ways of serving patient needs besides ordering drugs? If the patient will most probably see another doctor on his next visit, is the sketchy chart entry relative to medication enough of a link to assure coordinated medical care? If institutional authorities and professional persons are more or less aware of the tone of clinic care, what is blocking a community decision to pay for more doctor time in ambulatory care to avoid ill-justified expenditure on drugs? (The total outlay may be redistributed rather than increased.) Why is drug therapy in ambulatory care handled so differently from inpatient medication? The hospitalized patient, although sicker, is under much more vigilant monitoring by human and electronic observers with respect to his reaction and response to medication.

The Formulary: The Hospital as an Institution

The act of prescribing in an institutional setting is per se an act of complying with or deviating from a set of rules established by the staff—namely, the formulary. The rules identify which drugs may be selected by the doctor and the procedures which must be followed to secure exceptions under special circumstances.

For those concerned with innovation in the provision of medical care, comparison of formularies issued at different dates may yield some interesting information. The author has reviewed the formulary of Mount Sinai Hospital in New York for 1964 and its precursor of 1924.[5,12] The difference in content suggests how thoroughly the job of the physician with respect to therapy has had to be redrafted. Morphine, nitroglycerine, milk of magnesia, and acetylsalicylic acid have survived along with a few dozen other familiar drugs. The antiphlogistic mixtures have gone. Dermatology was the specialty still using the greatest number of drugs current 40 years earlier—but radiology, microbiology, urology, and allergy departments listed on their departmental formularies virtually no drugs contained in the 1924 volume.*

Anesthetics and diagnostic agents are among the categories in which change has occurred (as well as the better known antibiotics, tranquilizers, and antihistamines which are especially associated with the drug product revolution after World War II). The time span covered was great enough to encompass tremendous turnover, but study of formularies separated less widely in time is a possible way of exploring the gradual application of innovation in varying environmental settings.

The active use of a formulary is indicative of several characteristics of a hospital. It is correlated with size of hospital, type of sponsorship, and level of teaching activities. It requires a regular staff activity to keep the drug list up to date, and readiness to enforce the policy when the institution is confronted with deviations. The prescriber must justify his request on rational grounds to his chief, the pharmacy committee, or other designated authorities. The use of a selective formulary may be an index to the intellectual leadership within the hospital and to the sharing of responsibility for the quality of medical care of individual patients.[16]

Comparison of actual prescribing with formulary drugs which were therapeutically accepted by specified official agencies was carried out by Furstenberg in a public medical care program in Baltimore.[8] With greater supervision, the conformity was increased over time, to a point where 70 per cent of prescribing was identified as "formulary" and another 20 per cent as "in the spirit of

* Ammonium chloride and sodium bicarbonate, listed by the urology department, were the two drugs included in both 1924 and 1964.