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# Tools for improvement: a systematic analysis and guide to accreditation by the JCAHO

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By viewing the Joint Commission on Accreditation of Healthcare Organizations' (JCAHO) standards in the context of current accreditation practice, hospital librarians can understand and clarify their role in realizing their organization's mission, goals, and objectives. By broadening their view of the information function as described in the accreditation standards, health sciences librarians can enhance their position in the hospital's management team, improve health information practice, and contribute to the overall performance of the health care organization. The role of the librarian and the library throughout the entire set of standards and interrelationships with other professionals and units are described. Examples of ways to demonstrate conformity to the standards are provided. Special emphasis is placed on Standard 9, Management of Information, to provide guidance to the librarian undergoing JCAHO accreditation.

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## INTRODUCTION

Hospital librarians often view a visit by the Joint Commission on Accreditation of Health Care Organizations (JCAHO) as an experience to be survived, rather than an opportunity to enhance performance. The purpose of this article is to suggest ways in which the health information professional can use the accreditation process to improve health information practice. It will

- review the JCAHO standards, placing them in the context of current accreditation processes;
- describe how the health sciences librarian and library services are linked to the overall performance of the health care organization; and
- provide guidance to health sciences librarians

whose institutions are undergoing JCAHO accreditation.

With the publication of its manual in 1994 and its promulgation of the Agenda for Change, the JCAHO signalled a major transition in its approach to accreditation. Ample discussion of the implications of these changes for health sciences librarians, especially in the area of information management, has been ongoing and informative [1-4]. In the 1994 edition of the JCAHO manual, the librarian as an individual professional did not appear in the individual professional grid and there was no definition of a qualified health sciences librarian [5]. Furthermore, the manual contained the explicit statement that "[a]n organization is not required to have a library located in the organization." The JCAHO Information Task Force of the Medical Library Association worked hard to correct those oversights, and the 1996 edition calls for the participation of the health sciences librarian in numerous areas and identifies the library service in others [6].

In this article, we broaden the focus from the "Information Management" section to the context of the

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full manual. Health sciences librarians must understand JCAHO's changed concepts of information management in order to function successfully in the health delivery system. To appreciate these concepts, an understanding of the role and function of accreditation is essential.

### Understanding accreditation

Accreditation serves as a mechanism for quality assessment and quality enhancement in many different spheres of contemporary life. Within the accreditation environment, quality refers to the effective utilization of resources to achieve appropriate objectives [7]. Whether accreditation is applied to summer camps, secondary schools, nursing homes, or colleges and universities, the fundamental principles and practices remain the same.

Accreditation standards are written to reflect current practice and expectations for the specific functions the applicant performs. Setting standards involves stakeholders and results in meeting threshold criteria rather than achieving the highest level of quality. Most standards today are not quantitative or prescriptive; they require evidence and analysis of outcomes, outputs, and impact. They emphasize the importance of each organization's clear statement of mission, goals, and objectives, and its plans to achieve these objectives. JCAHO standards now focus on effective, efficient patient care, not organizational structures.

A first step is the self-study that is conducted by the organization; it is followed by a site visit during which a team of peers examines the organization to determine whether it meets standards. JCAHO's survey process is tailored to each particular institution's characteristics and performance. To facilitate assessment, the JCAHO is now developing indicators based on quantitative data contributed by various groups. This is a "bottom-up" process in that indicators are compiled from composite data that are submitted by a cohort of institutions. Earlier standards, in contrast, were "top-down" because they represented ideal cases not derived from empirical experience.

### Improving organization performance

The essence of the new standards is captured in the phrases "Doing the Right Thing" and "Doing the Right Things Well" (PI-4). This means that when determining whether to undertake a new program, an organization must demonstrate its appropriateness to the overall mission. For example, a library service must carry out functions that are appropriate to a health care organization. This mission affects decisions regarding collection scope and size and design of services. The mission becomes the touchstone against which decisions are measured.

"Doing the Right Thing" also means that a manager

allocates time and resources to programs according to their known or expected efficacy. For example, providing direct MEDLINE access may be appropriate in some environments, but it may be less effective when clinical staff are provided with information search support. "Doing the Right Thing Well" refers to the organization's effectiveness in carrying out its mission and its ability to demonstrate that it engages in continuous improvement. The cycle of ongoing improvement is depicted by the JCAHO on page PI-1. It consists of four steps: design, measure, assess, improve.

