# Reference Activity and the External User: Confluence of Community Needs at a Medical School Branch Library\*

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#### **ABSTRACT**

The allocation of reference services between primary and secondary users constantly challenges academic medical libraries. Routine statistics at a medical school branch library suggested that over 40% of its reference transactions involved persons not affiliated with the university. To investigate this finding, a survey of reference activity was conducted using measurement techniques unobtrusive to the user. Fifteen data items were recorded, including user status, type of question, intended use of information requested, status of staff taking request, and staff time spent. Survey results showed that nonaffiliates accounted for 51% of reference activity. Based on this documented data, definitive reference guidelines addressing hours, priority of requests, charges, and staffing patterns can now be developed. Findings will also assist in evaluating the library's regional role, in formulating marketing strategies, and in determining library objectives.

ACADEMIC health sciences librarians feel the daily pressure of providing services not only to faculty, students, and staff of their institutions, but also to community health professionals, nonaffiliated health students, and growing numbers of concerned health consumers. Land-grant institutions, including this university, accepted a three-fold mission of teaching, research, and public service when they were created by the Morrill Act in 1862. In addition, libraries located in smaller communities feel particularly obligated to meet the needs and foster the goodwill of their community

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\*This manuscript is an expanded version of a paper presented May 19, 1987 at the Eighty-seventh Annual Meeting of the Medical Library Association, Portland, Oregon. and region [1]. Allocating reference services between affiliated and nonaffiliated users can be balanced by written definitive or quantitative reference guidelines. These guidelines are most useful when based on documented data from a reference usage survey such as the one used in this study.

#### **PREVIOUS STUDIES**

Studies in academic libraries have led to the establishment of policies allocating resources between primary and secondary users. Piternick described a detailed study of external use of reference services which led to the institution of fees and the curtailment of privileges to certain groups [2]. In a survey of twenty-two academic libraries, Berry found that nonaffiliated users were treated differently, even though there was not an official policy addressing this issue. In-depth reference work for these users was avoided and questions were more quickly referred elsewhere [3]. Masters and Flatness offer ideas for policies limiting reference service for the secondary user [4]. The Association of Research Libraries Systems and Procedures Exchange Center produced an "External User Services Kit" consisting of sample reference policies from various research libraries [5]. None of these studies, however, deal specifically with health collections.

In 1976-77, Jeuell and associates contrasted the results of a brief survey of public information services policies at state versus privately supported medical school libraries. State medical schools did report greater attempts to meet external users' needs, apparently because of tax supported funding. Private medical school libraries were twice as likely to have written policies concerning services to external users [6,7]. In a more recent study, Calabretta and Ross reported 42% of their medical

school library reference activity was for nonaffiliates, but did not further analyze this unaffiliated group [8]. This paper describes a project in which data were gathered and analyzed regarding nonaffiliates who use a medical school branch library.

## THE LIBRARY, ITS POPULATION, AND SURROUNDINGS

The branch library is located at a regional site of one of the largest medical schools in the country. The medical school is community-based: a majority of the faculty, students, and residents spend most of their time in the two large affiliated teaching hospitals. A university-based graduate nursing program is also offered on site.

The library's collection is viewed as a resource for the community and downstate region. The city, with a metropolitan population of 340,000, is situated about 150 miles from the main medical campus and library. The local community has a medium-sized private university, a junior college, and several hospitals, all offering training in the health professions. Approximately 20,000 students are enrolled in these local institutions. Workshops for public librarians were presented by local health sciences librarians in order to foster basic medical collections in public libraries and to encourage direct referrals to the medical school library for advanced health information [9].

Fees are currently charged for online searching for all patrons and manual searching is provided at no charge, regardless of affiliation. Routine tallies consistently show that over 40% of reference transactions are for persons not affiliated with the university, but do not specifically identify outside groups. Since the branch had no written reference services guidelines, the investigators conducted a fifteen-item survey to identify external users and to determine why they were using the library. The survey was also designed to shed light on the library's regional role and its relationship with other libraries, teaching affiliates, and health agencies.

