

# The National Health Interview Survey Design, 1973–84, and Procedures, 1975–83

A description of the National Health Interview Survey, a national probability sample survey of the civilian noninstitutionalized population of the United States

Programs and Collection Procedures Series 1, No. 18

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### **Symbols**

- --- Data not available
- ... Category not applicable
- Quantity zero
- 0.0 Quantity more than zero but less than 0.05
- Z Quantity more than zero but less than500 where numbers are rounded to thousands
- Figure does not meet standard of reliability or precision
- # Figure suppressed to comply with confidentiality requirements

# The National Health Interview Survey Design, 1973–84, and Procedures, 1975–83

### Introduction

The National Health Interview Survey is the oldest of a program of surveys designed to collect data on the health and use of health services of the population of the United States.

On July 3, 1956, President Eisenhower signed the National Health Survey Act of the 84th Congress authorizing a continuing survey to secure information about health conditions in the population of the United States. Implementation was very rapid. A pretest of 1,200 households was conducted in Charlotte, N.C., in February 1957. During May and June of that year the nationwide operation was given a dry run; interviewing and editing proceeded as if the survey were in operation. Official data collection began in July of 1957, and the National Health Interview Survey has been continuously in the field ever since.

From the beginning, the U.S. Bureau of the Census has been responsible for the sample design and for the data collection of the National Health Interview Survey (NHIS). Historically, therefore, NHIS has been linked with the Current Population Survey (CPS), which is conducted primarily to produce data on labor force characteristics of the U.S. population. The sampling frames developed for the CPS have been used to select the sample for the NHIS although the latter is conducted independently. The CPS, which had been based on a probability sample since 1943,<sup>2</sup> and the principles and procedures used for it were adopted when the NHIS was designed in 1956.<sup>1</sup> Understanding the origin and the linkage makes it easier to understand NHIS sample design, questionnaire design, data collection, and estimation procedures.

It is possible to use data from the NHIS to look at change

over the entire period from 1957 to the present. However, changes in the sample design, the questionnaire, the field procedures, and the methods of measurement do cause discontinuities. The purpose of this report is to document such changes during the 1970's and early 1980's so that users of the publications and public-use data tapes will have the information in one reference. The actual time period covered varies among the chapters because there is more existing documentation for some areas than for others and because questionnaire changes and sample changes are deliberately not implemented at the same time. Changes in the questionnaire are well documented through 1974, 3,4 but there is little documentation in National Center for Health Statistics publications of the 1973 sample redesign or methods used to estimate variances.

Many people have contributed to this report both directly and indirectly. They have contributed indirectly by writing documents, especially U.S. Bureau of the Census documents, that were the basis for some sections of this report. While great thanks are due them, they are not acknowledged here because they are cited in the reference list. Others have contributed directly by providing unpublished memoranda and old files, and through review and discussion. Some who have been especially helpful are E. Earl Bryant, Clinton E. Burnham, Robert Casady, Karen Frey, Jimmie D. Givens, Patricia B. King, Dennis M. Klein, Mitchell P. La Plante, Paul W. Newacheck, Gerald C. Sanders, Gary Shapiro, Andrew A. White, Ronald W. Wilson, and Theodore D. Woolsey.

Section I: Sample Design and Estimation, 1973–84	
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### Chapter 1: Sample design

### Introduction

The National Health Interview Survey (NHIS) sample design has been based on the design for the national sample of the Current Population Survey (CPS) from its inception through the 1984 data collection. The two samples have been selected simultaneously, and most of the literature on the CPS also applies to NHIS.<sup>2,5</sup> The theoretical basis for the samples can be found in Hansen, Hurwitz, and Madow.<sup>6</sup> Details about the sample design have been abstracted from these two U.S. Bureau of the Census publications and, along with information from National Center for Health Statistics (NCHS) staff and publications, are given in this chapter.

Before going into detail, there are aspects of the design that are necessary for understanding and using data from the NHIS. No one should try using data from this or any other survey with a complex sample design without some understanding of how the sample was drawn.

The sample was designed to produce national estimates for the civilian noninstitutionalized population residing in the United States. The approach to doing so is first to divide the United States into geographically defined areas called primary sampling units (PSU's), which collectively cover the 50 States and the District of Columbia. The PSU's are classified into strata (combinations of PSU's with similar characteristics), and one PSU is then selected from each stratum. Within the selected PSU's, small, compact clusters of housing units are then selected. In area sampling, this stage of selection is accomplished by listing small areas of the PSU, called segments, and then selecting four adjacent housing units from within each segment. In list sampling such listing is not needed.

Because each family member in the selected housing units is in the sample, there is clustering within the household, within the segment, and within the PSU. This clustering causes the procedures for analysis, especially variance estimation, to differ from those in simple random sampling.

Another important aspect of the NHIS design is that it is a multistage probability design that permits a continuous sampling of the civilian noninstitutionalized population of the United States. It is designed in such a way that the sample scheduled for each week is an independent sample of the population; the weekly samples are additive over time. Thus, the design permits estimates for high-frequency measures or for large population groups to be produced from a short period of data collection and estimates for low-frequency measures or for smaller population subgroups to be obtained from a longer period of data collection. Because interviewing is done throughout the year,

with about 800 households in the sample each week, there is no seasonal bias.

Because of population shifts over time, the NHIS sample design is updated or redesigned after each decennial census. The redesign implemented in 1973 was an update and modification of earlier sample designs rather than an entirely new design. Details about the original design have been published. Much of what follows is a review of the original design and of the modifications for the update instituted in 1973 using data from the 1970 census.

In contrast, the 1985 redesign is entirely new. It will be the subject of other reports, and only the important changes are highlighted at the end of this chapter. The sample design discussed here applies only to data collected from 1973 through 1984.

### Selecting the primary sampling units

The first stage consisted of drawing a sample of primary sampling units (PSU's) from the 1,924 geographically defined PSU's into which the United States was divided by the U.S. Bureau of the Census. A PSU consists of a county, a small group of contiguous counties, or a standard metropolitan statistical area (SMSA). The PSU's collectively cover the 50 States and the District of Columbia.

Formation of such PSU's is more an art than a science although several principles and rules used in the original sample design are still relevant. Prominent among them were:<sup>1</sup>

- PSU's should be units for which a wide variety of descriptive statistics is available, permitting the PSU's to be stratified or classified in an efficient manner.
- When the PSU is used by a large survey organization, there are distinct economies in using the same set of PSU's for more than one survey. Consequently, there are advantages in having the PSU conform to administrative structure in the field, and in having the unit adaptable to many social and economic objectives.
- For technical sampling reasons, the greater the internal heterogeneity of the PSU, the more efficient it is. This principle tends to produce geographically large units.
- In contrast, costs per ultimate sample unit (that is, cluster
  of sample households) tend to increase with travel distances
  between ultimate units within a PSU, and thus to increase
  with the size of the PSU. This factor has limited the size of
  a PSU to not more than a few neighboring counties.

The rules used by the U.S. Bureau of the Census to define the PSU's for the redesign that was implemented in 1973<sup>5</sup> were:

- Each SMSA is defined as a separate PSU<sup>7</sup> except for the two standard consolidated areas (SCA's), which are each defined as one PSU, even though each SCA consists of more than one SMSA.
- 2. Each PSU consists of one county or two or more contiguous counties. This rule does not apply for certain States in New England where minor civil divisions (towns or townships) are used to define the PSU's. County equivalents are used in some States: (a) cities, independent of any county organizations, exist in Maryland, Missouri, Nevada, and Virginia, (b) in Louisiana, the county equivalents are known as parishes, and (c) in Alaska, where there are no counties, divisions defined by the U.S. Bureau of the Census are used.
- 3. The PSU's are defined within the boundaries of the four U.S. Bureau of the Census regions: Northeast, North Central, South, and West. The States in the four census regions are listed in appendix I. Exceptions to this rule have been made for SMSA's that cross regional boundaries. Those SMSA's that lie in more than one State are counted as single PSU's for sampling purposes, but the parts within the individual States are separately identified for convenience in tabulation and control. There are 30 SMSA's that are in more than one State, 7 of which lie in more than 1 U.S. Bureau of the Census region.
- 4. The area of a PSU does not exceed 2,000 square miles in the West and 1,500 square miles in the other regions except in cases where a single county exceeds the maximum area.
- 5. The population enumerated in the 1970 census of population of each PSU is at least 7,500 in the West and 10,000 in the other regions except where this would have required exceeding the maximum area specified in rule 4.
- 6. In addition to meeting the limitations on total area, PSU's are formed to avoid extreme length in any direction.

The PSU's used in the redesign based on the population enumerated in the 1970 census were closely related to those defined after the 1950 census.<sup>2</sup> Steps employed in combining counties to form the new PSU's<sup>5</sup> were:

- The counties included in SMSA's that were new or redefined since the previous revision were incorporated into the PSU definitions. Parts of PSU's remaining after such an operation were reviewed according to the criteria described above to determine whether further combination of counties into PSU's was necessary.
- Any single county that was not in an SMSA that exceeded the maximum area limitations given previously in number 4 was classified automatically as a separate PSU, regardless of population.
- The characteristics of all other counties within the same State then were examined to determine whether they might advantageously be combined with contiguous counties, keeping in mind the objective of heterogeneity and the

limitations on population and area. Combinations were made for:

- Counties with less than the minimum population were combined with other counties, if this did not conflict with other requirements.
- Counties with more than the minimum population were combined with other counties only if the maximum area was not exceeded and if the combination substantially increased the heterogeneity within the PSU.

For example, a combination involving counties in different economic areas was generally considered desirable even if both counties exceeded the minimum population. However, the maximum area limitation was adhered to as closely as possible because excessively large PSU's add to operating costs through increased interviewer travel expense.

- The characteristics of counties in contiguous States within regions were then compared to determine whether better combinations could be obtained by combining counties from neighboring States.
- The proposed combinations were reviewed to make the final determinations of PSU's. The reviews of this operation (and of the operation grouping PSU's into strata) represented an effort to apply the competent judgments of several persons in these processes. Personal preferences can have no place in the actual selection of sample units, as known probabilities of selection for all units in the population can be achieved only by the application of random processes of selection. However, there are many ways a given population can be structured and arranged prior to the application of the random selection process, and personal judgment legitimately can play an important role in devising an optimum arrangement; that is, one that will minimize the variances of the sample estimates.

The above principles and rules led to combining the 3,141 counties, county equivalents, and independent cities existing at the time of the 1970 census into 1,924 PSU's that were used for the NHIS and for other surveys conducted by the U.S. Bureau of the Census.

### Grouping PSU's into strata

Sampling theory makes it clear that if units to be sampled can be classified into strata whose members tend to be relatively alike within strata and different between strata, then sampling variances are reduced from those of samples of equivalent size drawn from an unstratified universe. The PSU's in the sample design that was based on the population enumerated in the 1950 census were stratified with the principal modes of stratification being geographic location, population density, rate of population growth (originally between 1940 and 1950), proportion of the population not of the white race, and type of industry in predominantly urban areas. The details of the stratification are given in appendix IV of the NCHS publication on the statistical design of the survey.

The sample design for the CPS and the NHIS in 1973

called for the combination of PSU's into strata with the selection of one PSU from each stratum. It is desirable to form strata with approximately equal populations for such samples. The optimal design for estimating characteristics for the total population calls for (approximately) equal probability of selection of persons. The maximum stratification effect is gained by having as many strata as sample PSU's. With a self-weighting sample, equal stratum sizes also have the advantage of equalizing the interviewer workloads. The objective, therefore, was to group PSU's with similar characteristics into homogeneous strata with approximately the same 1970 population in each stratum. Because the final counts from the 1970 census were not available when the sample was being designed, the preliminary counts were used for stratification in the redesign.

Theory also requires that the PSU's with the largest populations should be in the sample; that is, they should have a high probability of selection. PSU's with the largest populations are designated as self-representing (SR), and each of the SR PSU's was treated as a separate stratum and was included in the sample with certainty. The SR PSU's are listed in appendix II.

If the redesign of the sample could have been considered independently of the design already in use, it would have been relatively simple to form the strata. However, the number of strata is determined by considerations of cost as well as by considerations of variances, and it was also important to minimize costs when selecting the new set of PSU's. The rules for reviewing and modifying existing strata for use in the redesign reflected concern for both factors.

The review of the stratification of PSU's was done primarily by searching for "misfit" PSU's in the existing strata rather than undertaking an entirely new stratification for the redesign that was implemented in 1973. The most important of the characteristics that were the basis of the original stratification and that were considered for the restratification were:

- SMSA (an SMSA or not an SMSA).
- Rate of population change.
- Percent of population living in urban areas.
- Percent of population employed in manufacturing.
- Principal industries.
- Average per capita value of retail trade.
- Proportion of population not of the white race.

Limits were established for each of the characteristics. When a stratum contained a PSU with characteristics outside those limits, the PSU was considered for removal. However, the total number of revisions was small because a change in several characteristics beyond the established limits was usually required before a PSU was removed.

In general, the stratification derived for the earlier design was maintained; exceptions for PSU's and strata were governed by the following rules:<sup>5</sup>

 The largest of the 1,924 PSU's in the United States as of the 1970 census were designated SR PSU's. Except in special cases, all PSU's with a population greater than about 250,000 were made SR. The remaining PSU's were combined with other PSU's with similar characteristics to

- form the non-self-representing (NSR) strata. The strata were defined so that they did not cross regional boundaries (table A).
- Strata with NSR PSU's were made to have approximately equal populations.
- NSR SMSA PSU's were grouped into strata that had only SMSA PSU's so that all strata were either SMSA or non-SMSA strata.
- The restratification of the PSU's into NSR strata was done strictly on the basis of the characteristics of the PSU's within the stratum, without regard to the sample PSU's of the previous design. Each SR PSU was in the sample by definition. As shown in table A, there were 156 SR PSU's.
- In each of the remaining strata, one PSU was selected for the sample with a probability equal to its proportion of the total U.S. population enumerated in the 1970 census. The actual selection was made in two stages. In the first, a computer was used to designate controlled selection patterns of PSU's, and a probability was assigned to each of the admissible patterns generated by the computer. In the second, one of the computer-generated patterns was randomly selected to represent the new sample.
- Separate estimates were also desired for each of the subuniverses, called "tabulation areas" (appendix II).

These specifications resulted in classification of the PSU's into 376 strata.

### Subsampling within PSU's

The object of the subsampling procedure within the sample PSU's was to obtain a self-weighting probability sample in which every sample unit (person or household) had the same probability of selection. Unbiased estimates of population totals could then have been made by applying a single multiplier to the sample numbers.

Sampling considerations led to the conclusion that the variance would be as close to the minimum possible for a fixed cost if the sample was selected in compact clusters comprising

Table A. Number and population of strata for 376-primarysampling-unit design by region

Region	Number of strata	1970 population	Stratum size
Self-representing strata			Minimum
Total	156	130,495,743	
Northeast	50 32 48 26	41,854,236 32,824,092 30,049,022 25,768,393	259,754 256,843 227,222 213,358
Non-self-representing strata			Average
Total	220	72,681,943	
Northeast	20 72 102 26	7,143,875 23,752,566 32,745,594 9,039,908	357,194 329,897 321,035 347,689

about four adjacent housing units (or the equivalent) on the average. Therefore, ultimate sampling units (USU's) were defined in such a way that each contained an expected four housing units. These housing units represented the 70.6 million living quarters presumed to exist as of the 1970 census. The 70.6 million is the sum of the 1970 census count of 68.6 million plus one additional unit for every three persons not residing in housing units.

The overall probability of selection had to be the same for all USU's in order to achieve a self-weighting sample. The sampling fractions at each stage of selection had to be determined to meet this requirement. Thus, the probability of selection of the PSU multiplied by the probability of selection of the USU within the PSU must equal this overall probability of selection.

In practice, a segment is selected at an intermediate sampling stage prior to designating the USU. The character of a segment depends on the source from which it was selected. For example, it may be a small area, a place, or an enumeration district (ED). Segments do not have a common size, but they may always be expressed as an integral number of USU's. Each USU belongs to a specific segment and, for the purpose of administrative control, the segments are numbered and the USU's are identified by their segment numbers. It should be noted that in some of the NCHS publications in Series 10 based on data collected during 1973 through 1984, segments are called the ultimate stage, and six units is given as the expected number of households in a segment because the change from six to four in the 1973 redesign was not always reflected in the publications.