Librarians familiar with output measures in the library management literature may recognize the similarities between the cycle of plan, do, test, change and the cycle described by JCAHO. Step one consists of setting goals, planning an improvement, or establishing a program or service. Step two involves collecting data about the effects of step one. Assessing the data, step three, enables the manager to determine whether to continue in the direction that has been taken, or to adjust directions or approach. The fourth and final step is change—taking the actions that are necessary to achieve the goals or to maintain the program or service. Examples of improvement efforts include designing a new service, creating a flowchart of a clinical process, measuring patient outcomes, comparing the hospital's performance to that of other hospitals, selecting areas for priority attention, and even experimenting with new ways of carrying out a function. The emphasis is on long-term goals, monitoring, and showing progress.

Accreditation, done well, can help an organization to measure, assess, and improve organizational performance by using standards that are patient centered, performance focused, and organized around functions that can be found in all health care organizations. The assessments required for JCAHO accreditation can be integrated into already established planning and management activities to stimulate and support ongoing performance improvement. Ongoing evaluation and improvement assure the hospital librarian that effort expended prior to a particular review cycle can pay off year after year. Because JCAHO requires that planning and evaluation activities be organized around the achievement of specific objectives, rather than a unit-by-unit assessment, it is essential that the health sciences librarian understand how the current standards are structured.

### Structure of the JCAHO standards

The standards are grouped into three sections. The two major groups divide between those that focus on patient care and those that focus on organizational management. The third is a hybrid of the two. These sections are displayed in Figure 1 and are fully de-

**Figure 1**  
The JCAHO standards

Section 1:	Patient-focused functions Patient rights and organization ethics Assessment of patients Care of patients Education Continuum of care
Section 2:	Organization functions Improving organization performance Leadership Management of the environment of care Management of human resources Management of information Surveillance, prevention, control of infection
Section 3:	Structures with functions Governance Management Medical staff Nursing

scribed on page ADP 4 of "The Accreditation Decision Process" in the 1996 manual.

One of the easiest ways to understand JCAHO's changed approach is to examine the two matrices that illustrate how the individual professionals and hospital departments relate to these functions in the chapter "How to Use This Manual" on pages UM-4 and 5.

It is immediately apparent that the health sciences librarian, as a professional, has interrelationships that are different and distinct from those of the library services. To understand the role of the health sciences librarian, look at the matrix (UM-4) showing individual professionals to see that the librarian appears once under Section 1, "Patient-Focused Functions: Education (PF)," and four times under Section 2, "Organization Functions: Improving Organization Performance (PI), Leadership (LD), Management of Human Resources (HR), and Management of Information (IM)." Library services (note that the library is designated as a service, not as a place) do not appear in Section 1, "Patient-Focused Services," but appear five times in Section 2, "Organization Function: Improving Organization Performance (PI), Management of Human Resources (HR), Management of Information (IM), and Surveillance, Prevention, and Control of Infection (IC)."

From this analysis, it is clear that the hospital librarian must consider himself or herself part of the overall management team rather than focusing exclusively on the maintenance of a collection or the provision of services. This expanded role of the library and librarian can enrich the position the librarian holds in the organization and provide justification for acquiring much-needed resources. For example, Management of Human Resources (HR) targets both the librarian as an individual professional and library ser-

vices as a hospital unit. This standard supports hiring qualified librarians, obtaining continuing professional education, and securing adequate support staff for libraries. The standards in Section II Leadership (LD), also affirm the importance of the health science librarian by including the librarian in the hospital leadership cadre. Presenting health information professionals as participants in hospital planning for their own departments and sources of support for other departments implies an empowered position for them within the organization.

Three sections of the new standards apply to all departments and professionals: Improving Organization Performance (PI), Management of Human Resources (HR), and Management of Information (IM). These sections display the interrelationships of departments and the important role assigned to them by JCAHO.

### The information management standards

Bradley summarized JCAHO's new emphasis on information by using excerpts from the preamble to the standards; she also highlighted key features of its conceptual view of information management:

- Information management is an organization-wide priority, responsibility, and activity involving staff at all levels.
- Multiple types of information are used to support continuous improvement.
- Collaboration and information sharing are important for patient care and for the successful achievement of all the other standards [8].

