Organization of National Health Survey

THE THREE TYPES of activity authorized in the National Health Survey Act have as their purpose the obtaining of "accurate and current statistical information on the amount, distribution, and effects of illness and disability in the United States and the services received for or because of such conditions" (*1*). These three activities—a sample survey of the population, a series of special studies, and the development and testing of new or improved methods for obtaining current data—constitute the National Health Survey Program. To plan and direct the program, a small, experienced staff is being recruited in the Division of Public Health Methods of the Public Health Service.

The nucleus of the staff is already at work, drafting plans to implement the act. Successful execution of the program will require the assistance of health departments, the medical and dental professions, hospitals, and many other sources of health information. It is the understanding and cooperation of the general public, however, that is the most important ingredient of success.

The Bureau of the Census is providing expert help in designing the sample survey of the population. Technical consultants will give advice on all methodological aspects of the program. Three advisory committees will review the plans, keep the staff informed of needs for statistics which the program is capable of filling, and advise on obtaining the cooperation of professional groups and the public. One advisory committee will be drawn from operating agencies within the Department of Health, Education, and Welfare. A second committee will comprise representatives of all Federal departments and agencies having an interest in the data to be supplied. The third committee will be made up of leaders from the professions and business and from State and local governmental fields.

In addition to those consultants and committees, the program staff will have frequent discussions with individual agencies and groups about ways in which the program can be made more useful.

Planning for the three phases of the National Health Survey Program is now going on. First priority is being given to setting up the sample survey of the population. Methodological studies are, of course, an essential part of the planning process and will continue throughout the program since improving the techniques and adding to the usefulness of the results should never be considered to be complete. Collection of data for the series of special studies will not begin until after the sample survey is under way.

Despite the fact that decisions on various points are not yet final, it is possible to describe now, in general terms, the plans for the program.

The Household Survey

The sample survey phase of the program will consist of a continuous sampling of households on a national basis. Information will be collected in each household by carefully trained and supervised interviewers. The Bureau of the Census is devising sampling and field interviewing plans and preparing instruction and training manuals. The bureau will hire and train interviewers, supervise the field work, edit and code the questionnaires, and produce the required tabulations. The Public Health Service is responsible for the content of the survey questionnaire, for content of the tabulations that will be made of the replies, and for the analysis and publication of the results.

Field work on the household survey will start

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with pretesting activities on a small scale in early 1957. A "dry run" on a national scale will follow later in the spring. Collection of statistical information for periodic publication will begin about July 1.

The Questionnaire

When the household survey is in full operation, the questionnaire for the interview will consist of two parts, core items and supplements. Core items will include only the most basic types of information and will remain on the questionnaire for a long period of time. During the dry run period of the survey, only core items will be on the questionnaire.

The core questionnaire, as presently planned, will provide information on the incidence of illnesses and injuries involving either medical care or loss of time from usual activities (for example, the number of days lost from work or school), or both. The prevalence of chronic conditions known to the family and of various types of impairments will be obtained to the extent that they have caused trouble for the individual within a year preceding the interview. Persons with chronic conditions will be classified according to the degree to which these conditions have limited their activities.

In addition, core questions will ascertain the number of visits to physicians and dentists and the number and duration of hospital stays as well as the number of operations performed while the family member has been in the hospital.

These various measures of illness, disability, and medical care will be classifiable, on the basis of information collected in the core questionnaire, by age, sex, race, marital status, educational attainment, income, occupation, and industry for those in the labor force, by usual activity for those not in the labor force, and by residence in farm and nonfarm areas. The illness will also be classifiable by diagnosis in broad groups and by physician attendance.

After the dry run, the questionnaire will be opened for special supplementary inquiries. In this way, flexibility in content can serve the interests of additional users of the data. The supplements may be repeated at regular intervals or may be included once only. Since the total amount of interviewing in any one month will be relatively small, supplements may remain on the questionnaires for 3 months or longer depending on the degree of geographic detail required.

Collection of Data

Initially, the sample of households will be selected within the 330 areas (counties, parts of counties, or metropolitan areas) that constitute the first stage of sampling for the Current Population Survey of the Census Bureau. The Current Population Survey has for some years been collecting information, from a national sample each month, on employment, unemployment, and other economic data. Except very rarely, and then by chance, the households interviewed for the National Health Survey will not be the households sampled in the Current Population Survey.

After the dry run, which has as its major purpose the establishment of smoothly operating procedures, the household survey will be expanded gradually over a 6–month period until it includes approximately 400–450 sample areas known as primary sampling units. The reason for this difference in the design of the two national samples is that the National Health Survey will require estimates in greater geographic detail than the Current Population Survey.

The number of interviews in the primary sampling units will be far fewer than in the Current Population Survey. The interview rate during the dry run will be approximately 3,000 households a month for the country as a whole. By the end of 1957 it is hoped to increase the rate to about 3,500 households a month. This is in contrast to the 35,000 households interviewed each month in the Current Population Survey.

A careful control on the quality of the interviewing will be maintained by a regular program of reinterviews, and other devices, in a subsample of the households.

Publication of Data

The present plan is periodically to publish separate morbidity statistics for each of nine standard metropolitan areas: New York, Chicago, Los Angeles, Philadelphia, Detroit, San Francisco, Boston, Pittsburgh, and the com-

bined Washington, D. C.-Baltimore area. In addition, separate statistics will be published periodically for each of 11 geographic regions of the country. These correspond to the 9 standard geographic "divisions" of the Census Bureau, except that the East North Central Division and the South Atlantic Division each will be divided into two parts. Data from the regions will be shown separately for large metropolitan areas as a group, all other urban areas as a group, and rural areas.