#### **METHODOLOGY**

Data were gathered on all library users who asked questions during the sampled months. Information was recorded for

- -Who (affiliation status of user)
- -Referred by (how user was referred to library)
- -Purpose (intended use of information)
- —Library staff member (professional status)
- —Currentness (age of requested information)

- —Initial contact (mode of access)
- Question within scope (appropriateness of question to scope of library)
- —Able to answer (staff member's perception)
- Referred elsewhere (referral of question outside library)
- -Time (of day)
- —Level of information (technicality)
- —Type of question (directional, subject search, etc.; verification of interlibrary loans was excluded)
- —Staff time spent (amount of staff time)
- —Day of week
- ---Month

One survey form was filled for each question asked at public access points during all hours the library was open. The study was designed to be unobtrusive to the user. Patrons often revealed the required data in normal conversation, although it was sometimes necessary for staff to query the user. Approximately 2,427 survey forms were generated during five sample months chosen to represent activity during high- and low-volume periods.

Staff was trained in filling out survey forms to maximize the reliability of data by reinforcing definitions, clarifying misunderstandings, and providing motivation. As a reliability check, one person reviewed each form to ensure uniform completion and interpretation by library staff. Data were entered on Lotus 1-2-3- spreadsheet software and analyzed on BMDP statistical software [10].

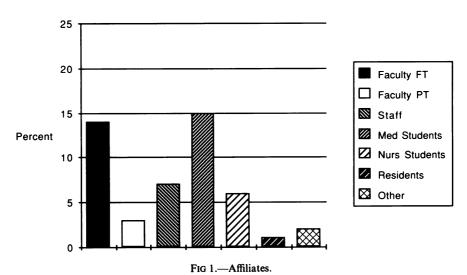
#### RESULTS

The large quantity of information yielded will influence future administrative decisions. The findings showed that the percentage of external users was even higher than anticipated. Overall, 49% of the reference service users were affiliated, 51% were not! A wide spectrum of types of affiliated and nonaffiliated users was revealed (Figures 1, 2). The most frequent patron was a nonaffiliated college student, predominantly from one institution. Questions from all outside students (18%) almost equalled those from all affiliated students (22%).

Nonaffiliated area health professionals asked 14% of the questions. The remaining questions came from various groups: 4% each from other libraries of all types and legal offices, and 11% from other members of the general public, including health consumers.

Mode of referral documented how a patron became aware of the library's availability. Eightyfive percent were recorded as referred by "self," which would be expected of repeat users. Patrons





were referred directly by another library 6% of the time. Local academic and public libraries provided most of these referrals. Less than 1% of the patrons were referred by the medical society or by a personal physician.

Requested information was used for job or academic purposes 90% of the time (Table 1). Forty percent was for student coursework and 6% for patient care. Questions relating to legal matters and health careers fell in the "other" category (14%). Only 10% of the questions were tallied as personal, about half of which were for personal health.

Miscellaneous categories of the general public (excluding health professionals, students, libraries, and legal personnel) asked questions concerning personal health 38% of the time. Eighteen percent of their questions were related to an interest in exploring a future health career (Figure 3).

A majority of the questions were of the type simple to answer, confirming the findings of earlier published reports (Figure 4) [11]. Directional and publication data questions together totaled 63%. Subject searches, about half of which were manual, were needed 18% of the time. Proportions of question types from nonaffiliates remained about the

$$(n = 2404)$$

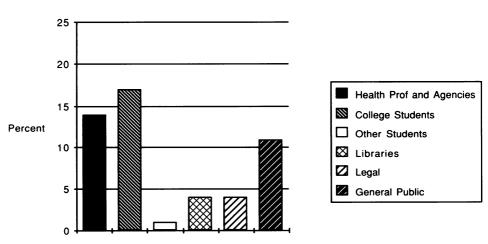


FIG. 2.—Nonaffiliates.

TABLE 1
Purpose (Intended Use of Information)
(n = 2359)

	Percent	Total percent
Job or Academic		90%
Student Course Work	40%	
Other	14%	
Academic/Technical Research	11%	
Teaching Preparation	7%	
Current Awareness	6%	
Patient Care	6%	
Program Development	3%	
Publication	3%	
Grant Proposal	<1%	
Personal		10%
Health	5%	
Other	5%	

same. However, nonaffiliates heavily favored manual searches (16%) over computer searches (2%), for which a fee is charged.