The selection of the actual sample within each PSU depends on the resources available within that PSU. As part of the 1970 census, the country was divided into 229,000 ED's. About 121,000 of the ED's were in the mail census that covered most of the larger urban centers; the remainder were in the conventional interview census. Each ED was identified with a State-county code and an ED number, and, for each, an address register was produced as part of the census enumeration. The completeness of the address information determined the way the census information was used in sampling.

Address registers were used where possible to form "list" ED's with address sampling. If the information was not sufficient for a "list" ED, the ED was classified as an "area" ED with area sampling. In general, ED's were classified into "list" and "area" samples by the responses to the following two questions:

- 1. Does the ED have at least 90 percent of the units recorded at addresses in the register with complete street name and house number?
- 2. Is the ED within the jurisdiction of an authority issuing building permits?

	Ques	ition 1
Question 2	Yes	No
Yes No	List Area	

In general, the list frame included the urban areas from which about two-thirds of the NHIS sample was selected.

The CPS A-design<sup>5</sup> had a selection probability of 1 in 1,968 in the design implemented in 1973. The initial NHIS design had a selection probability of 1 in 1,509.7446, or 1.3035 times the selection probability for the CPS. This meant that the NHIS selections were not evenly spaced selections, which resulted in a slightly increased sampling error.

At the same time the sample was selected, a block of 12 adjacent USU's was set aside for each NHIS selection to maintain the sample over the life of the sample design; that is, until the sample redesign following the 1980 census. Thus, the sample design implemented in 1973 could be maintained through 1984 before the sample would be exhausted.

However, for some of the smaller PSU's, the number of USU's needed for all surveys planned for the life of the sample design could turn out to be more than the number in the PSU. This was not a problem in the SR PSU's, where the basic sampling interval of 1 in 1,312 meant that there are 1,312 different systematic samples of USU's within the PSU. It was a problem in some of the smaller NSR PSU's, however, where the USU's would be exhausted before the end of the decade because the initial selections were separated by less than 80 USU's—the number needed for all the surveys planned at the time.

It would have been possible to return to the original USU's later in the decade and reuse them. Instead, an unbiased system of gradual replacement of sample PSU's over the life of the sample design was adopted. However, a system that moved to a different PSU only when the sample PSU was exhausted would eventually exclude the smaller PSU's. To avoid this bias, clusters of PSU's were established within each NSR stratum that contained a PSU unable to last out the decade. Such clusters, called rotation clusters, were determined before the sample PSU was designated. Each PSU in the rotation cluster that contained a small sample PSU was assigned the portion of the decade that it was to be in the sample so that each PSU would have its proper expected sampling rate. The sample was shifted from one PSU to another within the cluster according to these assigned portions. Thus, a stratum containing only PSU's with sufficient USU's had only one PSU in the stratum (that PSU is considered a rotation cluster all by itself). A stratum containing both sufficient and insufficient PSU's could have one, or more than one PSU in the sample depending upon whether a sufficient or insufficient PSU was selected. (A stratum with only insufficient PSU's would have had more than one PSU (all from the same rotation cluster) in the sample if there had been any in the sample.)

The number of PSU's replaced was actually quite small. There were 14 NSR PSU's in the design designated for replacement during the decade. For the purpose of calculating variances, these replacement PSU's were given the same number as the original PSU; the replacements are not a problem to the user of the public-use data tapes.

### The 1985 sample design

The design described here, which was used from 1973 through 1984, was based on the information from the 1970

<sup>&</sup>lt;sup>a</sup>An area sample using building permits to update.

census but was not a complete redesign of the sample. It was an update of the original,

The sample design instituted with the 1985 data collection year was a complete redesign. Very little of the information in this chapter is applicable to data collected in 1985 or later.

Over the years there was much discussion of changes that would be desirable when the opportunity to completely redesign the sample arose. A summary of some of the considerations and recommendations is in the report of the Technical Consultant Panel on the Health Interview Survey, a report of the National Committee on Vital and Health Statistics. The 1985 sample redesign did not incorporate all of the recommendations of the Technical Consultant Panel or all of the ideas of the many people who thought seriously about the features of the sample that would be desirable. Nevertheless, it is a major change that incorporates some of the recommended features.

Major features of the 1985 design that differ from the pre-1985 design are:

- The number of PSU's was reduced from 376 to 201.
- The entire sample, instead of approximately one-third, became an "area" sample.
- The black population was over-sampled instead of using equal probabilities of selection.
- There are two PSU's per stratum instead of one.

These changes permit NCHS to have more flexibility in using the respondents to the NHIS as a sampling frame for other surveys. They also make the estimates for the black population more precise. The changes should also make it possible for users of the public-use data tapes to calculate variances and standard errors with less computer time and less concern about adequate numbers of respondents in the PSU's.

### **Chapter 2: Estimation**

### Point estimates

The National Health Interview Survey (NHIS) is designed to make inferences about the civilian noninstitutionalized population of the United States. To do so it is necessary to inflate the sample counts to national estimates.

Four basic operations were involved for the data for each elementary unit (household, person, condition, hospitalization, and doctor visit) collected from 1973 through 1984:

- Probability of selection inflation. The data for each elementary unit were multiplied by the reciprocals of the probabilities of selection at each step in the design: primary sampling unit (PSU), segment, and household.
- Nonresponse adjustment. The data for each elementary unit were inflated by a multiplication factor to adjust for units where an interview was not obtained.
- First-stage ratio adjustment. The data for each elementary unit were ratio adjusted to the 1970 population within 12 color-residence classes within each geographic region.
- Poststratification by age-sex-color. The data for each elementary unit were ratio adjusted within each of 60 age-sex-color cells to an independent estimate of the population of each cell by a multiplication factor applied to the weight of each elementary unit (household, person, condition, hospitalization, and doctor visit). These independent estimates are prepared by the U.S. Bureau of the Census.

The probability of selection inflation is carried out each week. After the incoming reports are passed through controls to insure that the data input to the computers is consistent with sample design, properly coded, and capable of being tabulated, a series of mechanical edits is carried out on the computers. These edits make the questionnaire internally consistent, and adjust or account for item nonresponse.

Into each record of an elementary unit (person, household, condition, and hospitalization) basic sampling inflation factors are inserted. This step takes account of all stages of sampling. The factor is the reciprocal of the combined sampling fraction, which varies among tabulation areas (appendix II).

These steps are carried out weekly and provide a tape of edited and adjusted sample data for each week of the 13 weeks of the quarter. Therefore, the "scale" of data at this point is 1/13th of universe totals. Weekly data are then merged into quarterly totals. The nonresponse adjustment, first-stage ratio adjustment, and poststratification are performed for each quarter (13 weeks).

Despite intensive followup efforts, reports on some households in the sample had not been received at the tabulation cutoff. The noninterview rate was usually very low: less than 5 percent of the households did not respond—1 percent refusal, and the rest for all other reasons, such as no one at home after repeated callbacks. Nevertheless, any estimating procedure must necessarily impute values for statistics for which measurement had been intended for a sample household for which no interview is obtained.

Adjustment for noninterviews was accomplished by a calculation that assumes that respondents within a particular segment for a quarter represent the nonrespondents in that segment. In the rare instance in which less than half a segment is interviewed, the noninterview adjustment is modified by evidence from reports over the entire tabulation area. An illustration of the process is given for a hypothetical tabulation area in figure 1. Data for the five households in segment 2 are multiplied by the factor 1.2000 so that the five represent the six households intended for interview in the segment. Segment 4 in the example is of the unusual type in which less than half the households in the segment were interviewed, which leads to a further adjustment at the tabulation area level after a preliminary one has been made at the segment level. The tabulation area adjustment factor is the ratio of total households scheduled for interview to total households scheduled for interview minus the "excess" noninterviews; that is, the factor in the example is 220/218 or 1.0092. Data for all reporting households in the hypothetical tabulation area are multiplied by this factor to account for the two-household "excess" of noninterviews.

Statistical theory demonstrates that a ratio estimate for a

Segment number	Households scheduled for interview	Households not interviewed	Segment adjustment factor	Excess non- interviews
1	6	0	1.0000	0
2	6	1	1.2000	ō
3	8	0	1.0000	0
4	4	3	2.0000	2
• • •				
• • •			• • •	
• • •		• • •		
Tabulation area				
total	220	10		2

Figure 1. Adjustment for noninterviews

statistic generally is superior to an ordinary inflation estimate if there is correlation between the numerator and the denominator of the ratio. Also, if Y and X' are ordinary inflation estimates of two characteristics of a population, Y and X, respectively, and if the "true" total X is known independently, then the ratio estimate Y'' = (Y/X')X is a better estimate of Y than is Y', if there is correlation between Y'' and X''. In this form of estimate, the quantity (X/X'') becomes a calibration factor for the survey.

This principle is utilized at two stages in the NHIS. In the first-stage ratio adjustment it was used to reduce sampling variance among PSU's. Estimates of the 1970 population that would have been obtained from a complete enumeration of only the 376 sample PSU's were compared with official 1970 population counts for each of 12 color-residence classes within each of the four geographic regions. A multiplication factor was applied to the weight of each elementary unit. This brought the sample data into closer conformity with population controls for the universe; introduced only trivial, if any, bias into the estimate; and reduced sampling variance.

Advantages of the ratio-estimating process were exploited further by the introduction of a second calibrating or ratio factor, the poststratification, which brought the estimates of the U.S. population derived from the NHIS into agreement with independently determined controls for 60 age-sex-color classes of the civilian noninstitutionalized population of the United States.

The last poststratification factor is probably the one most important to users because the independent estimates are the same as those used for the Current Population Survey (CPS). Thus the national population estimates for these characteristics from the two surveys are the same, which greatly enhances comparability for users of data from both surveys.

The CPS is conducted the first week of every month, and independent national estimates of the civilian noninstitution-alized population are produced for each month. The NHIS is conducted weekly and is designed to produce quarterly estimates as well as annual ones. In practice, the estimate for the CPS conducted in the middle month of the quarter was used for the NHIS quarterly estimate. The NHIS quarters and the dates of the estimates are:

NHIS quarter	Population estimates
January-March	February 1
April-June	May 1
July-September	August 1
October-December	November 1

The 60 age-sex-color cells are shown in figure 2. Note that the color categories were changed from white and other to black and other beginning in 1980. The change was made to improve the precision of the estimates for the smaller black population.

### **Variances**

One of the advantages of a probability sample is that an estimate of the reliability of the results can be made from the sample itself. The form of the variance estimator depends on the sample design and the estimation procedures. It is desirable that the variance estimator be unbiased (and it should be con-

		olor		
1979 and earlier				
N	/hite	Other		
	1980 a	nd later		
0	ther	Black		
Male	Female	Male	Female	
		Other	1980 and later Other B	

Figure 2. The 60 age-sex-color cells in the National Health Interview Survey

sistent if not unbiased) and that it have a small sampling error. It is also desirable for computation to be simple.

At the time the National Health Interview Survey was initially designed, there had been relatively little work on methods of estimating variances for surveys with complex sample designs. Computers were slow, awkward, and had little memory. Computer software was virtually nonexistent. Nevertheless, the decision was made to present sampling errors in all reports based on NHIS data. Calculating and presenting sampling errors for the national estimates from the NHIS in all reports was a great advance in the presentation and interpretation of data.

The presentation of sampling errors in statistical reports is not a simple matter. There are two major decisions that must be made. The first is how to calculate the variances. The second is how to present them. The method used for estimating the variances for the statistics presented in the Series 10 reports has changed over time. The method of presenting them, charts of relative standard errors for classes of variables, has remained relatively constant.

Initially variances for the NHIS were calculated by a technique called the random group method. The method was used first for data collected in 1957. The variance charts constructed in 1961 based on the random group method of variance estimation were used until the late 1960's when some of them were replaced by charts based on the Keyfitz estimation procedure. For data collected in 1972, the Keyfitz estimation procedure was used to calculate new variance curves.

When the redesigned sample for the survey was implemented in 1973, new estimates of variances were needed. Balanced half-sample replication had been considered before.

and early work on the method had been supported by the National Center for Health Statisitcs (NCHS). <sup>10</sup> In the meantime there had been further work <sup>11</sup> and a computer program had been written to apply the technique to the data from the National Health Examination Survey (NHES, now NHANES). However, at that time no one knew how to form orthogonal patterns when there were as many PSU's as there were in the NHIS. That problem was solved when George Schnack formed the orthogonal patterns for more than 100 strata. <sup>12</sup> The computer program was extended so that it could be applied to the NHIS. <sup>13</sup> Using this program, variances were calculated for data collected in 1973. <sup>13</sup> Those calculations are the basis for the relative standard error charts published in Series 10 reports for data from 1973 through 1984.

The problem of presenting variances for a great number of statistics in limited space was solved by publishing charts of relative standard errors for classes of statistics.

A report on the research on the Keyfitz procedure<sup>9</sup> also gave the argument for presenting curves for classes of estimates:

Instead of presenting variances for each statistic, the data can be grouped and "average variances" given.... Grouping the statistics is not easy, but two points to consider are that the survey characteristics such as prevalence of any diseases represented in a group should have similar design effects and that the groups should cover the possible range of variation in the data. 14

Instead of presenting the individual estimates for each cell in the tables, a set of relative variance curves was drawn using the empirical relationship between the size of the estimate and the relative variance of the estimate. The formulas and the procedures for estimating the parameters are given in Hansen, Hurwitz, and Madow.<sup>6</sup> The procedures, using a function of the form,  $v_{x'}^2 = a + b/x'$ , are illustrated in the case study on the Current Population Survey.

The curves of relative standard errors (the square root of the relative variances) are published in all Series 10 reports from the NHIS. There are curves for wide-range, medium-range, and narrow-range response variables to allow for the differing distributions of the variables and their design effects. The curves were calculated for each of the recall periods used on the questionnaire and for each period of data collection from one quarter through 2 years.

A narrow-range statistic is defined for this purpose as (a) an estimate of the number of people in the population with a characteristic, such as the number of high school graduates or the number in excellent health, and (b) an estimate for which the response is usually 0 or 1 but may take on the value of 2 or very rarely 3, such as the number of hospital episodes in a year.

A medium-range statistic is defined for this purpose as an estimate that will rarely lie outside the range 0-5, such as the number of doctor visits in 2 weeks.

A wide-range statistic is defined for this purpose as an estimate that often will lie outside the range 0-5, such as the number of days of restricted activity in 2 weeks or the number of contacts with a physician in a year.

The total number of persons in the U.S. civilian noninsti-

tutionalized population or in an age-sex-color class or combination of classes used for poststratification is not subject to sampling error because these numbers are adjusted to demographically adjusted decennial census figures supplied by the U.S. Bureau of the Census.<sup>13</sup> Also, when the number of people in one of those classes is the denominator for a rate, the denominator has no sampling error.

The curves of relative standard errors serve a useful purpose by allowing the reader to obtain an estimate of the variability of the statistic of interest quickly; however, they may not be sufficient for relational analysis for several reasons. One is that a number of approximations and assumptions were required to derive relative standard errors (a) that would be applicable for the large number of data items obtained from the NHIS, (b) that could be prepared at reasonable cost, and (c) that could be presented in relatively little space. As a result, the charts provide estimates of the approximate relative standard errors rather than an estimate for each specific estimate. Second, although they take the size of the denominator into account, they do not take the differential effects of the clustered design into account; that is, two population groups of the same size may have different design effects. A limitation in using the curves is that the analysts cannot incorporate covariances in the analysis where it is appropriate.

An example of the differences in design effects for populations of similar size is shown in table B for the proportion of children with medical care within an interval. There are approximately 22 million children in families with six or more members in the household and there are approximately the same number in families in which the head has 13 or more years of education. Nevertheless, as can be seen in table B, the design effect for children in the first category is 3.41 and for the second it is 1.62. The standard error of the proportion of children with medical care for the first group is twice that for the latter.

