The Evolving Role and Value of Libraries and Librarians in Health Care

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Changes in medical information and technology are revolutionizing health care. As clinicians try to incorporate research into practice through comparative effectiveness research and decision support, they increasingly depend on technology to bring evidence to the bedside to improve quality and patient outcomes. Integrating current information into the processes of shared decision making and continuous learning supports the application of evidence in clinical decision making. Health sciences libraries and librarians have an increasingly important role in providing that information to clinicians as well as to patients and their families.

Health sciences libraries and librarians, like all participants in the health and health education system, must do more with less. Medical journal prices have increased by more than 30% in 5 years, yet the budgets of academic health sciences libraries (specifically, libraries that are members of the Association of Academic Health Sciences Libraries) increased by only 5.7% during that same period, and their workforce decreased by 11% between 2009 and 2012. As a result, these libraries have more with less. Medical journal prices have increased by more than 30% in 5 years, yet the budgets of academic health sciences libraries (specifically, libraries that are members of the Association of Academic Health Sciences Libraries) increased by only 5.7% during that same period, and their workforce decreased by 11% between 2009 and 2012. As a result, these libraries have increased their efficiency, and librarians have an increasingly important role in providing that information to clinicians as well as to patients and their families.

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Recent research has shown the value of information in patient care and highlights the role of the library and librarian in supporting this information revolution. The Value Study, conducted by Marshall et al4 at 56 library sites serving 118 hospitals, surveyed physicians, residents, and nurses who were involved in patient care or clinical research and could recall an event in the last 6 months when they had used an information resource. Of the 16122 survey respondents (including 5379 physicians, 2123 residents, and 6788 nurses), three-fourths reported that they had definitely or probably handled some aspect of patient care differently as a result of the information obtained from the library and information resources. Among the changes reported were advice given to the patient (48%), diagnosis (25%), and choice of drugs (33%). Most respondents (95%) reported that the information resulted in more informed clinical decisions. Respondents also reported that the information allowed them to avoid or reduce the possibility of the following adverse events: patient misunderstanding of the disease (23%); additional tests (19%); misdiagnosis (13%); adverse drug reactions (13%); medical errors (12%); and patient mortality (6%).

Other studies complement these findings. Sievert et al5 describing the results of a survey completed by 328 physicians and other health professionals at 4 hospitals, reported that 71% of the respondents said they changed how they managed the care of a particular patient as a result of information from the health sciences library, its website, or any of its resources. Brettle et al6 conducted a systematic review of the evaluation of clinical librarian services. In the 18 studies included in the review, the majority (14 studies [78%]) reported a positive effect on patient care, and more than one-fourth (5 studies [28%]) identified a positive effect on the choice of drug or therapy.

The study by Marshall et al4 also conducted 24 follow-up interviews with clinicians to provide insight into the perceived role of the library and the librarian in supporting information needs. The results suggest that librarians are valued for their search expertise and for their contributions in education, research, and quality and performance improvement. For example, librarians may teach students and clinicians to efficiently and effectively search for evidence. Those who use library resources report the information to be of value, which suggests the medical profession should give more attention to teaching students and clinicians skills that could improve their evidence searching.

A librarian’s presence at morning report correlated positively with shorter length of stays and lower hospital charges in 55 cases with 136 matched comparisons. In one controlled study, a clinical librarian joined the intervention team for patient rounds, providing evidence searching and instruction to residents and medical students. A significant positive effect was reported by the trainees; 27 of 34 participants (79%) said they changed treatment plans based on the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the librarian’s searches, and 30 (88%) based on their own searches after learning new information skills from the
An increasing role in providing patient- and family-centered information. In many hospitals and ambulatory care clinics, librarians are working directly with patients to help them understand their conditions and their care options. Information prescription programs are developed to provide personalized information to patients. For instance, a health care practitioner (e.g., physician, nurse, social worker) can make a referral to an appropriate resource, often a librarian who then provides information targeted directly to the patient's or family's needs. Although more research must be done to evaluate such programs, a study of 149 information prescriptions completed in the neonatal intensive care unit and for patients with breast cancer suggested that in an academic hospital setting, an information prescription service was a "useful adjunct to existing services."

Librarians also can play a role in managing the electronic information resources of a health care institution. Librarians and their technology support staff choose what publications and information sources to buy; negotiate prices; ensure that electronic resource vendors have the information they need to provide access; ensure remote access through proxy servers; organize the information on digital portals; build interfaces to facilitate searching; and collect and analyze usage data to validate responsible use of institutional resources.

In a well-functioning health care system, value should be defined as patient outcomes relative to costs. In a report by Marshall et al., 85% of 11 887 survey respondents instructed to recall a specific single patient encounter reported that having access to information saved them time. A case-control study by Banks et al. demonstrated that librarian support was associated with saved resources and reduced costs beyond a health practitioner's time savings; a librarian's presence at morning report correlated positively with shorter length of stays and lower hospital charges in 55 cases with matched comparisons.

The shift to include librarians in care teams will require careful attention to workflow design and to organizational and social issues. The presence of an additional person on the team will affect interpersonal dynamics, communication flow, and attention to proper role functioning to optimize team performance. There is also a significant time commitment by clinical librarians, with scalability and sustainability in question. Librarian training must also be addressed, with competencies defined, clinical domain education expanded, and ethical concerns related to confidentiality and the Health Insurance Portability and Accountability Act discussed.

With ongoing changes in health care as a result of information technology, health sciences libraries and librarians can play an important role in bringing high-quality, evidence-based medical information to the bedside, helping to make patient care both efficient and effective. Health care libraries and librarians are adapting to the changing information needs of physicians, other health care professions, researchers, and patients. With rigorous evaluation, enhanced librarian training, and continuous attention to advances in technology and needs of the users, health care librarians can provide value to patient care.

ARTICLE INFORMATION
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REFERENCES