The Cooperative Health Statistics System

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THE NATIONAL CENTER for Health Statistics has launched a new program—the Cooperative Health Statistics System—which has great importance for everyone concerned with health planning, management, and evaluation. This System will provide an economical and effective method of establishing and maintaining a data base to guide decision making regarding health care in the United States.

In recent years, there has been a growing concern regarding the issues of the availability and accessibility of health care, the quality of services, and their spiraling costs. For solutions to be broached, there first must be an adequate definition of the current situation. What are the health problems of people, and what are their health service needs? What are the resources available to meet these needs, and how are they used? Who is receiving what kinds of health care, under what circumstances, and at what cost? Although considerable time and effort are being expended nationwide in the area of health statistics, the efforts are fragmented, uncoordinated, and duplicative, and they often produce unreliable results. These separate activities do not lend themselves to incorporation into a unified national system. Except for vital statistics, the current national program depends largely on small probability samples, which yield useful data for the nation as a whole but have little direct value for States and communities.

The Cooperative System, therefore, is designed to establish a coalition among the various levels of government—Federal, State, and local. Basically, it will provide for the collection of any particular data element by the level of government that is best equipped to collect it. The information then will be shared with the other levels. As now envisioned, when the Cooperative System is in full operation it will include the following seven components in health and vital statistics.

Components

Manpower statistics (inventories and surveys), to provide data on the numbers, characteristics, and distribution of health personnel. This information is necessary to assess current health manpower capabilities vis-a-vis health service needs and to project future demands. The inventories will be based on 100 percent coverage and will furnish up-to-date continuing basic data. They also will provide the means for obtaining valid samples of the universe of manpower for a variety of surveys; for example, the attitudes of medical practitioners toward proposed new health programs.

Health facilities statistics (inventories and surveys), to include information on the numbers, types, and location of health facilities, as well as the types of services rendered and characteristics of the recipient population. The efficient use of existing facilities and the rational planning for future facilities demand an adequate data base. Again, the inventories provide not only ongoing basic data on facilities, but comprise a sample frame for surveys in any particular area in which more detailed study is necessary.

Hospital care statistics, to provide data about patients and services in short-stay (under 30 days) hospitals. Information collected through this component is necessary for appropriate planning to improve the accessibility, quality, and cost effectiveness of hospital services.

Household interview statistics, to obtain, from interviews of a sample population, information about a wide variety of health-related questions including data on perceived health problems, acute and chronic diseases, disability due to accidents and illness, utilization of health services, and expenditures for care. From such information measures can be constructed of the health status of the population, the need for health services, and some expression of the accessibility and availability of services.

Ambulatory care statistics, to provide information on care given to noninstitutionalized patients in physicians' offices, group practice settings, public health clinics, hospital emergency rooms and outpatient clinics, and through home visits or telephone consultation. Such data will permit

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more rational planning to improve the delivery and quality of ambulatory care.

Long-term care statistics, to provide information on patients and services in nursing and convalescent homes, mental institutions, and other extended care facilities, as well as alternative forms of care such as home health programs. Such data are valuable for patient care, management, evaluation, and policy development.

Vital statistics, to include data on births, deaths, fetal deaths, marriages, and divorces, as well as followback surveys based on samples of vital records to evaluate the data collected and to obtain additional information not available through the basic vital records. Vital statistics are important indicators of health problems and service needs and provide current data on the size, character, and growth of the base population. Cooperation among local, State, and Federal agencies has been traditional in this area, and the Cooperative System will enhance this existing relationship.

Uniform Data Standards

The preceding components do not cover the entire gamut of possibilities for the Cooperative System, but they do constitute the areas in which initial emphasis is placed. For each component of the Cooperative System there will be developed standardized definitions, comparable methodologies, and a core set of data—the minimum information required at the national level. This establishment of a uniform set of data standards will be a joint undertaking of both the producers and consumers of data at the national, State, and local levels to insure that the information generated is that which actually is needed. States and localities will need more information and greater detail than that specified in the national core set of data. These needs can be met by using the same collection mechanism with additional data items built onto the core and by conducting periodic and ad hoc surveys. Eventually a network of State statistical operations will be created from either previously existing or newly established agencies, each coordinating its efforts with local areas to meet community requirements, obtaining the basic data it needs about health status and problems within its own jurisdiction, and providing the Federal Government with a minimum set of uniform data in machine-readable form.