This IM standard applies to both the librarian as a professional and the library as a unit. The matrix shows this responsibility assigned to all professionals and to all departments. In the past, librarians may have seen this area as their primary prerogative, but today, JCAHO views it as a fundamental responsibility of all professionals and all departments. However, a shared responsibility is by no means a diminished responsibility. The approach reflected in the new standards provides a renewed awareness of the importance of information—and those who can manage it—to providing high-quality patient care.

The first six standards within the IM group describe an information management process common to all types of information. The manual includes a flowchart illustrating this process, which is summarized here:

- Identify information needs.
- Design the structure of the IM system.
- Define and capture data and information.
- Analyze data and transform them into information.
- Transmit and report data and information.
- Integrate and use information.

It is against this backdrop, emphasizing the key role

of information management, that four types of information are defined: patient-specific data and information, aggregate data and information, knowledge-based information, and comparative data and information. These four types of data are specified in standards 7 through 10. In addition to specifying the types of information and the functions, JCAHO stipulates indicators of quality for information management: timeliness and accessibility, accuracy, security and ease of access, use of aggregate and comparative information for improvement, efficiency, collaboration, and sharing. Though these may seem at first glance rather obvious to health sciences librarians, it is worth noting their inclusion in these standards—particularly in the case of the use of information for improvement—and the emphasis on collaboration and sharing.

The detailed discussion of the IM standards that follows contains illustrations and examples that are intended to guide and inform health sciences librarians as they work with others to meet the JCAHO standards. Greater attention is given to the IM standards not only because of their importance to JCAHO, but also because of their centrality to the practice of health sciences librarianship.

#### **Standard IM1. The hospital plans and designs information-management processes to meet internal and external information needs**

All of the standards continually emphasize the planning and design of services that are based on a needs assessment. This is a direct result of JCAHO's commitment to evaluation in the context of the institution's own mission, or as stated earlier, "doing the right thing." Determining what is "right" must precede evaluation of whether it is being done well ("doing the right thing well"). The importance of IM1 is indicated by the amount of space devoted to this standard, and the lengthy list of questions that can be used for needs assessment. Any health sciences librarian who is puzzled by the requirement to conduct a needs assessment may be enlightened by looking at this list of questions. In particular, the evidence for this standard is "a written plan for information management that is either independent or part of the overall hospital plans." The needs assessment conducted for the library function can be independent, or can form a component of the overall hospital plan.

When planning for information needs, it is essential that "appropriate clinical and administrative staff participate in assessing the hospital's information needs and in selecting, integrating, and using information-management technology." The health sciences librarian should be a key contributor to the planning for information needs and share this responsibility in a collaborative manner with others. The nature of the working group that is responsible for this task may directly

affect the way in which a needs assessment for library services is conducted.

#### **Standard IM2. Confidentiality, security and integrity of data and information are maintained**

Although this standard specifically mentions medical records, it also applies to the confidentiality of library records. Library policies concerning confidentiality of circulation records and information requests, and security of collections should conform to individual state laws and to the American Library Association's Code of Ethics: "Librarians must protect each user's right to privacy with respect to information sought or received, and materials consulted, borrowed, or acquired" [9]. Policies concerning confidentiality of library records and information requests, and security of collections should be reviewed and coordinated with other policies throughout the organization.

#### **Standard IM3. Uniform data definitions and data capture methods are used whenever possible**

The importance of using uniform data definitions should be obvious to every health sciences librarian. Bibliographic control depends upon the use of international numbering systems such as the ISBN, the ISSN, SuDocs, National Library of Medicine (NLM) classification, and Medical Subject Headings. The nearly universal conversion during the past two decades to electronic data transfer in library operations—from OCLC cataloging to automated interlibrary loan—has sensitized the library community to the importance of uniformity.

Also of interest to the health sciences library and information sciences community is work being done with the Universal Medical Language System (UMLS) that will enable the transfer of information across classification systems. The UMLS is intended to "rationalize" the various coding and organizational schemes that are used in medicine to improve the ability to compare and share data and information within and among organizations as specified in standards IM3 through IM3.2. Overall, librarians have a long and excellent history in this area; growth and challenge lie in establishing connections with others who have their own patterns of organization. The UMLS, conducted under the leadership of the National Library of Medicine, plays a significant role in facilitating these partnerships.

