

# Preselecting Literature for Routine Delivery to Physicians in a Community Hospital-Based Patient Care Related Reading Program\*

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## ABSTRACT

Health sciences librarians have been actively responding to the changing information needs of users by extending services which involve the selection of literature in response to specific requests from health care personnel. A further development is Patient Care Related Reading (PCRR), a hospital-based program of continuing medical education in which the librarian actively participates in the preselection, packaging, and routine delivery of literature for use by physicians caring for patients with certain clinical disorders. Criteria for selection of literature packet topics were developed jointly by librarians and physicians at their own hospitals. Librarians compiled bibliographic material, reviewed articles, and prepared preliminary packets. Physicians reviewed these packets and made suggestions for each article. Librarians then prepared final packets following reviewers' recom-

mendations and distributed them as a routine procedure to all physicians caring for patients with a diagnosis corresponding to prepared topics. Librarians were notified of patients with PCRR clinical problems by admitting office personnel, floor nurses, nursing supervisors, utilization review, and Professional Standards Review Organization personnel as a part of their usual activities.

Packets are used by physicians to add to their fund of knowledge, and for review and teaching purposes. PCRR has provided increased visibility of the library and its many services. Recognition of the librarian's role in the program reinforces the concept of the community hospital library as a service-oriented entity, and helps to establish the library as an active partner in the development and implementation of hospital-based continuing education programs.

EXTENDED library services such as Literature Attached to Charts (LATCH) [1] and Clinical Medical Librarianship (CML) [2, 3] have expanded the physical boundaries of the library by bringing resources to the user in the clinical setting. Both services involve the selection of literature in response to specific requests. This paper focuses on our approach to selecting literature for a Patient Care Related Reading (PCRR) program implemented at three community hospitals in suburban Boston. The program, an extension of

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LATCH and CML services, prepackages articles for *routine placement* on patients' charts or for delivery to physicians caring for patients with certain clinical disorders. Recommendations for selecting literature for subsequent use are based on the authors' collective experience and reports from physicians who participated in the project.

Purposes of the PCRR project were to assess the relevance of preselected literature to current cases, to study physicians' use of literature routinely attached to charts of their hospitalized patients, to determine if reading this literature would have a direct effect on patient care, to ascertain if evidence of such reading could be documented, and, if so, to provide a basis for granting Category 1 Continuing Medical Education (CME) credits. A primary goal of the project was to develop an alternative method of hospital-wide CME which is library-based and oriented toward medical problems of patients undergoing treatment.

Preselected literature for routine delivery to physicians proved to be relevant to current case problems. Interview or questionnaire responses were obtained from 108 of 135 practitioners who had received packets during an eight-month study period. Of these physicians, most read at least a portion of the articles. Two respondents acknowledged changing their patient management, and a third sought formal consultation as a direct result of PCRR recommendations. While peer review of charts did not yield documented evidence of reading, it did, in most cases, confirm literature relevance. In response to direct questions, physicians said they found PCRR contents helpful and informative, and were generally enthusiastic about the project. The packets were used to provide continuing education, as well as for review and teaching purposes. In fact, 85% of responding physicians said they would use PCRR packets as a source of CME, and most said they would take a brief quiz related to each article in order to acquire Category 1 credit for reading. PCRR materials also represented valuable educational tools for medical and pharmacy students, interns, residents, and nurses.

Several questions relating to selection of articles to be prepackaged for later use arose and were addressed. (1) How specific should a topic area be? If the topic is too narrow, the literature will apply to very few cases; if too broad, the literature will be too general or the packet too lengthy to be practical. (2) How many articles should a packet contain? Adequate coverage is required but the reader must not be overwhelmed by the material.

(3) To what reader should the contents be aimed? Although the primary care physician was the main target for the present study, the specialist consultant may have the greatest contact and responsibility for the actual management of patients in the hospital setting.

