

# Trends in hospital librarianship and hospital library services: 1989 to 2006

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**Objective:** The research studied the status of hospital librarians and library services to better inform the Medical Library Association's advocacy activities.

**Methods:** The Vital Pathways Survey Subcommittee of the Task Force on Vital Pathways for Hospital Librarians distributed a web-based survey to hospital librarians and academic health sciences library directors. The survey results were compared to data collected in a 1989 survey of hospital libraries by the American Hospital Association in order to identify any trends in hospital libraries, roles of librarians, and library services. A web-based hospital library report form based on the survey questions was also developed to more quickly identify changes in the status of hospital libraries on an ongoing basis.

**Results:** The greatest change in library services between 1989 and 2005/06 was in the area of access to information, with 40% more of the respondents providing access to commercial online services, 100% more providing access to Internet resources, and 28% more providing training in database searching and use of information resources. Twenty-nine percent (n=587) of the 2005/06 respondents reported a decrease in staff over the last 5 years.

**Conclusions:** Survey data support reported trends of consolidation of hospitals and hospital libraries and additions of new services. These services have likely required librarians to acquire new skills. It is hoped that future surveys will be undertaken to continue to study these trends.

## INTRODUCTION

The status of hospital librarians has concerned the Medical Library Association (MLA) for many years. As regulations, standards, and the economy have cycled through changes, hospital librarians have been challenged to demonstrate their value and avoid downsizing or closure of their libraries. As Holst succinctly stated in her Janet Doe Lecture, "Hospital libraries today are a reflection of the environment that at times nurtured them and other times neglected them" [1]. Monitoring the growth, downsizing, and changes in service and staffing of hospital libraries through surveys has been critical to tracking changes in this community and initiating campaigns to remind health care administrators of the importance of information services to quality patient care.

When MLA was first established in 1898, hospital libraries were a rarity, with only twenty-four libraries reported [2]. After World War II, the number of hospitals increased with government-funded renovation and construction of hospitals and reimbursement of health care costs through the Social Security Act. The creation of hospital libraries was spurred on by the requirement that hospitals have libraries in both the Medicare regulations and the Joint Commission on Accreditation of Hospitals' (now the Joint Commission) standards [3]. The American Hospital Association (AHA) conducted the first nationwide survey of hospital libraries in 1962 and provided a baseline of data about acute care hospitals [4]. A boom period followed through the late 1960s, but it was to be short lived. By 1972, health care cost controls had been

### Highlights

- Data support reported trends in the decrease in the number of hospitals and hospital libraries.
- About 44.0% of hospitals had some level of onsite library service in 1989, compared with between 33.5% and 29.1% of hospitals in 2005/06.
- More electronic services and resources, such as Internet access and online materials, are being offered by hospital libraries, in addition to more traditional services
- Library staffing appears to be more unstable today than in 1989, with more libraries reporting a decrease in the number of staff.

### Implications

- Hospital libraries and librarians continue to change in response to changes in the health care environment as health care administrators respond to financial pressures, library staff are downsized, degreed librarian positions are eliminated, and reporting structures change.
- MLA must continue to track the status of hospital librarians and libraries in light of the changing environment with surveys and other means, in partnership with others such as the National Network of Libraries of Medicine.



A supplemental appendix is available with the online version of this journal.

implemented and support for libraries was being curtailed [5, 6].

During this time, AHA, MLA, and Case Western University continued to study the status of hospital

libraries [7]. An analysis of these results by Crawford [8] showed that between 1969 and 1979, the number of libraries increased, though predominately among those hospitals with 500 beds or fewer. The author commented that between the 1969 and 1979 AHA surveys, there was "a shifting population of libraries that emerged, grew, or disappeared rapidly as their sponsoring institutions changed" [8]. Instead of a stable cohort of 2,000 hospital libraries, there was a core group of about 1,700 libraries, with another 300 appearing and disappearing over time.

