

VITAL and HEALTH STATISTICS

DOCUMENTS AND COMMITTEE REPORTS

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**Report of the
Fifteenth Anniversary
Conference
of the United States National
Committee on Vital and Health
Statistics**

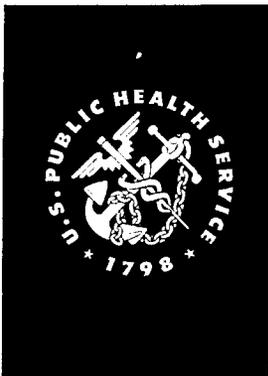
Review and evaluation of past activities of the
Committee with suggestions for future study in
demographic, health, and medical-economic statis-
tics.

Washington, .D.C.

June 1966

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
John W. Gardner
Secretary

Public Health Service
William H. Stewart
Surgeon General



NATIONAL CENTER FOR HEALTH STATISTICS

FORREST E. LINDER, PH. D., *Director*
THEODORE D. WOOLSEY, *Deputy Director*
OSWALD K. SAGEN, PH. D., *Assistant Director*
WALT R. SIMMONS, M.A., *Statistical Advisor*
ALICE M. WATERHOUSE, M.D., *Medical Advisor*
JAMES E. KELLY, D.D.S., *Dental Advisor*
LOUIS R. STOLCIS, M.A., *Executive Officer*

OFFICE OF HEALTH STATISTICS ANALYSIS

IWAO M. MORIYAMA, PH. D., *Chief*

DIVISION OF VITAL STATISTICS

ROBERT D. GROVE, PH. D., *Chief*

DIVISION OF HEALTH INTERVIEW STATISTICS

PHILIP S. LAWRENCE, SC. D., *Chief*

DIVISION OF HEALTH RECORDS STATISTICS

MONROE G. SIRKEN, PH. D., *Chief*

DIVISION OF HEALTH EXAMINATION STATISTICS

ARTHUR J. MCDOWELL, *Chief*

DIVISION OF DATA PROCESSING

SIDNEY BINDER, *Chief*

CONTENTS

	Page
Introduction -----	1
Dr. Robert Dyar, Chairman-----	1
Background-----	2
Dr. Halbert L. Dunn-----	2
Review, Evaluation, and Recommendations-----	2
A. Demographic Statistics-----	2
Presentation by Dr. Taeuber-----	2
Presentation by Dr. Kirk-----	4
Marriage and Divorce Statistics-----	4
Natality Statistics-----	4
Mortality Statistics-----	5
Population Projection and Estimates-----	5
Data for Negroes and Other Nonwhite Persons-----	5
Illegitimacy Data-----	5
Family Statistics-----	5
Use of Agencies Outside Government-----	6
Need for a Better Vital Statistics System-----	6
Discussion -----	6
B. Health Statistics-----	7
Presentation by Dr. MacMahon-----	7
Discussion -----	8
Presentation by Dr. Densen-----	9
Discussion -----	9
Other Study Proposals-----	11
C. Health Resource and Service Statistics-----	11
Presentation by Dr. Anderson-----	11
Discussion -----	12
Presentation by Mr. McNerney-----	12
Discussion -----	14
Committee Functions and Procedures-----	15
Committee Functions-----	15
The Committee Mechanism-----	16
External Relationships of the Committee-----	16
Conference Summary-----	17

CONTENTS—Con.

	Page
Appendix I	
Past and Present Members of the Committee-----	18
Observers and Guests of the Committee-----	21
Appendix II. Recommendations of Study Topics-----	22
A. Demographic Statistics-----	22
B. Health Statistics-----	23
C. Health Resources and Services-----	24
D. Committee Functions, Structure, and Procedures-----	25
Appendix III. Functions of the Committee-----	26

THIS REPORT is a summary of the discussion that took place at the 15th Anniversary Conference of the U.S. National Committee on Vital and Health Statistics. Present and past members of the Committee met to review and evaluate past activities with special attention given to major gaps in the program. This overall review was undertaken for guidance of a future program to include subject matter areas neglected in the past, those needing renewed attention, and those related to new areas resulting from changes of interest in and emphasis on demographic and health statistics. Evaluation of and suggested changes in functions and procedures of the Committee were also outlined.

Suggestions for study in demographic and health statistics included mechanisms to facilitate research in these fields—such as a population register, a universal birth number, and a type of national archives. Attention should be paid to methods for obtaining answers to current questions in natality and for greater understanding of differentials and changes in mortality. Improvement in coverage of marriage and divorce statistics and more vital and health statistics for small areas are obvious needs. Other ideas for studies included relation of migration and health, epidemiologic uses of vital and health statistics, and their uses in program planning and evaluation.

Fundamental questions exist about health resources and services, as, for example, medical care payment, measures of quality, types of flow within the health service system, and translation of consumer needs into estimates of needed personnel and facilities. These and many other questions are being raised by both the market and consumers of medical services.

FIFTEENTH ANNIVERSARY CONFERENCE

OF THE UNITED STATES NATIONAL COMMITTEE

ON VITAL AND HEALTH STATISTICS

Past and present members of the U.S. National Committee on Vital and Health Statistics, a technical group advisory to the Surgeon General of the U.S. Public Health Service, met in Washington, D.C., on December 14 and 15, 1964, to commemorate the 15th anniversary of its creation by assessing its record and planning for its future. Former and present Committee members and those who attended the anniversary meeting are shown in Appendix I. The present document, summarizing the discussions that took place over these 2 days, is structured according to the agenda that was followed.

Material in this report was selected and summarized from the verbatim record by John Storck, Ph.D., Division of Vital Statistics. Occasionally the order of discussion has been rearranged to bring closely related topics together. A few quotations from the verbatim record have been edited slightly for purely verbal reasons. Suggestions for future study topics are summarized in Appendix II.

INTRODUCTION

DR. ROBERT DYAR, *Chairman*

Dr. Dyar opened the meeting with three actions of respect: he named the Committee's predecessor chairmen (Dr. Lowell J. Reed, Dr. Philip M. Hauser, Mr. Pascal K. Whelpton, and Dr. Brian MacMahon); he noted with regret that death deprived the conference of three former Committee members (Dr. W. Thurber Fales, Mr. P. K. Whelpton, and Dr. Harold F. Dorn); and he greeted two guests (Mr. F. Fraser Harris, Director of the Health and Welfare Division of the Canadian Dominion Bureau of Statistics, and Dr. Ruth R. Puffer, Chief, Health Statistics Branch of the Pan American Health Organization).

Dr. Dyar called attention to the uniqueness of the Committee: it is multidisciplinary (an

unusual concept 15 years ago); it provides a means for vital and public health statisticians to cooperate with sources and users of their data; it conducts no statistical programs of its own, has no authority except its judgment, and endeavors only to be constructively responsive to questions posed by others in the public health and medical fields; and it is part of an international movement, since some 50 countries have the same or similar framework.

It is the purpose of this conference, Dr. Dyar observed, to discuss forward-looking possibilities for the consideration of the present Committee.

Perhaps we should modify our activities and interests to meet the challenge of new problems. What issues should we face? What new subjects should we consider? What methods and procedures should we use?

BACKGROUND

DR. HALBERT L. DUNN

Dr. Dunn reminded the group that the International Conference for the Fifth Decennial Revision of the International List of Causes of Death recommended in 1938 that the United States continue its studies of the statistical treatment of joint causes of death. The resulting United States Committee on Joint Causes of Death included among its members and consultants experts from the United Kingdom, Canada, and the Health Section of the League of Nations. This Committee "realized that the big job was to . . . produce an international list of causes of illness which was in some way linked directly with the causes of death."

The Sixth Decennial Revision Conference held in 1948 substantially accepted the Committee's proposal and gave the world the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*.

The U.S. Committee on Joint Causes of Death had succeeded, Dr. Dunn observed, through a broad interpretation of its mandate and because it had included in its deliberations a wide representation of experts interested in establishing a morbidity classification. The effort had been so successful that, Dr. Dunn remembered, it was felt that a similar mechanism was needed to tackle future problems. The proposal for the establishment of national committees on vital and health statistics or its equivalent, a subject of heated discussion, was finally adopted. As Dr. Dunn put the matter once: "If this were to be done, the conference would have to request nations to undertake such actions, since international protocol would be necessary for nations to work on international technical problems."¹ The strength of national committees on vital and health statistics, Dr. Dunn concluded, is "in granting complete freedom . . . to technical peo-

¹Dunn, H. L.: Objectives underlying future patterns of work of national committees on vital and health statistics. *Bulletin of the World Health Organization*. Vol. 11, No. 1-2, Geneva, Switzerland. World Health Organization, 1954. p.159.

ple." That freedom, of course, is confined to making recommendations concerning technical matters.

