

EXAMINING A MEDICAL CARE SYSTEM

fact, the evaluation of drug therapy according to rationality is a very significant device for examining the whole medical service system. Adding the judgment of qualified independent observers to the therapeutic probabilities assigned by the prescriber is an interesting research effort, sometimes embodied in the general medical audit. A study concentrating on drug evaluation¹⁴ showed that acquaintance with the full record was necessary for a considered judgment—and that qualified observers do not always agree. There is an area of consensus about therapy—and an area of lack of consensus—particularly when discussing the management of individual patients.

Despite difficulties, the classification of therapeutic expectations and probabilities of drugs is a significant and feasible tool for the understanding of the type of medical care rendered. But for fullest value the use of drugs should be appraised in the context of the type and sequence of diagnostic tests performed and of nondrug therapies (such as surgery, physical medicine, electroshock, and psychotherapy) applied. Thus we are back to elements of the complete medical audit.

Frequency and Cost of Prescribing

J. P. Martin in England attempted to track down the amount and causes of interarea variation in frequency and cost of prescriptions.¹⁰ For cross-sectional analysis he chose the year 1951 and studied 67 medium-sized county boroughs, in ten regions, with a total population of 8.82 million. The causal variables included: characteristics of medical practice, such as size of patient list and the proportion of single-handed practices; patient age and sex distribution; measures of social class and regional prosperity; measures of morbidity and climatic parameters.

To summarize a few findings: re-

gional variations in cost of prescribed drugs per patient were found, and were associated with frequency of prescribing, which in turn had a relation to climatic variation, morbidity indexes and the factor of "custom." This last summed up attitudes and expectations in the doctor-patient relation. The areas populated by working-class patients appeared to have lower-cost prescriptions for a variety of reasons.

Although not all of Mr. Martin's leads were rewarding, the systematic and inventive design indicated ways of studying prescribing as a resultant of various factors within the medical organization, in the general social structure, in regional economy, and in the geographic-biologic (hence, ecological) influences on need for care.

Other statistical analyses of prescribing are useful in the smaller settings of the health plan, hospital, or clinic.

The number of drugs prescribed for a patient on a single day is a revealing fact, or at least a suggestive one. The use of several drugs at once may imply uncertainty and an absence of adequate diagnosis. It may be less than rational in that no one drug is given a chance to work effectively, and in the worst case the drugs may cancel each other. Numbers alone are a screening device to identify cases for further study.

In certain outpatient clinics, one may find that the doctor spends little time with each patient and usually ends the visit with a prescription. The patient typically sees a different doctor at each visit even within the same clinic. These events are determined from ordinary records by computing the number of patients seen per doctor-hour, the proportion of visits resulting in a prescription, and the number of different doctors seen by patients with a given number of visits. Such figures point up areas of inadequacy in ambulatory care. If doctors were responsible for seeing fewer patients per hour, would they find other