

WANTED: RESEARCH IN THE ECONOMIC AND SOCIAL ASPECTS OF MEDICINE

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RECENT developments in medical care, public health, and social work in the United States have aroused active discussion concerning the relationships between medicine and the organized agencies of society. Numerous changes are under way in the art and organization of medical practice and in its relation to social and economic institutions. Numerous practical studies have been made, initiated by public health agencies, social workers, social scientists, and in some instances by medical associations. It is important that the data and problems of this field be investigated on an intellectual basis and not only on a controversial level. Nor should investigations be merely through studies undertaken to aid immediate practical decisions. The field is one for intellectual exploration as well as for practical action. It is desirable and timely that the field be charted intellectually; that needs and opportunities for research be defined and that projects, methods, and auspices of research be considered.

The Committee on the Costs of Medical Care, during its five years of study, 1927-1932, dealt chiefly with economic aspects, completing a number of descriptive studies of existing facilities for medical service and of plans and experiments in organized medical care; statistical studies of the incomes of physicians and dentists; of the amount and incidence of sickness among representative families and of their expenditures for various types of medical care. Some community studies of medical facilities and expenditures were also made. Practically no analytic or historical studies were pursued, and only preliminary attempts were made to study quality or adequacy of service or to develop criteria for such appraisals. The statistically recorded sickness experience of

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groups of families was not accompanied by case work or clinical studies which would have assisted the analysis and interpretation of the statistical findings.

It should be understood that this field of research does not involve merely a study of the *relations* between the medical and the social sciences, or between medical practice and social institutions. The study of these relationships is sometimes involved, but the essential elements are a body of phenomena, not merely relationships. The phenomena are such that they are influenced or "determined" both by elements which are usually regarded as "medical" and also by elements which are usually regarded as "social" or "economic." The investigation of the phenomena requires study of the status and behavior of individuals and of social groups, under conditions jointly created by biological elements, by the medical sciences and their applications, and by psychological, economic, and social factors. All the sciences and arts which are involved in medical practice, in public health and hospital administration, in economics, sociology, psychology, and social work, may be implicated in such studies.

At the present time, however, medical scientists generally regard the field as one outside their scope of intellectual interest. There are some exceptions, particularly among physicians associated with public health service, with psychiatry, or with social work. Social scientists have entered the field at certain points, but usually without recognizing that from their approach alone, the phenomena cannot be adequately studied or completely understood. There is need for techniques of the medical as well as the social scientists in gathering data, and medical and social scientists need to cooperate in the processes of analysis and interpretation.

The number of scientific groups and techniques involved suggests that research can be best pursued at universities, from the faculties of which the elements needed for any particular project

can be assembled. But other types of auspices, such as foundations, governmental agencies, or special schools or institutions, may be appropriate also. Different projects may fit different locations or auspices and it is probably desirable, at present, to diffuse research in this field rather than attempt to concentrate it in one or two places. This field of research may develop an intellectual unity of its own, such as biochemistry or genetics, each of which has developed out of originally "independent" sciences.

For purposes of illustration and suggestion, it may be well to outline some subjects for research. The field may conveniently be divided into five areas of investigation. The boundary lines will overlap. No attempt is made at completeness or at a logical order in the following lists.

1. The first general heading might be designated as public health or community studies. An outstanding problem here is the subject of morbidity. In the past, the knowledge of the amount of sickness has been limited to the few reportable diseases and to information secured from special studies. Recently, enough comprehensive sickness studies have been made to give a substantial amount of information, and data is also accumulating from industrial and other sources. Morbidity in various forms is becoming a more significant measure of health or of ill health in a community than is the death rate. Studies of morbidity of various types need to be made and correlated with economic status, with housing, and with the amount and kinds of medical care received by different groups. Morbidity needs to be evaluated in terms of its usefulness as a yardstick of community well-being or the reverse. The psychological and economic factors which affect morbidity need study as well as the physiological factors in view of the increasing amount of chronic or long-continued disease as distinguished from the acute and self-limiting sicknesses.

Studies of the utilization of medical services by individuals and families and of family expenditure for medical care were devel-

oped considerably by the Committee on the Costs of Medical Care. These need to be carried out in particular localities for particular groups of the population so that a wide variety of comparative data shall be available for understanding the conditions determining the amount of demand for medical services and the degree of utilization of medical facilities.

Studies of medical facilities in personnel and in institutions should be developed on a regional or community basis, with particular regard to the interrelations between communities of different sizes. There is evidence that the medical facilities in the smaller communities are not sufficient to constitute these areas as self-sufficient medical units, a considerable volume of medical service being sought in larger communities. This step-up process goes all the way, till in the major medical centers, chiefly but not always in very large cities, we find a substantial amount of the service rendered by physicians and hospitals furnished to persons who come from outside the community and often from considerable distances. These geographical relationships between communities with respect to the utilization of medical facilities have been but little explored. Knowledge upon this point is necessary to an understanding of the economic and social elements constituting the medical services of an area and is also fundamental to planning the distribution of medical personnel and institutions.