The economic downturn of the 1980s brought more challenges for hospital libraries as hospitals responded to prospective payment, competition, and new health delivery systems. Hospital libraries were caught in the middle of mergers, reorganizations, and the use of contract services [9]. The final Medicare regulations no longer viewed library services as a reimbursable expense and no longer required a library staffed by a certified medical librarian to be eligible for reimbursement [10]. Libraries became another cost center with no direct reimbursement of costs. These changes threatened the existence of library services, with library downsizings and closings reported.

These events stimulated two regional surveys of hospital libraries. In 1988, the Michigan Health Sciences Library Association surveyed libraries and reported that health care economics had "adversely affected the size and status of hospital libraries" and that downsizing was occurring [11]. Unfortunately, there were no comparable statistics from other states or from other years with which to compare the data and make broader generalizations. The Pacific Southwest Regional Medical Library Service had gathered data over the years and did a comparison of results collected in 1984 and 1989. This longitudinal analysis of hospital libraries revealed a tremendous drop in full-time equivalent staff and in libraries managed by a librarian with a master's degree, as well as a decrease in libraries providing a defined set of core services [12]. While the study demonstrated a regional trend, a nationwide study was still lacking.

The MLA Board reacted to these events by appointing the Ad Hoc Committee on the Position of Hospital Libraries "to address the serious issues facing the association's hospital library membership" and "to strengthen and promote hospital libraries in the current health care environment" [13]. The committee's first action was to publish a survey on the state of hospital libraries in November 1988, which revealed that 65% of the respondents had experienced negative changes between 1985 and 1988 in terms of reorganization, budget cuts, layoffs, downsizing, or frozen budgets and hiring. At the same time, librarians reported an increase in demand for reference, mediated search, and interlibrary loan services [14].

In 1989, AHA conducted another survey of US hospitals and health sciences libraries to learn more about the current status of the libraries in order "to enable providers to adequately define needs and plan

services for users" [15]. The survey found that almost 32% of all hospitals responding (n=2,167) had on-site libraries and over 70% of hospitals (n=899) with 300 or more beds had libraries. The study also found that "hospital libraries play diverse roles in meeting the information needs of the health care community and are active partners in achieving the goal of high-quality patient care within their institutions" [16]. The Pacific Southwest Regional Medical Library Service also conducted a study in 1994 and found that while hospital libraries remained stable in overall number, size, and staffing when compared to the group's 1989 survey, end-user services, especially searching and interlibrary loan, were increasing [17].

The pressures of the new millennium brought new stories of libraries being downsized and closed. Changes in health care delivery and reimbursement, consolidation into hospital networks, closure of hospitals, and increased scrutiny of non-revenue-generating departments challenged the very survival of the hospital library [18]. Librarians were concerned with proving that their libraries were a sound investment and could decrease costs [19]. MLA received several notices of hospital library closings as well as requests to generate letters of support for libraries and librarians. At chapter meetings and MLA's Chapter Council meetings, librarians expressed many concerns about closures. However, much of the information was anecdotal or incomplete [20].

Data support some of these anecdotal observations. Comparing data on the number of hospitals from the AHA 1989 study [15] with data derived in 2006 from AHA and the Directory of Hospital Personnel (DHP), it is estimated that the number of hospitals (n=6,853 in 1989) declined somewhere between 15.4% (to 5,795) [21] and 12.7% (to 5,980) [22] during that period. Similarly, using the 1989 AHA data and 2006 information from DHP and the National Library of Medicine's (NLM's) National Network of Libraries of Medicine (NN/LM), it is further estimated that the number of hospital libraries (n=3,030 in 1989) declined somewhere between 35.6% (to 1,950) [23] and 44.4% (to 1,684) [22] in 2006. Extrapolation from these figures indicated that about 44% of hospitals had some level of on-site library service in 1989, compared with between 33.6% and 29.1% of hospitals in 2006.