REVIEW, EVALUATION, AND RECOMMENDATIONS

The substantive activities of the Committee were considered by the Conference under the following headings:

- A. Demographic statistics
- B. Health statistics
- C. Health resource and service statistics

A moderator introduced each of these topics; and separate presentations were made by two discussants, after which the topic was thrown open for general consideration. Each topic, preceded by a short introduction based on the remarks of the moderator, will be treated here in terms of the two presentations and the ensuing discussion. In a few places the discussion has been added directly to the eliciting presentation.

A. Demographic Statistics

Moderator: Dr. Elbridge Sibley
Discussants: Dr. Conrad Taeuber
Dr. Dudley Kirk

Prior to 1946, Dr. Sibley observed, the numerators and denominators of vital rates were located in the same organization—the Bureau of the Census. Since then the numerators have been located in the Public Health Service.

PRESENTATION BY DR. TAEUBER

Dr. Taeuber emphasized two aspects of the country's demographic statistics: they are a byproduct of administrative statistics, and their improvement sometimes has depended on statistics that are produced by a unique Federal-State relationship involving the cooperation of many units with varying interests and resources. On occasion the Committee has recognized that some demographic needs can best be met by private agencies.

Accuracy and completeness in the registration of vital events have been an early and continuing concern of the Committee, which has strongly

emphasized the need for central tabulation of national vital statistics from copies of the original records. It also has stressed the need to provide technical services to State vital statistics offices.

There was considerable discussion of the need to improve the accuracy of information on vital records. The Iowa study to evaluate the reporting of congenital malformations on birth certificates by matching with hospital records was mentioned. It was noted that hospital records also needed checking; even within one clinical record there can be discrepancies.

The Committee has encouraged completion of marriage- and divorce-registration areas. There is urgent need for more adequate marriage and divorce statistics, including statistics on family formation and dissolution.

We need to know more about the relationship between marriage and the rate of household and family formation. . . . In many instances a marriage reduces the number of households. . . . Divorce . . . may lead to the establishment of two households where there was only one before.

We need to know more about the remarriages of divorced and of widowed persons, about the impact of divorce and widowhood on fertility, about the relationship of marital status to death rates.

With respect to timeliness of publication, Dr. Taeuber held that

We have passed the time when the analytical uses to which statistics could be put were such that it didn't matter much whether the materials were up to date. . . . Perhaps we need to give more attention to the possible contributions of sampling and advance reports in order to keep abreast of rapidly changing developments.

He pointed out that the recommendation to use a sample of birth records to make some data on fertility available long before the regular timetable would permit had not been implemented. In the discussion it was suggested that this proposal, as well as the currently collected 10-percent mortality sample, may now be obsolete in view of "... substantial progress made in speeding up the tabulation of the full annual materials."

Dr. Taeuber noted a considerable broadening of interest in demographic statistics combined with

the need for data pertaining to areas better suited to analytical uses than the traditional administrative areas. Areas such as the concept of standard metropolitan statistical area and the concept of rural and urban areas need to be more carefully defined for statistical uses. "The mechanics of coding addresses to such units as census tracts or city blocks are far simpler than they were even a few years ago."

Dr. Taeuber also considered "... the social and economic background in which birth and death occur." After referring to questions that were raised about accuracy of occupational entries on basic records and their comparability with census records, he pointed out that the Committee's alternative of educational attainment had not met with general acceptance among the registration areas.

The Committee had given little attention to the underregistration of deaths, to the possible effect of age biases in reporting deaths, or to the results that might follow from adjustment of census figures and population estimates. In general, he concluded,

Much more attention needs to be given to the circumstances that contribute to error or the absence of error in the preparation of original documents.

The Committee, in common with others, has paid no attention to internal migration, which

is of great importance to the public health analyst and is a major element for the demographic analyst. Migration . . . is frequently related to health conditions in both the areas of in- and out-migration. Marriage very frequently involves migration on the part of one or both parties. Birth and death rates are subject to considerable error unless migration is taken into account.

The Committee has shown little concern for the social and economic correlates of mortality, for such phenomena as changing and even increasing mortality at the older ages, for continuing mortality differences among population subgroups, or for the relatively low mortality of nonwhite persons among the aged. We know too little about family and household characteristics of people who die.

Dr. Taeuber reviewed the Committee's extensive studies of needed improvements in fertility statistics and noted with satisfaction that a recommendation favoring more analysis "... in the first instance by the staff that prepares the statistics" is now being implemented.

Illegitimacy has been neglected—its distribution in the population, the rate at which it occurs, its geographical variability.

In spite of considerable concern with population projections, there is still a need for more appropriate techniques, perhaps requiring extensive computations which are now within the reach of the computer. Especially difficult is the task of getting current estimates of the population of small areas such as counties, which are essential for obtaining rates for these areas. In the ensuing discussion a conferee mentioned a national coordinate system for locations that was being worked on around 1940 by the Bureau of the Census and the Post Office Department.

The Committee's endorsement of a quinquennial census has as yet produced no effect. In the discussion a conferee questioned whether even a complete population figure for local areas would give the local health statistics the base that is needed if it were available only every 5 years. It is understood that demographic data to be gathered would be limited to a few items, and in any event conditions could change greatly in a few years. Local household surveys that are beginning to approach the National Health Survey appear to be needed to supply information required to handle local-area health programs. Admittedly results might be spotty and might not reach all service programs. The little places would probably be left out.

PRESENTATION BY DR. KIRK

Dr. Kirk discussed in turn the four types of vital statistics of concern to demographers—marriage and divorce, natality, mortality, and population projections and estimates; three special problems—data for Negroes and other nonwhite persons, illegitimacy, and family statistics; and two broader questions—how governmental organizations should be related to outside agencies, and need to improve the vital statistics data system itself.

Marriage and Divorce Statistics

Marriage and divorce statistics together with natality and mortality data should be full partners in the vital statistics system. Marriage should enter, no less than age of mother, as an important factor in natality analysis. Perhaps no other vital statistic is more significant to business users than the marriage rate. "The number of children is perhaps more properly considered as a function of the marriage than it is of the woman." We need better measures of the changing age at marriage, cross-tabulations of husbands and wives, trends in residential origin of mates, age-adjusted rates for populations eligible for marriage or at divorce, and marriage attrition tables.

Natality Statistics

Dr. Kirk noted, "great progress ... under the leadership of this Committee ... [which] resulted in revolutionizing the reporting, tabulations, and analysis of natality statistics." However, the gains are partial:

These new developments are a valuable contribution to inquiry into the sources of observed changes in fertility, but they do not resolve the question of determining the contemporary trend in fertility. To that extent the new measures are a failure.

Short-range forecasts must bring marriage into the equations. First births are closely connected with time of marriage—90 percent occur within 5 years of marriage, and a good deal more than half of that 90 percent occur within 24 months of marriage. This means that date of marriage should be added to the birth certificate. In the ensuing discussion a conferee with registration background suggested that certificates be used as a sampling base for gathering needed information in lieu of adding items to them. It was noted that the National Center for Health Statistics currently is conducting special studies using samples of certificates as initial information sources to query for additional data. Also suggested was "... a medical record of birth which would be separate from the legal record."

Data on expected family size, future births, and further surveys on family planning are also needed. It may be difficult for a government agency to make this last kind of inquiry. However, there are reasons associated with the transition from oral to intrauterine contraceptives which make 1965 an excellent year for a study of family planning programs.

A conferee pointed out that in one study of expectation and performance with respect to pregnant white women, a large proportion were not using contraceptives; among those who were using them the older women took longer to become pregnant. "There are so many things involved that it is really a miracle to . . . come up with anything that really approaches something useful." In the words of another conferee, ". . . we have no really very good studies."

Mortality Statistics

It is important to find out why there have been little or no gains in age-specific mortality since 1954. Involved in the comparisons that might answer this question are difficult statistical problems with which the Committee should be concerned. Even the fundamental data—the ages at death in the numerators and the age-specific distributions in the denominators—need to be questioned. Perhaps an intergovernmental study is needed.

More work is needed on the reasons for higher mortality of males; on problems of perinatal and infant mortality (although the Committee has been active here), including such things as the statistics on induced abortion; and on genetic studies of hereditary diseases and defects.

