

HOW CAN THE HEALTH INTERVIEW SURVEY BE MORE RESPONSIVE?

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Introduction

The Health Interview Survey (HIS) program, a major national data system within the National Center for Health Statistics (NCHS), is currently undergoing an extensive evaluation in which major revisions are anticipated for implementation beginning in 1980. For the past year NCHS staff have met on several occasions with a Technical Consultant Panel (TCP) charged with assessing the current survey procedures and making recommendations for the future direction of the program. One of the primary objectives of this effort is to identify ways in which the survey can be more responsive to data users in the recognition of health data needs and in the dissemination of timely results. In achieving this goal it is important to know who the consumers are and to establish a line of communication between the producer of the statistics and health planners, policy makers and program managers for whom the results are intended.

This paper will focus on the responsiveness of the survey to national data needs in terms of the mechanism by which items are selected for inclusion on the ongoing HIS. Later in this session, in the paper "New Initiatives Involving the Health Interview Survey" Dr. Massey will discuss plans within NCHS to address some very specific data needs in the area of health expenditures and will report on efforts being undertaken to provide technical assistance to State and local areas in obtaining needed health data.

Background

The current HIS questionnaire consists of a core of basic items which are asked every year. The health items included in "core" obtain information on disability days (e.g., bed days, school and work loss), incidence of acute illness, prevalence of chronic conditions, dental and physician visits, hospitalizations and limitation of activity. A set of socioeconomic and demographic variables that remains unchanged from year to year including age, sex, race, education level, income, employment and marital status is also recorded for each member of the sample household.

In addition the questionnaire for a given year contains one or more sets of questions dealing with special topics of current interest to the health community. These topics are referred to as supplements and may appear only once or be repeated periodically. This subdivision of the interview content permits the survey to respond to changing data needs and provides trend statistics for both the basic health variables and the special supplemental items which are repeated.

At the present time approximately one-third of the interview is allocated to supplements. It has been suggested that in the future the interview

time be equally divided between core items and supplemental topics. In order not to increase total respondent burden it would be necessary to reduce the amount of time spent on core items. This could be accomplished by eliminating items or by rotating those basic items which remain relatively unchanged over short periods of time. As the emphasis shifts toward data collection on a greater variety of subjects, it becomes essential to review the method by which topics are identified and selected for inclusion as part of the survey. The entire selection process for supplemental topics is one of the major issues being discussed by the TCP in its assessment of HIS procedures.

Selection Process for HIS Supplements

In the past, three basic sources have been tapped to identify supplementary health topics for inclusion on the HIS questionnaire. First the NCHS Panel of Advisors has been contacted periodically and asked to identify national data needs which might be appropriately addressed through data collected by the HIS. This panel consisted of approximately 200 health professionals representing both government and private industry.

Contact was made with the panel through an informal letter of inquiry in which members were provided with a general explanation of the survey procedures and asked to provide input. The initiative for making needs for data known was left almost entirely up to the individual panel member. Only a minority of respondents have provided helpful replies when approached in this manner.

The second source used to provide input into the survey have been members of the NCHS staff. Through their participation in professional organizations, contacts in academic institutions, and normal work-related activities, these statisticians constantly interact with potential data users and hear first hand about data needs. Staff members have proved to be a valuable resource in identifying topics to be added to the questionnaire.

Finally, a number of suggestions for supplements have come from unsolicited requests. These have been from other government agencies (e.g., Food and Drug Administration, National Institutes of Health, Center for Disease Control, etc.) as well as from private organizations (e.g., the American Diabetes Association, the Arthritis Foundation, etc.). Usually these have been proposals in which the information to be collected and uses to be made of the results have been identified. In addition, these organizations frequently have included individuals, knowledgeable in the subject matter area, who have provided assistance during the development of the survey instrument.

Suggested topics, after an initial screening, have been presented for review to an ad hoc committee made up of senior NCHS staff. This committee made recommendations to the Director of the Division of

Health Interview Statistics who then made the final decision on what topics were to be included on the questionnaire.

Proposed Selection Process for HLS Supplements

A more formal process for selecting supplemental topics has been recommended by the TCP. The proposed procedures would differ from the current process in both the method of identifying supplemental topics and in the review of submissions. The new method would require that (1) a maximum solicitation effort be mounted every three years, (2) a detailed explanation of the survey be provided to each potential applicant, (3) initially each applicant respond to a standard set of nine items and (4) proposals be reviewed by an advisory committee made up of members outside of the NCHS.

Every three years a list of potential data users would be compiled. This list would include individuals who had recently requested data from the Division, members of all NCHS advisory committees (e.g., U.S. National Committee on Vital and Health Statistics, the Standing Committee of the Public Health Conference on Records and Statistics, etc.) and directors of other health programs within the Federal Government. A general announcement requesting interested persons to contact the NCHS would be made through the following organizations/publications: American Public Health Association, American Statistical Association, the World Health Organization, the International Association of Survey Statisticians, National Academy of Sciences, Public Health Reports, Statistical Reporter, Federal Statistical Users Conference Newsletter and selected NCHS Series 10 publications.

Individuals on the list and others who respond to the announcement would receive a solicitation package. This package would include a description of the survey and an application to be completed and returned to the NCHS.

The description of the survey would highlight the strengths and flexibility of the survey design. For example, the following items would be included:

1. Interviews are conducted each week in a probability sample of households in the United States.
2. About 800 interviews are completed each week.
3. Annual response rate equals about 95%.
4. All adult members of the household 17 years of age and older are invited to respond for themselves. Parents usually respond for their children.
5. For core items individuals not at home are responded for by an adult family member.
6. A random subsample of adults can be identified for self response on supplemental items. Telephone or personal callbacks can be made to obtain self response items.