## BACKGROUND

MLA realized that hard data and not just informal reports and stories needed to be collected. However, given that both resources and services were being delivered in a more digital environment, MLA also recognized that the emphasis in any data collection undertaken needed to be on the status of the librarian and professional library services and not the facility in which library services were provided [24]. In September 2004, based on a proposal from former MLA President Patricia L. Thibodeau, AHIP, FMLA, the MLA Board of Directors approved the formation of

the Task Force on the Status of Hospital Librarians. The task force was charged with identifying existing data and trends concerning the status of hospital librarians and developing an action plan that MLA could pursue to address the trends and influence decision makers and other key health care leaders who were reviewing library budgets and considering possible closures or reinstatement of hospital libraries. This task force became part of the expanded Task Force on Vital Pathways for Hospital Librarians, established in 2005, and was renamed the Vital Pathways Survey Subcommittee [25].

Two actions resulted from the work of the Vital Pathways Survey Subcommittee. Between September 2005 and October 2006, the subcommittee conducted a survey with the intention of identifying information related to the status of hospital libraries and librarians. The data would be used in recommending immediate and short-term actions that MLA could take to raise awareness of issues among members, hospital administrators, and other key health leaders. Also, a "Change in Status of a US Hospital Library" form [26] was made available on MLANET in October 2006 to enable hospital librarians to report both positive and negative changes in their libraries to MLA headquarters. Using this form, they could also request that MLA headquarters staff, working with the MLA president, contact their hospital administrators or others about the change.

## METHODS

### Survey

The "Survey of Health Sciences Libraries in Hospitals 1989" [15] was the last comprehensive survey of hospital libraries performed by AHA, so more up-to-date AHA data were not available. Therefore, the subcommittee reviewed the questions used in the 1989 AHA survey and developed similar questions where possible for the subcommittee's 2005/06 Hospital Library Survey to have some basis for comparison. While not all the questions from the AHA survey were replicated, the questions on hospital size, staffing, and services offered were retained. Responses to these questions were used to track some general trends over the past fifteen years. An in-depth statistical analysis of responses to the questions in both surveys was not conducted because complete, detailed data from the 1989 survey were not available. Some of the information used to compare data consisted only of estimates because AHA no longer collects information on the number of hospital libraries in the United States.

Questions were added to the survey to capture specific data of interest to the subcommittee as well as to reflect changes that had occurred in the health care environment since the AHA survey. The AHA survey used the American National Standards Institute (ANSI) definition of "hospital library" from 1983 [27]. An updated definition of hospital libraries [28] was used to ensure consistency across the responses

of participants. A hospital library was defined as an entity that "serves health service professionals in hospitals or elsewhere, whether in the private or public sector" and provides all of the following: (1) documents (print and other materials) held locally and remote resources (such as electronic resources) for which permanent or temporary access rights have been acquired by the library for use by a clientele; (2) staff members doing work that requires professional education (the master's degree or its equivalent) in the theoretical and scientific aspects of librarianship and, in some libraries, staff performing professional level tasks who, though not librarians, have equivalent education and training as required to meet the informational or educational needs of a clientele; (3) an established schedule, in which services of the staff are available to clientele; and (4) a physically separate location where library materials and services are provided to the library's clientele. New questions addressed topics such as role as part of a larger health system or teaching hospital, existence of an onsite library, and closure over the past five years and the reasons for it.

Accompanied by a cover letter signed by the MLA president and chair of the Hospital Libraries Section, the MLA survey was distributed by email to 4 groups between September 2005 and October 2006: hospital libraries that were members of MLA, based on MLA's membership directory (n=945); hospital libraries that were members of NN/LM, based on a list provided by NN/LM (n=1,950); and academic health sciences library directors, based on a list provided by the Association of Academic Health Sciences Libraries (n=132). Finally, NN/LM was asked to send out email reminders about the survey to state and some regional medical library associations and MLA chapters (unknown number) to increase participation. All survey respondents were compared and duplicate respondents' surveys were eliminated from the final data.

