
Chapter 4.
STRUCTURING COORDINATION
ACTIVITIES

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INTRODUCTION

The Federal health statistical program is a patchwork of numerous data collection projects, each of which addresses different needs or purposes. Individually designed projects prevent easy linkage of data and, therefore, the formation of statistical profiles. Excluding the data systems of the National Center for Health Statistics (NCHS), which provide baseline, general-purpose health data, Federal data activities are geared to the programmatic needs of agencies that operate them. There is no systematic appraisal of the content, adequacy, needs for, or uses of health data currently collected. Rather, decisions regarding data collection, use, and release are made primarily by the acquiring agency.

Uses and needs for statistical information cut across agency jurisdictions; yet, there is no central control over health data activities, even those supervised by the Department of Health, Education, and Welfare (HEW). The two primary administrative mechanisms for monitoring data projects—statistical budgeting and the reports clearance process—exert some pressure against increased proliferation of different types of health data collection projects. However, insufficient attention has been given to coordinating the numerous data collection activities of various Federal health programs.

The lack of a systemwide approach in Federal endeavors is not unique to the area of statistics. The generic problem of fragmentation is a result of each agency's pursuit of its own specific mission; consequently, no constituencies and few incentives for coordinating agency activities exist. HEW, however, has recognized the problem of fragmentation in the area of health technologies and has begun to address it. To systematically link the activities of various agencies, HEW has proposed a major initiative for managing the life-cycle of technology development, evaluation, transfer, diffusion, utilization, and phase-out (38). A similar strategy for managing and coordinating health data projects throughout the Federal Government is also needed.

This chapter describes a structure that would coordinate health statistics according to three constituent functions: developing an analytical framework for planning the statistical system, improving the efficiency of data collection activities, and ensuring data accessibility for potential users. Activities that might be undertaken to fulfill each of these three functions are suggested. The need to formally delegate and institutionalize responsibility for coordinating activities is highlighted. The characteristics and resources that such a coordinating body would require are delineated and possible alternative organizational locations within the Federal bureaucracy are identified.

CONCEPTUAL FRAMEWORK

Designing a conceptual framework is a critical prerequisite to the development of a unified, comprehensive health statistical system. Planning the design of such a frame-

work should initially entail defining the objectives of a comprehensive health statistical system, determining the kinds and amounts of data needed to meet the various goals of the system, and applying a set of organizing principles to the data. Long-term comprehensiveness, flexibility, and balance in statistical coverage of substantive areas should be built into the framework in order to identify ongoing statistical systems that have little further utility and to respond to changing needs for information.

A conceptual framework would establish an analytical foundation for rational planning. With a definitive list of specific items of information being collected, the framework could further serve a clearinghouse function by providing information about what and how data can be located. Careful analysis of the framework would permit identification of overlapping jurisdictions in data collection and areas in which there are gaps in our knowledge. Decisionmakers who examine the framework could both determine how Federal statistical dollars are spent and what uses are made of data collected, and, as necessary, shift priorities for data collection. They could also use the framework as the basic tool for administering and allocating resources to the Federal health information system.

Devising the conceptual framework requires much initial theoretical work by technically skilled staff, who are familiar with the diversity of health statistics, in order to develop the matrix and methods for systematic analyses of data in each cell. Thereafter, staff would be needed both to collect and maintain information about existing data collection activities and to respond to requests directed to the clearinghouse. Personnel with statistical expertise and analytical abilities also would be required to determine the needs of data producers and users, to identify data gaps, and to aid in setting data collection priorities. These latter activities are integral to the planning process, and staff would have to be able to exercise sufficient authority to effect results based on their analyses.

Once the design of the conceptual framework is completed, a detailed inventory or audit of existing data systems must be conducted with the objective of integrating them into the framework. The survey could take the form of periodic requests to Federal agencies or it could be institutionalized as part of an existing administrative mechanism, such as the statistical budget request or the reports clearance procedure. If one of the current mechanisms for auditing data activities was used to build the analytical framework, it would need to be modified to ensure coverage of all health data systems and to permit the exhaustive collection of information about each data system. The framework should include all data systems that could potentially meet broad purposes; therefore, projects operated by State and local governments and by private national organizations should also be inventoried.