Each time the curves have been recalculated, they have been used without modification in succeeding years until the sample is redesigned as if there has been no change in the distribution of the population or the dependent variables over an extended time period. The effect of the changes over time may not be trivial. In evaluating the change from 1973 through 1979, Givens found that the weighted relative standard errors for each of the eight curves he evaluated showed consistent increases over time because of the attrition in sample size. Moreover, the values predicted from the curves differed from the computed values. In 1980, which was a special case because 4 weeks were eliminated from the sample, one-third of the variance estimates were in error by more than 20 percent.

Also, it is important to note that the NHIS was designed with one sample PSU selected from each stratum (there is more than one if the stratum is a non-self-representing stratum and the PSU is a rotation cluster containing more than one PSU, although it is still treated as one and there is only one in any given year). The methods usually used for estimating the variances assume two PSU's in each stratum. Therefore, pseudostrata, each containing two PSU's, had to be created to calculate the variances. This was done in the self-representing strata by dividing each stratum into two PSU's so that it was a stratum with two "PSU's." The non-self-representing strata

Table B. Number, proportion of children who have received care within an adequate interval, estimates of standard errors, and design effects by selected characteristics of children and youths under 18 years of age: National Health Interview Survey, 1975–76 annual average

			Standa	ard error	Design effect	
Characteristic	Number in thousands	Proportion with adequate interval	Simple random sample	Complex	SE	Variance
Total	73,234	0.8566	0.001295	0.002152	1.66	2.76
Family size						
1-3 persons	12,789 21,063 17,081 22,301	0.9090 0.8963 0.8598 0.7864	0.002543 0.002101 0.002656 0.002744	0.002693 0.002687 0.003170 0.005067	1.06 1.28 1.19 1.85	1.12 1.64 1.42 3.41
Education of head of family						
0–11 years	24,771 25,888 21,874	0.7953 0.8678 0.9161	0.002563 0.002105 0.001875	0.004240 0.002960 0.002383	1.65 1.41 1.27	2.74 1.98 1.62
Family income						
\$0-\$4,999 \$5,000-\$9,999 \$10,000-\$14,999 \$15,000 or more	8,418 15,171 17,558 26,697	0.8186 0.8231 0.8543 0.8932	0.004200 0.003098 0.002663 0.001891	0.005437 0.004678 0.003760 0.002822	1.29 1.51 1.41 1.49	1.68 2.28 1.99 2.23
Age of child						
0-5 years	21,130 24,298 27,806	0.8789 0.8693 0.8287	0.002244 0.002157 0.002265	0.002796 0.003257 0.003284	1.25 1.51 1.45	1.55 2.27 2.11
Standard metropolitan statistical area						
Yes	53,324 19,910	0.8701 0.8204	0.001456 0.002720	0.002415 0.004562	1.66 1.68	2.75 2.81

NOTE: SE = standard error.

SOURCE: M. G. Kovar: A methodological study of factors associated with whether children receive adequate medical care. *Institute of Statistics Mimeo Series* No. 1428. Chapel Hill, University of North Carolina, School of Public Health, Department of Biostatistics. Dec. 1982.

were paired with one another and a pseudo-PSU number was assigned to one member of the pair and that number plus one to the other.<sup>12</sup>

The pseudo-PSU's are on all public-use data tapes for data collected in 1980 or later. They enable the interested tape user to estimate variances and standard errors for a variety of statistics using one of several commercially available computer programs. <sup>16-19</sup> They do not enable the user to replicate the variance estimation procedure used by NCHS for the Series 10 reports. The NCHS balanced half-sample replication program takes poststratification into account. <sup>13</sup> To do so, the balanced half-sample replicates must be used and those replicates, which take up a great deal of space, are not on the public-use tapes.

Tape users should also note that the variance estimation methods based on Taylor-series approximation<sup>16,18,19</sup> cannot be used directly for estimating the variances of medians. The balanced half sample methods can be used.

For data collected prior to 1980, the published curves of relative standard errors must be used. These are adequate for many analyses, and many users of the data will prefer using them regardless of when the data were collected. Instructions for using the charts are given in all NCHS Series 10 publications.

### Weights on public-use data tapes

### Core questions

For estimates of the population of persons with attributes (such as persons limited in activity, in poor health, or with one or more bed days during the year), the four quarterly weights are averaged to produce the annual weight. This is labeled "basic weight" on the public-use data tapes. Weights for a quarter, 6 months, 1 year, and 2 years of data collection are on the public-use data tapes. Weights for longer periods of time can be constructed by averaging the annual weights over the desired time period.

For estimates of events with 2-week recall periods (such as the number of disability days, doctor visits, or acute conditions), events are added to produce the annual estimate. This is labeled "6.5 weight" on the public-use data tapes. The weight is 6.5 because 13 weeks in the quarter divided by 2 weeks of recall equals 6.5.

Example—A user wanting to estimate the number of people limited in activity should use the basic weight if using data from a full year of data collection.

Example—A user wanting to estimate the number of bed days (2-week recall) should use the 6.5 weight.

Example—A user wanting to estimate the number of bed days per person limited in activity should use the 6.5 weight for the numerator and the basic weight for the denominator.

### Special core questions

Because six different lists of chronic conditions were used beginning in 1978, with respondents in one-sixth of the households being asked each list, special weights had to be developed to provide national estimates of the prevalence of chronic conditions. A factor, which is also on the public-use tapes, is multiplied by the basic person weights to produce weights approximately six times as large.

Similarly, the recall period used for the number of hospital discharges and days in short-stay hospitals published in Series 10 reports is 6 months. Therefore, the weight is double the basic person weight (that is, the semiannual weight), if the user wants to duplicate the published estimate. That can be done from the information on the hospital tape.

However, the user of the public-use data tapes should be careful to note that the published number of hospital episodes during the year is based on a 12-month recall question, so the appropriate weight for episodes and the associated days is the basic person weight.

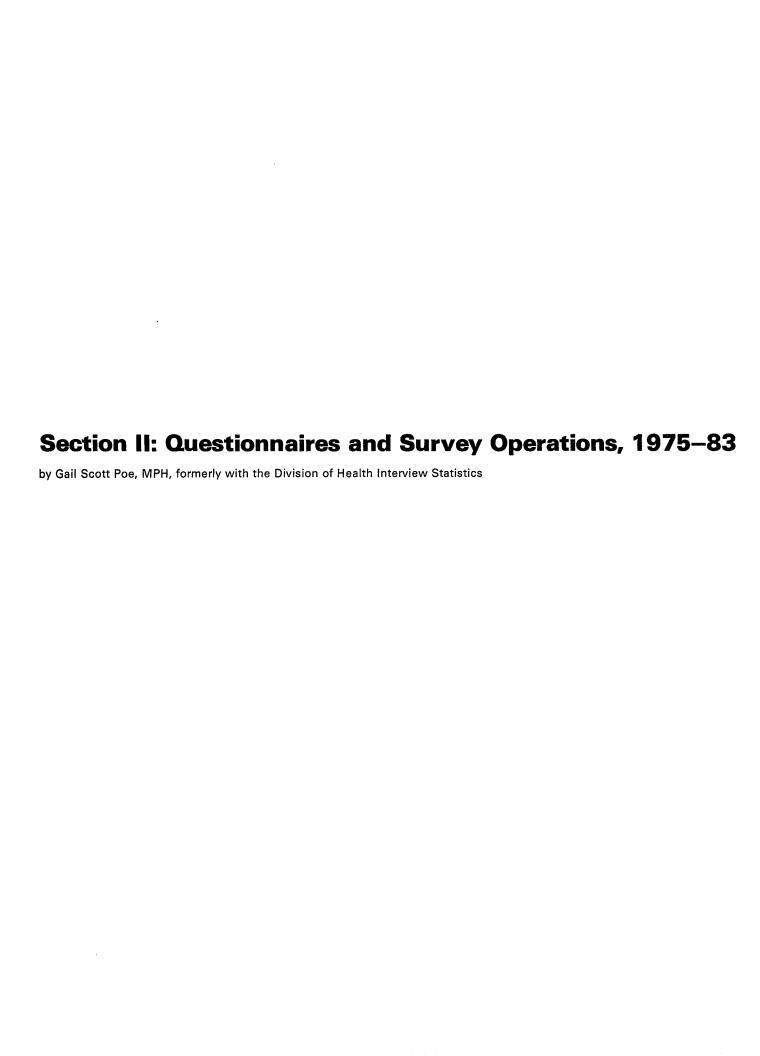
### Supplements

The questions on many supplements were asked about all household members at the time of the interview. The weights for questions on those supplements are the same as the ones for equivalent core questions.

In other cases, there was subsampling for the supplement or response rates were different (as when supplements were left to be mailed in or only a fraction of the people in the household were asked the question). The weights for questions on those supplements are different from those for core questions.

For example, questions about smoking were asked of onethird of the adults in the last 6 months of 1980. The weights reflect the subsampling. The Child Health Supplement questions were asked about only one child in each family in 1981. The weights for that supplement also reflect the subsampling and differ from the basic weights by a factor approximately equal to the inverse of the number of children under age 18 in the household.

Thus, each supplement is given appropriate weights, and the public-use data tapes are released separately from the core questionnaire tapes.



# Chapter 3: NHIS questionnaire and interview design and development

### Introduction

The NHIS questionnaire consists of two basic parts: core and supplements. The questions on the core portion of the questionnaire are asked each year. The supplements change from year to year.

The basic concepts measured in the core questionnaire have remained essentially the same since the inception of the survey. These concepts include morbidity, disability, and use of medical services and facilities. For a discussion of these concepts see references 3 and 20. The questions to address the concepts on the core include illnesses and injuries, days of disability including bed days, work-loss days, school-loss days, and other cut-down days due to acute or chronic conditions. Questions on limitation of activity caused by chronic conditions or impairments, hospitalization, doctor contacts, perceived health status, as well as the social, economic, and demographic characteristics of the interviewed persons are also included. From 1975 through 1981 questions on dental visits were part of core, but in 1982 these questions were eliminated from core.

Supplements on a wide variety of health topics have been included in the NHIS since 1959. The supplements have changed from year to year in response to current interest in special health topics. Some supplements, such as out-of-pocket health expenditures and health insurance, have been repeated several times to enable measurement of change over time.

There have been three major periods in the history of the NHIS questionnaire: 1957-68, 1969-81, and 1982-83. These periods were demarcated by two large-scale formal evaluations that resulted in major changes in the survey questionnaire and procedures. Within each of three periods there was some degree of continuity in the measurement of survey concepts. Across periods, however, there were major differences in the survey design. In the first period, 1957-68, there was less continuity in the measurement of survey concepts because this period was viewed as an experimental one, and major methodological research projects were conducted to refine the survey procedures. In the next period, 1969-81, there was more continuity in the measurement of concepts. This was not considered a period of experimentation, and the philosophy at that time was to attempt to restrict changes until the next evaluation period. The philosophy espoused at the beginning of the more recent period starting in 1982 was, again, to restrict changes until the next major evaluation.

In data analysis of trends, extreme caution must be exercised whenever the questionnaire format for a variable changed. Changes in levels of estimates could be due to changes in the questions asked or in interviewer procedures, rather than to actual changes occurring in the population.

The history of the NHIS questionnaire format (including both core and supplements) from 1957 through 1974 is documented.<sup>3,4</sup> This chapter presents the major changes in the questionnaire made between 1969 and 1974. It also contains a detailed, topic-by-topic discussion of the changes made in the core questionnaire from 1975 through 1983. This period encompasses a major changeover in 1982 in questionnaire format resulting from a formal evaluation of the survey. The objectives of the formal evaluation and the major projects undertaken during the evaluation period are presented first. In addition, this chapter presents a discussion of the supplemental topics from 1975 to 1983. This discussion on supplements includes a description of the procedures used for adding supplemental topics, the content of the supplements, and the data collection methods, such as respondent rules, that have been used in the supplements.

### Major questionnaire changes, 1969-74

Although there was a fair degree of continuity in the questionnaire design from 1969 to 1981, some important changes were made that should be considered when analyzing changes in estimates over the period because, as mentioned, changes in questionnaire format can have a major effect on the levels of estimates. The changes from 1975 to 1983 are described in detail later in this chapter. Because the changes from 1969 to 1974 are documented in detail elsewhere,<sup>3</sup> only a summary of the most major changes is presented here. Items or batteries of items that were included on a one-time basis during 1969-74 and then removed are not listed. They are described in reference 3. However, inclusion of such items also could have had an effect on the estimates produced in the survey. A change that is not reflected in the questionniare occurs each time the U.S. Bureau of the Census designates new standard metropolitan statistical areas, redraws the boundaries of old ones, or makes any other changes in the geographic codes. There were many such changes in 1973 as a result of the new information obtained from the 1970 census.

 Starting in 1969 two new areas were added to the 2-week recall questions in an attempt to elicit certain kinds of conditions: one was related to dental visits for the treatment of oral conditions and the other was related to hospitalizations during the 2-week period for emergency or other types of care. However, neither of these areas produced a sufficient number of reportable conditions to justify including them on a permanent basis. Hence, the hospital probe question was deleted in 1970, and the dental probe question relating to conditions was dropped from the questionnaire in 1971.

- In 1971 the question to ascertain whether the hospital episode was the first admission for the designated cause of hospitalization was removed because it was confusing to respondents and because the information obtained was of questionable reliability.
- In 1971 a probe on accidents and injuries occurring during the 2-week recall was added.
- In 1973 a question on the amount of income for each individual family member was added.
- In 1973 a question to determine year of birth was added to verify the accuracy of the reported age.
- In 1974, questions relating to education, military service, employment, and marital status were asked later in the interview.

### 1976-81 evaluation period objectives

Starting in 1976, in accordance with the long-range plan of the survey and in light of changes in the medical care system and problems that had emerged in the survey since 1969, the second major reassessment of the survey occurred. The products of the reassessment, a revised questionnaire and accompanying interviewer materials, were fielded beginning in January 1982.

The major focus of the reassessment was on the core component of the NHIS questionnaire. The major objectives of the reassessment were to:

- Improve the quality of the data by decreasing the nonsampling error component attributed to the interviewer collection procedures, lack of understanding by the respondents of the items, and/or the processing of the information. For example, whenever possible interviewer instructions were printed on the questionnaire to reduce the number of procedures the interviewer had to remember. Question wording specifically appropriate for children, which in the past was left up to the interviewer, was put on the questionnaire. On the doctor contact probe page, the concept of reporting medical contacts (even when it was a physician's assistant (for example, nurse, etc.) who actually provided the care), was directly communicated to the respondent. Items on the revised questionnaire were reordered to improve the continuity of the interview and minimize the amount of backtracking required of the interviewer. One of the major improvements in the revised questionnaire was the standardization of the conventions used by the interviewers in administering the questionnaire. For example, the use of parentheses, brackets, etc., meant the same in all questionnaire locations.
- Remove from the questions any unnecessary repetition and avoid asking questions not relevant to a particular respondent (that is, in asking subsequent questions, use or

- retrieve information given earlier). For example, in the revised questionnaire, only persons who report themselves as currently employed are asked about recent work loss or whether a particular condition caused work-loss days.
- Review survey concepts and modify them to be consistent
  with current and anticipated data requirements. This objective was expanded to include a review of NHIS sociodemographic items in light of the recommendations made
  by the Office of Federal Statistical Policy and Standards
  and the U.S. Bureau of the Census. These recommendations were made to standardize certain items in an effort to
  insure comparability among Federal surveys.
- Structure the core so that these items will remain basically fixed for several years and be independent of supplemental topics to (a) eliminate the need for costly revisions of interviewer and processing procedures from year to year, and (b) minimize the effect of a supplement on the responses to the core items.
- Reduce the amount of interview time and other resources devoted to the core to devote a higher proportion of resources to the development of and inclusion of supplemental topics in the NHIS.

These objectives were, for the most part, met by the 1976–81 evaluation process except for a reduction in the interview time devoted to core. Although some core questions were eliminated in the revised instrument, other questions were added to more clearly communicate concepts to respondents. The objective of increasing the quality of survey results while retaining all of the topics was not compatible with the reduction of interview time.