Population Projection and Estimates

"The history of population projections is not a distinguished one," to which cohort fertility and other recent developments "have added very little." The Committee needs to be concerned with this problem.

Current estimates, especially for the geographic divisions of the country, lack the most crucial element—migration. "The crucial variable . . . is now not births, not deaths, but migration."

Although the rate of natural increase for about 95 percent of the States is usually between 1 and 2 percent per year, the population change for the States has ranged from minus 7 percent to over 75 percent in the decade 1950-60. "The Committee should regard migration . . . as a priority item even though there may be some question as to whether migration is a vital statistic."

There is the possibility now with electronic computation of quite elaborate regression procedures using a whole battery of measures, such as school enrollment, social security records, telephone listings, utilities, construction data, births, deaths, and historical experience.

Dr. Kirk next discussed three specific data problems not confined to the particular areas considered before.

Data for Negroes and Other

Nonwhite Persons

Bogue (University of Chicago) has estimated that the 1960 census shows an 8.1 percent undercount of Negro males, with a 3.7 percent undercount of females. By age, there is an estimated undercount of 15 percent for males aged 20-29 and an overcount of 29 percent at ages 75-79. In short, these figures are "a mess," needing study.

The Committee should also continue to exercise a watchdog function in keeping so important an item as color or race on the basic documents.

Illegitimacy Data

The rise in illegitimacy rates over recent decades creates serious problems in health and demography, and there are many statistical problems connected with these data.

Family Statistics

The situation is not yet ready for a comprehensive system of family statistics, but the Committee should begin to explore ways of getting usable family statistics.

Dr. Kirk next turned to two broader questions.

Use of Agencies Outside

Government

There is a growing need to recognize the importance of cooperative work with outside organizations. A conferee later suggested that the Committee explore the responsibility and the role that these organizations might assume.

Need for a Better Vital Statistics System

We need another kind of system—one especially that can cope with migration. The country "is going to have to come to a population register system" even though there are massive problems in establishing and maintaining it. The Committee should review the operation of such systems elsewhere, it should consider how electronic methods might facilitate its operation, and it should explore the legal problems that are involved.

With a register "the effects of migration and current population estimates...are intrinsic in the system.... The longitudinal record is on the books...and related kinds of longitudinal documents" could be created like "a basic medical record for individuals." At present "there are fragments...of records or registers of the population of the United States"; besides vital statistics records, there are census, Social Security, and Internal Revenue data which are too diverse for a genuine population register.

Discussion

Because of the magnitude of the problem and the technical difficulties that would have to be solved, it was suggested that sampling studies might better be used than a population register. Another conferee emphasized "the terrific burden" that would be placed on the population and added that the plan of a population register would "create for scientific purposes a police activity." It was suggested that registration might have an award attached to it. Another conferee saw no objection to the Committee making the three studies Dr. Kirk had envisaged [of register systems now in use, of new electronic possibilities, of legal problems connected with a register]:

But if the Committee is going to work at this, first I'd rather have them decide what the system is for, and I don't think the Committee can come up with an agenda, a menu of purposes that this thing would serve that would make it useful.... Let's assume it worked.... What have you got in there to start with, and what do you want to do with it that's any good? I can't think of any statistical operation in which the ratio of yield to cost is as unfavorable as it probably is in this situation.

Small-area population statistics were cited as a major area in which a population register might prove useful.

In the course of the discussion the birth-number concept was briefly described. Proposed around 1950, it was not adopted by all of the registration areas, and it has been dropped by quite a few areas since then because it was not used. A Public Health Conference on Records and Statistics study group is now working on this problem of record linkage. This group is considering the merits of an index of deaths to be used for death clearance.

Mr. Harris described the Canadian uniform numbering system for all births, deaths, and marriages, which is associated with the national family allowances program. It covers all persons born after 1925, and in some provinces it extends back into older records. In Quebec, especially, the birth number will be made

an all-purpose number to be used as the actual filing framework in certain social security programs and as a central number cross-referenced to the actual filing numbers in others.

The Canadian birth number has been used to match cohorts of marriages with births, identifying marriages consanguineous at the first cousin level with subsequent linking of infant deaths to study death and handicapping-condition differentials. Such studies need not stop here. Thus Newcombe (Canada) has studied the degree to which stillbirths and infant deaths tend to be replaced within stated periods for given characteristics of mothers.

A total linkage system also would enable the translation of case-basis hospital records into person-basis statistics. This could result in differential predictions regarding future hospital stays of groups having different prior hospital experiences.

With respect to the need for a total population register in Canada, Mr. Harris reported that the proposal under consideration

is not to register the whole population from scratch and then move it forward in the form of a population register but to take advantage of the records that do exist mainly in the health field and to use some common numbering system such as the birth number to link these together in such a way that one will, in fact, have... something that quite closely would resemble a population register.

For example, changes in address would be picked up automatically by the system (as from the post office or other agencies), and the record could easily be updated without requiring individuals to report a change of address.

B. Health Statistics

Moderator : Dr. Forrest E. Linder
Discussants: Dr. Brian MacMahon
Dr. Paul M. Densen

Dr. Linder introduced the discussants by suggesting that the topic to be discussed was concerned with what the entire country should be doing in health statistics and not just the National Center for Health Statistics and that the perspective should be international as well as national. Later Dr. Linder reminded the conferees that the international program of the National Center for Health Statistics is "... at a place where we can afford to stop and look around and see where we might go." Further, the Committee also is at a point of change. Over the past few years a great deal of work was put into revising the International List. With this activity approaching completion, the Committee "... has a chance to look around and see with what new and challenging ideas they might want to engage themselves."

PRESENTATION BY DR. MacMAHON

Dr. MacMahon dealt with the use of vital and health statistics for epidemiologic purposes. He noted, extending a phrase of Dr. Taeuber's "... that epidemiologic statistics are a byproduct of the demographic statistics that are a byproduct of the administrative statistics." To date, however, demographic improvements have been relevant chiefly to what might be called classical epidemiologic methods. As epidemiology has moved from hypothesis formation to hypothesis testing, there has arisen

the need for correlation of data on individuals rather than on populations. Studies involving vital records are often record-linked rather than record-dependent. They start or end with a vital record, but rarely is the vital record the sole source of information.

The need for tabulated data is reasonably well-filled, often by regularly published information and sometimes by special tabulations. Now, however, existing records must be supplemented by data from other sources that might be obtained from nonstatistical information appearing on these records—for example, the names of possible informants.

The issue of confidentiality of vital record information, the availability of personnel and resources at the record source, and whether the investigator has the item of information a particular State filing system requires for locating a certificate are matters of concern.

To deal with these central problems, Dr. MacMahon made two proposals for Committee study, one of which was

The desirability and feasibility of establishing a national archives of vital and health records in which would be preserved, in forms providing reasonable accessibility, as a minimum the birth and death certificate material now routinely sent to NCHS, but, additionally, basic records of other activities such as those of the National Health Survey and individual epidemiologic investigations.

Discussion

Various names were suggested for the proposed national archives of vital and health records, including "access file" and "National Center for Health Records."

There was doubt as to the accuracy and validity of such an accumulation—about "the value and the propriety of routinely collected information for epidemiologic purposes."

The minimum core of the national archives, one conferee noted, would be something like a national index of birth and death records. At its maximum it might become a repository for a vast number of different kinds of records, and questions of quality certainly would arise.

Dr. MacMahon replied that you at least might expect to learn, for example, the date and place of death of a person, thus opening up the possibility of locating a hospital record or some other source. In any event the vital records would not lose quality through being stored in a central place, and they would certainly be more accessible.

A conferee with registration experience doubted that a national index would be legally possible. As another remarked, to make individual records generally available "...would scare a State registrar to death."

As a second proposal Dr. MacMahon recommended that the Committee engage in

An examination of the issue of confidentiality of birth and death certificates and of the practicability... [of transferring] to the Federal government power to authorize use of birth and death certificate material for health studies.

A conferee stated that some registration areas are in such financial straits that they hide behind the confidentiality restriction to keep from filling research requests. This could be remedied, however, through financial grants to States to enable them to fill these requests. Another conferee held that what is needed is

A set of guidelines as to how... to carry out... statutory requirement of confidentiality of vital records plus the interest of the medical society and the fact that certain records might lead to liability of the physician that would end in court.

Also needed, another conferee observed, is to have funds coming from research fees go into a revolving fund set up for the purpose in the vital records operation within the health department. These funds could then be used to engage additional personnel needed to supply research needs. This would require new legislation in some areas.