### Change in status form

In October 2006, MLA headquarters posted the "Change in Status of a US Hospital Library" form on MLANET at the request of the Task Force on Vital Pathways for Hospital Librarians. The form was meant to rapidly collect information on major changes in individual hospital libraries in the United States. These changes could be reported by the hospital library staff or by colleagues who were aware of any major changes going on in a library. The form was developed by the task force based on feedback from hospital librarians about types of changes that were occurring in hospital libraries. It was agreed that the information that was reported via the form would be kept confidential; individual librarians and hospitals would not be identified; and only aggregate data about changes in hospital libraries would be reported by MLA. When librarians completed the forms, they could send them electronically to MLA headquarters. If the forms requested that letters be sent to their administrators or other parties, then a designated



**Table 1**  
Characteristics of 2005/06 respondent hospitals

	Percentage
<b>Ownership (n=606)</b>	
Private, not-for-profit	72.6
Government (federal, state, local)	17.4
Investor-owned, for-profit	4.6
<b>Bed size (n=607)</b>	
<100	7.7
100–399	54.2
400+	38.1
<b>Part of health system (n=606)</b>	
Yes	64.7
No	35.3
<b>Teaching hospital (n=604)</b>	
Yes	65.0
No	35.0

MLA staff member would get in touch with the requestor to develop letters unique to their individual circumstances. After approval by the librarian, the letter would be signed by the MLA president and MLA executive director and sent to the designated person.

## RESULTS

### Survey

**Sample characteristics.** A combined total of 611 usable responses were received. This represents between 31.3% (n=1,950) [23] and 36.3% (n=1,684) [22] of the estimated number of hospital libraries in the United States. Because there was a much lower response rate in 2005/06 (n=611) than in 1989 (n=2,167), a comparison was made by state of the number of hospitals with libraries and percentage of respondents. This comparison determined that a representative geographic sample of the total population was obtained in the 2005/06 survey and was similar to the sample in 1989. Also, a comparison of the percentages of the 2005/06 responses, state by state, with the estimated distribution of hospital libraries, state by state, in the DHP [22] indicated again that the sample was representative of the population of hospital libraries.

Complete results from the Hospital Library Survey are shown in the appendix (online only). This includes the comparison of 2005/06 results with 1989 results, where possible. To ensure the respondents represented the current distribution of the types of hospital library settings, MLA respondent data were compared with DHP [20] and AHA [15] data. Libraries in teaching hospitals and not-for-profit hospitals were overrepresented in the respondents, and libraries in for-profit hospitals and government-owned hospitals were underrepresented. Therefore, the data might be somewhat skewed toward teaching and nonprofit hospitals. The majority of 2005/06 respondents were part of a private, not-for-profit hospital with over 300 beds that is part of a health care system (Table 1). The library was a separate department with a separate budget.

**Table 2**  
Library services offered 2005/06 (n=611)

Service	Number	Percentage of respondents
Access to MEDLINE/PubMed	597	97.7
Database searching performed by library staff	593	97.1
Interlibrary loan	592	96.9
Existing collection of current books and journals	591	96.7
On-going subscriptions to journals	590	96.6
Reference services for finding needed information	588	96.2
Access to free Internet resources through workstations	574	93.9
Annual budget for purchase of new books	570	93.3
Electronic books or other online reference materials (e.g., UpToDate)	527	86.3
Electronic journals	526	86.1
Access to commercial online services (e.g., StatRef)	511	83.6
Training programs in database searching and using information resources performed by library staff	475	77.7
Library web page/website	427	69.9
Consumer health information for patients and the public	414	67.8
Services of a clinical librarian	208	34.0
Information resources embedded into patient information systems, such as computerized provider order entry (CPOE) or an electronic health record (EHR)	90	14.7

**Library services offered.** Table 2 gives a complete listing of services offered by the libraries. Over 95% of the 2005/06 survey respondents offered the following services: access to MEDLINE, interlibrary loan, database searching, access to a collection of books and journals including journal subscriptions, and references services. Between 75% and 95% offered access to Internet resources, including commercial online services, electronic books and journals, online references materials, and database and information resources training. Less than 75% had a library website or web page or offered consumer health information for patients and the public.