Growth and Implementation

The growth of the Cooperative System has been planned in two overlapping stages—a research and development phase and an operational phase. The research and development phase was instituted in late 1971 under the auspices of the National Center for Health Services Research and Development, in close collaboration with the National Center for Health Statistics (NCHS). The purpose of this phase is to examine alternatives for the content, structure, and methods of the Cooperative System in order to identify those most amenable to the design of an effective system for obtaining and using health statistics. Since 1971, 13 grants have been awarded for projects, expected to extend over 2 or 3 years, to investigate a wide variety of situations and activities.

Each of the seven components is being addressed through these projects, and all of the activities are pursuing research issues which must be resolved. However, some important questions relating to methodology, analysis, and utilization of the component data are not yet being examined adequately. As a result, a more directed research program is being planned, which will use the contract rather than the grant mechanism. Also, the responsibility for research and development has been transferred to the National Center for Health Statistics, combining the authority for research and development and implementation in one organization and facilitating integration of the two phases.

Initially, the operational phase will be concentrated in vital statistics, manpower, and facilities and in assisting States to develop the capacity to implement these and other components. Vital statistics is an area in which there has been a great deal of research and development over the years; there are well-accepted national standards on data content, definitions, and methodology, and long-standing cooperation among the three levels of government.

The Cooperative System will add to the existing situation the elements of standardization, one-time-only processing, and increased Federal support. States which are now or soon may be ready to meet the standards are being invited to indicate to NCHS their interest in entering into implementation contracts. In mid-1973, the first operational contracts for the vital statistics component were negotiated with four States. Since five States already were providing vital event data under experimental contracts, there now are nine States processing their vital statistics and providing them to the Federal Government in machine-readable

form and according to national standards relating to timeliness, item content, definitions, and quality.

Similar data procurement contracts will be negotiated with States in the areas of health manpower and health facilities, since past experience and current research and development efforts have paved the way for early establishment of minimum basic data sets for these components. It is hoped that vital statistics and manpower and facilities components can be implemented in most States within 3 to 5 years. When operational, they can provide the frames from which to draw appropriate samples for use in surveys.

So far this discussion has been concerned with the roles of the Federal and State participants. Where do the local areas fit in? It is expected that often the local health jurisdictions will be collecting basic data for many components of the Cooperative System. In areas where the size of the population permits, data can be collected in detail at the local level and individual data items furnished the other partners of the Cooperative System. It is not anticipated that extensive contracting will be undertaken directly with local agencies for implementation. However, joint State-local cooperation is encouraged in data acquisition and application as one method of eliminating duplication in the collection and processing of information. As less well-defined components emerge in prototype from the research and development efforts, emphasis may be placed on the involvement of local areas as data-gathering agents for the State. In addition, input concerning the utility of data must emerge from the local levels to insure that the Cooperative System is responsive to needs at that level for program management, planning, and evaluation of health care delivery programs.

Successful implementation of the Cooperative Health Statistics System demands priority attention at the Federal level. As indicated by the following items, the National Center for Health Statistics will provide guidance to State and local agencies in the development of the system, will establish a technical assistance and training program, and will pay an appropriate share of the costs.

- Planning and development contracts will be negotiated with a number of States to aid them in organizing for increased health statistics capabilities and in developing the operations necessary for statistical component implementation contracts.
- For a State to be effective in the operational phase of the Cooperative System, it will be necessary to identify trained people who have a clear concept of the System and who are aware of the State and Federal capacities and needs. The contract protocol for each of the components recognizes the necessity for the State to have available trained staff to perform the statistical procedures required to provide data in a form to meet the needs of all the partners in the System. During implementation, a minimal level of staff for this purpose may be supported. It is expected that this support will be on a continuing basis and will serve as an effective way of bringing more components into the State program.
- Support also will be given for specialized training of current staff for functions related to the new Cooperative System. In addition, a training program will be developed to assist in training or retraining health statisticians and other data handlers to improve data analysis capabilities of States. This program probably will be multifaceted, including on-the-job training, university-based educational programs, and shorter courses offered through the NCHS Applied Statistics Training Institute.
- The program of technical assistance in health statistics now provided by NCHS to State and local agencies will be expanded to give necessary support to the Cooperative System activities throughout the country. Technical assistance, though, must be viewed as a two-way street, since NCHS will derive considerable information from the actual developments and experiences in the State and local operations.
- A program of continuing communication will be instituted to provide information sharing among all participants.
- A data use and analysis laboratory will be established within the National Center for Health Statistics. Among its functions will be (*a*) developing, testing, and demonstrating the application of special tabulations and analyses of data generated by the Cooperative System's several components for community use and (*b*) performing special research and development in the problem-oriented analysis of a variety of data useful for local planning purposes.
- Finally, the Federal Government will pay its share of the costs to States and localities for developing and producing statistics.