Information derived from such inventories would form the data base for the creation of a matrix that illustrates the relationships among existing health data systems. To be a worthwhile planning tool, the matrix must be comprehensive and permit the interaction of many health data system variables, including:

- class of data collected (such as demographic characteristics, facilities, manpower, service usage, costs, health status, lifestyle, and environmental measures);
- standard variables and/or identifiers collected;
- type of respondent and coverage;
- method of collection (mandatory or voluntary);
- collector of data (Federal, State, local, or private), level of aggregation at each stage, and data flow;
- statistical methodology;
- costs of the project for data collection, processing, analysis, and publication;

- provisions for confidentiality;
- periodicity of data collection;
- users of data and their requirements for timeliness and geopolitical detail; and
- determinants of access to data (such as official publications and availability of computer tapes).

The establishment of a clearinghouse of information on statistical systems has been advocated periodically. In 1971, the President's Commission on Federal Statistics recommended that the Bureau of the Census be funded to maintain a catalog of Federal statistics that would list the activities of all agencies (15). In 1977, the Commission on Federal Paperwork, echoing the earlier recommendation, suggested the development of a Federal Information Locator System that would provide a reference point for Federal agencies and others wishing to know what data are collected (23). Citing deficiencies in available data for estimating reporting burden, the Federal Paperwork Commission also recommended that a detailed register of all Federal reports, to be derived from improved clearance request forms, be designed, automated, and used for planning by the Office of Management and Budget (OMB) (24). Specifically noting duplicative requests for information about the health industry, this Commission urged OMB to develop a comprehensive inventory of data already collected in the health field (22). Finally, the President's Reorganization Project recommends, in its 1978 draft report, locating a Federal Data Locator Service and data user inquiry service in a central statistical organization (16).

Recognizing the need for a systematic data base, the HEW Health Data Policy Committee published a list of all health data projects conducted by the Department in FY 1975 and FY 1976 (40, 41). The Public Health Service (PHS) prepared a similar inventory for FY 1977 but limited the list to PHS data activities (42). The newly created Health Data Advisory Committee (HDAC) is preparing another departmentwide inventory that includes data projects administered in FY 1978. These inventories provide a brief description of each data project and reference staff to contact for further information.

Some attempt has been made to use these inventories as the basis for a conceptual framework. PHS, for example, presented its 1975 health statistics plan as a descriptive framework for arraying all health program management data systems (40). Also, the 1976 health statistics plan incorporated elements of a preliminary conceptual framework for health statistics by organizing data projects into four primary subject-matter categories: health status, health care resources, health services utilization, and health care expenditures. It was proposed that the framework be used to promote cross-program analysis, to identify opportunities for standardizing data collection, and to facilitate future decisions on the development and modification of statistical systems (41). It is not clear, however, whether the health statistics plans have been used for such analytical purposes.

EFFICIENCY

Once the conceptual framework has been developed, efforts can begin to improve the efficiency of data collection activities, the second coordinative function. Efficiency means conducting health data collection activities in the most cost-effective manner possible. To achieve cost-effectiveness in health data collection, existing health data projects may need to be modified, combined, or terminated. New data collection systems also may be needed. Three specific problems are addressed with regard to efficiency: inadequate technical design, overlapping data collection, and lack of comparability.

Inadequate Technical Design

The appropriate use of the latest technical capabilities is one method of ensuring optimal efficiency. Sophisticated statistical methods may obviate the need for costly repetitive data collection efforts. For example, synthetic estimates derived from data gathered on a regional or national basis, despite certain recognized limitations, may be sufficient for the statistical needs of local jurisdictions. Sampling procedures often serve statistical purposes as well as, or better than, responses from an entire universe of respondents. Recent advances in survey research, such as computer-assisted telephone interviewing techniques, offer cost-cutting alternatives in the field of statistical surveys.

Efficiency can also be improved by redesigning independently conducted surveys or studies to meet the needs of several users. In FY 1976, the National Center for Health Services Research (NCHSR) and the National Center for Health Statistics (NCHS) spent more than \$5 million on a large national survey that examined the sources and amounts of health care expenditures by various population groups for episodes of illness. The National Cancer Institute (NCI) spent **\$500,000** in the same year on a survey designed to provide similar types of information, but the NCI survey focused on costs solely associated with the care of cancer patients. Several institutes in the National Institutes of Health (NIH) now are working on a collaborative effort with NCHS to “piggyback” some of their data needs on the Hospital Discharge Survey of NCHS. The impetus for this cooperative endeavor came from several researchers at NIH in an effort to obtain data that they could not have gathered themselves given the budgetary constraints of their respective institutes.

NCHS has the greatest number of statistical experts within HEW. NCHS provides technical statistical services to Federal agencies through its Reimbursable Work Program (RWP). However, the effectiveness of the RWP in assuring the use of appropriate methods is limited because it has a small staff and its services must be requested by other agencies. NCHS also does technical reviews of some new data projects at the request of the PHS forms clearance office. Technical reviews appear to be an effective mechanism for identifying major statistical deficiencies in data activities, but they further delay an already lengthy clearance process (43).

