# Medical Literature Filing Systems in Family Practice Residency Programs

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Nearly 18 years ago, Jeghers[1] articulated the need for life-long learning and self-education for physicians. He suggested that training in the techniques of self-education should begin in medical school and continue through residency training. Jeghers envisioned a medical literature filing system for journals as a basic tool in the self-educating process.

There is ample evidence of the value of journals to physicians. Using personal interviews, Stinson and Mueller[2] found journals the most used resource for continuing medical education. However, the accessibility of the information in journals determines their usefulness. Binding journals and accessing through the cumulative indexes is inconvenient, requires a great deal of space, and is expensive. Medical literature filing systems overcome these disadvantages and provide a convenient method to retrieve needed information.

Medical filing systems may be divided into three categories based upon the organization of the index: numerical, alphabetical, and reference card. Numerical systems use the table of contents of textbooks, library classifications, or billing codes to assign numbers to topics listed in order on an index. This index serves as a key to the file folders, which are similarly arranged. The National Library of Medicine Classification System[3] and *Excerpta Medica*[4] are representative of library classification systems. In family practice the use of billing codes, such as the International Classification of Diseases, 9th revision (ICD-9) or the shorter, adapted version, the updated International Classification of Health Problems in Primary Care (ICHPPC, Pri-Care) have been promoted for use by family physicians.[5,6]

Alphabetical systems have been proposed for clinical pharmacy,[7] child psychiatry,[8] and physical therapy.[9] Any numerical system may be readily converted to an alphabetical system by arranging the major categories and subcategories alphabetically.

Aside from the traditional systems used in libraries, there are a number of other ingenious reference card systems.[10] Although these permit extensive cross-referencing, they are difficult to organize and maintain.

The purpose of this study was to survey family practice programs to determine the prevalence, type, patterns of use, and instruction in medical literature filing systems.

## Methods

A preliminary survey questionnaire was mailed to three family practice residency programs in Phoenix and returned with critical comments of the instrument, leading to two minor revisions. The final questionnaire was mailed to all 381 directors of family practice programs listed in *The 1981 Directory of Family Practice Residency Programs*.

The programs were divided into five different groups and assigned a number according to their administrative program structure (community hospital, unaffiliated—1; community hospital, univer-

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**Table 1. Types of Files Reported**

| | Number | Percent of Total |
|---|---|---|
| Alphabetical | 68 | 47 |
| Numerical | 75 | 51 |
| Table of contents | 9 | 6 |
| Pri-Care | 54 | 37 |
| National Library of Medicine | 4 | 3 |
| Other | 8 | 5 |
| Reference card | 3 | 2 |

sity affiliated—2; community hospital, university administered—3; university hospital—4; and military hospital—5). Completed questionnaires were returned by 304 of 381 (80 percent) programs. When divided into the five different program structures, the proportions of respondents were similar when analyzed by chi-square.

The directors were asked on the questionnaire whether their centers possessed a literature filing system or instructed in its use. These data were analyzed by chi-square and required a P value greater than .05 to accept the null hypothesis. The directors were also asked what type of file was used and who was responsible for its organization and maintenance. Finally, the directors were asked how often the residents and attending physicians used the file. These data were analyzed by Student's *t* test.

## Results

Forty-eight percent of the responding programs have medical literature filing systems for resident use in family practice centers. Forty-one percent of the programs instruct in the organization and use of filing systems. When analyzed with respect to program structure category, there were significant statistical differences in both possession of a file and instruction in its use. Type 1 (unaffiliated hospital) and type 4 (university hospital) programs tended to possess and instruct in files more than the other programs.

Table 1 describes the types of files reported by the programs.

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**Table 2. Use of the File**

| Program Structure Category | Average Weighted Use | |
|---|---|---|
| | Residents* | Attending Physicians* |
| 1. Community hospital, unaffiliated | 2.00 | 2.12 |
| 2. Community hospital, university-affiliated | 1.89 | 1.84 |
| 3. Community hospital, university-administered | 1.86 | 2.14 |
| 4. University hospital | 2.21 | 2.29 |
| 5. Military hospital | 1.50 | 1.50 |
| Total | 1.96 | 1.99 |

*Average value on a 1 to 4 scale; Differences not significant

The estimated use of the file by residents and attending physicians per half-day in the center was related to program structure and is shown in Table 2. The responses, "rarely," "less than once," "once," and "more than once" were assigned a weighted score of 1, 2, 3, or 4, respectively. There were no statistically significant differences among the program structures or between the residents and attending physicians. The average overall use by both residents and attending physicians approximated less than once per half-day when assigned in the center. In addition, the use of the file by residents and attending physicians did not seem to be affected by the file organization.

## Comment

The reasons why unaffiliated community hospital and university hospital programs led in the possession of and instruction in files are not immediately obvious, but may reflect differing attitudes or resources on the part of the respective faculty. Those programs with files also tended to provide instruction in their use.

The lack of a difference between the alphabetical and numerical systems in the use of the file suggests that the organization of a file may not affect its use. Alternatively, differences in use of alphabetical and numerical systems may become apparent only at a higher volume. The ease of establishing and maintaining a file should be a leading consideration for a program planning to adopt a literature file. Reference card systems require a great deal of time to establish and maintain. These limitations may be the reason for the limited use of reference card systems in this survey. Numerical systems are readily adopted by programs by using published classification schemes such as Pri-Care or the National Library of Medicine Classification System. However, these numerical systems depend heavily on an index and the memorization of numbers. Alphabetical systems are more difficult to establish, but maintenance is facilitated by the logical use of the alphabet for filing.

### References

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