

Personal Medical Reference Files for Family Physicians

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Family practice has firmly accepted a leadership role in the establishment of practice indexing and control mechanisms for primary care practices and in the continuing education of primary care physicians. These independent programs logically interrelate if the International Classification of Health Problems in Primary Care (ICHPPC) morbidity coding index is adapted to the maintenance of personal reference and bibliographical files. The literature data base so developed then has direct and specific application to patient care situations, and to continuing education oriented around active case material, teaching, and research.

Experience demonstrates a high degree of student responsiveness to such a reference resource. Yet most receive no exposure to this basic tool throughout their entire medical school and specialty training. An inexpensive, simple system is proposed which can be expanded conveniently to any level of detail, cross-reference capability, and content. This has been found useful in teaching and practice and is well accepted by family medicine residents at the Geisinger Medical Center.

Froom has described a comprehensive system for indexing the clinical and epidemiological aspects of a primary care practice including morbidity (diagnosis) indexing, the "E-book" system, age-sex indexing, family filing, and geographic filing.¹ These are now widely accepted tools of the new specialty of family practice. The Medical College of Virginia study has further established the worth of these systems.² A logical extension of this approach is the development of a personal medical reference system including a bibliography-abstract file and a reprint file indexed to correspond to these pre-existing systems.

Gaeke cites Jehgers as having noted the value of a personal reprint and journal article file as an aid to physicians' continuing education.³ They re-

port that 60 to 80 percent of medical students will develop such a resource if exposed to the concept even once during their training. Applications to patient care and teaching are obvious. Nevertheless, many physicians complete specialty training without exposure to so basic a tool. Gaeke, in 1974, cites a bibliography of ten general references for the previous ten years.³ A library computer search for the last ten years reveals no other pertinent articles. The Canadian handbook for family practice devotes one page to a reference file based on the Index Medicus.⁴ An off-line search prior to 1966 reveals only one significant article in the English literature and a few minor references in less well-known journals. Physicians are often concerned about the complexity of establishing such a system, largely because of the difficulty of providing an indexing system adequate for ease of filing and retrieval. Others fear the time commitment needed to maintain it.

The system suggested below utilizes

the ICHPPC⁵ as the foundation of an indexing system which can be easily tailored to individual needs and is precise enough to allow secretarial staff to do the actual filing and retrieval on request of the physician. This index is particularly useful since a detailed, topical, alphabetical listing of diagnoses, signs, and symptoms is published with the ICHPPC, automatically converting a "reference card" system to a simultaneous "keyword" system of great detail with no extra effort.⁶

Filing System

A two-part filing system is suggested. The major section contains actual reprints, handouts, and journal articles of sufficient authority or usefulness to be retained for many years. The second component is a bibliographical and abstract reference file to articles not retained in the reprint file or those found in hardbound volumes which cannot be destroyed. Cross reference cards may also be entered for articles falling under more than one heading. A third component is suggested for medical students and house officers which would contain articles of immediate value while in training but of insufficient merit for retention over many years.

Index

An index of five parts is suggested. Part A is a copy of the index itself kept immediately available at the front of the file. Other copies should be kept where medical reading is usually done (eg, office, home, library).

Part B includes basic science topics not usually represented directly by clinical diagnoses.

Part C includes the 18 major divisions of the ICHPPC and is a listing of all common primary care medical, psychiatric, and socioeconomic diagnoses by category of disease, eg, infections, tumors, diseases of specific organ systems, and a supplementary socioeconomic category. These are then subdivided into common groupings (Table 1) or according to special interests of the physician. It is important to use the actual code numbers for filing, not arbitrarily assigned sequential group numbers, in order that later subdivisions or additions may be made. Articles within sections are filed sequentially by specific code numbers.

Part D of the index contains topics

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Table 1. Suggested Index

A. Index and ICHPPC Code Book

B. Basic Sciences

(Enter here only if not classifiable in ICHPPC)

- I. Anatomy
- II. Anesthesiology
- III. Biochemistry and Physiology
- IV. Community and Preventive Medicine
- V. OB-GYN
 - a. Gynecology
 - b. Obstetrics
 - c. Breast
- VI. Pathology
 - a. Anatomic
 - b. Clinical
- VII. Pediatrics
 - a. Growth and development
 - b. Adolescent medicine
- VIII. Pharmacology
 - a. Drug summaries
 - b. Drug interactions
- IX. Radiology and Nuclear Medicine
- X. Surgery
 - a. General
 - b. Orthopedic
 - c. ENT

C. ICHPPC Classifications

- I. Infective and Parasitic Diseases
- II. Neoplasms
 - a. Malignant
 - b. Benign
- III. Endocrine, Nutritional, and Metabolic Diseases
- IV. Diseases of the Blood and Blood-forming Organs
- V. Mental Disorders
 - a. Psychoses except alcoholic
 - b. Neuroses
 - c. Other
- VI. Diseases of the Nervous System and Sense Organs
 - a. Nervous system
 - b. Eye
 - c. Ear
- VII. Diseases of the Circulatory System
 - a. Heart
 - b. Blood pressure problems
 - c. Vascular system
- VIII. Diseases of the Respiratory System
- IX. Diseases of the Digestive System
- X. Diseases of the Genitourinary System
 - a. Urinary system

- b. Male genital organs
- c. Breast
- d. Female genital organs
- e. Disorders of menstruation
- f. Fertility problems