Overlapping Data Collections

Agencies tend to collect data that meet their specific program needs for planning, monitoring, and evaluation without regard for the needs of other agencies. Because most Federal health programs are categorical in approach, that is, designed to serve carefully defined groups, the activities of various programs often overlap.

The magnitude of the problem should not discourage efforts to reach the goal of one-time collection of the same or similar data from the same respondents. Grouping data in a conceptual framework by the class of information collected and by type of respondent would aid in identifying overlapping data collection activities. Careful analysis of total costs for each project should indicate the most cost-effective methods for collecting necessary data.

Addressing the issue of overlapping data collection, the Commission on Federal Paperwork advanced the concept of the “cognizant” agency⁽²²⁾. A “cognizant” agency is the one assigned to lead data collection activities and provide appropriate data to other Federal agencies collecting similar data. The Commission also advised that a separate agency collect data that have applications for multiple users. Regarding the latter recom-

mendation, the Commission specifically mentioned the Bureau of the Census. However, in the area of health statistics, NCHS and its program, the Cooperative Health Statistics System (CHSS), must also be considered as suitable candidates.

At present, OMB has the authority, provided by the Federal Reports Act, to designate a central collection agency; the Secretary of HEW also has the authority to *coordinate* statistical activities within the Department. OMB has recognized inefficiencies in the statistical systems of HEW and has suggested organizational changes. In 1971, OMB recommended that collection and processing of statistical information be combined in a service-oriented data collection and processing center in HEW (20). Informational requests would be channeled to this center, which would then review these requests and decide how they could best be fulfilled. The service center was intended to provide necessary statistical services, including staff and equipment, for the substantive program agencies throughout the Department. HEW did not reorganize, however, in response to the OMB request. OMB maintains the principle that major and continuing multipurpose data collections should be undertaken through statistical collection centers. However, it traditionally has deferred responsibility to HEW for deciding agency roles in statistical matters (26).

One attempt to coordinate HEW data activities through the Federal Reports Act mechanism was successful. In 1968, OMB's predecessor, the Bureau of the Budget, assigned responsibility for a uniform and coordinated system of reports on family planning programs to the Office of the Assistant Secretary for Health. At that time, Federal funds for programs in family planning were provided by at least four different Federal agencies. Potential users of the data included a wide range of both public and private groups. The Assistant Secretary delegated operating responsibility to NCHS, and a uniform reporting system, which collected encounter data from both private and publicly funded family planning clinics, was operational by 1972.

Data collected on hospital use is the most dramatic example of overlap in health data collection systems. The Medicare administrative program, the Medicaid Management Information System (MMIS), the Professional Standards Review Organization (PSRO) Management Information System (PMIS), the CHSS hospital care component, and the NCHS Hospital Discharge Survey all collect discharge data concerning patients whose hospital costs are reimbursed under Federal programs. Private organizations, such as insurance companies and abstracting services, also collect similar data.

Federal officials have long been aware of duplication in the collection of hospital use data. However, as the requirements of each agency differed with respect to timeliness of data reporting, completeness of coverage of hospitals and patients, and specificity of data elements, consensus on a single data collector could not be obtained. Despite the fact that the claims payment process in the Medicare program has been operational since 1966, planning and implementation of the other major data systems—MMIS, PMIS, and the hospital care component of CHSS—occurred concurrently during the mid-seventies. During this period, efforts were made to incorporate a core of common data elements, the Uniform Hospital Discharge Data Set (UHDDS), into each system. In April 1975, the Secretary of HEW approved the policy of implementing the UHDDS in all appropriate Department data systems.

As of October 1978, none of the three newer data collection systems was operational countrywide. * Total Federal expenditures through FY 1978 exceed \$7 million for the

*Of a total 171 PSROS, 10.s had operating data systems (7); 17 States had an HEW-approved MMIS (44); and the hospital care component of the CHSS was funded in 9 States (19).

PSRO data system and \$3 million for the hospital care component of the CHSS (7, 19). Information on costs for the hospital discharge data component of MMIS are unavailable. Under the MMIS program, the Federal Government provides matching grants to States for the development and operation of the automated information system. Similarly, the Medicare program is unable to separate its statistical system costs from its administrative costs for claims processing.