### 1976-81 evaluation period activities

### **NHIS Technical Consultant Panel**

During 1976–77 the National Committee on Vital and Health Statistics initiated a series of actions to review the data collection procedures and basic data sets being managed by the National Center for Health Statistics (NCHS). The overall review process adopted was the establishment of subcommittees consisting of several members from the National Committee on Vital and Health Statistics and supplemented by nonmembers who were specialists in the subject matter involved. Each of these subcommittees was designated a "Technical Consultant Panel" with the specific name or mission of the subcommittee appended.

The Technical Consultant Panel on the National Health Interview Survey was the subcommittee named to evaluate how well the NHIS was meeting its legislative mandate in light of its historical role and current data needs. The members of the panel were selected from many disciplines so that the technical aspects could be reviewed as well as the applicability of the results to users such as Congress, the Department of Health and Human Services, other Federal agencies, State health departments, health planning units, and health research investigators. The final report of the Technical Panel was released in December 1980.8

### First pilot study

The first data collection using a draft revision of the NHIS questionnaire was conducted by a private contractor in the spring of 1978. The staff of the Division of Health Interview Statistics took a major role in the questionnaire design, manual preparation, interviewer training, quality control procedures, and field observations. The contractor hired and paid the interviewers, selected the households to be interviewed, arranged for printing of the questionnaires and duplication of other survey forms and manuals, rented training facilities, and provided staff to support the survey activities.

The field test gave the staff of the Division of Health Interview Statistics an opportunity to observe a large number of interviews and to make a subjective assessment of the overall feasibility of the revised questionnaire. As a result of these observations, the staff made modifications to specific questions that respondents misunderstood as well as to those items that hampered the flow of the interview. In summary, the field test provided an opportunity to test and modify the revised questionnaire, interviewer's manual, and training procedures based on staff observations. The U.S. Bureau of the Census pilot study (described in the next section) used these improved instruments and procedures to collect data that could then be compared with data obtained from the ongoing NHIS.

### Second pilot study

In 1979, a major field pilot study using the revised questionnaire was conducted by the U.S. Bureau of the Census in a probability sample of U.S. households. In addition to testing field procedures, a major objective of this study was to compare national estimates obtained using the revised questionnaire with those based on results from the current questionnaire. Phase I of the pilot study, a pretest of the procedures, took place in Springfield, Ohio, in June 1979 (OMB No. 68–S79031). Approximately 225 household interviews were completed, and minor modifications were made to the test questionnaire and procedures in preparation for the national study.

Phase II of the pilot study occurred simultaneously with the regular 1979 NHIS fourth quarter data collection using a separate national sample. This study afforded direct comparisons of estimates produced from the experimental questionnaire to estimates obtained from the ongoing survey.

The interviewing in phase II was spread over a full calendar quarter (13 weeks) in a national probability sample. Approximately 5,000 household interviews were completed.

The field operations involved in phase II were identical to those used for the regular NHIS (for example, supervisors' training session followed by a 2-day interviewer training session in the week immediately preceding the first week of interviewing).

A comparison of selected estimates based on data from the phase II experimental questionnaire and from the ongoing NHIS for the fourth quarter of 1979 (called the control questionnaire) is presented in appendix III. Caution should be exercised in drawing inferences from the comparisons of data from the experimental and control questionnaire to the data from the final instrument introduced in 1982 because for some topics major changes were made to the questionnaire after the

pilot study. Estimates derived from questionnaire sections in which major changes were made after the pilot study are indicated with a footnote in appendix III. Mention of the changes is made in the topic-by-topic discussion of the questionnaire that follows.

In summary, the local area study (phase I) permitted a more intensive subjective review of the questionnaire concepts and procedures while the national study (phase II) enabled analysts to make a quantitative analysis of the survey results.

#### Final pretest

Based on the results of analysis from the previous studies, a final pretest questionnaire was developed and tested in approximately 300 households in August 1981 in York, Pa. With few exceptions, only minor modifications were made in the survey instrument and procedures after the York pretest. Regular data collection using the revised questionnaire began in January 1982.

# Topic-by-topic changes in questionnaire format, 1975–83

One of the things that remained constant over the period 1975–83 was the use of different recall periods for different questionnaire topics. Generally, shorter recall periods were used for events that occur with higher frequency and are harder to recall, and longer recall periods were used for events that occur with lower frequency and are easier to recall. Sometimes both short and long recall periods were used when a variable was used for different purposes.

There are five different reference periods used in the core NHIS: a 2-week period, a 12-month period, a 13-month period, "now," and "ever." Sometimes other reference periods are used for supplemental questions.

The 2-week reference period is used for reporting doctor contacts, disability days, and employment status. These are the 2-weeks (14 days) just prior to the week in which the interview is conducted. The 2-week period starts on a Monday and ends with and includes the Sunday just prior to interview week, which starts on Monday. It does not contain any days of the interview week.

The 12-month reference date is used for the 12-month bed days item and the 12-month doctor visits item. The 12-month date is "last Sunday's" date a year ago; therefore, the 12-month reference period begins on that date and ends on the Sunday night before interview.

The 13-month hospital date begins on the first day of the month preceding the month in which Monday of interview week falls, 1 year ago. Estimates of hospital episodes are based on those hospitalizations that occurred during the 12 months prior to interview. A 13-month recall period is used for hospital episodes to obtain reports of hospitalizations that started over 12 months ago but ended within the 12-month period.

The "now" and "ever" reference periods are used in addition to the past 12 months for chronic conditions. "Now" is defined as during the past 2 weeks including last Sunday night and "ever" means at any time prior to interview week.

Changes in questionnaire items and organization from 1975-83 are presented on a topical basis in the remainder of this chapter.

### Household composition

Household composition questions (figure 3) are used to construct the variables: number of families in the household, number of unrelated individuals, number of persons in the household, size of family, and family structure. Between 1975 and 1981 the household composition questions remained unchanged. In 1982 the questions were expanded slightly to improve the coverage of the survey (that is, to decrease the likelihood of missing persons). In addition, in 1982 the "head of household" concept was replaced by the "reference person" (that is, one of the household members who owns or rents the residence). Family relationships are assigned by the interviewer

on the basis of the reference person. The reference person concept is consistent with standard U.S. Bureau of the Census practice on other demographic surveys such as the Current Population Survey.

### Date of birth, age, and sex

Both date of birth and age are asked to reduce reporting error in age of persons. Items on date of birth, age, and sex remained the same from 1975 through 1983 (figure 4).

### **Armed Forces**

The Armed Forces questions are used to classify persons as to whether they served on active duty in the Armed Forces by period of service (figure 5). In 1976 post-Vietnam ("May 1975 to present") service was added to the response categories. Also starting in 1976 the questions were asked of both males

<b></b> 81					sc	SCHOOL
What ar I have I Have I Do any Are any	the name of the head of this household? — Enter name in first column e the names of all other persons who live here? — List all persons who live here. isted (Read names). Is there anyone else staying here now, such as friends, relatives, or roomers' missed anyone who USUALLY lives here but is now away from home?	· 🗀	No	10.	First name 1	F 1
How is	related to (Head of household)?			2.	Relationship	
1982–8	3			□s	P Old age	BD
	A. HOUSEHOLD COMPOSITION PAGE				1	
b. What c. I hav an an an an b. Op a	are the names of all persons living or staying here? Start with the name of the person or one of ersons who owns or rents this home. Enter name in REFERENCE PERSON column.  If "Yes," enternames in columns.  If the names in columns.  If the name in columns.  If the name in colum	C2	Related Mon	osp. Non	hip NCE PERSON  Irth Date  WORK RD  1 1 Wa Yes  2 1 Wb No	Number  LTR: HS (CON
А3	Refer to ages of all related HH members.	А3			l persons 65 and o her (4)	ver (5)
	iny of the persons in this family now on full-time active with the Armed Forces of the United States?  Yes No (5)  Is this?  Delete column number(s) by an "X" from 1 - C2.			······································		
c. Anvo	ne else?					
Ask d. Wher	Yes (Reask 4b and c) No for each person in Armed Forces: e does — usually live and sleep, here or somewhere else? box in person's column.	4d.	,		ving at home of living at home	
5. We v	ated persons 17 and over are listed in addition to the respondent and are not present, say: rould like to have all adult family members who are at home take part in the interview. Inames of persons 17 and over) at home now? If "Yes," ask: Could they join us? (Allow time)				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

Figure 3. Household composition

Figure 4. Date of birth, age, and sex

and females whereas before they had been asked of males only. In 1980 several changes were made to the Armed Forces questions because there was concern that the previous set of questions produced an overestimate of veterans due to the inclusion of reservists and/or National Guardsmen. In addition, there was the desire to establish a uniform definition of the term "veteran" to increase comparability of data provided in NHIS, the 1980 Decennial Census, and administrative records of the Veterans Administration. The phrase "serve in the Armed Forces" was changed to "serve on active duty in the Armed Forces." In addition, questions were added to determine whether the person was ever an active member of a National Guard or military reserve unit and, if so, whether all of the person's active duty service was related to the Guard or reserve unit.

### Education

Questions on education (figure 6) are used to construct the variables education of individual and, before 1982, education of head of household. In 1982 "school" was changed to "regular school" to make it clearer to the respondent to exclude schools such as technical schools, and "has attended" was changed to "has ever attended." The lower age limit for asking the education

question was lowered from 6 to 5. From 1971–81 education was asked for all persons 17 years of age and over; starting in 1982 education was asked for all persons 5 years and over.

### Race and origin

Respondents are classified according to race and, starting in 1976, whether they are of Hispanic origin (figure 7). Comparing estimates for racial groups in some cases may be inappropriate because the questions to determine race and national origin changed considerably over the period 1975–83. These changes resulted from tests and analysis of race and origin data. In addition, directives from the Office of Federal Statistical Policy and Standards<sup>23,24</sup> contained new policy on race and origin data collection and presentation.

Prior to 1976, the only survey item on race was interviewerobserved race; there was no national origin question. If a household member was not seen, the interviewer marked a box based on the race of those household members present. The interviewer did not ask, but rather marked one of the categories white (W), black (B), or other (OT) for each household member. This observed-race item stayed unchanged until 1982.

In 1976, in addition to interviewer-observed race, a ques-

1975-79<sup>1</sup>

Did — ever serve in the Armed Forces of the United State	PS; 	3a.	L	2 N (NP)
o. When did he serve?	Vietnam Era (Aug. *64 to April* 75) VN	b.	ı vn	5 PVN
Circle code in descending order of priority. Thus if	Korean War (june '50-jan. '55)			
person served in Vietnam and in Korea, circle VN.	World War II (Sept. '40-july '47) WWII		2 KW	€ OS
	World War 1 (April '17-Nov. '18) WWI		3 WWII	9 DK
	Post Vietnam (May '75 to present) PVN			
	Other Service (all other periods) OS		4 WWI	

<sup>1&</sup>quot;Post Vietnam (May 1975 to present)" was added to the 1976 NHIS questionnaire.

### 1980-83

a, Did EVER serve on active duty in the Armed For	rces of the United States?	la.	1 Yes 2 No (2)	
b. When did —— serve?  Mark box in descending order of priority.  Thus, if person served in Vietnam and in Korea, mark VN.	Vietnam Era (Aug. '64 to April '75) VN Korean War (June '50 to Jan. '55) KW World War II (Sept. '40 to July '47) WWII World War I (April '17 to Nov. '18) WWI Post Vietnam (May '75 to present) PVN Other Service (all other periods) OS	ь.	t	5  PVN 8  OS 9  DK
. Was —— EVER an active member of a National Guard or military reserve unit?			Yes 2	No (2) 7 🗔 DK (
d. Was ALL of active duty service related to Nation	nal Guard or military reserve training?	d.	1 Yes 3	No 9 _ DK

Figure 5. Armed Forces

	Mark box or ask:		Under	7 (NP)		
2a.	What is the highest grade or year attended in school?	2a.	00 🔲 None (3			
	•		Elem: I	2 3 4	5 6	78
			High: 9	10 11	12	
			College: I	2 3 4	5 6	+
ь.	. Did —— finish the —— grade (year)?	ь.	1 Y	2 N		

2a. What is the highest grade or year of regular school —— has ever attended?	2a.	00 Never attended or kindergarten (NP)
·		Elem: 12345678
		High: 9 10 11 12
		College:   2 3 4 5 6 +
b. Did finish the (number in 2a) [grade/year]?	} <i>-</i>	
B. DIG HRISH the (thumber in 20) Egiode/ year]:	ъ.	1 _ Yes 2 _ No

Figure 6. Education

tion was added on national origin or ancestry for persons 17 years of age and older. Although the question asked for origin, the response categories provided to the respondent on a flash-card included racial categories. The observed-race and the origin questions were continued in 1977 although the flashcard changed somewhat. In 1978 respondents aged 17 years and older were asked separately their race and origin, and the origin question was changed to Hispanic origins only. In 1979 the race category "Alaskan Native or American Indian" was changed to "Aleut, Eskimo, or American Indian."

In 1982 the following changes were made: In the Spanishorigin question the response categories of Mexican and Mexicano were combined; questions on race and Spanish origin were asked for all family members and not just for persons 17 years of age and over; the box for recording the interviewer-observed race item was moved to after the race question, and the observed race of only the household respondent was marked.

In NHIS analyses, for purposes of classifying persons according to race, from 1975–79 interviewer-observed race was used; however, reported race and origin were on the computer files for methodological purposes. For NCHS publications, starting in 1980 respondent-reported race was used and interviewer-observed race was used to impute race only if the respondent-reported race was unknown. Although from 1976–79 respondent-reported race is on the computer files, caution must be exercised in its use because of the many changes made in the question during that time period. For children, in 1980–81 race was imputed based on the reported race of parent(s). Starting in 1982 race for children was based on respondent-reported race for the children.

1975-81, observed race			sc	s C H	100L
		la.	First name		AGE
		Last nam			RACE 1 W 2 B 3 O1
		2.	Relationsh	nip	SÉX 1 M 2 F
3. What is's date of birth? (Enter date and Age, and circle Race and Sex)		3.	Month	Date	Year
1976–77, national origin  Hand Card O	60.	· T	Under	17 (NP)	
If 17+, ask:  6a. Which of those groups BEST describes — — 's national origin or ancestry?			(En	ter precode)	
If multiple entries, ask:  b. Which of those groups, that is, (entries in 6a) would you say	ь.	.		(Spacifu)	

Figure 7. Race and origin

### CARD 0

### National Origin or Ancestry

- 01 Countries of Central or South America
- 02 Chicano
- 03 Cuban
- 04 Mexican
- 05 Mexicano
- 06 Mexican-American
- 07 Puerto Rican
- 08 Other Spanish

- 09 Other European, such as German, Irish, English, French
- 10 Black, Negro, or Afro-American
- 11 American Indian or Alaskan Native
- 12 Asian or Pacific Islander, such as Chinese, Japanese, Korean, Philippino, Samoan

OR

Another group not listed - Specify

### 1977, flashcard for national origin

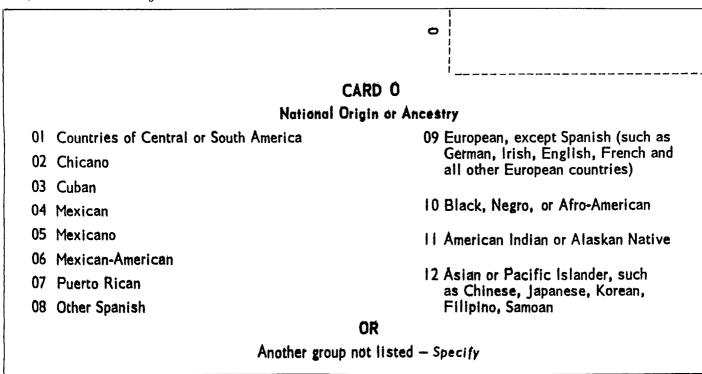


Figure 7. Race and origin—Con.