One third of the time, initial contact was by phone. This compares to 16% reported in previously published studies [12]. Less than 1% of initial contact came by mail and the rest arrived in person.

Only 1% of the questions were judged to be out-of-scope. These were mainly general reference and biographical/directory questions. In spite of the large numbers of external users, patrons seem to have a good understanding of the scope of an academic medical library collection.

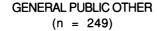
The study showed that nonprofessional staff

played a major role in providing reference service, answering three-fourths of all questions, predominantly at the circulation desk (Table 2). LTAs (library technical assistants) alone handled 50%, student employees 24%. Professionals were involved only 26% of the time. Questions from nonaffiliates were generally handled by nonprofessional staff; those from affiliates were answered more often by more skilled professionals. These observed patterns were governed partly by hours of use, since student employees work evenings and weekends, a time when outside students are more likely to be in the library.

The large number of directional and publication data questions corresponded well to three-fourths of the questions taking less than five minutes; only 9% lasted longer than fifteen minutes (Figure 5). Nonaffiliates asked a higher percentage of the shorter questions. Faculty asked the longest questions overall.

Eighty-eight percent of the reference activity took place before 6 P.M. (Figure 6). The busiest time overall was from 2 P.M. to 4 P.M., confirming results from other published surveys [13]. Less than 2% occurred between 10 P.M. and midnight, and was mainly for outside students (63%). Data concerning hours, day of week, and month must be interpreted in light of hours when the library was open. During the academic year the library was open as follows: 16 hours (Monday through Thursday), 9 hours (Friday), 5 hours (Saturday), and 11 hours (Sunday). Summer hours (mid June to mid August) were abbreviated.

Over 90% of the activity took place on weekdays (Figure 7). Wednesday, Tuesday, and Monday in



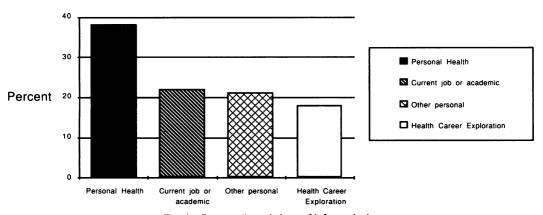


Fig. 3—Purpose (intended use of information).

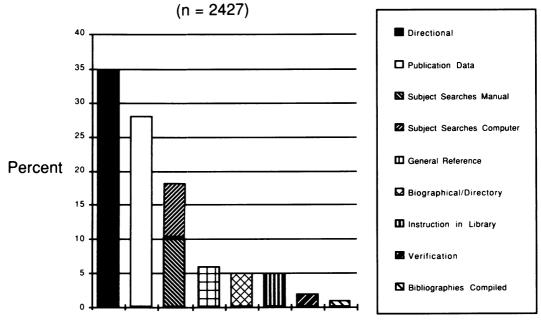


Fig. 4.—Type of question.

that order were the highest; Saturday and Sunday were a low 5% each. Sixty-two percent of weekend activity was generated by nonaffiliates.

The survey was conducted over a period of three and one-half medical curriculum academic months (March, April, August, and October) and one and one-half summer months (July and August). October alone generated over 30% of the data, probably reflecting both a higher volume month as well as increased staff proficiency at documenting all questions.

### **DISCUSSION**

These results show that the library is highly involved in fulfilling community health informa-

TABLE 2

LEVEL OF LIBRARY STAFF MEMBER AND PATRON

STATUS (n = 2403)

	Library Staff Member		
	Nonpro LTAs	ofessionals Students	Professionals
Patron Status			
Affiliates	24%	9%	16%
Nonaffiliates	26%	15%	10%
Total	50%	<del>24%</del>	<del>26%</del>

tion needs, as mandated by the regionalization of health education within the state. Provision of the best service possible to nonaffiliated users remains a priority, but due to their large numbers, some changes may be required to balance external users' needs against the needs of primary users. Although a majority of the reference assistance required by nonaffiliated users is of short duration and can be handled by the nonprofessional library staff, this heavy usage does put a strain on library resources.