It was suggested that the Committee might conduct a study of just what the confidentiality issue is, not only with respect to vital records but medical records in general. Another conferee warned, however, that giving the problem visibility might be destructive. It also was suggested that the Committee might consider generally how records could be made more usable for research.

As another broad area for Committee consideration, Dr. MacMahon instanced need for new data sources. Epidemiologic methods are being transformed for two reasons:

A change of subject matter to major concern with the chronic diseases, a need to look at low-level epidemics, diseases in which there is a long latent period between cause and effect, and for which development is insidious and diagnosis in the early states often difficult... [and] the potential in data processing equipment.

All existing data sources—vital records, morbidity reporting (including the National Health Survey)—need review from the viewpoint of epidemiologic utilization. Other data sources, such as model hospital reporting areas and model physician reporting areas, should be considered. In England groups of about 100 physicians each who know their base population agreed to keep uniform records of every patient they see, of the diagnosis, and of the treatment. In the United States there would be the problem of defining the population at risk.

A conferee agreed on the need for such groups, instancing physical rehabilitation and coronary heart disease as areas of application. While there is much work going on with respect to these problems, there are no community programs nor will there be any until we find ways, first, to control the incidence and, second, to work with

practitioners in the community who see this possibility.

Finally, Dr. MacMahon recommended that a program of epidemiologic studies based on the National Health Survey, similar in structure to studies based on vital records that we now have, should be considered. For example, a recent study of peptic ulcers, though useful for administrative and economic purposes, was only the start of an epidemiologic investigation, because there was neither a confirmation of diagnosis nor a separation from other types of ulcers (e.g., gastric or duodenal).

PRESENTATION BY DR. DENSEN

Dr. Densen dealt with the use of vital and health statistics in program planning and evaluation. He spoke first of the need for local-area health statistics, which might be developed, for example, by local household surveys modeled on and tied to the National Health Survey. For areas with large populations, such surveys could be coordinated with the National Health Survey, either to supplement it or sometimes to indicate that its values can be relied on for the area. When one comes to local neighborhood areas, however, we may need to develop the statistics further. The Committee should examine this whole subject of local-area statistics.

Discussion

Dr. Densen did not believe that the National Health Survey should expand its program as such into local areas. It should keep its national character. Local-area studies should be organized, however, to find out in what ways they differ from the national picture. While conforming in this manner with the national survey, they could also contain additional questions that depict the local scene in fuller detail.

It might be a good idea, also, for the National Health Survey to consider some kind of subsidization to local area surveys or at least some experimentation on tying the two kinds of surveys together.

Dr. Linder reminded the group that the Committee had developed the plan for a national

health survey which led to the passage of the National Health Survey Act of 1956. It might now study how local health surveys might be organized:

The strategy of them, the plan of them, how they are implemented . . . the various mechanical and organizational ways that they could be done, and . . . set up a constitution framework . . . as the Committee did for the National Health Survey 10 years ago.

It was suggested that the medical examination part of the National Health Survey might gain something by enlisting the cooperation of local physicians, as for example in determining the frequency of hernias, where there is little diagnostic variability. "Local health departments which are concerned with . . . bringing public health directly to the population, must find ways of working with practicing physicians of the community." Otherwise they are confined to the indigent population.

Mr. Woolsey cautioned against the use of national results to clarify local situations. "If there is a lot of money at stake they would probably need to collect their own data to get better information." On replicating the national survey, even on an independent basis,

the National Health Survey, and particularly the Health Interview Survey, seems to be discussed as a perfected instrument, and it is by no means such . . . We are in the midst of a program . . . of reappraisal of the whole survey to try to bring to bear the methodological research that has been carried out over the past 5 or 6 years and make such improvements as we can, and perhaps cut back on the objectives at points where we think that it is pretty evident that we are not accomplishing the job and don't yet know how to accomplish the job.

Perhaps attention should be shifted to chronic disability, for example, rather than to chronic morbidity. Also, it seems possible that disability is what health departments should be concerned with. "This represents our failures in the field of public health just as mortality does."

It was also pointed out that local surveys, differing from the national survey, would allow a great deal of experimentation. In particular, local surveys can ask questions that are directly related to service programs of the health department. To gain local support, household surveys must ask questions that are meaningful at the local level.

One method of cooperation would involve joint consideration of certain methodological problems by the National Health Survey and selected local surveys. Similarly, medical-care utilization could be studied by the Committee to see what approaches promise to be most useful.

Local-area surveys can study special groups—e.g., Puerto Rican migrants to the United States or Negroes migrating to Northern cities.

In the course of this discussion another problem was emphasized—the question of response error on surveys of the kind under discussion. In Dr. Linder's words:

There is an enormous field here for... methodological research work. We visualize this as perhaps a crisis in social science. More people are taking surveys of more things... asking people questions without any commensurate amount of work in trying to [test] the accuracy with which these questions can be answered or are answered.... I think these questions can be answered and the methods [of validation] can be developed, but it is certainly going to take a lot of effort to do it.

One conferee mentioned longitudinal observation as a means of evaluating survey results. Some time was spent inquiring what the word might mean. Is it enough that there is continued observation of a single panel? One conferee distinguished this type of observation, which he called a prospective study, from a true longitudinal study, "in which the intermediate steps form an important part of the analysis." It was suggested that the Committee might investigate this term.

Turning to another matter, Dr. Densen noted that the chief means now available for control of the increasingly important chronic diseases is comprehensive, high-quality, continuous medical care. Health departments are at least acting

as catalysts in providing this type of care, but what they urgently need are precise statistical measurements for measuring its effectiveness. Thus we need ways of describing the clinical and functional status of the patient when he enters the program; and we need measures of the effectiveness of alternative procedures.

For example, some hospitals tend to keep acute, nonfatal coronary occlusion patients about 15 days, while others average about 30 days. Which is the better procedure from the standpoint of the patient's subsequent experience? To answer this question we must start with similar patients; we must agree on the prognosis end points to be examined; we must know what we mean by "severity"; what measures of the impact of stay we shall use; how changes in functional capacity shall be arrived at.

But beyond this we are moving away from providing services through categorical disease entities to general medical care:

A general medical-care program is one in which the agency rendering the service to the eligible group assumes responsibility for the total health of those to whom it gives care.

According to what measures can one say that this approach provides better medical care than can be provided otherwise? Further, with one group of elderly people it was found that many of the things that are being done "are not in the clinical area at all but are more concerned with improving their capacity to cope with the exigencies of daily living." For example, they may need foot care. Therefore, there is need for some measure of functional capacity which might possibly be combined with clinical status:

What we need here is the equivalent of an early international list with a recognition that though the list may be imperfect, it will be better than what we now have in the sense that people agree to record things in similar fashion.

In the long run we need to determine what are "meaningful end points" based on epidemiologic

observation in relation to the different chronic diseases; only then "are we going to get measures of the quality of medical care in relation to its impact on the health status of the population." Earlier, Dr. Densen had remarked that mortality is a relatively poor standard for measuring the health status of the aged.

With another problem, the addictive disorders, the usual methods for obtaining prevalence and incidence are impractical. Mortality statistics do not reveal the addicts; household surveys seldom count them; laboratory tests are not available on a population basis; and no single agency in the community comes in contact with them.

During discussion it was suggested that the Committee might develop "a plan of service statistics for some of the new health programs that are going into areas where we haven't tried measurement and evaluation heretofore." The mental health and mental retardation areas were mentioned as examples.

OTHER STUDY PROPOSALS

At the close of the session of which he was moderator, Dr. Linder asked for other study suggestions. Included were the following:

Ways in which the Committee might develop and maintain closer liaison with teaching institutions

Family studies

Conceptual problems arising from multiple cause-of-death tabulation

A food survey to consider the relationship of food to health

A more fundamental consideration of cause-of-death statistics, not necessarily based on the present format of the death certificate

A reconsideration of the conceptual design of the National Health Survey in the light of changing needs for morbidity data

Emotional stress in pregnant women and the effect on pregnancy outcome

Topics the Committee had decided not to investigate over the 15 years of its existence

C. Health Resource and Service Statistics

Moderator : Dr. Franklin D. Yoder
Discussants: Dr. Odin W. Anderson
Dr. Walter J. McNerney

In introducing the discussion of statistics on health resources and services Dr. Yoder noted that this is a very broad subject in which standards are now changing rapidly.