### **Employment status**

The employment status questions, used to classify persons according to employed, unemployed, and not in the labor force, remained unchanged from 1975–81 and were asked for persons

17 years of age and over (figure 8). The employment status questions refer to the 2 weeks prior to Sunday night before the interview. In 1982 the questionnaire was reorganized to eliminate repetition through the questions so that the current employment status was ascertained for persons age 18 (instead of

Hand Card R  Mark box or ask:  11d. Pleasu give me the number of the group or groups which describes — 's racial background.  Circle all that apply.  I — Alaskan Native or American Indian			こ Under 17 (NP)
3 - Black 4 - White	·		
If multiple entries ask: b. Which of those groups; that is,(entries in 11a	) would you say BEST describes's racial background?	b.	1 2 3 4 5 p
Hand Card C Mark box or ask:			Under 17 (NP)
12a. Are any of those groups —-'s national origin (Where did —-'s ancestors come from?)	or ancestry?	12a.	1 Y 2 N (NP)
b. Please give me the number of the group.		ь.	
Circle all that apply.			12345678
I — Puerto Rican 2 — Cuban 3 — Mexican 4 — Mexicano	5 — Mexican-American 6 — Chicano 7 — Other Latin American 8 — Other Spanish		

Hand Card R — Mark box or ask:	· · · · · · · · · · · · · · · · · · ·	Under 17 (NP)
4a. Please-give me the number of the group or groups which describes's racial background.	4a.	1 2 3 4 5 - Specify 2
Circle all that apply.		
I — Aleut, Eskimo or American Indian		
2 — Asian or Pacific Islander		
3 - Black		
4 - White		
5 - Another group not listed - Please specify	ļ. ļ	
If multiple entries ask:		1 2 3 4 5 - Specify
b. Which of those groups, that is, (entries in 4a) would you say BEST describes ——'s racial b	ackground? b.	
		<b>18</b> 00 P
Hand Card O - Mark box or ask:	Į į	Under 17 (NP)
5a. Are any of those groups ——'s national origin or ancestry? (Where did ——'s ancestors come from?)	5a.	1 Y 2 N (NP)
b. Please give me the number of the group.	ь.	
Circle all that apply.		
1 — Puerto Rican 4 — Mexicano 7 — Other Latin American	[	12345678
2 - Cuban 5 - Mexican-American 8 - Other Spanish		
3 — Mexican 6 — Chicano		

Figure 7. Race and origin-Con.

17) and over before the questions on 2-week disability days were asked. In addition, several wording changes were made; for example, the phrase "at a job or business" was added to "did ——— work at any time." The concepts measured by the employment status series over the entire period 1975–83 were similar to the concepts measured by the standard U.S. Bureau of the Census Current Population Survey items.

### Occupation and industry

The questions relating to occupation and industry for currently employed persons remained basically unchanged from 1975–83 (figure 9). For the purposes of coding occupation and industry in 1973–82, the 1970 Census of Population Classified Index of Industries and Occupations<sup>25</sup> was used. Starting in

1983 the 1980 Census of Population: Alphabetical Index of Industries and Occupations<sup>26</sup> was used.

### Marital status

The marital status question remained unchanged from 1975 through 1981 (figure 10). Starting in 1982 a slight wording change was made and the interviewer instructions were changed to ask the item of all persons aged 14 years and over (rather than aged 17 years and over) to conform with standard U.S. Bureau of the Census practice and to facilitate comparisons with data from other surveys. In addition, the response boxes were changed from "married—spouse present" to "married—spouse in HH" and from "married—spouse absent" to "married—

γ			
Hand Card R. Ask first alternative for first pe  3a. What is the number of the group or groups whice What is —— race?  Circle all that apply	erson; ask second alternative for other persons. th represents race?	3a.	1 2 3 4 5)
I - Aleut, Eskimo, or American Indian 2 - Asian or Pacific Islander 3 - Black	4 - White 5 - Another group not listed - Specify		Specify
Ask if multiple entries:		Ь.	12345)
b. Which of those groups; that is, (entries in 3a)	would you say BEST represents —— race?		- · · · · · · · · · · · · · · · · · · ·
			Specify
c. Mark observed race of respondent(s) only.		c.	1 W 2 B 3 O
Hand Card O.		1	
4a. Are any of those groups —— national origin or	ancestry? (Where did ancestors come from?)	4a.	1 Yes 2 No (NP)
b. Please give me the number of the group.			
Circle all that apply			
I - Puerto Rican	5 - Chicano	1 .	
2 - Guban	6 - Other Latin American	ь.	1234567
3 - Mexican/Mexicano	7 - Other Spanish	l	
4 - Mexican American	r — Gardi Spainsii	}	
(9-3-62)	Page 47	1	<u> </u>

Figure 7. Race and origin—Con.

Mark box or ask:		Under 17	(NP)
6a. Did work at any time last week or the week before - not counting work around the house?	6a.	1 Y (7)	2 N
b. Even though did not work during these 2 weeks, does have a job or business?	ь.	1 Y	2 N
c. Was looking for work or on layoff from a job?	c.	1 Y	2 N (7)
d. Which — looking for work or on layoff from a job?	d.	1 Looking 2 Layoff	3 🔲 Both

1982-83

D. RESTRICTED ACTIVITY PAGE PERSON 1									
Hand calendar, {The next questions refer to the 2 weeks outlined in red on that calendar, beginning Monday, ( <u>date</u> ) and ending this past Sunday ( <u>date</u> ).}									
Dà	Refer to age.								
D1	Under 5 (4)	<u> </u>	☐ 18 and over (1)						
<u>n</u> ot			ny time at a job or business, le unpaid work in the family						
1 Yes (Mark "Wa" box, THEN 2) 2 No									
b. Even though —— did not work during those 2 weeks, did —— have a jab or business?									
1 Tyes (Mark "Wb" box, THEN 2) 2 No (4)									

L2 Refer to "Age" and "Wa/Wb" boxes in C1.	L2	0 Under I8 (NP) 1 Wa box marked ( 2 Wb box marked ( 3 Neither box mar	5a)
5a. Earlier you said that has a job or business but did not work last week or the week before.  Was looking for work or on layoff from a job during those 2 weeks?	5a.	1 🗌 Yes (5c)	2 No (6b)
b. Earlier you said that —— didn't have a job or business last week or the week before.  Was —— looking for work or on layoff from a job during those 2 weeks?	ъ.	1 ☐ Yes	2 \ \ \ No (NP)
c. Which, looking for work or on layoff from a job?	c.	1 Looking (6c) 2 Layoff (6b)	3 🗍 Both(6b)

Figure 8. Employment status

Ask for all persons with	7a. For whom did work? Name of company, business, organization, or other employer	7a.	Employer	
a "Yes" in 6a, b; or c. If "Yes" in 6c	b. What kind of business or industry is this? For example, TV and radio manufacturing, retail shoe store, State Labor Dept., farm	b.	Industry	
only, questions 7a through 7e apply to this	c. What kind of work was doing? For example, electrical engineer, stock clerk, typist, farmer	c.	Occupation	
person's LAST full-time civilian iob.	d. What were — 's most important activities or duties? For example, types, keeps account books, files, sells cars, operates printing press, finishes concrete	d.	Duties	
,	Complete from entries in 7a-d; if not clear, ask:		Class of works	r
	e. Was an employee of PRIVATE company, business, or individual for wages, salary, or commission?P	•.	1 🗆 P	5 🗀 l
	a FEDERAL government employee?		2 🗆 F	€ □ SE
	self-employed in OWN business, professional practice, or farm?  If not a farm, ask: Is the business incorporated?		3 🗆 S	7 🗌 WP
	Yes		4 🗆 L	● ☐ NEV (8)
	working WITHOUT PAY in family business or farm? WP NEVER WORKED			
	f. How many hours a week (does/did) usually work at that job?	۲.		
		l	Hours	•
	If "N" in 6b, go to 8; otherwise ask:	Γ		
	g. During the past 2 weeks, did have any other job or business?	g.	1 Y	2 N(8)
	h. How many hours a week does usually work for pay at ALL jobs?	h.		: <del></del>
			Hour	5

32-83	_	
Earlier you said that worked last week or the week before. Ask 6b.		
. For whom did work? Enter name of company, business, organization, or other employer.	6b. and	Employer
• For whom did — work at —— last full-time civilian job or business lasting 2 consecutive weeks or more?  Enter name of company, business, organization, or other employer.	с.	
. What kind of business or industry is this? For example, TV and radio manufacturing, retail shoe store, State Labor Department, farm.	d.	Industry
. What kind of work was doing? For example, electrical engineer, stock clerk, typist, farmer.	•.	Occupation
i. What were — most important activities or duties at that job? For example, types, keeps account books, files, sells cars, operates printing press, finishes concrete.	f.	Duties
	<u> </u>	
Complete from entries in 6b-f. If not clear, ask:  Was  An employee of a PRIVATE company, business or individual for wages, salary, or commission?  A FEDERAL government employee?  A STATE government employee?  A LOCAL government employee?  C Working WITHOUT PAY in family business or form?  NEVER WORKED or never worked at a full-time civilian job lasting 2 weeks or more.  NEV	g.	Class of worker  1

Figure 9. Occupation and industry

spouse not in HH"; however, the interviewer instructions for filling these boxes remained the same over the entire period 1975–83. (HH is the abbreviation for household.) The interviewers were instructed to mark the "married—spouse in HH" (or present) if the spouse was listed on the questionnaire as a

household member (even if the spouse was an Armed Forces member). The interviewers marked the "married—spouse not in HH" (or absent) if the couple was not legally separated and the spouse was not listed on the questionnaire as a household member.

<sup>&</sup>lt;sup>1</sup>In 1980 and 1981 the "never worked" category was removed from 7e.

If 17+, ask:  4. Is —— now married, widowed, divorced, separated, or never married?	4.	0 Under 17 1 Married — spouse present 6 Married — spouse absent 2 Widowed 4 Divorced 5 Separated 3 Never married
982-83  Mark box if under 14. If "Married" refer to household composition and mark accordingly.  7. Is now married, widowed, divorced, separated, or has never been married?		0 Under I4 1 Married — spouse in HH 2 Married — spouse not in HH 3 Widowed 4 Divorced 5 Separated 6 Never married

Figure 10. Marital status

### Income

From 1975-81 the income questions were unchanged (figure 11). First a family income for the past 12 months was ascertained according to 10 income groups shown to the respondent on a flashcard. Next a 12-month individual income question was asked with the same 10 income categories. In 1982-83 the income questions were restructured to obtain more detail on family income and to reduce the level of refusals and "don't know" responses. Only family income was determined. In the new questions, respondents were first asked whether the family income was more or less than \$20,000. Different flashcards were for families above and below \$20,000. Additional sources of income were listed in the questions and the interviewer explained why income data were needed if the respondent was reluctant to answer the question. The increased number of categories on the flashcards also made it possible to determine poverty level.

### Hospitalization

The questions on hospitalization (figure 12) are divided into two parts: probes to determine number of times an overnight hospitalization occurred during the past 12 months and detailed questions on each hospitalization. The NHIS final data set does not contain hospital stays for normal newborns; nor does it include hospitalizations for patients who do not stay overnight. NHIS estimates relating to number of short-stay hospital discharges and average number of hospital days are based on discharges occurring during the 6 months prior to interview, whereas estimates of short-stay hospital episodes and 12-month hospital days are based on the 12 months prior to interview. The shorter reference period for discharge-related estimates is used because it produces less response error and less total error despite higher sampling error for this type of statistic. Because the survey is restricted to persons who were reported living in the household at the time of interview, the estimates do not include the hospital experience of persons who were hospital-

### 1975-81

10.	Hand Card I.  Which of those income groups represents your total combined family income for the past 12 months — that is, yours, your ——'s, etc.? Include income from all sources such as wages, salaries, social security or retirement benefits, help from relatives, rent from property, and so forth.	10.	00 A 06 G 01 B 07 H 02 C 08 I 03 D 09 J 04 E 10 K
l la	No. Which (ether) family members received some inceme during the past 12 months?  Mark "Income" box in person's column.	11a.	[] Income
ь	Did any other family members receive any income during the past 12 months?  Y (Reask 11a and b) N		<u> </u>
12.	If only one person with "Income" box marked, go to 13.  If 2 or more persons with "Income" box marked, ask 12 for each.  Which of those income groups represents's income for the past 12 months?	12.	00 A 06 G 01 B 07 H 02 C 08 I 03 D 09 J 04 E 10 K

Figure 11. Income

### CARD I

Under \$1,000 (including loss)
\$ 1,000 - \$ 1,999 Group B
\$ 2,000 – \$ 2,999
\$ 3,000 - \$ 3,999
\$ 4,000 – \$ 4,999
\$ 5,000 \$ 5,999
\$ 6,000 – \$ 6,999
\$ 7,000 – \$ 9,999
\$10,000 - \$14,999 Group I
\$15,000 — \$24,999
\$25,000 and over

### 1982-83

8a. Was the total combined FAMILY income during the past 12 months — that is, yours, (read names, including Armed Forces members living at home) more or less than \$20,000? Include money from jobs, social security, retirement income, unemployment payments, public assistance, and so forth. Also include income from interest, dividends, net income from business, farm, or rent, and any other money income received.  Read if necessary: Income is important in analyzing the health information we collect. For example, this information helps us to learn whether persons in one income group use certain types of medical care services or have certain conditions more or less often than those in another group.	8a.	1 S20,000 or more (Ha Card I) 2 Less than \$20,000 ( Card J)	
Read parenthetical phrase if Armed Forces member living at home or if necessary.  b. Of those income groups, which letter best represents the total combined FAMILY income during the past 12 months (that is, yours, (read names, including Armed Forces members living at home))? Include wages, salaries, and the other items we just talked about.  Read if necessary: Income is important in analyzing the health information we collect. For example, this information helps us to learn whether persons in one income group use certain types of medical care services or have certain conditions more or less often than those in another group.	b.	00	20  U  U  21  V  V  22  W  Y  23  X  Y  25  Z  Z  26  ZZ

Figure 11. Income-Con.

ized during the 12-month reference period but who died prior to the interview or who were discharged to institutions or long-term-care facilities. These considerations should be taken into account in using NHIS hospital discharge data, especially for the elderly.

A method was developed for obtaining data and estimating the specific portion of decedent experience that should be added to the data on the living population so as to produce estimates of total hospital utilization over any specified reference period.<sup>27</sup>

From 1975 through 1981 the hospital probe questions re-

mained unchanged. In 1982 several changes in the probe questions were made. The probes were moved to the beginning of the questionnaire for two reasons. First, the interviewer is provided with an opening question that focuses immediately on a health variable that is easily understood and reported by the respondent. Second, this information is useful to the interviewer in asking about physician contacts later in the interview. Another change starting in 1982 was that the concept of an "overnight" stay was stated in the question to the respondent to avoid having this decision made by the interviewer and perhaps missing a

#### **CARD I**

**U** ...... 20,000 - 24,999

**V** ...... 25,000 - 29,999

**W** ..... 30,000 - 34,999

**X** ...... 35,000 — 39,999

**Y** ...... 40,000 - 44,999

**Z** ...... 45,000 - 49,999

**ZZ.....** 50,000 and over

### Figure 11. Income-Con.

physician contact. Still another change was the elimination of the probes to determine stays in nursing homes, convalescent homes, and similar places. These probes were never intended for the purpose of making estimates of the use of nursing homes and similar places but rather were included to pick up additional short-stay hospitalizations. Because the probes were not contributing significantly to the reporting of short-stay hospitalizations, they were dropped in 1982.