Because the agencies collecting discharge data are located in both the Health Care Financing Administration (HCFA) and PHS, the Secretary of HEW is responsible for resolving conflicting interests. Under the Carter administration, the Secretary has actively pursued a solution to this 6-year problem. HCFA and PHS submitted a joint memorandum of understanding on the subject to the Secretary in the spring of 1978. Lacking other resources with unbiased interests, the Office of the Secretary sought technical advice and options from two staff offices, the Assistant Secretary for Management and Budget (ASMB) and the Assistant Secretary for Planning and Evaluation (ASPE). A tentative decision regarding the method of collecting discharge data for Federal purposes was reached in late summer, 1978; an implementation plan hopefully will be forthcoming.

Fortunately, such evident duplication does not characterize other components of the Federal health statistical system, although there does appear to be redundancy in the activities of the Medicare and Medicaid programs, NCHS, the Bureau of Health Planning, and the Bureau of Health Facilities regarding health facility data. The hospital discharge data systems example, along with the one on family planning data, illustrate that if the problem is of sufficient magnitude, action will be taken eventually. However, the weaknesses of present policy mechanisms for combating such duplication are underscored in three respects.

First, there was a complete failure to address the duplication problem during the planning period for the data collection systems. Planning for statistical projects proceeds as an internal agency activity, and involvement by other levels of government usually comes only at the later stages of the process when clearance is sought. In the case of the hospital discharge data systems, officials were aware of the duplication problem during the planning stages but unable to resolve the conflicts in perceived data needs among the different agencies. Consequently, millions of taxpayer dollars were spent for data systems that, even today, do not meet total programmatic needs. If planned data collection activities are not obviously overlapping, duplication may not even be recognized, much less appropriately reduced.

Second, the attention, interest, and intervention of the Secretary of HEW was required before resolution of the problem began. Duplicative Federal hospital discharge data systems have spanned three administrations. Knowledge and interest in the subject have changed and hindered reaching what is basically a management decision. Secretarial involvement comes only when a binding decision is sought by agencies. If data systems are operating and meeting programmatic needs, the interests of the agencies are not served by elevating the debate to the level of the Secretary.

Third, no impartial staff with statistical expertise and indepth knowledge about the varying needs of programs were available to the Secretary when a decision was made to act. Sporadic involvement of planning and management staff may be adequate in the hospital discharge data systems case, but such erratic activity constitutes neither a timely nor ongoing policy mechanism.

Lack of Comparability

Numerous data collection systems, serving both general and programmatic needs, are likely to continue given the decentralized nature of the health statistical system. Much of the data now collected are of good quality, but their utility is seriously limited by the inability to link data systems. Most analyses require more complete information than any single data system is able to provide. For example, examining the use of U.S. hospitals requires the integration of data from the American Hospital Association's annual survey, the Medicare summary utilization file, and the NCHS Hospital Discharge Survey.

There are at least two barriers to linking, or “networking,” data systems. First, the majority of Federal health data systems are referenced to differing base populations (the denominator figure in ratios). Again, the referencing difference results from the categorical approach of the Federal Government in targeting programs to particular groups, facilities, or disease categories. Even with the general-purpose statistical program of NCHS, researchers have difficulties linking data collected in surveys that use sampling methods with mortality data, which are collected on the total U.S. population.

The linkage of data systems can be partially improved by referencing existing data systems to national, regional, or local-area populations. However, the long-term solution to this problem is probably the creation of a totally integrated information system. A technical panel of the National Committee on Vital and Health Statistics (NCVHS) is developing criteria and guidelines for such an integrated system to be used under national health insurance. The panel recommended in an interim statement that the information system be population-based and have the ability to count “persons” (36). An information system based on “persons” would not only allow calculation of rates for specific populations but also provide identifiers (such as Social Security numbers) that permit linkage to measures of resources, use, costs, and health status.

A second barrier to linking health data systems is the lack of common nomenclature, definitions, codes, and units of measurement. It is difficult to assess program achievements, compare programs, or even relate data from a particular program to the situation in the country generally without comparable terminology and measures. Standardization is the critical prerequisite to this type of linkage.

The need for standard definitions in HEW data collection systems is highlighted by a study conducted under the auspices of the Health Data Policy Committee (37). Forty-two common data elements in 73 of HEW's major repetitive statistical systems were analyzed in the study. Over 800 variations were found in the way the data elements were collected or displayed.

The Office of Federal Statistical Policy and Standards (OFSPS) in the Department of Commerce is responsible for the development and implementation of statistical standards and guidelines. Excluding the designations for geographic areas and ethnicity, no uniform definitions that are applicable in the health area have been issued as guidelines. The Office of Statistical Policy (OSP), in the Office of Planning and Evaluation, serves as a focal point for coordinating statistical standards within PHS. OSP has the authority to mandate use of standards by agencies within PHS through the forms clearance procedure, but has no authority over Federal agencies outside PHS, such as those in HCFA. OSP has only recently developed guidelines for eight data elements: sex, race, date of birth, marital status, residence, date of admission, date of discharge, and type of ownership. These guidelines are expected to be promulgated through PHS reports clearance channels in the near future.