PRESENTATION BY DR. ANDERSON

Dr. Anderson reminded the conferees that the order of discussion that had been pursued was valid both chronologically and logically in that it had proceeded from consideration of mortality and natality through consideration of morbidity to consideration of health resources, facilities, and personnel. Routine reporting in these last areas is now as reasonable as routine reporting in the other areas; and we must now try to join or relate the three major areas to each other.

The Committee's recently issued document, "Statistics on Medical Economics" (PHS Publication No. 1125), is an excellent summary and estimate of current routine reporting, combined with realistic recommendations for further reporting in the third major area of health statistics now to be discussed.

Our health services system, which has illness as its central concern, can be regarded in a number of ways:

As an economic system, involving the flow of funds, investments, expenditures, into, through, and out of it

As an anatomical system involving a distribution by types of work of facilities and personnel

As an organizational system, involving an interrelationship of patients, funds, personnel, use, in a vast establishment costing over \$35 billion a year

As a human system, involving human relations and interactions

We know very little about the flow of funds in relation to private practitioners—our dentists, pharmacists, physicians—although perhaps 90 percent of the volume of physician services flows through our private practice structure. We know nothing about the investments private practitioners have made in setting up and amortizing their practices. Hence, we cannot indicate how the private, the institutional, and the governmental sectors are intertwined economically.

Organizationally, we have inherited a health services system geared largely to acute conditions, with the hospital and the physician as the central core. But we are now creating many services for long-term illnesses which are on the periphery of that main core. We are extremely deficient in our knowledge of the flow from the central core to the periphery, and we do not know adequately what is entailed in this type of situation.

In nursing homes, for example, the health services system shades off into nonprofessional services. The system also ramifies into families, with home helps, and into the society itself. We need to know "how the professional health services structure interrelates with the nonprofessional helps of one kind or another." This means that "we must move more and more into a consideration of the human factors in the functioning of a unique system like our health services."

Humanly speaking, waiting periods in outpatient departments often are unconscionable, and the outpatient department is too often a bleak place. Our statistics should record such facts. We should examine the concept of convenience. "We can figure out the tolerance points, the workload of physicians, the tolerance points of patients, and so forth."

We see ranges of use patterns that differ in different contexts—in a group-practice context, in a fee-for-service Blue Shield context, and so on—but we don't know why.

With respect to measuring quality, we are still in the methodological stage. We can indicate whether or not surgery is performed by doctors with board certification. We could report more on what takes place in what kinds of institutions.

Discussion

A conferee suggested that it was high time for a group with wide recognition to develop "some kind of document that sets forth the different points of view from which you can look at quality." This would not mean that the group would decide whether someone performing an operation was or was not qualified because he possessed or did not possess some accepted trait.

Another discussant indicated that health services were too rigidly categorized as are health personnel. Nursing homes contain a substantial percentage of persons not really belonging there, who have no other place to go. They could be taken into day-care centers while the family is working during daylight hours. "The nursing home could keep standards but then the housing elements wouldn't have to be under those standards." Also the housing unit could be associated with community activities in a community center. The Committee might well formulate patterns relevant to problems of this kind.

During the course of the discussion Dr. Anderson reiterated his conviction that the Federal Government "should go more and more into routine reporting of use and expenditure data [in the health area], particularly from households." It was noted that other countries are looking to the United States to develop standards in these areas of health manpower and health facilities.

PRESENTATION BY MR. McNERNEY

Mr. McNerney observed that health administration is feeling the need for more facts and better information because it is moving from preoccupation with technical questions and good human relations to more basic matters of policy formulation and the concept of responsibility to a constituency. The shift is being hastened by the very rapid rise in health costs, which is highly visible to the consumer. The consumer also is noting great variations in admission rates, in use rates of facilities in hospitals, in use by race, and so on. Concern is accentuated by collective

bargaining and by politics. In labor agreements, where health benefits in 1952 constituted about 20 percent of the fringe benefit dollar and retirement about 50 percent, health now accounts for about 37 percent of the fringe dollar and retirement about 39 percent.

Consequently, the consumer of health statistics is asking increasingly more sophisticated questions, such as

How effective are prepayment or insurance in meeting episodic costs? Does the beneficiary at best merely stand still, or is he receiving increased coverage? A major industry wants a closely supervised panel set up to answer these and related questions.

What are the impacts of service, supposedly with full payment, as against indemnity on medical costs? Does the one encourage misuse, the other prohibit it? Is there a proper mixture? Do deductibles reduce needed care or unneeded care?

What differences, say in admission rates, can be demonstrated as depending on the organization of medical practice, as for example, under or not under group-practice programs?

The consumer asks the very frank question, what is good and what is bad care? Accreditation does not satisfy him, nor does general reference to the quality of care. He wants to know the criteria according to which care is effective.

The market wants better information about work standards—for example, allowable variations for performing an uncomplicated urinalysis.

The market wants to know how multiple coverage should be handled.

There is greater interest in better measures of disease and in their translation into the need for manpower and facilities. The market knows this is a difficult area, but it is not content with the present, wide variations in practice and planning. What

is the matter with getting some health inventories taken, although the translation of either a symptom or complaint or a finding into the need for facilities or programs is a matter of judgment?

With nursing homes and the like, how can we develop substitute facilities rather than additive facilities?

With disadvantaged groups—the aged, the temporarily unemployed, the chronically low-income—the buyer recognizes that a lot of the data are averages, the problem might lie in distribution, and that we really don't know as much about it as we think.

Mr. McNerney next turned to a consideration of priorities and roles as between government and the private sector. In his view:

The government is in a far better position to answer the incidence and prevalence of need and translation of this into terms of service, this broad descriptive type of information, or again an analysis of the system. The government is in a much better situation to comment on the disadvantaged as they exist as a nationwide problem.

Correspondingly, you probably get further on the more sensitive areas of effective use and work standards by having the format laid down perhaps nationally for the sake of some consistency, with implementation through the private sector.

Mr. McNerney recommended that the Committee take an overview and draw some guidelines to avoid undesirable duplication and get certain agencies out of a posture of indecision, especially foundations and national associations.

The time is ripe for better methods of data collection; for making use of more explanatory variables, including use of multivariate analysis; for separating the effects of rising costs from the effects of rising utilization, in terms of education, family size, and age. We need better definitions of specialist, nursing home, and nursing and better measures of comparative costs of types of care. In conclusion:

Finally I would urge you in discussing the future of this Committee to keep a pipeline out to the nonprofessional, that is the consumer, to keep the administrative point of view before you, because it is now one to be reckoned with. It is now an informed one, and it will give you some useful guidelines on how to be helpful. This should be an ingredient in this Committee as well as the scholarly point of view which worries about things or should worry about things well beyond some of these considerations.

Discussion

Mr. McNerney was asked three general questions:

1. Should the Committee study the hard facts that are wanted by buyers and consider how these facts might be produced?

In Mr. McNerney's thinking, demography, health statistics, and health resources and facilities should not be separated. "In order to know how many beds are needed I have to know population trends. In order to translate that into the number of beds I have to know morbidity." He was confident that the Committee could get honest answers from buyers of health services.

2. Should the Committee try to adjudicate responsibility between the government, nongovernment, and various agencies in the field of health services?

Mr. McNerney suggested that the Committee might be interested in sponsoring a conference of foundations and national associations to enlarge overall awareness. This should lead to "a slightly enlarged consensus about relative roles." It was noted that such a conference was recommended in the letter of transmittal of the medical economics report to the Surgeon General.

3. Would buyers of health services be willing to make resources available for considering the kinds of questions that had been discussed?

Mr. McNerney replied that they would, and in fact were doing this now by contributing to foundations and by having people for this purpose on their own staffs.

One conferee endorsed the view that the Committee should enlarge its responsibilities by going more deeply into particular problems of methodology. The Committee should work on improving analytical methodology as well as data collection methodology.

Another discussant noted that the Committee has

people dealing in two universes: one whose primary concern is with the universe of people and another one whose universe consists of some kind of administrative actions. . . . Where problems of medical care administration involve the classification and sorting out of people and what happens to people, I can see that the Committee has a strong and compelling interest. . . . When it gets down to the universe of, say, controls and tests. . . I don't see the direct connection with people. . . . We might shy away from direct involvement in service activity measurement which departs from observations of people.

It was agreed that the report on medical economics was a first venture of the Committee into a new field and that the merit of doing further work in that direction certainly should be assessed. Another discussant thought that this particular Committee of course should consider only those questions of vital and health statistics "that really have a basis for . . . [using] statistical techniques." It was noted that the Committee through its subcommittee mechanism could call upon experts in any area "within the broad purview of health and vital statistics."

