## Toward the Definition of Family Practice —A Quantum Jump

John P. Geyman, MD

In the past there has been little research in primary care in North America despite the fact that 90 to 95 percent of all doctor-patient contacts occur at this level.<sup>1</sup> Most of our medical literature has been derived from the study of patients admitted to university hospitals, which represent only one out of 250 patients seen by physicians and one out of 1,000 patients at risk each month.<sup>2</sup> Biomedical research has traditionally attracted more funding support than health services research. Research in family practice has been limited until recent years by such factors as the absence of academic departments in medical schools, the difficulty of organizing collaborative research involving practicing family physicians, and the lack of effective research tools.

With the advent of academic departments in most of our medical schools during the past seven years and the development of such research tools as the problem-oriented record, ambulatory coding systems, data retrieval methods, and computer analysis, we are now seeing vigorous new research efforts in family practice. The study reported here from the Medical College of Virginia represents the most significant step to date toward the definition of the content of family practice and makes a quantum jump toward new knowledge in this important area.

The Virginia study is particularly impressive in several ways. It reports

the occurrence of over half a million patient care problems presenting over a two-year period in the practices of 118 family physicians and family practice residents throughout Virginia. Urban, suburban, and rural practice settings were studied, and teaching and non-teaching practices were compared. A high validity of recording methodology was achieved. Perhaps most important, an effective linkage was developed and maintained over a prolonged period of time between the university and practicing family physicians in the community to carry out this collaborative state-wide study.

It is to be expected that this monumental study will perhaps raise as many questions as it definitively answers. It is by no means a perfect study, due largely to the current state of the art in primary care research. There are limitations in any of the currently available coding systems which have been developed for ambulatory care problems. Criteria for recognition of diagnoses and problems inevitably vary somewhat among individual physicians. The difficulty of under-reporting in such areas as behavioral problems is doubtless due to a variety of related issues, including confidentiality of patient records. The three reviewers who focus on the clinical, educational, and research implications, respectively, of this study point out other specific limitations of the study.

The Virginia study opens up exciting new directions for research in family practice. The immediate challenge is to convert such massive data to improved clinical practice and more relevant educational programs. Further study of specific problems within each of the 22 diagnostic categories should yield new understanding of the occurrence and natural history of common illness which can lead to more effective early diagnosis and clinical management. We can now look more critically at the curriculum and clinical experience provided in educational programs at all levels - undergraduate, graduate, and postgraduate. Similar studies should be carried out in other regions in North America and can benefit from the experience in Virginia in carrying out effective collaborative research with family physicians in active practice. The Virginia study serves as a landmark for the continued development of research as an essential element in better defining the academic discipline of family medicine, developing more relevant teaching programs, and improving clinical approaches in family practice. Such research is not only vital to family practice as a developing specialty but to all other disciplines in medicine within a constantly changing health care system.

## References

1. Haggerty RJ: The university and primary care. N Engl J Med 281:416-422, 1969

2. White KL, Williams TF, Greenberg BG: The ecology of medical care. N Engl J Med 265:885-892, 1961 Appearing in this supplement is a tabulation of all problems identified by all physicians from both teaching and non-teaching practices during the entire RCGP work sheet recording period.

These diagnoses were classified according to the problem-oriented adaptation of the coded classification of disease of the Royal College of General Practitioners directly related to the H-ICDA. This adapted classification is endorsed by the Department of Family Practice of the Medical College of Virginia, Virginia Commonwealth University in Richmond, Virginia, and is directly correlated with the problemoriented medical record currently employed in its teaching practices.

The major categories of disease classification are as follows:

- 1. Communicable diseases
- 2. Neoplasms, including reticuloses
- 3. Allergic, endocrine, metabolic, and nutritional disorders
- 4. Diseases of blood and blood forming organs
- 5. Mental illness, personality disorders, and psychoneurosis
- 6. Diseases of the nervous system and sense organs
- 7. Diseases of the circulatory system
- 8. Diseases of the respiratory system
- 9. Diseases of the digestive system
- 10. Diseases of the genitourinary system
- 11. Pregnancy, parturition, and puerperium
- 12. Diseases of the skin and cellular tissue
- 13. Diseases of bones and organs of movement
- 14. Congenital malformation
- 15. Certain diseases of early infancy
- 16. Signs, symptoms, and ill-defined conditions
- 17. Accidents, poisonings, and violence
- 18. Prophylactic procedures
- 19. Procedures performed
- 20. Problems other than specific diagnostic/symptomatic
- 21. Family history of selected diseases
- 22. Selective therapeutic index

During the entire RCGP work sheet recording period, all physicians involved identified a total of 526,196 problems, of which 205,938 were males and 320,258 females. These totals can be further separated into age and sex groups as follows:

Age	Male	Female
00 - 04	25,079	22,217
05 - 09	15,181	13,406
10 - 14	13,906	13,036
15 - 24	31,125	57,760
25 - 34	23,818	46,347
35 - 44	20,369	36,374
45 - 54	23,700	41,590
55 - 64	22,665	36,014
65 - +	30,095	53,514