#### **Standard IM4. Decision makers and other staff are educated and trained in the principles of information management**

The library shares responsibility with information systems departments to educate and train the users of data and information. Education and training in infor-

mation systems can encompass technical training as well as evaluation of the literature, as exemplified by the *JAMA* series User's Guide to the Literature and personal information management. Teaching users how to evaluate information, select and search MEDLINE and other relevant databases, and evaluate education needs is supported by this standard. Records of classes and tutorials presented by library staff can provide useful evidence of meeting this standard.

**Standard IM5. Transmission of data and information is timely and accurate**

While most of the examples cited refer to medical records, laboratory records, and the like, the importance of the delivery of timely and accurate knowledge-based information is not to be underestimated. An outgrowth of this need is the necessity for the library's computer capabilities to be integrated with the larger system of the health care setting, thus enabling access on an as-needed basis and leading the way to standards IM6 and IM8. (IM7 deals primarily with patient-specific data, generally handled by the medical records function within the health care organization.)

**Standard IM6. Adequate integration and interpretation capabilities are provided**

**Standard IM8. The hospital collects and analyzes aggregate data to support patient care and operations**

These two standards address the need for an information management process that makes it possible to incorporate information from various sources and generate reports to support decision making. Familiar examples of integration of information systems are clinical librarian programs in which the librarian is included as a member of the clinical team making patient rounds. The librarian's responsibility is to provide case-specific links to the published (knowledge-based information) literature. A second example is the Literature Attached to Charts (LATCH) program that makes similar links between patient cases and relevant literature. Recently, several studies have been conducted that examine the effect on patient treatment and length of stay when knowledge-based information is made available to clinical staff in a timely and efficient manner [10–13]. Establishing relationships between the availability and effective use of knowledge-based information and the organizational efficiency and effectiveness of the health care system is an important growth area for health sciences librarians, both as individual professionals within their own organizations, and collectively as a profession engaged in research.

In hospitals where there is an institution-wide information system, the librarian is often responsible for ensuring that access to bibliographic and other data-

bases is available from the clinical site. While such direct access to the literature may appear to "bypass" the librarian, it is the health sciences librarian who has the quality assurance responsibility to ensure that staff are appropriately trained and supported in their information search. Assessing the quality of the information retrieved is equally important, and a key role for the health sciences librarian.

The librarian is also responsible for securing "agreements with reference databases and other external data and information resources for access or participation" (IM15). These resources may be networks of libraries or other information and resource providers and other nonbibliographic databases.

**Standard IM9. The hospital provides systems, resources, and services to meet its needs for knowledge-based information in patient care, education, research, and management**

The JCAHO has identified expert knowledge-based information as vital to a health care organization's ability to provide patient care. Knowledge-based information supports clinical decision making, continuing education of staff, administrative planning and management, performance assessment and improvement, patient and family education, and research. Knowledge-based information consists of systems, resources, and service that can make a difference in the way patients are treated and in the outcome of their health care. Systems are the structures needed to identify, locate, and control knowledge-based information—catalogs, networks, consortia, thesauri, controlled vocabularies—tools familiar to every librarian. Resources are the journals, books, databases, practice guidelines, and patient education materials. Librarians are critical to the organization's ability to respond to information requests, and to anticipate information needs and systematically link current, gold-standard evidence from the literature with health care processes [14]. The health sciences library community has the opportunity to engage in cooperative data collection efforts to produce useful performance indicators for knowledge-based functions.

Knowledge-based information—the literature—has relevance for health professionals who must acquire and maintain the knowledge and skills they need to care for patients. Knowledge-based information is key to all research endeavors, whether clinical or administrative. It supports clinical and management decision making and performance improvement, and it forms the basis of patient and family education.

**Standard IM9.1 The hospital's knowledge-based information resources are available, authoritative, and up to date**

The librarian's expertise in collection development and assessment is essential to meeting this standard. Tools

such as the Brandon Hill lists and the *Library for Internists* that can be used to assist in this process are well known to health sciences librarians. Professional judgment is required in selecting materials outside the areas covered by these lists and in determining whether substitutions can be made when resources are limited. Assessment of collections and arrangements for obtaining materials that are not available on-site should be an ongoing activity and is relatively easy and straightforward. Traditionally librarians have restricted themselves to dealing with published materials ("the literature"), but today, the boundaries determining what constitutes "publication" have blurred. Resources available on the Internet are confusing, sometimes misleading, and at times, difficult to access. Continually reviewing online resources as well as teaching others to find and judge the data available in these resources is a sometimes daunting, ongoing, and challenging experience.