Another type of study which may be classed within the public health or community field relates to experiments and plans in organized medical services, such as voluntary health insurance schemes, public medical services, health demonstrations, group practice plans in hospitals, clinics, private groups, *et cetera*. A number of descriptive studies of such plans and experiments have been made. It is important to place such studies upon a scientific basis, so that they shall include professional, administrative, and financial appraisals of the scope and quality of service. Thus far the only basis for such appraisals, except on the financial side, has

been the considered opinion of some specialists in the particular type of work examined. Criteria are needed for the appraisal of the professional and administrative aspects of organized medical services and of the quality of care for various diseases and conditions. To develop such criteria is a major challenge to physicians, public health workers, and medical administrators. Surveys and appraisals of health insurance and public medical services in foreign countries also need to be made thoroughly and from the same point of view.

2. The second main group may be called sociological studies. The following brief list will be illustrative:

Scientific (technological) and social elements in recent changes in the status and relationships of medical services.

Similar study in relation to hospitals and clinics.

Rate of application of various inventions in preventive and curative medicine and correlation with social and economic factors.

Concept and literature of "social medicine" in Europe.

Medical care as an aspect of current culture.

Ecological studies of the distribution of physicians (a) in large cities, (b) in rural areas, with particular reference to young physicians. Similar study of hospitals, particularly of proprietary hospitals.

Obviously these sociological studies can be approached from the historical as well as from the analytic standpoint. From the historical point of view, special phases of the medical field or of particular "inventions" may be traced with reference to the technical and the social elements which played a part in their development and in their application in medical practice. From the same approach should proceed general historical studies in the development of medicine as an aspect of culture and biographical studies in which social and economic factors are given their due place.

3. A third main grouping of studies is economic. Research in the economic relations of medicine may include a great variety

of practical subjects, some of which are touched under the administrative heading below. Some of the studies suggested under the public health heading are largely economic in their content. The sources and amounts of incomes of the practitioners and agencies furnishing medical care are significant matters needing continued investigation. Income has been increasing from sources other than fees from individual patients. These changes in the sources of income affect the amount of expenditure for medical care and the amount and types of services utilized.

Very little attention has been given to the economic theory of medical services, although the nature and relations of these services present fascinating opportunities for economists of an analytic bent. Among examples are such subjects as:

The elements of demand for medical service; the interrelations and relative weight of these elements; the measures of demand.

Analysis of "free choice of physician" in its psychological, professional, and economic implications.

Amount and incidence of capital charges involved in medical services.

Value and pricing of medical services.

4. The fourth area of research may be designated the clinical field. The cooperation of physicians is particularly needed in most of these studies, since they involve the investigation of individuals with biological, pathological, social, and economic elements all to be considered. As illustrations might be mentioned:

The medical, social, and economic elements in various diseases, including consideration of etiology, character and duration of treatment, cost of diagnosis and treatment, and physical, economic, and social effects. This involves case and statistical studies.

Special consideration of certain chronic diseases from the same points of view.

The cost of various diseases for diagnosis and treatment,

considering comparative costs under various methods of treatment, or various conditions of organization of service.

Birth control. (a) Effectiveness of various methods (including the "safe period") correlated with economic and social status. (b) Cost of various methods, and of the commodities utilized.

5. The fifth area of investigation may be called the administrative. A growing proportion of medical care in sickness and the larger part of preventive service are now furnished through organizations rather than by individual practitioners. The character of the organizations and of their administration becomes a significant element which conditions the medical service itself and which also has substantial effect upon its availability and its costs. The following topics might be mentioned:

Organized practice as compared with individual practice with reference to efficiency and costs (development of a comparable cost accounting).

Costs of service in organized medical practice. (a) General analysis of costs. (b) Costs of particular functions or departments. (c) Costs of certain preventive services under organized and under practitioner administration.

Characteristics and qualifications of personnel for various functions in organized medical services.

Units and terminology for the statistics of organized medical care and of administrative practice in hospitals and clinics.

The production and distribution of medical commodities as a business, *e.g.*, X-ray, eye glasses, surgical appliances, certain hospital supplies.

Studies of various administrative, financial, and community problems of hospitals and clinics.

Some of the topics under the five headings have already received considerable study. Others have been touched little if at all. Numerous other topics could be added to the lists. Obviously any comprehensive programs of research should include a critical survey of investigations already made in each area; but "compre-

hensive programs" are no more important than the initiative of individual investigators who hunt on their own. Medicine is old; organized medical research is young; social and economic research is still younger; the areas of joint interest are, from the intellectual standpoint, in their infancy. Men long dealt with health as part of the realm of magic; only very slowly have parts of it come under scientific and conscious control. We now see that the field of health involves not the body alone, nor even body plus mind, but body and mind in the physical and social setting of the human species. From this approach either the medical scientist or the social scientist can pursue useful inquiries; but for comprehensive studies, still more for serviceable interpretations of data, there must be cooperative activity. The tillage of the field promises rich intellectual and human returns.