COMMITTEE FUNCTIONS AND PROCEDURES

Discussants: Mr. Eugene L. Hamilton
Dr. O. K. Sagen

Mr. Hamilton said that he would call on Dr. O. K. Sagen to assist in leading the discussion on Committee functions and procedures, especially with respect to external relationships of the Committee. The open discussion had the benefit of replies to a questionnaire that had been distributed to conferees in advance of the meeting.

COMMITTEE FUNCTIONS

Mr. Hamilton first called attention to the six-item formulation of Committee functions (see Appendix III) which was developed in 1949 and has appeared since then in the Committee's annual reports. Dr. Moriyama was asked to comment on the Committee's activities in fulfilling the stated functions. He noted considerable activity under each of them except (d), insofar as it states that the Committee shall "...serve as a clearinghouse for activities dealing with public health statistics problems."

It was noted that the original listing of functions had a strong international flavor, but aside from the international list problem the Committee actually has not been deeply involved in international questions. There is, for example, the problem of measuring population increase in countries without a registration system. In its early days, it was pointed out, the Committee did give considerable thought to developing the national committee system throughout the world.

Two other problems where international experience might enlighten us, it was suggested, are infant mortality with its international differentials and the development of comparable measures of performance in the medical-care system with a view to assessing our own system. Other special studies such as stomach cancer among Japanese in Japan, Hawaii, and the United States have international overtones. Study of international differentials in infant mortality, it was pointed out, is going forward in the National Center for Health Statistics.

It was noted that the term "public health," which appears throughout the statement of functions, should be interpreted broadly enough to include the study of demographic problems. That as a matter of fact is how the Committee has interpreted the term.

It was pointed out that exercise of a clearinghouse function implies information collection and dissemination and, therefore, a considerable staff:

We assume we are all bright and alert around here and aware of what is going on. But a step beyond that requires staff, money, time It would change the whole character of this Committee.

The functions of the Committee have evolved as two kinds of things:

One, it is the Committee's responsibility to seek out brave new worlds to conquer, to point to problems that exist and indicate possible lines of solution without the Committee itself solving the problem...the classical example is the report on morbidity statistics that eventually resulted in the establishment of the National Health Survey. The other is to be the watchdog and the conscience of the vital and health statistics activities of the country...and for both of these things the Committee needs to be informed not in the clearinghouse sense but rather well and generally informed on what is going on in this whole area of vital and health statistics interpreted in the broadest sense.

As advisor to the Surgeon General in matters of vital and health statistics, the view was expressed that the Committee had legitimate functions going beyond areas that have specifically been assigned to the Public Health Service. As instances, demographic recommendations have been made to the Surgeon General, who could only pass them on to the Bureau of the Census; and recommendations in the field of military health were transmitted from the Armed Forces to the World Health Organization through the Surgeon General.

THE COMMITTEE MECHANISM

The Committee has a 4-year term of service which includes the term of service of those who become Chairman; therefore, a Chairman can seldom be expected to serve for more than 2 years. One proposal was for a 6-year term of Committee membership, with one-third rotated off every 2 years.

On the question of substantive discussion of proposed positions and actions, as against time given over to formal reports from subcommittees, the view was expressed that more time should be spent in identifying and developing in detail explicit charges to subcommittees and in assessing and evaluating their final reports with somewhat less time devoted to progress reports. It also was suggested that the Committee might be briefed more fully through correspondence and that reports might be supplemented by a face sheet summarizing the current status of the activity. The advisability of members of the Committee serving on Subcommittees, in addition to the Secretary, also was raised.

With respect to personnel time involved in conducting the Committee, it has involved one full-time person for the clerical part, plus perhaps one-quarter of the Secretary's time.

It was suggested that the Committee might well seek a followup of some of its findings in a wider group of journals and that annual reports might "delineate problems, deliberately stimulate interest in given areas . . . and comment on international analogies and problems." Doing this might involve additional staff help.

EXTERNAL RELATIONSHIPS OF THE COMMITTEE

Dr. Sagen introduced the following discussion. There has been some overlap especially in former years between the activities of this Committee and those of the Public Health Conference on Records and Statistics, which seeks to serve the professional interests of members of the country's vital statistics system. This overlap has occasionally concerned the State registrars and health statisticians to whom the Committee represents a consumer viewpoint with respect to the statistics of which they are producers. The remedy was, and continues to be, adequate communication between interested parties. For example, the Public Health Conference has study groups of which the Committee should be cognizant and vice versa. Dr. Sagen described briefly the activities of its current study groups.

CONFERENCE SUMMARY

The course of the meetings together with much of the detail was summarized at this time by Mr. Theodore D. Woolsey. Aside from his summary of details he found a number of major themes of the 2-day conference:

The shift of attention of the National Committee from problems of completeness of our vital statistics to problems of response error and evaluation studies

Consideration of the possibilities of a population register along with the related question of providing population statistics for small areas on a current basis

The need for increased availability of vital records and the feasibility of that need being met by establishing what was called a national archives of vital records

Problems associated with the confidentiality of vital records

The need for statistics in evaluating medical-care programs

The question of local health surveys and the extent to which they should be related to the National Health Survey

The dynamics of the health-service system

Statistical needs of the health-service consumer

The Chairman observed that many subjects covering a wide variety of fields have been studied and much has been accomplished in the impressive performance of the Committee in the past. In addition the discussions at this Conference provide much food for thought and will be of continuing value. In future deliberations the Committee will refer frequently to the suggestions that have been offered here in its attempt to see what can be done for further development of vital and health statistics in the United States.

The conference ended its formal activities with a vote of thanks to the Secretary and his staff.

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APPENDIX I

PAST AND PRESENT MEMBERS OF THE COMMITTEE

<i>Member</i>	<i>Affiliation</i>	<i>Dates Served</i>
Anderson, Dr. Odin W.	Research Director Center for Health Administration Studies University of Chicago Chicago, Illinois-----	1959-63
Baehr, Dr. George (absent).....	Mt. Sinai Hospital New York, New York-----	1949-55
Beelman, Dr. F. C. (absent)	Secretary and Executive Officer Kansas State Board of Health Topeka, Kansas-----	1949-51
Chancellor, Mr. Loren E.	Director, Division of Vital Statistics State Department of Health Des Moines, Iowa-----	1962-
Crosby, Dr. Edwin L. (absent)	Director American Hospital Association 840 North Lake Shore Drive Chicago, Illinois-----	1952-58
Daily, Dr. Edwin F. (absent)	Deputy Medical Director Health Insurance Plan of Greater New York New York, New York-----	1949-60
Densen, Dr. Paul M.	Deputy Commissioner of Health City of New York Health Department 125 Worth Street New York, New York-----	1949-59
*Dorn, Dr. Harold F.	Chief, Biometrics Branch National Heart Institute National Institutes of Health Bethesda, Maryland-----	1949-63
**Dunn, Dr. Halbert L.	Chief, National Office of Vital Statistics Public Health Service Washington, D.C.-----	1949-50
Dyar, Dr. Robert	Chief, Division of Research California State Department of Health 2151 Berkeley Way Berkeley, California-----	1961-

*Fales, Dr. W. Thurber	Director, Statistical Services Baltimore City Health Department Baltimore, Maryland-----	1949-53
Haenszel, Mr. William M.	Chief, Biometry Branch National Cancer Institute National Institutes of Health Bethesda, Maryland-----	1964-
Hamilton, Mr. Eugene L.	Director, Medical Statistics Agency Office of Surgeon General Department of the Army Washington, D.C.-----	1949-59
Hamilton, Dr. C. Horace	Professor of Rural Sociology School of Agriculture North Carolina State College Raleigh, North Carolina-----	1960-
Hauser, Dr. Philip M. (absent)	Professor of Sociology University of Chicago Chicago, Illinois-----	1949-60
Heustis, Dr. Albert E. (absent)	State Health Commissioner Michigan Department of Health Lansing, Michigan-----	1958-60
Hubbard, Dr. John P.	Professor of Preventive Medicine School of Medicine University of Pennsylvania Philadelphia, Pennsylvania-----	1956-61
Hutcheson, Dr. Robert H. (absent).....	Commissioner of Public Health Tennessee Department of Public Health Nashville, Tennessee-----	1951-58
Kirk, Dr. Dudley	Demographic Director Population Council New York, New York-----	1961-
Lee, Dr. Everett S.	Associate Professor of Sociology University of Pennsylvania Philadelphia, Pennsylvania-----	1964-
Linder, Dr. Forrest E.	Director, National Center for Health Statistics Public Health Service Washington, D.C.-----	1958-
MacMahon, Dr. Brian	Professor, Department of Epidemiology Harvard School of Public Health Boston, Massachusetts-----	1959-63
McNerney, Mr. Walter J.	President Blue Cross Association Chicago, Illinois-----	1963-