**Standard IM9.2. The hospital services, resources, and systems for knowledge-based information are based on a needs assessment**

When JCAHO evaluates a health care organization, it does so in the context of its stated mission, recognizing that the needs of one organization may not be the same as those of another. Accreditors look for evidence that an institution maintains processes and structures to ensure its ability to identify and deliver high-quality services appropriate to its mission, constituent community, and size. It must be able to assess its own performance and make necessary adjustments.

The current manual includes a discussion of standard IM9.2 and the criteria for assessment. Careful reading of this section will provide specific guidance in how the organization's performance in this area is judged. Needs assessment is conducted in order to learn more about the users and mission of the parent organization, and that needs (and therefore programs and services) are context-based. Comparisons, if they are made at all, must be made with similar organizations. Assessments should identify areas of accomplishment, and areas where improvement is needed. Subsequent assessments should reveal changes and improvements based on the targets that have been established through needs assessment. The reader will quickly recognize that this process describes the "plan, do, test, change" model described earlier.

The library service is expected to provide the resources and systems that support access to knowledge-based information. Design of these programs and services must be based on a needs assessment. How the librarian conducts this needs assessment, and the results that are achieved should determine the scope and direction of the library services. It is crucial that the needs assessment be conducted effectively. If

it is simply a survey hurriedly pulled together before the visit to show compliance, the opportunity to examine new approaches to information resources and services is lost along with genuine understanding of the ongoing assessment and improvement cycle.

The health sciences librarian might consider focusing a needs assessment on accessibility and timeliness (after-hours use); methods of document delivery; turnaround time on a request; patient access to the library; links with the hospital's internal information systems and with external databases and information networks; ability to respond to information requests from staff, patients, and families; anticipation of information needs and systematic linking of literature to clinical and organizational processes; provision of relevant, current, and accurate information within appropriate time frames and in formats appropriate to users' needs; and education of patients and families.

Survey research is the most common form of research reported in the library and information science literature. Unfortunately, it is often badly done, not efficient from a cost benefit standpoint, and not particularly effective. There are other more contemporary, more effective, and less expensive ways to meet the requirements of JCAHO. For example, one approach might compare user and non-user focus groups, or employ an on-the-spot questionnaire to assess satisfaction with information search results. If the hospital librarian does choose to conduct a survey, it is best to adapt survey instruments that have already been designed and pretested, rather than attempting to develop a questionnaire independently. Some examples are included in *National Network* and the *Bulletin of the Medical Library Association*; other examples may be identified through a literature search [15, 16].

Library users are often excellent sources of anecdotal stories describing how information helped change the outcome of a treatment; these can illustrate dramatically the importance of library services. An informal record of these instances is easy to maintain, and can be useful to surveyors.

Developing a plan or schedule for conducting these brief assessments also demonstrates ongoing compliance and reduces the stress of pulling data together under pressure. It also provides greater latitude for exploring areas of dissatisfaction or under-utilization of resources. Effective needs assessment will identify areas of needed improvement, growth, or reduction; conducting needs assessment over an extended period ensures that there is adequate time to address problems and develop solutions.

## CONCLUSION

Members of the JCAHO Information Task Force, along with many MLA members, have worked to enhance the importance of the library and its place in the JCA-

HO standards. Like all accreditation standards, these standards can be used as a tool for assessing and improving the library and its services and for strengthening the role of the library in its home institution. Rather than viewing a visit from the accrediting body as a dreadful ordeal to undergo and survive, we argue that the process provides the enterprising librarian a new perspective on the contributions that health sciences librarians can make to the overall functioning of the health care organization. Rather than restricting his or her role to supporting the library as a physical or organizational unit, accreditation reviews present the health sciences librarian with a variety of opportunities to bring professional expertise to ongoing assessment and the development of best practices. The process can be empowering and enlightening, and can result in improved performance. While the manual offered by JCAHO may seem overwhelming, a systematic analysis of all the sections where the library and the librarian are cited can engender a new appreciation of their importance and relevance to the larger institution.

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