**Library staffing.** Almost 99% (n=591) reported having staff assigned to maintain the library and/or provide library services. The majority of respondents' libraries (73.3%, n=433) were staffed by full-time professional librarians with master's of library science (MLS) degrees. This was in contrast to the 1989 data, where only 53.7% (n=1,163) were staffed by MLS-degreed librarians. Table 3 provides complete results from the survey. Also, the majority of respondents (97.3%, n=563) reported that job qualifications had stayed the same or had increased over the past 5 years, and over half (64.7%, n=573) reported that staffing was adequate to meet the needs of the library's clientele.

### Comparison of 2005/06 and 1989 survey results

**Hospital description.** Over 92% (n=between 560 and 572) of 2005/06 respondents had libraries that met the updated ANSI definition of hospital libraries [28], allowing a reliable comparison of results between the 2005/2006 and 1989 surveys. As noted above, a higher percentage of government-owned hospitals respond-

**Table 3**  
Library staffing 2005/06 (n=591)

Types of staff	Number	Percentage of total respondents
Part-time clerical/paraprofessional	187	31.6
Full-time clerical/paraprofessional	260	44.0
Part-time professional librarian (with master's of library science [MLS])	133	22.5
Full-time professional librarian (with MLS)	433	73.3
Part-time nonlibrary professional (administrator, nurse, MD)	10	1.7
Full-time nonlibrary professional (administrator, nurse, MD)	29	4.9
Services delivered by library staff in another health system member	9	1.5
Circuit rider agreement for professional library services	6	1.0
Contract or agreement with another institution for professional library services	19	3.2
The library is staffed with volunteers	109	18.4
Other	75	12.7

ed in 1989 (28%, n=2,167) than in 2005/06 (17.4%, n=606). Also, the bed size of responding hospitals was larger in 2005/06 than in 1989. More 2005/06 respondents came from larger hospitals with respect to bed size, with 13% more in the 400–500+ categories than in 1989 and about 10% less in the 50–199 categories (Table 4).

There was also a slight increase in the percentage of private, not-for-profit hospitals reporting and over a 10% (n=536) decrease in government-owned hospitals in 2005/06 respondents compared with those in 1989 (Table 5). Almost 20% more respondents reported that they were separate departments with their own budgets in 2005/06 (88.8%, n=588) than in 1989 (69.3%, n=2,167).

**Library services.** As far as staffing was concerned, among the 43% who reported changes (n=254), almost 18% more reported decreases in staffing in 2005/06 (n=172; 67.7%) than in 1989 (n=282; 50%). Also, a smaller percentage reported having a clinical librarian in 1989 (15.6%, n=339) than in 2005/06 (34%, n=208). About 78% (n=475) of 2005/06 respondents provided training programs in database searching and the use of information resources, while up to 50.4% (n=1,093) of 1989 respondents provided some kind of end-user education or training.

New technologies, including the Internet, have had the greatest impact on library services between 1989 and 2005/06, allowing access to Internet resources, electronic books and journals, and online reference sources. While, in 1989, 73.3% (n=1,588) of the libraries supported access to NLM databases compared to 97.7% (n=597) in 2005/06, a smaller

**Table 4**  
Bed size of responding hospitals, 2005/2006 vs. 1989

Bed size	Percentage of 2005/06 (n=607)	Percentage of 1989 (n=2,167)
<100	7.7	13.5
100–299	39.2	45.0
300+	53.1	41.5

**Table 5**  
Hospital ownership reported by respondents, 2005/06 vs. 1989

Ownership of hospital	Percentage of total respondents, 2005/06 (n=606)	Percentage of total respondents, 1989 (n=2,167)
Federal	6.1	10.3
State/local government	11.3	17.7
Private, not-for-profit	72.6	67.4
Investor-owned or private, for-profit	4.6	4.6
Don't know	0.8	—
Other	4.6	—

percentage provided access to commercial online services (38.4%, n=833 for the most frequently reported database) compared to 2005/06 (83.6%, n=511). Finally, a higher percentage of libraries provided consumer health information for patients and the public in 2005/06 (67.8%, n=414) than in 1989 (37.7%, n=818).