A related effort in standardizing data is the development and implementation of uniform minimum data sets for well-defined substantive areas. These minimum data sets represent the basic items of information considered useful by major providers and users in a particular area of statistics. Each data element has a uniform, standard definition, and as a group, these elements form a core of information that facilitates linkage among data systems. The use of minimum data sets is a basic concept underlying CHSS, which establishes an organizational mechanism for sharing data among multiple users.

Responsibilities for the minimum data sets are shared by a number of offices and committees within HEW (31). NCVHS, through its technical subpanels, develops and designs the minimum data sets. NCHS provides staffing and technical advice for these groups. OSP has responsibility for promulgating the data sets within PHS once they have been established as a policy of HEW. Finally, the departmentwide Health Data Advisory Committee (HDAC) is supposed to provide leadership in advising the Secretary of HEW on policy and procedures for the establishment, implementation, and review of the minimum data sets. Only the Secretary has authority to approve the policy of implementing the minimum data sets throughout the Department. Both NCVHS and the Commission on Federal Paperwork have recommended that a single, central office have responsibility for promulgating and monitoring implementation of all minimum data sets (22, 33).

DATA AVAILABILITY

The third coordinative function is ensuring that the data collected in ongoing statistical projects are both accessible and responsive to the needs of potential users. Data dissemination and interpretive analyses normally are discrete from data collection. Efforts to ensure that data are, in fact, analyzed and used should parallel activities designed to improve the efficiency of data collection.

Most Federal agencies with large ongoing data projects conduct inhouse analyses and publish statistical summaries for the public. Improvements have been made in the dissemination of routinely collected data. An important example of improved dissemination efforts is the annual publication of *Health, United States*, a report mandated under the Health Services Research, Health Statistics, and Medical Libraries Act of 1974. The report, compiled jointly by NCHS and NCHSR, comprehensively addresses selected health issues and relies on data sources throughout HEW.

Published statistical documents, however, often do not contain sufficient detail for research and policy analyses. Computer tapes designed for public use provide the greatest flexibility to users because they contain fully disaggregated microdata with individual identifiers removed. Obtaining computer tapes of disaggregated data, which are not routinely made available by the sponsoring agency, presents many difficulties for analysts. If special computer programming is required to merge data from several files, insurmountable problems may be encountered.

The statistical system of the Medicare program in HCFA illustrates problems of data availability. Four basic data files, the enrollment file on eligible beneficiaries, the file on certified facilities, the hospital and skilled nursing facility use record, and the physician payment record, form an extensive data base. These files can be linked through provider and beneficiary identifiers and could potentially produce a wealth of information for health care researchers and decisionmakers. Operating statistics, such as aggregate reimbursements by number of beneficiaries, are published monthly in the Social *Security Bulletin*.

Ietin, and, periodically, summary volumes are produced for public use. Special statistical tabulations are difficult, however, to obtain from these data. Thus a single user—the Medicare program—defines what information is extracted from this large data base.

The Medicare program does attempt to accommodate the needs of other Federal programs and users. A special staff is maintained in the Office of Policy, Planning, and Research (OPPR) in HCFA to respond to individual requests. In 1978, over 2,000 requests for data were promptly answered (6). In addition, the first set of statistical tables specifically designed for use by local-area PSROS and planning agencies was generated in mid-1978 from the Medicare statistical system. Years of planning preceded the publication of this initial set of statistical tables that contained data for 1975. This lack of timeliness results partially from the technical problems of linking and merging large data files.

Administrative priorities within the Medicare program also function to constrain the ready availability of data. Because statistical projects do not directly aid the primary mission of the Medicare program, administrators who are involved with daily program operations are sometimes unaware or unconvinced of the contribution that statistical efforts can make. As a result of increasing budgetary controls, administrative policy often dictates that statistical operations have a low priority. Consequently, the research office within the Medicare program, itself, has had periodic difficulties in obtaining computer services for inhouse statistical analyses, and computer time for users outside the Medicare program has been extremely limited. Outside work is permitted only when it does not interfere with program-related activities, and restrictions protecting the confidentiality of information preclude the release of unedited computer tapes (1). Under the reorganization that established HCFA in 1977, computer services for the Medicare statistical program remained in the Social Security Administration (SSA). SSA does not have a formal statistical service function. The necessity of crossing bureaucratic lines to obtain data will probably increase problems of availability in future statistical projects.

