;64(1):50-2.
4. MATHESON NW, COOPER JA. Academic information in the academic health sciences center: roles for the library in information management. *J Med Educ* 1982 Oct;57(10 pt 2):1-93.
5. KOSKA, op. cit.
6. LORENZI NM. Introduction: Integrated Academic Information Management Systems (IAIMS). *Bull Med Libr Assoc* 1992 Jul;80(3):241-3.
7. JOINT COMMISSION ON ACCREDITATION OF HEALTHCARE ORGANIZATIONS. Accreditation manual for hospitals. Oakbrook Terrace, IL: The Commission, 1993.
8. IBID., 43.
9. JOINT COMMISSION ON ACCREDITATION OF HEALTHCARE ORGANIZATIONS. Comprehensive accreditation manual for hospitals. Update 3. Oakbrook Terrace, IL: The Commission, 1997 Aug:IM1.
10. IBID., IM37.
11. SCHARDT CM. Going beyond information management: using the Comprehensive Accreditation Manual for Hospitals to promote knowledge-based information services. *Bull Med Libr Assoc* 1998 Oct;86(4):504-7.

*Received March 1999; accepted May 1999*