### Change in library status reports

Between October 2006 and May 2008, MLA headquarters had received 121 usable change in status report forms. Of those, 14 respondents asked for letters to be written to their hospitals' administration. Headquarters received 2 responses back from administrators indicating that they acknowledged our concern, but that economic times and new technologies had precipitated these changes. Table 6 is a summary of these reports. Of 80 responses from MLA members, 49 reported negative changes, while 23 reported positive changes. Of the 41 responses from nonmembers, 30 reported negative changes, while only 6 reported positive changes. Table 7 provides a list of specific responses from the change in status form between October 2006 and May 2008. The 2 most frequently reported changes were in staffing, including downsizing and elimination of MLS staff members, and library closings. Changes in whom one reports to, mergers with another library, or change to a virtual library (total n=38) were not always perceived as negative.

### DISCUSSION

Some changes were noted in hospitals and hospital libraries between 1989 and 2005/06, based on the survey data. The changes in the sizes and types of hospitals responding likely reflected the closing of military and veterans' facilities and attached hospitals

**Table 6**  
Summary of change data collected from "Change in Status of a US Hospital Library" forms, October 2006–May 2008

Type of change	Percent members (n=80)		Percent nonmembers (n=41)	
	n (%)		n (%)	
Positive	23	(29)	6	(15)
Negative	49	(61)	30	(73)
Neutral	8	(10)	5	(12)
Total	80	(100)	41	(100)

**Table 7**  
Reported changes in status of hospital libraries by specific action

Reported action taken	Percentage of responses (n=121)	
	n	(%)
Staff down-sized	28	(23)
Staff increased	5	(4)
Change in who report to*	16	(13)
MLS staff eliminated	18	(15)
MLS staff hired	10	(8)
Lost resources or space	10	(8)
Library closing	27	(22)
Merging with another library*	8	(7)
Merging with another department*	7	(6)
Becoming virtual library*	7	(6)

\* Not always perceived as being negative action by respondents.

and the mergers, other consolidations, and rise of health care systems.

Changes were also noted in the roles of hospital librarians. These changes were due in part to the development of new technologies that allowed new formats and new ways to access clinical and other health care information. They appeared to have not only increased the staffing of libraries by clinical librarians, but have also increased the training role that librarians play in their institutions and have created new roles in developing websites and providing web resources.

Too few responses have as yet been received in regard to the change in status of hospital libraries to draw any definite conclusions about trends, although the forms do support data about the decreasing number of hospital libraries. A formal hospital library survey should be performed again in a few years to obtain more reliable data about emerging trends.

## CONCLUSIONS AND FUTURE CONCERNS

The status of hospital librarians and libraries is still volatile due to the dynamic nature of the health care and financial environments. While the types and number of services have increased, about a third of the respondents report that staffing has been down-sized. However, it appears that a higher percentage of hospital libraries have professional librarians delivering those services than in the past. The change of status report form has shown that closures are continuing, but other pressures are having an impact on the status of libraries, including the loss of MLS staff, changing reporting structures, loss of space and resources, and consolidation within other hospital departments or libraries.

It is hoped that the MLA hospital survey data can be used as a baseline for future surveys of the state of hospital libraries and librarians. Data support the trend toward the declining number of hospital libraries and a trend toward the increasing number of roles and responsibilities of the hospital librarian in the twenty-first century, as the types of health care information available and the means of providing this information for the most effective and efficient patient care continue to evolve. The profession must continue to evolve with the environment in which it works.

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