Like the Medicare statistical system, most other Federal statistical activities are components of larger programs. Programmatic statistical and data processing units increase the utility of data tabulations and analyses for programmatic needs. Data usually are gathered in response to expressed management interests; consequently, definitions and data categories are tailored to specific problems. However, the availability and responsiveness of data decreases for users outside the organization. In light of the fact that each program must pay for statistical services within the constraints of its overall budget, statistical output and analyses not directly related to the program cannot be justified.

Even if a health data system is operated by a statistical agency, the program that funds it determines its scope and viability. The National Reporting System for Family Planning Services (NRSFPS) illustrates this point. As previously described, NCHS began operating this system in 1972 because no single agency had responsibility for the diverse Federal programs related to family planning services. Since 1972, most family planning projects have been administratively reorganized under the Bureau of Community Health Services (BCHS) in the Health Services Administration (HSA). Although the Planned Parenthood Federation of America, a private organization, was a primary user of NRSFPS, BCHS became its main source of funding. In 1976, BCHS paid three-quarters of the total \$1 million cost, NCHS funded the remainder and provided staffing.

A report by the General Accounting Office (GAO) in 1975 questioned the utility of data produced in NRSFPS (46). It found that reports often were incomplete, inaccurate, and tardy, and that many family planning projects did not participate in the system. Moreover, KHS had no programmatic need for the detailed clinical data provided by

the system because the management needs of BCHS are met through another reporting system. As a result, BCHS recommended adoption of a more economical sample system that would permit better quality control. In 1977, the NRSFPS was converted to a sample system; some observers question its continued survival (47).

Under the Budget and Accounting Procedures Act of 1950, OFSPS has the authority to issue regulations for the improved analysis, publication, and dissemination of statistical information. OMB is mandated under the Federal Reports Act to ensure that information collected by Federal agencies is tabulated to maximize the usefulness of information for other Federal agencies and for the public. OMB also has authority to require sharing of information among agencies.

Although both OFSPS and OMB have responsibilities for statistical activities across the Federal Government, neither organization has sufficient staff resources to adequately address the problems of access in the area of health data. Furthermore, OMB'S involvement comes only when an agency seeks clearance for a data project. In the example of the family planning reporting system, OMB did hold several special hearings before approving conversion to a sample system. However, OMB'S powers primarily reside in its ability to disapprove projects. OMB cannot force an agency to collect data for which it has little or no use.

Improvements in data responsiveness and availability for the spectrum of users are necessary to obtain maximum utility from data that are collected in the Federal statistical system. Examination of a conceptual framework would allow identification of potential users for various types of data. In addition, user requirements for reporting levels and periods, timeliness, and other data specifications could be analyzed. If a central organization with adequate resources and sufficient authority over agency statistical activities was established, it could implement the results of such analyses. In addition, data collection activities could be modified to meet the needs of multiple users. Arrangements also could be made for sharing data among programs, and computer tapes with appropriate specifications for authorized users could be provided automatically.

Excessive time lags in availability of data could be reduced if necessary resources, such as personnel and computer services, were partially controlled by a central organization. If demands for statistical information were justified, additional facilities and manpower could be provided to the agencies processing data. Alternatively, processing of multipurpose data could be done centrally in facilities designed for such purposes. Confidentiality provisions restricting use of agency data should be considered carefully under the latter alternative.

CENTRAL COORDINATING UNIT

There is a clear need to assign formal responsibility for the functions relating to the coordination of Federal health statistics. Agencies that independently operate programmatic statistical projects can neither resolve interagency jurisdictional disputes nor comprehensively address systemwide needs. Institutionalizing the coordinative functions within the Federal bureaucracy will not solve all the problems associated with the fragmentation of the health statistical system. The complexity and breadth of Federal health programs make solutions that are easy and widely accepted extremely difficult to attain. Delineating clear lines of authority regarding statistical matters, however, would provide the basis for more rational, knowledgeable, and impartial decisionmaking.

The Regulatory Policy and Reports Management Division in OMB and the Office of Federal Statistical Policy and Standards (OFSPS) in the Department of Commerce together have sufficient statutory authority to conduct coordination activities. Their responsibilities extend over the entire Federal statistical establishment; yet, they have not had the necessary resources for extensive involvement in subject areas or the data activities of individual departments. Reconstituting these offices only to improve statistical operations in the health area is not a realistic option. The Commission on Federal Paperwork recommended that these offices should be strengthened and continue to monitor departmental actions. However, the Commission also recommended assigning planning and coordinating responsibilities to focal organizations within each department (23, 24).