From 1975 through 1981 the detailed questions on each

### **CARD J**

A ...... Less than 1,000 (including loss)

**B** ..... 1,000 - 1,999

**C** ...... 2,000 -- 2,999

**D** ...... 3,000 — 3,999

**E** ...... 4,000 - 4,999

**F** ...... 5,000 - 5,999

**G** ...... 6,000 - 6,999

**H** ..... 7,000 - 7,999

**1** ...... 8,000 — 8,999

**J** ...... 9,000 -- 9,999

**K** ...... 10,000 – 10,999

**L** ......... 11,000 — 11,999

**M** ...... 12,000 — 12,999

N...... 13,000 - 13,999

**0** ...... 14,000 - 14,999

**P** ...... 15,000 — 15,999

**Q** ...... 16,000 — 16,999

R ...... 17,000 - 17,999

**s** ....... 18,000 - 18,999

**T** ...... 19,000 — 19,999

hospitalization were unchanged. They were placed after the detailed questions on conditions. In 1982–83 the detailed hospital questions were placed before the detailed condition pages so that the interviewer could enter conditions for which there was a hospital night during the 2-week reference period and complete detailed condition pages without backtracking. Another change starting in 1982 was that the detailed questions on the condition causing hospitalization needed for coding to the four-digit *International Classification of Diseases* (ICD) were no

29a.	Was a patient in a hospital at any time since (date) a year ago?	29 a.	Y N (Item C)
ь.	How many times was in a hospital since(date) a year ago?	ь.	Times (Item C)
744			
*****	Was anyone in the family in a nursing home, convalescent home, or similar place since (date) a year ago? Y N (31)		
ь.	. Who was this? — Circle ''Y'' in person's column.	30ъ.	Y
c.	If "Y," ask: During that period, how many times was —— in a nursing home or similar place?	c.	Times (Item C)
31a.	Ask for each child I year old or under if date of birth is on or after reference date.  Was born in a hospital?  If "Yes," and no hospitalizations entered in his and/or mother's column, enter "I" in 29b and item C.  If "Yes," and a hospitalization is entered for the mother and/or baby, ask 31b for each.	31a.	Y N ( <i>NP</i> )
Ь	. Is this hospitalization included in the number you gave me for? If "No," correct entries in 29 and item C for mother and/or baby.	ь.	Y N

1975–81, detailed questions					
HOSPITAL PAGE	1.	Person number			
You said that was in the hospital (nursing home) during the past year.  2. When did enter the hospital (nursing home) (the last time)?  Make sure the YEAR is correct	2.	Month Date Year			
		Name			
3. What is the name and address of this hospital (nursing home)?	3.	Street			
		City (or county) State			
4. How many nights was —— in the hospital (nursing home)?	4.	Nights			
Complete 5 from entries in 2 and 4; if not clear, ask the questions.  5a. How many of these —— nights were during the past 12 months?	5a,	Nights			
b. How many of these —— nights were during the past 2 weeks?	ь.	Nights			
c. Was —— still in the hospital (nursing home) last Sunday night for this hospitalization (stay)?	c.	Y N			
6. For what condition did —— enter the hospital (nursing home) — do you know the medical name? If medical name unknown, enter an adequate description.	6.	Normal delivery Normal at birth			
For delivery ask:  Was this a normal delivery?  For newborn, ask:  Was the baby normal at birth?  If "NO," ask:  What was the matter?  Show CAUSE, KIND, and PART OF BODY in same detail as required for the Condition page.		Cause On Card C Acc. or Inj.  Kind  Part of body			
7a. Were any operations performed on —— during this stay at the hospital (nursing home)?	7a,	Y o N (Next Hosp)			
b. What was the name of the operation?	ь				
If name of operation is not known, describe what was done.					
		Y (Describe) N			
c. Any other operations during this stay?	c.				
FOOTNOTES	لبسما				
		:			
		i			
A Condition page is required if there is an entry of "I" or more nights in 5b. If the condition in item C and fill a page for it after completing columns for all required	nere i: hospi	s no Condition page, enter talizations.			

Figure 12. Hospitalization

HOSPITAL PROBE	60.	1 TYes
6a. Since (13-month hospital date) a year ago, was a patient in a hospital OVERNIGHT?	]	2 No (Mark "HOSP." box, THEN NP)
b. How many different times did stay in any hospital overnight or longer since ( <u>13-month hospital date</u> ) a year ago?	ь.	Make entry in "HOSP," box, THEN NP)
Ask for each child under one:	7a.	1 Tes
7a, Was born in a hospital?		2 No (NP)
Ask for mother and child:  b. Have you included this hospitalization in the number you gave me for?	ъ.	☐ Yes (NP) ☐ No (Correct 6 and "HOSP." box)

1	982-	-83.	detailed	auestions

1	4			
J. HOSPITAL PAGE	HOSPITAL STAY 1			
1. Refer to C1, "HOSP." box.	1.	1. Person number		
2. You said earlier that — was a patient in the hospital since (13-month hospital date) a year ago. On what date did — enter the hospital ([the last time/the time before that])? Record each entry date in a separate Hospital Stay column.	2,	Month Date Year .		
3. How many nights was —— in the hospital?	3.	0000 None (Next HS)		
4. For what condition did —— enter the hospital?  • For delivery ask:  Was this a normal delivery? Was the baby normal at birth?  If "No," ask:  What was the matter?  What was the matter?  What was the matter?  ### Open initial "No condition" ask:  Why did —— enter the hospital?  • For tests, ask:  What were the results of the tests?  If no results, ask:  Why were the tests performed?	4.	1 Normal delivery 2 Normal at birth 3 No condition Condition		
J1 Refer to questions 2, 3, and 2-week reference period.	Jì	At least one night in 2-week reference period (Enter condition in C2, THEN 5)  No nights in 2-week reference period (5)		
5a. Did —— have any kind of surgery or operation during this stay in the hospital, including bone settings and stitches?	5a.	1 Yes 2 No (6)		
b. What was the name of the surgery or operation?  If name of operation not known, describe what was done.	b.	(1)		
c. Was there any other surgery or operation during this stay?	c.	Yes (Reask 5b and c) No		
6. What is the name and address of this hospital?	6.	Name Number and street		
		City or County State		

Figure 12. Hospitalization—Con.

longer collected on the detailed hospital page. Hence, starting in 1982, except for hospitalizations occurring during the 2-week reference period, conditions were not coded according to the ICD. Rather, the items asked in 1982–83 permitted classification of each hospitalization into the following categories: (a) normal birth, (b) birth with complications, (c) normal delivery, (d) delivery with complications, (e) other than birth or delivery and condition reported, and (f) other than birth or delivery and no condition reported. From 1975 through 1983, although conditions were coded to four-digit ICD detail, the data were

processed in such a way that for many hospitalizations it was not possible to determine whether a birth or delivery was involved. Other changes made in 1982 through 1983 included deleting probe questions to clarify whether any nights were during the past 12 months or 2 weeks, because these probes were deemed no longer necessary; and adding the phrase "including bone settings and stitches" to the question on operations. to make explicit to the respondent that these should be included.

The results of the 1979 phase II nationwide field test indicated that there were no differences between the NHIS control

and experimental questionnaire in statistics produced on number of discharges, average length of stay, and number of nights.<sup>28</sup> (See appendix III.)

### Limitation of activity due to chronic conditions

All persons are classified into one of four groups:

- Unable to perform major activity due to chronic condition or impairment.
- Limited in kind or amount of major activity due to chronic condition or impairment.
- Limited in other activities due to chronic condition or impairment.
- No limitation in activity due to chronic condition or impairment.

Between 1975 and 1981 there were no changes in the core questions asked on limitation of activity (figure 13). These questions first asked for a person's major activity during the past 12 months (that is, working, keeping house, going to school, or something else). Persons ages 45 years and over reporting their major activity as something other than "working," "keeping house," or "going to school" were asked whether they were retired. If the person was reported as "retired," the next question was whether he or she retired because of health. These cursory questions were not adequate, however, to permit classification of the person as retired because the word "retired" means different things to different people. For children under 6 years, it was assumed that the child's major activity was taking part in ordinary play. Next, questions were asked about limita-

### 1975-81

Ages 17+ Ages	19a. What was — doing MOST OF THE PAST 12 MONTHS — (For males):  If "something else," ask:  b. What was — doing?  If 45+ years and was not "working," "keeping house," or "going to school," ask:  c. Is — retired?  d. If "retired," ask: Did he retire because of his health?  20a. What was — doing MOST OF THE PAST 12 MONTHS — going to school or doing something else?  If "something else," ask:		1  Working (24a) 2  Keeping house (24b) 3  Retired, health (23) 4  Retired, other (23) 5  Going to school (26) 6  17+ something else (23) 7  6-16 something else (25)
6-16	b. What was doing?	ļ <u>.</u>	
Ages under 6			0 ☐ I —5 years (21) 0 ☐ Under I (22)
21a. is able	to take part at all in ordinary play with other children?	21 <sub>0</sub> ,	Y 1 N (28)
b. Is he limite	d in the kind of play he can do because of his health?	ь.	2 Y (28) N
c. Is he limite	d in the amount of play because of his health?	 с,	2 Y (28) N (27)
22a. Is limit	ed in any way because of his health?	220.	1 Y 5 N (NP)
b. In what wa	y is he limited? Record limitation, not condition.	ь.	(28)
23a. Does h	ealth now keep him from working?	23 <sub>0</sub> ,	1 Y (28) N
b. Is he limite	ed in the kind of work he could do because of his health?	ь.	2 Y (28) N
c. Is he limite	ed in the amount of work he could do because of his health?	c.	2 Y (28) N
d. Is he limite	d in the kind or amount of other activities because of his health?	d.	3 Y (28) N (27)
24a. Does N	OW have a job?	24a.	Y (24c) N
b. In terms of	health, is NOW able to (work - keep house) at all?	ь.	Y 1 N (28)
c. Is he limite	d in the kind of (work - housework) he can do because of his health?	c.	2 Y (28) N
d. Is he limite	d in the amount of (work — housework) he can do because of his health?	d.	2 Y (28) N
e. Is he limite	d in the kind or amount of other activities because of his health?	e.	3 Y (28) N (27)
25. In terms of	health would be able to go to school?	25.	Y 1 N (28)
26a. Does (woul	d) have to go to a certain type of school because of his health?	26 a.	2 Y (28) N
b. Is he (woul	d he be) limited in school attendance because of his health?	ь.	2 Y (28) N
c. Is he limite	d in the kind or amount of other activities because of his health?	с.	3 Y (28) N
27a. Is —— limit	ed in ANY WAY because of a disability or health?	27 a.	4 Y 5 N (NP)
b. In what wa	y is he limited? Record limitation, not condition.	ь.	
28a. About how	long has he { been limited in been unable to had to go to a certain type of school?}	28 a.	000 Less than I month
b. What (other	) condition causes this limitation?	ъ.	Enter condition in Item C
If "old age	" only, ask: 1s this limitation caused by any specific condition?		Ask 28c Old age only (NP)
c. Is this limi	tation caused by any other condition?	с.	Y (Reask N 28b and c)
Mark box o	r ask:		Only 1 condition
	ese conditions would you say is the MAIN cause of his limitation?		

Figure 13. Limitation of activity

Ì	B. LIMITATION OF ACTIVITIES PAGE		
В1	Refer to age.	B1	1
What was doing MOST OF THE PAST 12 MONTHS; working at a job or business, keeping house, going to school, or samething else?  Priority if 2 or more activities reported: (1) Spent the most time doing; (2) Considers the most important.		1.	1 Working (2) 2 Keeping house (3) 3 Going to school (5) 4 Something else (5)
2a. Does	any impairment or health problem NOW keep from working at a job or business?	2a.	1 🗌 Yes (7) 📗 No
b. 1s	- limited in the kind OR amount of work can do because of any impairment or health problem?	ь.	2 Yes (7) 3 No (6)
3a. Does	any impairment or health problem NOW keep from doing any housework at all?	3a.	4 🗌 Yes (4) 📗 No
b. is	- limited in the kind OR amount of housework can do because of any impairment or health problem?	ь.	5 Yes (4) 6 No (5)
Ask Ask If pr	4a. What (other) condition causes this?  Ask if injury or operation: When did [the (injury) accur?/have the operation?]  Ask if operation over 3 months ago: For what condition did have the operation?  If pregnancy/delivery or 0-3 months injury or operation  Reask question 3 where limitation reported, saying: Except for (condition),?  OR reask 4b/c.		(Enter condition in C2, THEN 4b)  1  Old age (Mark "Old age" box, THEN 4c)
b. Besi	des ( <u>condition</u> ) is there any other condition that causes this limitation?	ь.	Yes (Reask 4a and b)
c. Is th	s limitation caused by any (other) specific condition?	c.	Yes (Reask 4a and b)
	Mark box if only one condition. d. Which of these conditions would you say is the MAIN cause of this limitation?		Only I condition
5a. Does	any impairment or health problem keep from working at a job or business?	50.	1 Yes (7) No
b, ls	- limited in the kind OR amount of work could do because of any impairment or health problem?	ь.	2 Yes (7) 3 No
B2 <sub>.</sub>	Refer to questions 3a and 3b.	B2	1 "Yes" in 3a or 3b (NP) 2 Other (6)
6a. Is	- limited in ANY WAY in any activities because of an impairment or health problem?	60.	1 Yes 2 No (NP)
b. In w	net way is limited? Record limitation, not condition.	ь.	Limitation
7a. What (other) condition causes this?  Ask if injury or operation: When did [the (injury) occur?/have the operation?]  Ask if operation over 3 months ago: For what condition did have the operation?  If pregnancy/delivery or 0-3 months injury or operation  Reask question 2, 5, or 6 where limitation reported, saying: Except for (condition),?  OR reask 7b/c.		7a.	(Enter condition in C2, THEN 7b)  1  Old age (Mark "Old age" box, THEN 7c)
b. Besid	b. Besides ( <u>condition</u> ) is there any other condition that causes this limitation?		Yes (Fleask 7a and b) No (7d)
c. Is th	c. Is this limitation caused by any (other) specific condition?		Yes (Reask 7a and b)
	box if only one condition.  h of these conditions would you say is the MAIN cause of this limitation?	d.	Only I condition
l		1	Main cause

Page 4

Figure 13. Limitation of activity—Con.

FORM HIS-1 (1982) (4-6-82)

tions in major activity. For persons 17 years and over, including retired persons, whose reported major activity was something other than work, keeping house, or going to school, questions were asked about limitation in working. All children 6–17 years of age were asked about school attendance and school activity limitations. If no limitations were reported in major activity, the person was asked about limitations in other activities. Finally the person was asked if he or she was limited in any way because of a disability or health. For any reported limitation, the main condition causing the limitation was ascertained. In processing the data, limitations caused by other-than-chronic conditions are eliminated. The limitation of activity variable does not include limitations caused by acute conditions.

Many modifications were made to the limitation of activities questions in the revised 1982 questionnaire. Many more interviewer instructions were printed on the questionnaire to reduce errors. The phrase "because of any impairment or health problem" was substituted for the phrase "because of a disability or health." For babies under 1 year, additional questions were asked concerning limitation in play activities. Attending special classes because of a health problem was added to the school limitation concept and the school age was lowered to include children 5 years of age. All persons ages 18–69 years (ages 18–70 years in 1982), not just those whose usual activity was working, were asked about their limitations in working at a job or business. Persons whose major activity was housework were

	B. LIMITATION OF ACTIVITIES PAGE, Continued		
В3	Refer to age.	В3	0 Under 5 (10) 3 60-7i (14) 1 5-17 (11) 4 7i and 2 18-59 (84) over (8)
goin	was — doing MOST OF THE PAST 12 MONTHS; working at a job or business, keeping house, g to school, or semething else? rity if 2 or more activities reported: (I) Spent the most time doing; (2) Considers the most important.	8.	1 Working 2 Keeping house 3 Going to school 4 Something else
care	use of any impairment or health problem, does need the help of other persons with personal needs, such as eating, bathing, dressing, or getting around this home?	9a.	1 🗌 Yez (13) 👚 No
need	use of any impairment or health problem, does —— need the help of other persons in handling —— routine s, such as everyday household chores, doing necessary business, shopping, or getting around for purposes?	ь.	2 Yes (13) 3 No (12)
10a. Is	– able to take part AT ALL in the usual kinds of play activities done by most children —— age?	10a.	Yes 0 No (13)
b. Is	- limited in the kind OR amount of play activities —— can do because of any impairment or health problem?	ь,	1 Yes (13) 2 No (12)
11a. Does	any impairment or health problem NOW keep —— from attending school?	11e.	1 Yes (13) No
b. Does	—— attend a special school or special classes because of any impairment or health problem?	ъ.	2 Yes (13) No
c. Does	need to attend a special school or special classes because of any impairment or health problem?	с.	3 Yes (13) No
d. 1s	- limited in school attendance because of health?	ď.	4 Yes (13) 5 No
12a. is	- limited in ANY WAY in any activities because of an impairment or health problem?	12a,	1 Yes 2 No (NP)
b. În wi	nat way is limited? Record limitation, not condition.	ь.	Limitation
	(other) condition causes this?	$\vdash$	
	if injury or operation: When did the (injury) occur?/have the operation?	130.	(Enter condition in C2, THEN 13b)
	if operation over 3 months ago: For what condition did have the operation? egnancy/delivery or 0-3 months injury or operation		1 Old age (Mark "Old age" box, THEN 13c)
Re : OF	ask question where limitation reported, saying: Except for (condition),?  R reask 13b/c.		,
	des ( <u>condition</u> ) is there any other condition that causes this limitation?	ъ.	Yes (Reask 13a and b) No (13d)
c. Is th	is limitation caused by any (other) specific condition?	ē.	Yes (Reask 13a and b)
	box if only one condition. h of these conditions would you say is the MAIN cause of this limitation?	d.	Only I condition
<u> </u>			Main cause
B4	Refer to "Age," "Old age," and "LA" boxes. Mark first appropriate box.	B4	5-59 and "Old age" box marked (14) 5-59 and entry in "LA" box (14) Other (NP)
14a. Beca	use of any impairment or health problem, does —— need the help of ether persons with —— personal needs, such as eating, bathing, dressing, or getting around this home?	14a.	1 Yez (NP) No
Ask b. Beca such	if age 18 and over. use of any impairment or health problem, does —— need the help of other persons in handling ——routine needs, as everyday househeld chores, doing necessary business, shopping, or getting around for other purposes?	ь,	2 Yes 3 No
FORM HIS-1	1922) (4-0-82) Page 6		

Figure 13. Limitation of activity-Con.

also asked about limitations in housework. Persons ages 18–69 years whose major activity was going to school or something else were asked only about limitations at a job or business. All persons 5 years and over reporting a limitation of activity as well as all persons 60 years of age and over were asked about their need for the assistance of another person in performing necessary activities for daily living. Note that all persons 60–70 years of age (60–69 years in 1982) were asked about limitations in working and about need for assistance in activities for daily living.