Moriyama, Dr. I. M.	Chief, Office of Health Statistics Analysis National Center for Health Statistics Public Health Service Washington, D.C.-----	1949-
**Reed, Dr. Lowell J. (absent)	President Johns Hopkins University Baltimore, Maryland-----	1949-56
Sagen, Dr. O. K.	Assistant Director National Center for Health Statistics Public Health Service Washington, D.C.-----	1954-58
Schlesinger, Dr. Edward R.	Assistant Commissioner for Special Health Services State Department of Health Albany, New York-----	1960-
Shackelford, Mrs. Margaret	Director, Division of Statistics Oklahoma State Department of Health Oklahoma City, Oklahoma-----	1958-62
Sibley, Mr. Elbridge	Executive Associate Social Science Research Council Washington, D.C.-----	1949-50
Taeuber, Dr. Conrad	Assistant Director Bureau of the Census Department of Commerce Washington, D.C.-----	1961-
*Whelpton, Mr. P. K.	Director, Scripps Foundation for Research in Population Problems Miami University Oxford, Ohio-----	1959-61
Yerushalmy, Dr. Jacob	Professor of Biostatistics School of Public Health University of California Berkeley, California-----	1963-
Yoder, Dr. Franklin D.	Director of Public Health Illinois State Department of Health Springfield, Illinois-----	1962-

*Deceased

**Retired

OBSERVERS AND GUESTS OF THE COMMITTEE

Councill, Dr. Clara E.	Deputy Chief, Office of Health Statistics Analysis National Center for Health Statistics Public Health Service Washington, D.C.-----	Observer
Guralnick, Miss Lillian	Statistician Office of Health Statistics Analysis National Center for Health Statistics Public Health Service Washington, D.C.-----	Observer
Harris, Mr. F. Fraser	Director, Health and Welfare Division Dominion Bureau of Statistics Ottawa, Ontario, Canada-----	Guest
Lunde, Dr. Anders S.	Assistant Chief Division of Vital Statistics National Center for Health Statistics Public Health Service Washington, D.C.-----	Observer
Puffer, Dr. Ruth R.	Chief, Health Statistics Branch Pan American Health Organization c/o WHO Regional Office Washington, D.C.-----	Guest
Storck, Dr. John	Staff Assistant Division of Vital Statistics National Center for Health Statistics Public Health Service Washington, D.C.-----	Observer
Woolsey, Mr. Theodore D.	Deputy Director National Center for Health Statistics Public Health Service Washington, D.C.-----	Observer

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APPENDIX II

RECOMMENDATIONS OF STUDY TOPICS

The United States National Committee on Vital and Health Statistics (Committee) is located organizationally in the National Center for Health Statistics (NCHS) and operates in an advisory capacity to the Surgeon General of the U.S. Public Health Service. The members of the Committee serve as individuals representing a technical discipline or field of subject matter interest and do not represent agencies or organizations. The Committee bases its studies and conclusions chiefly on investigations conducted by subcommittees that report to it on questions that have been referred to them by the Committee.

The Committee was established in 1949 in accordance with a recommendation of the First World Health Assembly that all governments form such committees. On December 14-15, 1964, past and present members of the Committee met in Washington, D.C., to assess its record and plan for its future. The present report summarizes under the following headings possible study topics mentioned without any attempt to reach consensus on desirability.

- A. Demographic statistics
 - 1. Fundamental characteristics of the United States vital statistics system
 - 2. Marriage, divorce, the family, and the household
 - 3. Natality
 - 4. Mortality
 - 5. Other questions
- B. Health statistics
 - 1. Epidemiological uses
 - 2. Uses in program planning and evaluation
- C. Health resources and services
 - 1. Fundamental questions
 - 2. Questions raised by users of medical services
- D. Committee functions, structure, and procedures
- E. NCHS functions, relations, and policies

Subjects grouped under the last heading extend beyond the activities of the Committee. Some suggestions might have been listed in several places, and the ordering here is somewhat arbitrary. Suggestions to continue

specific interests already evinced by substantial Committee studies—e.g., development of the marriage- and divorce-registration areas or desirability of a quinquennial census—have been omitted. Possible study topics with new directions for previous interests are included.

However studies mentioned are phrased here (chiefly for brevity) or in the verbatim record on which this summary is based, it should be understood that the Committee does not conduct substantive studies. Thus "cross-tabulations of characteristics of husbands and wives" indicates that the Committee should specify what tabulations are needed, the data required to obtain these tabulations, how these data might be gathered, their limitations and uses, and other similar matters.

Suggestions are identified as 1, 2, and so forth.

A. DEMOGRAPHIC STATISTICS

- I. Fundamental Characteristics of the United States Vital Statistics System
 - 1.1: Evaluation of the present United States vital statistics system in the light of systems used in other countries and in terms of the attributes of a population register system, the potentialities of new techniques of data processing, and the legal questions involved.
 - 1.2: Problems connected with increasing use of vital records by agencies and individual researchers.
 - 1.3: Review of birth and death certificate data from the viewpoint of epidemiological needs.
 - 1.4: Possibility of separate medical and legal records of birth.
 - 1.5: Practicability of transferring the power to authorize use of birth and death certificate material for health studies to the Federal Government, and what would be required to effect that transfer.
 - 1.6: Specification of needed verification studies of data on vital records and on hospital records.

2. Marriage, Divorce, the Family, and the Household

- 2.7: Survey of the entire area with a view to making recommendations of needed family statistics.
- 2.8: Marriage and divorce and the rates of family and household formation.
- 2.9: Age-adjusted marriage and divorce rates by population eligible for marriage or divorce; attrition tables analogous to life tables; and so forth.
- 2.10: Better measures of the changing age at marriage.
- 2.11: Trends in residential propinquity and origin of mates.
- 2.12: Family and household characteristics of people who die.
- 2.13: Cross-tabulations of characteristics of husbands and wives.
- 2.14: Relationship of marital status to death rates.

3. Natality

- 3.15: Improved measures of natality that are more sensitive to current changes, taking account of all available and producible data—period or current, cohort, and completed fertility (with marriage data included, and especially natality by duration of marriage).
- 3.16: Study of what information could be obtained by querying a sample of births without addition of numerous items on the certificate, with cognizance being taken of present NCHS sampling programs in this area.
- 3.17: Family planning in relation to economic, social, psychological, and religious factors.
- 3.18: Planning of further inquiries on expected final family size.
- 3.19: Illegitimacy.

4. Mortality

- 4.20: The kinds of information needed from mortality statistics.
- 4.21: The multiple cause-of-death problem.
- 4.22: Statistical problems connected with study of why there has been so little gain in age-specific mortality in the United States over the past decade.
- 4.23: Mortality differentials and changes at various age levels, in various subgroups, especially among nonwhite persons, the aged, males, and other special groups.
- 4.24: Social and economic correlates of mortality.
- 4.25: Accuracy of the data; e.g., underregistration of deaths, age biases in reporting deaths.

- 4.26: Induced abortion, in view of claim that they reach 1 million a year in the United States.

5. Other Demographic Problems

- 5.27: Possibility of using sampling techniques more widely than at present in the vital statistics area.
- 5.28: Internal migration as a crucial factor in demographic change in the United States.
- 5.29: Geographic areas better suited to analytic uses than the traditional administrative areas (whether these areas be larger or smaller than those now generally used).
- 5.30: Obtaining satisfactory small-area estimates.
- 5.31: Ways of identifying place of residence, as possibly by a national coordinate system.
- 5.32: Adequacy of the classification into rural and urban.
- 5.33: Census overcounts and undercounts affecting vital rates and life table data.
- 5.34: Problems in getting valid age data on all kinds of records; possible approach by way of an intergovernmental committee or a joint study with the Social Security Administration.
- 5.35: Circumstances contributing to errors on vital records, and ways of reducing their effects.
- 5.36: Improvement of statistics on the Negro and other nonwhite persons.
- 5.37: Statistical handling of hereditary diseases and defects.
- 5.38: Methods of population projection, especially more complicated procedures using computer.