7. Supplements may be completed for the entire household or for any subset of household members. They may be left for completion at a later date and returned by mail.
8. Interviewing is performed by a permanent staff or trained interviewers of the Bureau of the Census.
9. Questionnaire content.

The initial application of a supplemental topic would be made by providing NCHS with information on the following items:

1. Topic: _____
2. What questions on this topic need to be answered? (Please do not list specific questions to be asked of respondents. Rather, state the questions on this topic for which you would like answers.) _____
3. How would you use the data collected on this topic? _____
4. For what population group(s) are the data needed? _____
5. For what geographic unit(s) are the data needed? (Mark all that apply)

<input type="checkbox"/> Health Service Areas	<input type="checkbox"/> Total U.S.
<input type="checkbox"/> States	<input type="checkbox"/> Large Standard Metropolitan Statistical Areas
<input type="checkbox"/> 12 Census regions	<input type="checkbox"/> Other-- Please specify
<input type="checkbox"/> 4 major U.S. regions	_____

6. Except in special circumstances, there will be a minimum of 12 months between the end of data collection and publication of results. Will this time lag negate the usefulness of the data collected on this topic?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Please explain: _____

7. Other than yourself, who would be the major users of the data collected? (List both agencies or organizations and names of primary individuals.) _____
8. How would these other organizations or individuals use the data collected on this topic? _____

9. Your name _____
(last) (first) (middle)

Agency or organization _____

Mailing address _____

(City) (State) (Zip code)

Telephone Number _____

(Area Code)

Items 5, 7 and 8 would be omitted when the proposed topic area was primarily concerned with a survey methodology problem.

Initial review of submissions would be made by Division staff and the Advisory Committee. Individuals submitting topics that pass the first level of review would be contacted for further input and final recommendations would be made to the Director of the Division of Health Interview Statistics by the Advisory Committee. All respondents would be notified of the final topic selections and of the results of the review process as it applied to their proposals. The Advisory Committee would meet as needed to review unsolicited proposals for topics.

Release of Data

Any increase in the number of supplements on the questionnaire will impact on the analysis and publication of the survey results. Currently data from the HIS are released in several forms. Since 1963, over 120 reports have been published in the Vital and Health Statistics series. Publication of a year's data begins in October of the year following completion of data collection. Selected information from the survey appears in Advanced Data Reports. This series is reserved for brief presentations and is used to expedite publication of survey results. Between 10 to 15 reports are produced each year.

In order to assist data users the NCHS has published a Topical Index. It is essentially a matrix of health and health services variables crossed with demographic and socioeconomic variables. The cells of the matrix show the report number in which a particular combination of statistics can be found.

Unpublished tabulations produced routinely as well as tabulations on file which are related to but not presented in formal publications are available upon request. In addition special tabulations are provided data users at cost. In 1977 special tabulations were prepared and delivered to eleven different organizations as follows: 3 Federal agencies, 2 State agencies, 4 universities, 2 other private organizations.

Data from the HIS for years 1969-1975 are available for purchase in the form of public use data tapes. The tape is usually available within two years after completion of data collection. Primarily, the time lag is due to the need for the staff to review the results in order to insure completeness and reliability of the data and to permit development of the documentation. Last year 33 tapes were sold to 17 data users as follows: 6 Federal agencies, 1 State agency, 7 universities and 3 other private organizations. A catalogue listing and describing these tapes, entitled NCHS Standardized Micro-Data Tape Transcripts, is available upon request from the NCHS.

In order to produce more timely results as well as promote communications between HIS staff and potential data users the TCP has suggested that more resources be allocated to the contracting

out of data analysis. In addition the TCP has recommended a greater utilization of the Inter-governmental Personnel Act, which provides for the exchange of personnel between Federal, State and private organizations. To achieve a wider dissemination of survey results the TCP has recommended that the Division publish more papers in professional journals outside of the NCHS.

Uses of HIS Data

Although it is difficult to generalize about the uses which are made of HIS data, the NCHS has made a beginning in identifying who the data users are and what uses are being made of the data. Many examples of the use of results from the HIS in major government programs may be given. Estimates of health problems and resultant utilization of health care services were used in formulating the legislation for both the Medicare and Medicaid programs. Statistics on the health characteristics of smokers and non-smokers were used in the 1964 report of the Surgeon General entitled Smoking and Health. Currently, insurance coverage and utilization statistics from HIS are being used in studying the various National Health Insurance proposals.

From over 1,000 telephone and mail inquiries made directly to the Division in 1977 both the type of user and health variables requested were identified. The percent distribution by type of user was as follows:

Federal Agency	30%
State Agency	7%
Hospital	2%
Universities or Colleges	10%
Private Individuals	9%
Other Private Industry	42%

The percent distribution by type of health variable requested was as follows:

Chronic Conditions and Impairments	33%
Physician and Dental Visits	11%
Limitation of Activity and Disability	9%
Injuries and Acute Conditions	8%
Medical Economics	5%
Public Use Tape Information	4%
Survey Material	3%
Miscellaneous	19%
Unable to Fill	9%

A 1968 NCHS survey which was called "The Identification of NCHS Data Users and Uses Made of the Data" yielded very little program specific information. However, several very important methodological problems were identified. These included (1) How does one define a user?, (2) How does one define use?, (3) How does one get the user to define his use? and (4) How does one deal with the problem of non-users? It is hoped that in the near future resources will be available which will provide the opportunity to survey HIS users and potential users in order to more clearly identify consumer needs.

In order to evaluate the public use data tapes activity plans are already underway to conduct a data use and needs survey of purchasers of NCHS tapes. In addition the feasibility of holding a conference with present and potential users of NCHS tapes is being studied.