- XI. Pregnancy, Childbirth, and the Puerperium
 - a. Prenatal complications
 - b. Abortion
 - c. Delivery
 - d. Postpartum complications
- XII. Diseases of the Skin and Subcutaneous Tissue
- XIII. Diseases of the Musculoskeletal System and Connective Tissue
 - a. Arthritis and arthrosis
 - b. Nonarticular rheumatism
 - c. Syndromes related to the vertebral column
 - d. Other
- XIV. Congenital Anomalies
- XV. Perinatal Morbidity and Mortality Conditions
- XVI. Physical Signs, Symptoms, and Ill-defined Conditions
- XVII. Accidents, Poisonings, and Violence
 - a. Fractures
 - b. Dislocations and subluxations
 - c. Sprains and strains
 - d. Other traumas
 - e. Adverse effects
- XVIII. Supplementary Classifications
 - a. Preventive medicine
 - b. Family planning
 - c. Administrative procedures
 - d. Maternal and child health care
 - e. Miscellaneous
 - f. Social, marital, and family problems and maladjustments

D. Family Practice

- I. Audit — Peer Review
- II. Bibliography
- III. Concepts
- IV. Continuing Education
- V. Equipment
- VI. Legal — Malpractice and Legislation
- VII. Medical Records
- VIII. Practice Management
- IX. Practice Structure

E. Special Interests

- I. History of Medicine
- II. Medical Ethics and Philosophy
- III. Memberships
- IV. Computers

of particular interest in primary care, eg, office management, patient education, health-care delivery systems (Table 1).

Part E is a supplementary classification for areas of personal interest to the physician, eg, computers in medicine, human values in medicine, history of medicine.

This provides a comprehensive, detailed, yet efficient index which correlates with other basic systems of family practice management. Moreover, it correlates directly with patient problems: "benign hypertension" is number 401 in the patient chart, in the "E-book" catalog of the practice, and in the physician's personal reference file.

Maintenance

When the physician finds an article that appears of worth or specific interest, it should be filed at once, even if unread. Most of us can attest to stacks of unread journals bearing folded corners and paper clips which mark our good intentions, still unfulfilled weeks or months later. Good but unused articles which cannot readily be retrieved from stacks of journals could be immediately recalled if they were filed at discovery rather than after a delayed reading. Articles in dispensable journals may be removed with a sharp razor blade or scalpel, stapled, and labeled with the ICHPPC code number or category of its major content on the upper right-hand corner. They may be filed at any time by anyone, including a secretary (or patient spouse!).

Articles which cannot be clipped, including those in hardbound journals, textbooks, or journals on loan, should be listed in a bibliography reference file. This can simply be a sheet of heavy paper or a separate folder placed as the first entry under every index category of the reprint file. More elaborately, a separate 3 x 5 inch card file or a loose-leaf notebook divided to correspond with major divisions containing separate sheets for subdivisions can contain entries similar to library reference cards identifying content, author, and location of articles. Some physicians may prefer to enter abstracts of articles and comments on their specific merits or techniques as well. Cross references for articles in the reprint file falling under more than

one major topic may also be included. For those who desire a very complete system, relatively easy methods are available for matching relevant cards in separate categories to minimize browsing time when retrieving the most appropriate articles on a given subject. These employ last digit grouping, "key-sort" cards with marginal perforations, or IBM cards.^{6,7,8}

Medical students and house officers may wish to maintain a third component containing less definitive articles, eg, treatment summaries or symposia, of immediate worth but not important enough for long-term retention. This can readily be done by color coding such entries in either file, by entering these as a separate group in the first section of each category, or by maintaining a separate but parallel filing system specifically for "temporary" articles.

Equipment

Materials needed are minimal and can be purchased for about \$50 to \$200, depending on the quality of filing cabinet used. Paper materials cost about \$40. Once established, essentially no additional cost is incurred as additions occur infrequently and wear is minimal.

A simple cardboard file box for \$10 can be sufficient to start, but a full suspension file drawer will eventually be needed. Two drawers will usually be adequate for several years. Fifty heavy-gauge dividers for major categories cost about \$10, and 100 manila folders for subdivisions cost about \$20. Separate folders, heavy-gauge papers, or a 3 x 5 inch card drawer with dividers and cards are needed for bibliography entries at a cost of up to \$25. Paperbound copies of ICHPPC, including the alphabetized index, can be obtained from the American Hospital Association for about \$1.25.*

Discussion

A convenient, economical system for retaining and retrieving printed material should be as much a part of every physician's practice as are the patient charts. For primary care purposes,

a combined reprint and bibliography reference filing system is recommended. Unfortunately, many physicians are not exposed to the concept of a personal medical reference file early in their careers or in a manner compatible with their practices. Physicians tend to do their reading at home after hours and therefore take an unstructured, even haphazard, approach to selection and retention of valuable reference information.

The use of a primary care indexing system provides a means of developing a personal reference library of patient care articles, medical records, and research-management tools. This library then becomes a stimulus for continued education and improved patient care through reading and consultation of the literature.

Cost is low, time-consuming work can easily be delegated, recall is immediate. The secretary need only know the desired topic or ICHPPC number to pull relevant references. Easy methods are available for comparing references to retrieve those most appropriate with minimal "browsing," and a thorough "keyword" index is automatically available by use of the ICHPPC code. A bibliography is developed for review, research, and teaching.

The system should be simple with further expansion or subdivision possible as interest and use suggests. Yet it should not be so simple that insufficient categorization with lack of specificity hinders filing or retrieval and discourages further use. A representative suggested complete index is given in Table 1.

References

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* American Hospital Association, 840 North Lake Shore Drive, Chicago, IL 60611.