Chronic Disease Surveillance

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The process of medical care has received little scientific attention. This lack of investigation of an enterprise that consumes almost 11 percent of the gross national product of the United States is truly astounding. The National Ambulatory Medical Care Survey has been a significant attempt to remedy this paucity of information. Begun somewhat more than ten years ago and employing a probability sample of physicians who record patient care data for one-week periods, its several surveys are a major source of information about what physicians do in their offices. Yet even these splendidly planned and conducted studies are lacking in the kinds of information required for intelligent appraisal of health resource utilization. Data are not patient-specific or longitudinal, and outcome studies are not possible. In addition, specificity of the 15 items recorded by participating physicians is limited. For example, type of x-ray examination or clinical laboratory procedure is not recorded.

Another approach to the study of the phenomena of office-based care has been taken by networks of primary care physicians. Patient data are recorded either continuously in a surveillance mode or intermittently for specially designed research projects. The Ambulatory Sentinel Practice Network (ASPN)[1] and the sentinel stations of The Netherlands[2] are examples of national networks, while the Dartmouth Primary Care Cooperative Information Project (COOP) is a group of regional cooperating physicians. The International Primary Care Network (IPCN) composed of nine national networks provides a framework to compare physician behavior between countries.

Reporting in this issue of *The Journal of Family Practice* on opinions about visit frequency for essential hypertension, Doctors Lichtenstein, Sweetnam, and Elwood used a group of 50 randomly selected South Glamorgan general practitioners. Their analysis of the several variables that have an impact on visit frequency and decision to treat, such as level of pretreatment diastolic blood pressure, patient's age and sex, and the interaction between these variables provide new insights into how physicians make decisions. These aspects of physician behavior have profound implications for the costs of medical care. For example, one less annual physician visit by each of the estimated 18.3 million hypertensive adults receiving medical care for their hypertension[3] would result in a saving of $366 million, assuming a cost of $20 per office visit. The subject, however, is far from simple because cost consequences are only part of an equation that is balanced by optimal care, and an evaluation of optimal care requires outcome data. For hypertension patients, outcome data are reasonably straightforward, including blood pressure levels and cardiac events such as congestive heart failure and stroke. For some diseases, however, such as type II diabetes mellitus (NIDDM), the relationship between blood glucose control and complications is more uncertain, and the effect of therapy including frequency of visits on blood glucose levels is not established.

The importance of scientific investigations often relates to the asking of appropriate questions, even if the particular study fails to provide the answers. Clearly, Dr. Lichtenstein and his colleages have addressed an important issue and have suggested additional means

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to obtain answers. Prospective studies employing networks of primary care physicians collaborating in well-designed studies is one method with considerable potential for providing the required data. Regional, national, and international networks can make separate, yet complementary, contributions to the study of costs vs quality of care for chronic disease surveillance. With cost containment an ever-increasing factor constraining medical care, there are few primary care investigations more compelling at this time.

References

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