There are a number of advantages to vesting authority over statistical matters in a central coordinating body within HEW. An organization clearly responsible for coordinating statistical activities could at least ensure that appropriate activities are undertaken. A necessary degree of continuity and public accountability also would be provided by institutionalizing coordination responsibilities. The coordinating unit could serve to encourage data users to participate in the Federal health statistical system. Users could depend on this central coordinating body both to learn about the availability of data and to mediate conflicting needs. The central unit could advocate and help ensure balance and comprehensiveness in the Federal health statistical system.

A potential disadvantage to centralizing coordinative functions is decreased responsiveness to the substantive needs of program managers. Giving planning powers for statistical operations to staff in an office that does not use data could reduce the relevance and utility of the data collected. Professional statisticians are experts in the methods of data collection, not in the use of statistics for decisionmaking purposes. Consequently, trade-offs may be necessary between coordination and efficiency and programmatic responsiveness.

Characteristics

A strengthened coordinating and planning unit within HEW should embody three basic characteristics: sufficient authority to impose decisions on agencies, the necessary statistical and analytical capabilities to conduct activities requiring technical expertise and judgement, and adequate resources to build a viable core effort.

The coordination activities that require authority over Federal agencies are shown in table 3. Statutory authority for such activities already is provided by the Federal Reports Act and the Budget and Accounting Procedures Act (2, 4). These authorities could be delegated either legislatively or administratively to an HEW coordinating unit. To exercise its authority effectively, the coordinating body should also have final responsibility for, and control over, the statistical budgeting and the forms clearance procedures. The ability to approve, veto, or reallocate resources among data collection projects is crucial for setting priorities and planning rationally for a Federal health statistical system. Moreover, giving control over the existing administrative tools to the coordinating body would expedite the implementation of its decisions.

Table 3 also shows those coordination activities requiring technical skills. Planning, managing, and coordinating the health statistical system is a staff function, and therefore, the quality and competence of personnel is essential. A critical level of manpower is necessary to accomplish the various tasks associated with coordination activities. HEW is bureaucratically complex, technically diverse, and politically dynamic. Staff of the coordinating office need to be isolated from both operational and organizational pres-

Table 3.—Coordination Activities**Activities Requiring Authority Over Federal Agencies**

- Collect complete information on health data projects from Federal agencies.
- Establish priorities for data collection projects.
- Designate appropriate agencies to collect health data.
- Modify, combine, or terminate data collection projects, or parts thereof, as necessary.
- Initiate new data collection projects.
- Determine and implement standards for terms, definitions, codes, and units of measurement for use in health data projects.
- Determine and implement uniform minimum data sets where appropriate.
- Release health data and statistical information to appropriate users.
- Detail technical support to agencies.
- Allocate supplemental funds and manpower among agencies for data collection, processing, analysis, dissemination, and publication.

Activities Requiring Technical Capabilities

- Develop conceptual framework for health statistics.
- Collect and maintain information about health data projects.
- Respond to requests for information about health data collection activities and data availability.
- Examine existing data collection projects for duplication and inefficiencies.
- Analyze alternatives for data collection to determine most cost-effective methods.
- Conduct technical reviews of data projects for statistical methodology and quality; propose alternative methodologies if suitable.
- Develop standards for terms, definitions, codes, and units of measurement used in health data projects.
- Identify user problems in areas of data responsiveness and access.
- Provide statistical and other technical services for agencies.

tures. Addressing the lack of coordination in Federal statistical activities, past commissions have stressed the necessity of leadership by strong, independent professional staff (15, 23, 24).

Adequate funding and staff resources are the third prerequisite for building an effective coordinating unit. To utilize existing statistical programs to the fullest possible extent, supplemental funds should be appropriated for discretionary use by the coordinating unit in an effort to realize systemwide goals. Such funds would support core staff, provide extra resources to meet emerging statistical needs and fill gaps, and permit flexibility in arrangements for integrating data sources and sharing data among programs.

In addition to a special appropriation, the central organization could manage funds now allocated for the performance of multi-purpose data collection. At present, each agency determines its own statistical needs and funds activities from its programs' budgets. If an agency conducting a data project is also the sole Federal user of the statistical product, that agency should fund and operate the data project. However, if statistical information can be used by a number of agencies, the data project's operating costs should be shared. Channeling funds for such data systems through a central organization would facilitate the equitable distribution of costs for data collection, processing, and dissemination among various Federal users. Federal agencies can now, and sometimes do, reimburse one another; but the necessity of negotiating and signing formal agreements prolongs and complicates the process. If the central coordinating unit had the authority to allocate funds, it could create an ongoing, simple administrative mechanism for exchange among agencies and non-Federal public and private users.