In the preparation and distribution of prepackaged literature, the librarian lacks a specific user with a specific problem. The traditional librarian-user interaction, which facilitates on-demand service, is also missing. Assumptions, criteria, and guidelines were developed to fill these gaps for the identification of topics, selection of literature, and preparation of packets.

#### IDENTIFICATION OF PATIENT MANAGEMENT PROBLEMS AND SELECTION OF PACKET TOPICS

Each packet dealt with one topic.\* Topics were selected by local physicians from lists of clinical problems commonly seen. At one hospital, education committee members identified twelve topics, one third of which were included in a list of diagnoses most commonly seen. At another hospital, topics were suggested by a variety of key individuals including the chiefs of medicine and surgery, full-time specialists, and chairpersons of audit and infection control committees. Other patient care oriented committees, for example, tumor, tissue, or surgical complications, can provide suggestions for topics.

#### GUIDELINES FOR SELECTED TOPICS

Because some clinical problems were more suitable than others, specific criteria emerged for topic selection:

1. Applicability of the local hospital's practice. Complications of heart surgery would be excluded since study hospitals do not perform heart surgery.
2. Frequency of problem occurrence, including common as well as rare but important disorders. Bacterial meningitis was an easily

\*Adult respiratory insufficiency; anaerobic infections; aspirin potentiation of bleeding problems; bacterial meningitis; blood component therapy†‡; complications of anticoagulant therapy‡; coronary artery disease; diabetic ketoacidosis; fever of unknown origin; management of the diabetic patient; Parkinson's disease; pneumonia‡; pulmonary embolism; thrombophlebitis; upper gastrointestinal hemorrhage‡; urinary calculi; urinary tract infection.

†Packets revised during the course of study.

‡Topics used at only one hospital.

developed packet, but was underutilized because the problem occurred infrequently at these hospitals. However, it was most useful when such cases did appear.

3. Relevance for use by generalists or specialists (depending on who is actually managing certain types of problems). Generally, highly specialized topics were not useful to the primary care physician. For example, patients with adult respiratory distress syndrome in one hospital are usually referred to the same specialist, while at another hospital, these patients are most often treated in the intensive care unit by a number of specialists. In this situation, a packet on chronic obstructive pulmonary disease would have greater usefulness on the general medical and surgical floors.
4. Availability of pertinent literature. Some management problems were suggested for which appropriate literature was difficult to find, for example, hematuria and the anticoagulated patient. Membership in a local consortium and use of the search facilities and resources of the regional medical library proved to be helpful in identifying and obtaining articles.
5. Ability to identify (flag) a clinical problem quickly. In order to deliver a packet to a patient's chart, there must be a method to identify or flag relevant clinical problems from daily admission diagnosis lists or from the charts or kardex of patients that develop a PCRR program problem while in the hospital. Problems identifiable on admission are the easiest to flag. Some problems, such as management of anaerobic infections, are more difficult because laboratory test results must be obtained in order to confirm the diagnosis.
6. Specificity of topics. The problem must be specific enough to be covered by a literature packet of reasonable size. For example, the amount of literature on gastrointestinal hemorrhage is so massive that the problem had to be narrowed to management of upper gastrointestinal hemorrhage.

Based on information from physicians, and the frequency of use of packets, the best examples of "successful" packets in this study were diagnosis and treatment of pneumonia, upper gastrointestinal hemorrhage, fever of unknown origin, thrombophlebitis, and urinary tract infection.

#### IDENTIFICATION OF THE PERTINENT LITERATURE

The librarians used currently available search techniques to locate articles, screen them, and develop a preliminary packet for physician review. The different literature searching tools at each hospital influenced the outcome of preliminary packet choices to some extent. Librarians at two hospitals shared the results of each search. At one hospital *Index Medicus* and MEDLINE were used for searching; at another, only *Abridged Index Medicus* was used. Citations of all pertinent articles were noted, and choices for preliminary packets were made from these citations. Physicians evaluated the literature and made recommendations for each article. The librarian selected articles for the final packet based upon physicians' comments and recommendations.