To publish statistics in this maximum geographic detail, it will be necessary to accumulate data for a period of 2 years. However, summary statistics may be presented at more frequent intervals for four major Census Bureau regions of the country (Northeast, North Central, South, and West) as well as by size of place, in terms of population, for the country as a whole.

According to present plans, the most frequent publication of any particular statistical table will be at intervals of 3 months. Data for the preceding calendar quarter will be included. These published tables will be devoted to information for which it is desirable to show quarter-to-quarter change. An example might be the frequency of injuries resulting from automobile accidents.

Special Studies

The special studies will produce auxiliary information of a type that the household interview cannot provide. They will be based either on subsamples of the national household sample or on separate samples. Though they may vary in nature, all special studies will be based upon scientifically designed samples so that the results can be generalized to a defined population. They will emphasize the measurement of disease by means of clinical tests, physical examinations, or the analysis of medical records. The entire health survey program is planned as an integrated system in which the special studies will supplement the data obtained in household interviews.

Because of wide interest in the prevalence of chronic diseases and impairments, including conditions not yet diagnosed, the first of the special studies will be designed to provide a thorough medical and dental evaluation by a professional team for a cross-sectional sample of persons of all ages. The need for statistics on undiagnosed and nonmanifest conditions has been emphasized by the Subcommittee on National Morbidity Survey (*2*). Two recent surveys, one in Hunterdon County, N. J., and one in Baltimore, have demonstrated that, in conjunction with a household interview survey, the medical evaluation of a subsample can produce useful data.

The staff of the National Health Survey Program will conduct the studies with the help of field personnel employed for each study. Part of the work, however, such as the abstracting of medical records, may be contracted to organizations with access to the information needed.

Although first priority is being given to the household survey, staff and consultants of the program have begun to design the first of the special studies for the National Health Survey. Field work on this study, however, probably will not begin before late 1957.

Methodological Studies

The third phase of the program will include methodological experiments in connection with the national household survey; studies to determine the nature and magnitude of errors of measurement associated with clinical tests and physical examinations; matching of data from one source against data from another; and basic investigation of entirely different methods of measurement, such as panels of physicians keeping records concerning the patients under their care.

The methodological studies will be conducted sometimes alone by the staff of the National Health Survey Program, and at other times in conjunction with the Bureau of the Census or other organizations. Some methodological problems may be investigated by schools of public health, health departments, health insurance agencies, or research groups employed on a contract basis.

Limitations of the Program

"It is clear that this legislation would close a major gap in our population and health sta-

tistics. We have available today only piecemeal data—from special studies and surveys, from reports on particular kinds of diseases, or from records kept for a variety of purposes on particular segments of the population" (*3*).

"A national health survey based on a representative sample of the total population would provide a comprehensive picture of illness, both with respect to coverage of the population and to inclusion of the entire range of types of illness. As such it will supplement and extend existing sources of health data" (*4*).

These statements appeared in the Senate and House of Representatives reports on the proposed national health survey. However, recognition of the potential value of the survey in defining more clearly the extent of illness and disability in the Nation should not obscure the fact that the program has definite limitations.

The size of the national sample, for example, is such that estimates in greater geographic detail than planned cannot be made without enlarging the sample for that purpose. Moreover, the sample cannot provide independent information concerning persons in small groups of the population or for diseases of low frequency.

Further, there are limitations to the accuracy of diagnostic information collected in household interviews. The household respondent, at best, can pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. Facts concerning the circumstances of the illness or injury and the resulting action taken by the individual, such as going to bed or seeing a physician, can be obtained more accurately from household members than from any other source. However, when clinical detail or diagnoses for unattended or nonmanifest illness are required, information procured by interview does not substitute for a medical examination. For this reason, information collected in the special studies, for example, by physical examinations and clinical tests, will supplement the results from the household survey.

The statistics from the program will not provide critical tests of clinical and epidemiological hypotheses. For example, the program could not test the hypothesis that a specific vaccine would prevent a certain disease. For this, an experimental design, a control group, and similar conditions would be required. The program may, however, suggest hypotheses that can be tested by other appropriate means. Information that is required quickly for corrective action, as in an epidemic, will have to come from other sources, such as the notifiable disease reporting system.

The program is intended to supplement existing sources of information and provide a background of broadly based illness statistics. It does not purport to replace the many ad hoc studies now being conducted.

Aside from such limitations as these, imposed by the methods to be used and the resources available, the program is free to collect any statistics on the incidence, prevalence, or other measures of disease, injury, or impairment, the disability or other effects of this morbidity, and the medical care used in its treatment. The sole guide is the usefulness of the data.

REFERENCES

(*1*) National Health Survey Act, Public Law 652, 84th Cong., 2d sess. Washington. D. C., U. S. Government Printing Office, 1956.

(*2*) U. S. National Committee on Vital and Health Statistics, Subcommittee on National Morbidity Survey: Proposal for collection of data on illness and impairments: United States. A report of the subcommittee. PHS Publication No. 333. Washington, D. C., U. S. Public Health Service, 1953.

(*3*) U. S. Congress, Senate: Continuing survey and special studies of sickness and disability in the United States. Report No. 1718 to accompany S. 3076. 84th Cong., 2d sess. Washington, D. C., U. S. Government Printing Office, 1956.

(*4*) U. S. Congress, House of Representatives: National Health Survey Act. Report No. 2108 to accompany S. 3076. 84th Cong., 2d sess. Washington. D. C., U. S. Government Printing Office, 1956.