To assure that the needs of primary users are being met while continuing to fulfill the public service mission, the collected evidence suggests that two groups of issues be addressed. First, specific library services and operations should be reviewed.

- 1. Library hours should be examined. A gate count by user type could be conducted during evening and weekend hours to establish who is physically in the library. Hours should be scheduled around primary users' needs.
- Reference services guidelines should be determined. Priority could be given to primary clientele and users who arrive in person.
   Phone callers could be asked for affiliation status when questions involve more than simple directional or brief publication data.
- Charges for services may be appropriate when time-consuming questions are asked by outsiders. Guidelines could define a free

(n = 2426)

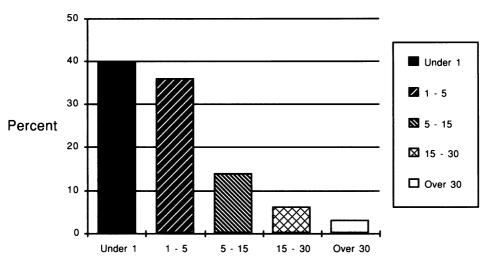
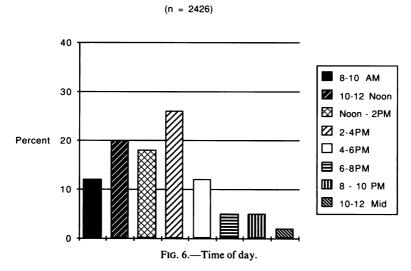


FIG. 5.—Amount of staff time spent (in minutes).

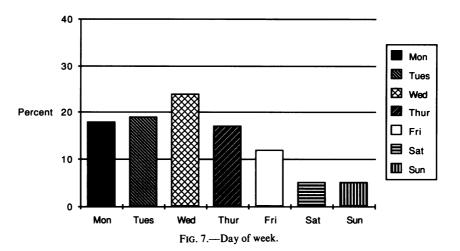
"decent minimum" amount of time to be provided [14]. Fee-based services above this minimum could be marketed to health consumers, nonaffiliated health professionals, and legal personnel.

4. Considering the large number of questions fielded by nonprofessionals, training of staff in reference skills is very important. More emphasis should be placed on thorough orientation of new employees as well as continuing education for existing staff. Secondly, results suggest the need for further investigation in the following areas:

- Allocation of staff should be further examined. Is the appropriate staff member handling the appropriate type of question and client?
- Information needs of health consumers remain unclear. What level of technical information can the average health consumer understand and what type of information does the consumer expect to find at a medical







school library? Is a highly motivated layman comfortable with the professional medical literature? Why are so few health consumers referred to the library by personal physicians?

- The library use patterns of potential primary clientele need clarification. Reference needs of community-based clinical faculty and affiliated residents are of particular concern.
- 4. The study should be replicated to validate reliability of results. The methodology could be compared by conducting a random sample of survey months to be measured against this benchmark study.

These concerns are not unique to this library. Similar concerns have led other libraries to initiate fee-based programs to balance reference services. Wood described the programs of several prominent biomedical libraries in her excellent monograph on marketing and fee-based services [15]. The survey results will serve as the first step in a complete marketing environmental analysis to identify current as well as potential clients.

The mix of patron types varies from library to library. Health libraries in particular must respond to a confluence of diverse and growing groups who are vitally interested in health information. The importance of medical collections as a resource for the general community must be acknowledged. Although each individual group of outside users may be small, this study shows that they can add up to a large total. Libraries' traditionally passive reaction should be replaced by fine-tuned monitoring of all types of users and their needs. Sound

administrative decisions can then be based on the institution's mission and documented facts instead of impressions and sometimes faulty hunches.

For those academic medical libraries without written reference services guidelines, the balance between available resources and outside demand may get out of hand. Fulfilling the service mission should not overshadow the university's obligation toward its primary clientele. This can only be controlled through policies and enforcement based on documented data.

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