#### GUIDELINES FOR ARTICLE SELECTION BY LIBRARIANS FOR PRELIMINARY PACKETS

The following general guidelines were followed in the selection of articles for preliminary packets:

- articles were current;
- contents were appropriate for the identified reader—the primary care practitioner or the subspecialist;
- articles included an abstract;
- one review article was included;
- articles addressed patient management problems of diagnosis or therapy.

Articles were not selected from a title review alone, but were read for content and orientation in order to exclude single case reports, clinical studies involving longitudinal research, and animal studies. Librarians were able to facilitate physicians' selections by using these criteria for their preliminary screening of the literature. Generally six articles were chosen for physician review.

#### GUIDELINES FOR PACKET REVIEW BY PHYSICIANS

Written guidelines developed locally included the following: (1) packets consisted of two or three articles totalling not more than thirty pages; (2) only one review article was included; (3) articles provided recommendations for diagnosis or treatment; (4) generally, recommended approaches to patient management were compatible with local hospital practice, in terms of available facilities and services. However, in some instances, articles that recommended facilities and services not available locally were chosen to suggest consideration of the need for consultation or patient referral.

## PATIENT CARE RELATED READING PROGRAM

Reviewers were strongly encouraged to adhere to these guidelines. They were also requested to recommend additional articles for inclusion in the final packet.

Reviewers were requested to make one of the following suggestions regarding each article: (1) retain in packet; (2) discard; or (3) list in a supplemental bibliography. Reviewers were also asked to provide additional comments.

Because project personnel differed at each hospital, the role of the librarian in the final literature selection varied. At one hospital, the physician coordinator was the PCRR project liaison person between the librarian and the reviewer, and actively promoted the project among the medical staff. Therefore, the coordinator rather than the librarian worked directly with the reviewer. The librarian then compiled final packets based almost entirely on physician reviewers' recommendations. At another hospital, there was no local physician coordinator. The librarian worked directly with reviewers and therefore was in a position to exercise more individual judgment in the preparation of final packets.

### PHYSICAL PREPARATION OF PCRR PACKETS

Packets included a table of contents, bibliography, and literature evaluation form for completion by physicians. Review articles were followed by those that dealt with specific diagnosis or treatment techniques.

At one hospital, articles were enclosed in large manila envelopes; at another, manila file folders were used and tabs of colored tape were attached to the first pages to facilitate locating each article. When it was found that packets required clearer identification as being part of the PCRR program, the following modifications were made: a brightly colored sticker, describing the purposes of the study, was attached to the front of each packet along with a second sticker, listing the contents. A copy of the study announcement memo which had been previously sent to the medical staff was also included.

### DISTRIBUTION OF PACKETS

Librarians, nurses, or utilization review personnel involved in the project were notified of flagged

cases and delivered packets to physicians' mailboxes, or to the charts of their patients with PCRR program clinical problems. When packets first appeared in the charts, some physicians did not notice them or recognize them as being part of the project. Therefore, the librarian either telephoned the doctor's office or spoke to the physician on the floor to alert him that the packet had been delivered. At one hospital, packets remained with the patients' charts, and medical records personnel returned packets to the library. At another, packets were returned directly to the library by floor secretaries or project personnel after use or upon discharge of the patient.

### COMMENTS AND CONCLUSIONS

Contacts made by the librarians with physicians, nurses, and other hospital personnel as a result of the PCRR program have increased the visibility of both the librarian and the library. Health professionals who have been introduced to the hospital library through the project have begun to use other library reference services. Recognition of the librarian's role in the PCRR project reinforces the concept of the community hospital library as a service-oriented entity, as an integral part of the hospital, as an active support unit of the patient care team, and as an essential element of hospital continuing education activities. As with most hospital-based CME modalities, PCRR's successful implementation depends, to a large extent, on the leadership skills of a project director, who must provide direction and support for the program on a continuing basis.

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