The revised experimental questionnaire used in the 1979 phase II nationwide field test resulted in a higher proportion of children being limited (because of the added special class ques-

tion) than the control questionnaire. (See appendix III.) Lower proportions of persons 65 years and over had limitation of activity on the experimental questionnaire; that is a consequence of not asking about work limitation for persons 65 years and over.

The upper age limit for asking questions on work limitation was raised from 65 to 70 years before the final 1982 questionnaire went into use. These changes should be taken into consideration in making inferences from the experimental version to the final 1982 instrument. Nevertheless, a considerable effect was observed on limitation in major activity for the experimental questionnaire when all persons 17–64 years were asked about work limitation. Although no increases were observed in the overall proportion of persons ages 17–64 reporting

<u></u>	B. LIMITATION OF ACTIVITIES PAGE	1	
B1	Refer to age.	В1	1
keep	was —— doing MOST OF THE PAST 12 MONTHS; working at a job or business, ing house, going to school, or something else? rity if 2 or more activities reported: (1) Spent the most time doing; (2) Considers the most important.	1.	1
2a. Does	any impairment or health problem NOW keep from working at a job or business?	2a.	1  Yes (7)  No
b. ls	limited in the kind OR amount of work —— can do because of any impairment or health problem?	ь.	2 Yes (7) 3 No (6)
3a. Does	any impairment or health problem NOW keep from doing any housework at all?	3a.	4 Yes (4) No
b. ls	- limited in the kind OR amount of housework ~— can do because of any impairment or health problem?	ь.	5 Yes (4) 6 No (5)
Ask Ask If pre Re	(other) condition causes this? If injury or operation: When did [the ( <u>injury</u> ) occur?/have the operation?] If operation over 3 months ago: For what condition did have the operation? Ignancy/delivery or 0-3 months injury or operation - Ignancy as a where limitation reported, saying: Except for ( <u>condition</u> ),? It reask 4b/c.	40.	(Enter condition in C2, THEN 4b)  1  Old age (Mark "Old age" box, THEN 4c)
b. Besid	es ( <u>condition</u> ) is there any other condition that causes this limitation?	Ь.	Yes (Reask 4a and b) No (4d)
c. Is this limitation caused by any (other) specific condition?		c.	Yes (Reask 4a and b)
Mark box if only one condition.  d. Which of these conditions would you say is the MAIN cause of this limitation?		d.	Only I condition
		ļ	Main cause
	any impairment or health problem keep from working at a job or business?	50.	1 Yes (7) No
b. Is	limited in the kind OR amount of work could do because of any impairment or health problem?	Ь.	2 Yes (7) 3 No
B2	Refer to questions 3a and 3b.	B2	1 "Yes" in 3a or 3b (NP) 2 Other (6)
6a. Is	limited in ANY WAY in any activities because of an impairment or health problem?	6a.	1 Yes 2 No (NP)
b. In wh	at way is limited? Record limitation, not condition.	ь.	Limitation
Ask i Ask i If pre Re	(other) condition causes this?  injury or operation: When did [the (injury) occur?/—have the operation?]  in operation over 3 months ago: For what condition did — have the operation?  gnancy/delivery or 0—3 months injury or operation —  ask question 2, 5, or 6 where limitation reported, saying: Except for —— (condition),?  reask 7b/c.	7a.	(Enter condition in C2, THEN 7b)  1 Old age (Mark "Old age" box, THEN 7c)
b. Besid	es ( <u>condition</u> ) is there any other condition that causes this limitation?	ъ.	Yes (Reask 7a and b) No (7d)
c. Is this	limitation caused by any (other) specific condition?	c.	Yes (Reask 7a and b) No
	oox if anly ane condition. of these conditions would you say is the MAIN cause of this limitation?	đ.	Only I condition
ORM HIS-1	1983) (9-3-92) Page 4		

Figure 13. Limitation of activity—Con.

limitation of activity, a considerable shift occurred in the types of limitations reported. The proportion of persons, whose major activity was keeping house, reporting "unable to work" was more than twice the percent of the same group that reported being unable to perform housework. For a more complete description of the experimental questionnaire results compared with the control questionnaire, see references 28 and 29.

In 1983 the upper age limit for asking questions on limitations in work was lowered from 70 to 69. In addition, all persons responding that they needed help with personal needs were asked for the condition causing the limitation. In this way, limitations caused by nonchronic conditions could be deleted.

#### Disability days

Estimates of total disability days (also called restricted activity days) and disability days by type (bed days, work-loss days, school-loss days, and other disability days) are made using the disability day questions (figure 14). Figure 15 shows the relationships among the types of disability days. The number within the large circle represents the total number of disability days. The small circles represent bed-disability days and work-loss or school-loss days. Note that work- or school-loss days and bed days are included in disability days.

The disability day set of questions is also used along with

	B. LIMITATION OF ACTIVITIES PAGE, Continued			
В3	Refer to age.	В3	0 Under 5 (10, 1 5-17 (11)	2 18-69 (NI 3 70 and over (8)
going	was — doing MOST OF THE PAST 12 MONTHS; working at a job or business, keeping house, to school, or something else?  ity if 2 or more activities reported: (1) Spent the most time doing: (2) Considers the most important.	8.	1 Working 2 Keeping hot 3 Going to se 4 Something e	hool
	use of any impairment or health problem, does —— need the help of other persons with —— personal needs, such as eating, bathing, dressing, or getting around this home?	9a.	1 Yes (13)	☐ No
needs	use of any impairment or health problem, does —— need the help of other persons in handling —— routine s, such as everyday household chores, doing necessary business, shopping, or getting around for purposes?	ь.	2 🗍 Yes (13)	3 🗌 No (12)
10a. Is	- able to take part AT ALL in the usual kinds of play activities done by most children age?	10a.	Yes	0 No (13)
b. Is	limited in the kind OR amount of play activities —— can do because of any impairment or health problem?	ъ.	1 Yes (13)	2 No (12)
11a. Does	any impairment or health problem NOW keep from attending school?	lla.	1 Yes (13)	□ No
b. Does	—— attend a special school or special classes because of any impairment or health problem?	b.	2 Yes (13)	□ No
c. Does	need to attend a special school or special classes because of any impairment or health problem?	c.	3 Yes (13)	□ No
d. ls	- limited in school attendance because of health?	d.	4 🗌 Yes (13)	5 No
12a. Is	- limited in ANY WAY in any activities because of an impairment or health problem?	12a.	1 🗌 Yes	2 No (NP)
b. In wi	nat way is limited? Record limitation, not condition.	ъ.	Limi	tation
Ask Ask If pre Re OF b. Besid	(other) condition causes this?  if injury or operation: When did [the (injury) occur?/have the operation]  if operation over 3 months ago: For what condition did have the operation?  egnancy/delivery or 0-3 months injury or operation  eask question where limitation reported, saying: Except for (condition),?  R reask 13b/c.  des (condition) is there any other condition that causes this limitation?	13a. 	1 Old age (Me THEN 13c) Yes (Reask No (13d)	
c. Is th	is limitation caused by any (other) specific condition?	c.	Yes (Reask	13a and b)
	box if only one condition. h of these conditions would you say is the MAIN cause of this limitation?	d.	Only I cond	ition
FOOTNO	TES		Main caus	e
FORM HIS-II	(1983) (9-3-82) Page 6		1 <del>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </del>	

Figure 13. Limitation of activity—Con.

the doctor contact questions (figure 17) to elicit the reporting of illness and injuries for constructing estimates of acute conditions. Respondents are asked to report any conditions causing the disability days.

From 1975 through 1981 the questions to determine the number of disability days remained the same. Questions were asked for a 2-week recall period about bed days (days in which the person stayed "in bed all or most of the day"), work-loss days for persons 17 years of age and over, school-loss days for persons 6–16 years of age, and other days the person "cut down on the things" he or she "usually does because of illness or injury." Where appropriate, the interviewer probed to clarify

how many of the work- or school-loss days the person stayed in bed. For persons with one or more disability days during the past 2 weeks, the conditions causing the restricted activity were ascertained.

To reduce underreporting of disability days from accidents or injuries and the underreporting of accidents or injuries that caused either disability days or a doctor contact, a probe was included about any accidents or injuries occurring during the past 2 weeks.

Some work- or school-loss days may also be bed-disability days. From 1975 to 1981 NHIS defined work-loss days only for persons 17 years of age and over and school-loss days only

	B. LIMITATION OF ACTIVITIES PAGE, Continued	}	
В4	Refer to age.	B4	0 Under 5 (NP) 2 60–69 (14) 1 5–59 (85) 3 70 and over (NP)
В5	Refer to "Old age," and "LA" boxes. Mark first appropriate box.	B5	Old age" box marked (14) Entry in "LA" box (14) Other (NP)
care	use of any impairment or health problem, does —— need the help of other persons with —— personal needs, such as eating, bathing, dressing, or getting around this home?	14a.	1 Yes (15) No
b. Beca	er 18, skip to next person; otherwise ask: use of any impairment or health problem, does —— need the help of other persons in handling —— routine usuch as everyday household chores, doing necessary business, shopping, or getting around for other purposes?	ь.	2 ☐ Yes 3 ☐ No (NP)
Ask i Ask i If pre Re	other) condition causes this?  finjury or operation: When did [the ( <u>injury</u> ) occur?/ — have the operation?]  f operation over 3 months ago: For what condition did — have the operation?  gnancy/delivery or 0—3 months injury or operation —  ask question 14 where limitation reported, saying: Except for —— ( <u>condition</u> ),?  treask 15b/c.	15a.	(Enter condition in C2, THEN 15b)  1 [] Old age (Mark "Old age" box, THEN 15c)
	es ( <u>condition</u> ) is there any other condition that causes this limitation?	b.	Yes (Reask 15a and b) No (15d)
c. Is thi	s limitation caused by any (other) specific condition?	c.	Yes (Reask 15a and b) No
	of these conditions would you say is the MAIN cause of this limitation?	d.	Only I condition
FOOTNOTE			Main cause
FORM HIS-1	13831 (9-3-82) Page 8		

Figure 13. Limitation of activity-Con.

for children ages 6-16. Starting in 1982 NHIS defined workloss days only for persons 18 years of age and over and schoolloss days for children ages 5-17.

From 1975-81, employment status was obtained after work-loss days and the analyst reconciled any inconsistencies between the two variables. Starting in 1982, the interviewer determined current work status prior to asking the work-loss series. This change was made to assist the interviewer. Another change was that the concept of a disability as being "more than half of a day" was communicated to the respondent in the questions asked. Still another change in questionnaire format was that an entire page was devoted to each family member for

recording disability days. The probe questions on accidents and injuries were moved to the Health Indicator Page.

The results of the 1979 phase II evaluation test indicated that for all persons the revised experimental questionnaire elicited about the same level of total restricted activity days per person. <sup>28,29</sup> However, for persons 65 years and over the number of restricted activity days was higher for the control group (9.7) than for the experimental group (6.8). Again, caution must be exercised in drawing inferences between the experimental questionnaire results and the final results from the 1982 questionnaire because major changes were made to the experimental questionnaire battery of questions on restricted activity before

19/5-8	1	١
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If related persons 17 years old or over are listed in addition to the respondent, say:				
doctors and dentists, illness in the family, and other health related items. (Hand calendar) The next few questions refer to the past 2 weeks, the 2 weeks outlined in red on that calendar, beginning Monday, (date), and ending this past Sunday, (date)  5a. During those 2 weeks, did — stay in bed because of any illness or injury?  5b. During those 2 weeks, how many days did — stay in bed all or most of the day?  6c. — WL days (B) or None (B)  7. During those 2 weeks, how many days did illness or injury keep — from work?  6c. — WL days (B) or None (B)  7. During those 2 weeks, how many days did illness or injury keep — from school?  7. During those 2 weeks, how many days did illness or injury keep — from school?  8. On how many of these — days lost from for work School  9a. (NOT COUNTING the day(s)  1 is bed 1 lost from work 1 lost from work 1 lost from work 2 lost from work 3 lost from work 4 lost from work 5 lost from work 6 lost from work 7 lost from work 8 lost from work 9 lost from work 10 lost from wor	Н	We would like to have all adults who are at home take part in the interview.	Н	1 [ ] At home
b. During that 2-week period, how many days did — stay in bed all or most of the day?  6. During those 2 weeks, how many days did illness or injury keep — from work?  7. During those 2 weeks, how many days did illness or injury keep — from school?  8. On how many of these — days lost from work school did — stay in bed all or most of the day?  9a. (NOT COUNTING the day(s) { in bed lost from work lost from work lost from work he usually does because of illness or injury?  b. (Again, not counting the day(s) { in bed lost from school of lost from school of lost from school of miss work miss school of ut down or that condition caused — to { stay in bed miss work miss school cut down } during the past 2 weeks?  b. Did any other condition cause him to { stay in bed miss work miss school cut down } during that period?  c. What condition?	5a. 1	doctors and dentists, illness in the family, and other health related items. (Hand calendar) The next few questions refer to the past 2 weeks, the 2 weeks outlined in red on that calendar, beginning Monday, <u>(date)</u> , and ending this past Sunday, <u>(date)</u> . During those 2 weeks, did — stay in bed because of any illness or injury?	5a.	00 N   If age:
(For females): not counting work around the house?  7. During those 2 weeks, how many days did illness or injury keep — from school?  7. SL days oo \( \) None (9)  8. On how many of these — days lost from \( \) school \( \) did — stay in bed all or most of the day?  8. \( \) On how many of these — days lost from \( \) school \( \) lost from work \( \) lost from school \( \) Paus \( \) Were there any (other) days during the past 2 weeks that — cut down on the things \( \) he usually does because of illness or injury?  b. (Again, not counting the day(s) \( \) \( \) in bed \( \) lost from work \( \) lost from school \( \) During that period, how many (other) days did he cut down for as much as a day?  If one or more days in 5–9, ask 10; otherwise go to next person.  \$\) Stay in bed \( \) miss school \( \) cut down  10a. What condition caused — to \( \) stay in bed \( \) miss school \( \) cut down  b. Did any other condition cause him to \( \) stay in bed \( \) miss school \( \) cut down  c. What condition?  C. Enter condition in item C   10 \)  c. Enter condition in item C   10 \)  c. Enter condition in item C   10 \)	ь. І	During that 2-week period, how many days did stay in bed all or most of the day?	ь.	Days Under 6 (9)
SL days   Oo   None (9)			6.	
8. On how many of these — days lost from \$\begin{array}{c} \text{work school} \\ \text{9a. (NOT COUNTING the day(s)} \\ \text{lost from work lost from work lost from school} \\ \text{Were there any (other) days during the past 2 weeks that — cut down on the things he usually does because of illness or injury?  b. (Again, not counting the day(s) \$\begin{array}{c} \text{in bed} \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	7.	During those 2 weeks, how many days did illness or injury keep —— from school?	7.	
Were there any (other) days during the past 2 weeks that — cut down on the things he usually does because of illness or injury?  b. (Again, not counting the day(s) { in bed lost from work lost from school } /	8.	On how many of these days lost from \( \begin{array}{c} \work \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	8.	
During that period, how many (other) days did he cut down for as much as a day?  If one or more days in 5-9, ask 10; otherwise go to next person.  Stay in bed miss work miss school cut down  b. Did any other condition cause him to  Stay in bed miss work miss school cut down  c. What condition?  Enter condition in item C  Ask 10b  Y  N (NP)  c. Enter condition in item C (10c)		Were there any (other) days during the past 2 weeks that —— cut down on the things he usually does because of illness or injury?	9a.	
If one or more days in 5-9, ask 10; otherwise go to next person.  Stay in bed miss work miss school cut down  b. Did any other condition cause him to stay in bed miss work miss school cut down  c. What condition?  Enter condition in item C Ask 10b  Y  N (NP)  c. Enter condition in item C (10c)	ь.	(Again, not counting the day(s)  {     in bed     lost from work     lost from school }  During that period, how many (other) days did he cut down for as much as a day?	ь.	
b. Did any other condition cause him to   miss work   miss school   cut down   c. What condition?   b.   N (NP)  c. What condition?		If one or more days in 5-9, ask 10; otherwise go to next person.	10a,	
		Did any other condition cause him to    miss work   miss school   cut down    during that period?	b.	
	с,	What condition?	c.	Enter condition in item C (10b)
			<u> </u>	<u> </u>