The central organization should not only receive and disburse funds but also provide statisticians on an as-needed basis to agencies requiring technical assistance in survey design, computer programming, or special analyses of data. Restrictions on agency staffing

levels by the personnel system of the Federal Government currently limit opportunities for transferring staff to different agencies as their programmatic needs change. Designating specific staff positions in the central coordinating unit for such roving assignments would alleviate this problem.

Location

A number of offices within HEW could possibly assume responsibilities for coordinating health statistics. The offices described below as possible alternatives should not be considered mutually exclusive. Placing authority with several offices may be appropriate. Some activities for coordinating health statistics are already performed by offices in HEW. Different offices could be delegated responsibilities for activities requiring authority over substantive program agencies and for activities requiring technical capabilities. No office now performs all the necessary tasks, and therefore, additional staff and funding would be required regardless of which office or offices are selected. The fundamental requirement in assigning responsibility is an unambiguous mandate to manage health statistics.

A New Office Within the Office of the Secretary. Establishing a new staff office that reports directly to the Secretary of HEW would highlight the importance of coordinating health statistics. Location in the Office of the Secretary would both facilitate necessary negotiations with agencies outside HEW that collect health data and provide the necessary jurisdiction over the HEW bureaucratic hierarchy. An office whose sole function is to coordinate health statistical activities would have no competing tasks and programs to interfere with the fulfillment of its mission. Its decisions would not be biased by programmatic interests. However, the risk of politicizing coordinative activities is increased if they are located in the Office of the Secretary. In addition, attracting skilled and knowledgeable personnel to an office without an established statistical and analytical reputation may be difficult, and building adequate resources is a lengthy process.

The Office of the Assistant Secretary for Management and Budget (ASMB). This Office has established ongoing relationships with the principal operating components in HEW as well as with other departmental staff agencies. ASMB is responsible for making recommendations to the Secretary concerning the allocation of budgeted funds to all programs in the Department. It also advises the Secretary on matters relating to the delegation of legislative authorities to HEW agencies. ASMB now functions as the final reports clearance office for HEW. It also has major responsibilities in the area of automated data processing. The Commission on Federal Paperwork has recommended that units coordinating the several functions relating to information resources management be placed in offices, such as ASMB, that are responsible for general management (23). A possible disadvantage of placing such units in ASMB is that this Office is budget-oriented and might give statistical matters only secondary attention.

The Office of the Assistant Secretary for Planning and Evaluation (ASPE). Like ASMB, ASPE is a staff office to the Secretary that has established communication lines with agencies throughout HEW. It has experience in conducting objective policy analysis, planning, and evaluation. However, in the area of health statistics, its responsibilities have been limited. Before their transmittal to the Secretary, it reviews and comments on major new data projects originating from the health bureaucracy. ASPE also conducts some basic methodological research in the statistical area. ASPE'S major responsibility is planning departmental initiatives for health programs and, therefore, it has some substantive interests. As a result, it might not be impartial if it had responsibility for determining statistical priorities among all programs.

The Office of Statistical Policy (OSP). The Public Health Service (PHS) is the principal operating component of HEW that is concerned with health matters; it operates the great majority of health statistical projects. OSP, as a staff office to the Surgeon General, relates closely with the six PHS agencies. It is the final PHS reports clearance office. Furthermore, the Office now serves, at least nominally, as the departmental focal point for the coordination of health data and statistical policy. The ability of OSP to effectively arbitrate disputes among agencies over statistical matters may be hindered, however, by its position in the same administrative level as other operating components of HEW.

The National Center for Health Statistics (NCHS). NCHS is also in a staff office to the Surgeon General. The advantages and disadvantages of its placement within the bureaucracy are similar to those of OSP. NCHS is described separately because it has the largest number of health statisticians in HEW. For coordination activities requiring technical capabilities, it is the logical agency within which to place such responsibility. Furthermore, PHS has stated that NCHS should function as the key agency for coordinating the collection of health statistics (31). NCHS now administers two programs designed to improve the efficiency and coordination of health statistics: the Cooperative Health Statistics System (CCHS) and the Reimbursable Work Program (RWP). Also, legislation passed in the 95th Congress, Public Law **95-623**, apparently authorizes new responsibilities for NCHS in relation to setting standards and coordinating health statistical activities. In the past, however, NCHS has been unable to fulfill the coordinating role adequately (26). Agencies collecting data have sought advice from NCHS at their own discretion and on an irregular basis. Because NCHS itself operates large data collection projects, its ability to be impartial may also be questioned.