B. HEALTH STATISTICS

1. Epidemiological Uses

- 1.39: Study of the need for and the possibility of creating "a national archives of vital and health records," so that epidemiology may make use of individual records (and gain access to material linked to individual records) in its now enlarging function of hypothesis testing.
- 1.40: Review of National Health Survey procedures and analyses from the viewpoint of epidemiological utilization, including the possibility of epidemiological studies based on NHS records.
- 1.41: Identification of desirable new areas of morbidity reporting—e.g., leukemia, congenital malformations.
- 1.42: Characteristics and feasibility of model physician reporting areas.
- 1.43: Characteristics and feasibility of model hospital reporting areas.

2. Uses in Program Planning and Evaluation

- 2.44: Possible local-area uses of National Health Survey data.
- 2.45: Feasibility and characteristics of local household surveys, perhaps even to the level of neighborhoods, modeled on and coordinated with the National Health Survey.
- 2.46: Consideration *de novo* of the conceptual design of a national morbidity survey in the light of experience and changing needs.
- 2.47: Uses that the National Health Survey might make of local physicians; e.g., to obtain data on the occurrence of diseases with little diagnostic variability, such as hernias.
- 2.48: The response error problem in health surveys—a particular case of a crucial problem in social science surveys.
- 2.49: Ways of measuring the impact of medical-care programs on the incidence, prevalence, and prognosis of chronic disease in the population; e.g., for particular conditions, how can the impact of length of hospital stay on prognosis be measured?
- 2.50: Ways of measuring the efficacy of various programs; e.g., general medical-care programs which assume responsibility for the total health of clients, home-care programs, rehabilitation programs, nursing-home programs.
- 2.51: Ways of measuring the continuity of medical care.
- 2.52: Plans for service statistics for some of the newer health programs; e.g., certain neurological disorders, mental retardation.
- 2.53: Ways of establishing closer liaison with schools of public health and other health institutions in dealing with problems of measurement, research, and planning.
- 2.54: New ways (in addition to morbidity and mortality) of measuring the health status of the aged.
- 2.55: Ways of getting satisfactory counts of the addictive disorders; e.g., narcotics addiction, alcoholism.
- 2.56: Ways of measuring emotional stress.
- 2.57: Food consumption statistics.

C. HEALTH RESOURCES AND SERVICES

1. Fundamental Questions

- 1.58: Information needed about the economic aspects of our health services system; the investments and the fund flows within the entire system, including private practitioners, pharmacists,

hospitals, and so forth and including private, institutional, and governmental investment and expenditure patterns.

- 1.59: Ramifications of the health services system into the society, families, homes, and other supports for health activities.
- 1.60: Types of flow within the health services system; e.g., flows between its traditional central focus in the hospital and physician and the relatively new arrangements for long-term illness.
- 1.61: Identification of detailed aspects of the system in operation: the physician-patient relationship (e.g., waiting periods); the convenience context of medical decisions (e.g., whether or not to hospitalize).
- 1.62: Measures of quality of health services.
- 1.63: Possibility of routine reporting of health-related use and expenditure data, particularly from households, which shall be as routine as the mortality and morbidity data now being reported.
- 1.64: Specification of better measures of prevalence and incidence of disease as related to manpower and facilities.

2. Questions Raised by Users of Medical Services

- 2.65: Many of the topics listed below might be combined into a single comprehensive analysis of the kinds of information needed by users of medical services.
- 2.66: Evaluation of hospital use under varying systems; e.g., insurance vs. no insurance, complete insurance vs. deductibles, and so forth. Which systems encourage overuse, underuse?
- 2.67: Admission rates and other variations (e.g., productivity) between group and nongroup practice programs.
- 2.68: What is good and what is bad medical care—if not in terms of quality, then in terms of whether it is effective according to stated criteria (rephrased later, to fit the Committee's technical approach, as "the different points of view from which you can look at quality of say medical care").
- 2.69: Work standards; e.g., man hours needed for a regular urinalysis, with allowable variations.
- 2.70: How to get the facts about multiple coverage.
- 2.71: Getting health inventories, even though translation into needs involves judgment.
- 2.72: Identification of linkages from one point to another in the health system.
- 2.73: Establishment of varying patterns of care; e.g., when nursing homes are established, should we pile them on top of prior types of care or are there other types of organization?

- 2.74: With the disadvantaged (e.g., the aged, the temporarily unemployed, the chronically low-income), what portion of the need is real, and what portion is a statistical artifact (e.g., a matter of distribution over the curve)?
- 2.75: Establishment of guidelines as to the priorities and roles between the private and the governmental sectors; e.g., government might be able to indicate the incidence and prevalence of need and translate this into norms of service requirements, might frame a view on the disadvantaged, and might develop use and work standards.
- 2.76: Identification of statistical techniques (e.g., multivariate analysis) which would yield better data; provision of clearer definitions (e.g., specialist, nursing home); specification of needed information (as in the aged program).

D. COMMITTEE FUNCTIONS, STRUCTURE, AND PROCEDURES

- D.77: Should the Committee concern itself with more problems having an international flavor, such as
- a. Population measurement problems in countries without a satisfactory registration system.
 - b. Infant mortality problems, where the United States might benefit from a better understanding of why certain countries have a lower rate (actually now being studied in NCHS).
 - c. Development of comparable measures of performance in the medical-care systems of different countries.
 - d. Comparable mortality statistics.
 - e. Comparable morbidity measures.
 - f. Studies of peoples of foreign origin in the United States.
 - g. Cancer-rate differences.
- D.78: Should Committee chairmen have a longer tenure of service?
- D.79: Should the Committee give more attention to subcommittee drafts of final reports, with possibly less attention to interim reports?
- D.80: Should there be closer liaison between the Committee and its subcommittees, as by service of members of the Committee on each subcommittee?

- D.81: Should there be more or fuller documentation: summaries, face sheets, fuller minutes, and so forth?
- D.82: Development of more explicit charges to the subcommittees?
- D.83: Advisability of more followup Committee recommendations in journals and elsewhere.
- D.84: More staff assistance to the Secretary?

E. NCHS FUNCTIONS, RELATIONS, AND POLICIES

- E.85: Consideration of areas of profitable cooperative relationships between NCHS and other agencies, governmental and private.
- E.86: Further exploration of Federal-State relationships in the area of vital and health statistics.
- E.87: On the distribution of responsibility between governments at various levels and other agencies, should NCHS "be interested . . . in sponsoring a conference that brings together representatives of foundations, of national associations (Professional Activity Service, for example), and others who have an interest . . . so that at least they can be cognizant of what the overall picture is and what others are doing"?

(On the international level, see D.77 above, which in some of its aspects might concern NCHS.)

- E.88: Study of what the confidentiality question is, not just with birth or death records but with medical records generally.
- E.89: Sampling and advance reports as ways of obtaining more rapid publication of vital data; should a birth sample, e.g., be initiated?
- E.90: Should the 10-percent mortality sample be continued?
- E.91: Record-linkage possibilities (now being studied by the Public Health Conference on Records and Statistics).
- E.92: Ways of taking account of the wide range of variation in health data within the United States.
- E.93: Clarification of the meaning of "longitudinal study" and of the kinds of problems that would have to be solved by such studies.
- E.94: Possibility of NCHS subsidizing local-area health surveys.
- E.95: Greater consultation with users of vital and health data, including nongovernmental users.
- E.96: Should NCHS from time to time summarize developments in statistical methodology?



APPENDIX III

FUNCTIONS OF THE COMMITTEE

The U.S. National Committee on Vital and Health Statistics, a committee of the Surgeon General of the Public Health Service, was created at the request of the Department of State in accordance with the recommendations of the First World Health Assembly. The major objectives of the National Committee are to promote and secure technical developments in the field of vital and health statistics and to obtain clearance of national and international viewpoints on vital and health statistics problems.

The following statement of functions and policies will serve as a guide in performing the functions of the U.S. National Committee on Vital and Health Statistics.

FUNCTIONS

- (a) Delineate statistical problems of public health importance which are of national or international interest;
- (b) Stimulate studies of such problems by other organizations and agencies whenever possible, or make investigations of such problems through subcommittees appointed for the purpose;
- (c) Review findings submitted by other organizations and agencies, or by its subcommittees, and make recommendations for national and/or international adoption;
- (d) Cooperate with other committees or organizations concerned with public health statistics in the United States so as to serve as a clearinghouse for activities dealing with public health statistics problems;
- (e) Serve as a link between the organizations in the United States engaged in public health statistics and the statistical secretariat of the World Health Organization, and other international agencies concerned with public health statistics; and
- (f) Cooperate with national committees of other countries in the study of problems of mutual interest.



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