11a. During the past 2 weeks, did anyone in the family, that is you, your — —, etc., have any (other) accidents or injuries?	Y	N (12)		
b. Who was this? - Mark "Accident or injury" box in person's column.			116.	Accident or injury
c. What was the injury?			ε.	Injury
d. Did anyone have any other accidents or injuries during that period?	Y (Reask IIb and c)	N		
If "Accident or injury," ask;  e. As a result of the accident, did — — see a doctor or did he cut down on the things he	usually does?		e.	Y (Enter injury in item C) N

Figure 14. Restricted activity (disability days)

the final 1982 questionnaire went into use. NHIS makes estimates of disability days caused by specific types of conditions (for instance, annual number of disability days caused by acute respiratory illnesses). For the purposes of making these estimates, from 1975 through 1981, for each condition reported on the detailed condition pages, the number of each type of disability day during the past 2 weeks was asked. On the restricted activity page, the experimental questionnaire ascertained the number of each type of disability day for each condition reported as causing disability. This procedure led to a reduction in condition-specific disability days and hence the final 1982 questionnaire reverted to the previous approach of eliciting

condition-specific disability days on the detailed condition pages.

The experimental questionnaire resulted in more work-loss days for females—probably because of placing the employment status question prior to the work-loss question. It is likely that when people are asked about whether they have a job or business before the work-loss question, they may remember about days lost from work more often than when these questions are not asked in sequence. Because this approach was retained for the 1982 questionnaire, it is possible that the estimated work-loss days in 1982 will be higher than in 1981 even if there were no real change in the population.

1	<b>I</b>
D. RESTRICTED ACTIVITY PAGE PERSON 2	Refer to 2b and 3b.  No days in 2b or 3b (6)
Hand calendar,	I or more days in 2b or 3b (5)
{The next questions refer to the 2 weeks outlined in red on that calendar, beginning Monday, ( <u>date</u> ) and ending this past Sunday ( <u>date</u> ).}	5. On how many of the ( <u>number in 2b or 3b</u> ) days missed from [work/school] did —— stay in bed more than half of the day
Refer to age.	because of illness or injury?
D1 Under 5 (4) 5–17 (3) 18 and over (1)	00 None No. of days
	Refer to 2b, 3b, and 4b.
1a. DURING THOSE 2 WEEKS, did —— work at any time at a job or business, not counting work around the house? (Include unpaid work in the family [farm/business].)	6a. (Not counting the day(s) missed from work missed from school (and) in bed
Yes (Mark "Wa" box, THEN 2) 2 No	Was there any (OTHER) time during those 2 weeks that —— cut down on the things —— usually does because of illness or injury?
b. Even though —— did not work during those 2 weeks, did —— have a job or business?	Yes
1 TYes (Mark "Wb" box, THEN 2) 2 No (4)	b. (Again, not counting the day(s) missed from work missed from school (and) in bed
2a. During those 2 weeks, did — miss any time from a job or business because of illness or injury?	During that period, how many (OTHER) days did —— cut down for more than half of the day because of illness or injury?
_ Yes 00 _ No (4)	No. of cut-down days oo None
b. During that 2-week period, how many days did —— miss more	Refer to 2-6.
than half of the day from —— job or business because of illness or injury?	D3  No days in 2-6 (Mark "No" in RD, THEN NP)  or more days in 2-6 (Mark "Yes" in RD, THEN 7)
No. of work-loss days	Refer to 2b, 3b, 4b, and 6b. miss work
100 None (4)	7- When (asker) and in the miss school
3a. During those 2 weeks, did —— miss any time from school because of illness or injury?	(or) stay in bed (or) cut down weeks?
Yes	miss work
b. During that 2-week period, how many days did — miss more than half of the day from school because of illness or injury?	b. Did any other condition cause —— to miss school (or) stay in bed (or) cut down during that period?
	1 Yes (Reask 7a and b)
No. of school-loss days	FOOTNOTES
oo T None	
4a. During those 2 weeks, did —— stay in bed because of illness or injury?	
Yes	
b. During that 2-week period, how many days did —— stay in bed more than half of the day because of illness or injury?	
00 None (6) No. of bed days (Mark "BD" box, THEN D2)	
la. During the 2-week period outlined in red on that calendar, has anyone in th	e family had an injury
from an accident or other cause that you have not yet told me about?	□ No (2)
b. Who was this? Mark "Injury" box in person's column.	1b.   Injury
c. What was injury? Enter injury(ies) in person's column.	e. Injury
d. Did anyone have any other injuries during that period?	
☐ Yes (Reask It	, c, and d) No
Ask for each injury in Ic:	e. Yes (Enter injury in C2, THEN
e. As a result of the (injury in Ic) did [/anyone] see or talk to a medical of (about) or did cut down on usual activities for more than half of	octor or assistant te for next injury)

Figure 14. Restricted activity (disability days)—Con.

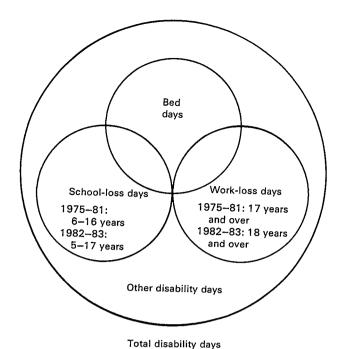


Figure 15. Relationships among the types of disability days as defined by the National Health Interview Survey

Another issue of importance relates to the probe question on accidents and injuries. In the 1979 phase II experimental questionnaire, this probe was separated from the disability day questions and was asked later in the interview, with the idea of eliminating the probe if it had no apparent effect on the estimates. It was decided, however, that without the probe there would have been a reduction in reports of accidents and injuries that caused either disability days or doctor contacts; hence the probe was reinstated for the final 1982 questionnaire.

#### 12-month bed days

The question on number of 12-month bed days was not on the questionnaire in 1975 but it has been on every year since then (figure 16). This variable is used to classify persons according to number of bed days within broad ranges. In this way estimates can be made of the percent distribution of persons according to the number of bed days in the 12 months prior to interview. The question on 12-month bed days is not used to produce estimates of the number of bed days because the level of accuracy for this purpose is inadequate. Instead, the 2-week recall question for bed days is used to produce such estimates. In the 1982 revised questionnaire, the 12-month bed day question remained essentially the same but the response category boxes were replaced with an open-ended response entry, thus permitting more flexibility in analysis (different groupings of number of days can be used). Based on the evaluation experiment, the level of estimates was not affected by the slight changes in the question and relocation of the item within the questionnaire.

#### 2-week doctor contacts

NHIS estimates of annual doctor contacts according to place of visit, type of specialist seen, reason for visit, and conditions are based on the respondent reporting events for the 2 weeks ending Sunday night before interview (figure 17). The doctor contact questions are also a major avenue, along with the disability day questions, for the reporting of acute illness.

The questions on doctor contacts using a 2-week recall period remained essentially the same from 1975 through 1981. A minor change occurred starting in 1976 when the interviewer instructions were printed directly below the question to remind the interviewer not to count doctors seen while a patient was in a hospital (question 14 in figure 17 for 1975–81). Similarly, the details asked for each contact (such as place) remained essentially unchanged from 1975–81 except that in 1977 the reason for the visit was not asked (question 6 in figure 17 for 1975–81).

The revised questionnaire for 1982 incorporated major changes in the probes and detailed questions on doctor contacts occurring during the past 2 weeks. The probes were expanded to explicitly convey to the respondent the concept of including all medical care contacts in which the care was provided by a physician, nurse, or anyone else working under the supervision of a medical doctor. The respondent was reminded to include telephone calls for prescriptions or test results and house calls as contacts. These new procedures are consistent with the im-

BD	Mark box(es) from item C.	BD	1   I+ Bed Days 2   I+ Hospital Stays 3   No Bed Days
(In (We	ring the past 12 months (that is since <u>(date)</u> a year ago), ABOUT how many days did ness or injury keep — in bed all or most of the day? clude the days in the past 2 weeks.) (Include the days while a patient in a hospital.) is it more than 7 days or less than 7 days?) is it more than 30 days or less than 30 days?) is it more than 40 feb year or less than 40 feb year?)		0 None 1 1-7 2 8-30 3 31-180 (1-6 months 4 181+ (6 months +)

2. During the past 12 months, {that is, since (<u>12-month date</u>) a year ago) ABOUT how many days did illness or injury keep — in bed more than half of the day? (Include days while an overnight patient in a hospital.)

\_\_\_\_\_No. of days

Figure 16. 12-month bed days

#### 1975-81, probe questions<sup>1</sup>

1979-01, probe questions			τ	
14. During the past 2 weeks (the 2 weeks outlined in red on that calendar) how many times did —— see a Do not count doctors seen while a patient in a hospital.	nedica	Il doctor?	14.	00 None Number of visits
(Besides those visits)			-	
15a. During that 2-week period did anyone in the family go to a doctor's office or Y clinic for shots, X-rays, tests, or examinations?  N (16)	<u>-</u>			
b. Who was this? - Mark "Doctor visit" box in person's column.			15ъ.	Doctor visit
c. Anyone else?  Y (Reask   N	5b and	d c)		
If "Doctor visit," ask d. How many times did —— visit the doctor during that period?	• •	• • • • • • •	d.	Number of visits (NP)
16a. During that period, did anyone in the family get any medical advice from			of the	2.57, 2.57,
a doctor over the telephone? N (17)		<u>-</u> !	444	Contraction of the Contraction
b. Who was the phone call about? — Mark "Phone call" box in person's column.  c. Any calls about anyone else?  Y (Reask I	6b and	d c)	165.	Phone call
If "Phone call," ask	- <b></b>		100	
d. How many telephone calls were made to get medical advice about?			d.	
Fill item C, (DV), from 14–16 for all persons.			H	Condition (Item C THEN 17d)
Ask 17a for each person with visits in DV box.		i	1 1	Pregnancy (17e)
17a. For what condition did —— see or talk to a doctor during the past 2 weeks?			170,	No condition
b. Did —— see or talk to a doctor about any specific condition?	<b></b> .		Ь.	Y N (NP)
c, What condition?	<b>-</b> -		c.	Enter condition in item C Ask 17d
d. During that period, did —— see or talk to a doctor about any other condition?		!	d.	Y (17c) N (NP)
e. During the past 2 weeks was sick because of her pregnancy?				Y N (17d)
f. What was the matter?			۱.	Enter condition in Item C (17d)
			لب	
1975–81, detailed questions <sup>2</sup>	Τ.	1		
2-WEEKS DOCTOR VISITS PAGE  Earlier, you told me that had seen or talked to a dector during the past 2 weeks.	1.	Person numb	Her _	Company Company
2a. On what (other) dates during that 2-week period did visit or talk to a doctor?	20.	Month	Date	OR { 7777
b. Were there any other doctor visits for him during that period?	<u>.</u>	Y (Reask 2a		
Where did he see the doctor on the <u>(date)</u> , at a clinic, hospital, dector's office, or some other place?	3.	1 Doctor	's offi	ent in hospital (Next DV)
If Hospital: Was it the outpatient clinic or the emergency room?		doctor'	's clin hone	nic)
}		3 Hospita 4 Home	al Out	tpatient Clinic
If Clinic: Was it a hospital outpatient clinic, a campany clinic, or some other		5 Hospite		nergency Room
kind of clinic?		7 Compar		Industry Clinic <sup>i(y)</sup> ア
4. Was the doctor a general practitioner or a specialist?	4	01 Genera	l pras	ctitioner Specialist
		. —		ecialist is he? 7
5. During this visit (call) did actually see (talk ta) the doctor?	5.	1 Y	=	2 N
6s. Why did he visit (call) the dector on(date) _?	64.	-		
Write in reason		- Dies		
Mark appropriate box(es)		1 Diag. o		
		2 Pre or I		
		5   Immuni	zation	
	+ ; .	Y (Enter	condif	tion in 6a N (Next DV)
b. Was this for any specific condition?	"	Y (Enter of and char	nge t	o "Dieg.
b. Was this for any specific condition:  Mark box or ask:		or treat	ment	o "Diag. ")  ported in 6a

A Condition page is required for the condition in question 6. If there is no Condition page, enter condition in item C and fill a page for it after completing columns for all required doctor visits.

1 <sub>In</sub>	1975 the	interviewer	instruction	in question	14 was not on	questionnaire.

PI

Figure 17. Doctor contacts

<sup>&</sup>lt;sup>2</sup>In 1977 question 6 was not asked.

	E. 2-WEEK DOCTOR VISITS F	PROBE PAGE		1	
	f to respondent(s); e next questions are about health care received during the	2 weeks outlined in red on tha	t calendar.		
E1	Refer to age.	Andreas (Andreas Andreas Andre	the second section of the	ĒΊ	Under (4 /1b) 14 and over (1a)
such	ng those 2 weeks, how many times did —— see or talk to a as dermatologists, psychiatrists, and ophthalmologists, as not count times while an overnight patient in a hospital.)			1a. and b.	00 None (NP)
	ng those 2 weeks, how many times did anyone see or talk t s while an overnight patient in a hospital.)	o a medical doctor about?	(Do not count		Number of times
anyo	ides the time(s) you just told me about) During those 2 we at hame or go to a doctor's office, clinic, hospital or some ne working with or for a medical doctor. Do not count time	other place? Include care fro	m a nurse or		
	received this care? Mark "DR Visit" box in person's colu	ımn.		2b.	DR Visit
c. Anyo	ne else?	Yes (Réask 2b and c	) [ No		
	for each person with "DR Visit" in 2b: many times did —— receive this care during that period?			d.	Number of times
medi	ides the time(s) you already told me about) During those 2 cal advice, prescriptions or test results over the PHONE fo	weeks, did anyone in the fami rom a doctor, nurse, or anyone	ly get any working with		
or to	r a medical doctor?	☐ Yes	☐ No (E2)		
b. Who	was the phone call about? Mark "Phone call" box in perso	on's column.		36.	Phone call
c. Were	there any calls about anyone else?	Yes (Reask 3b and c	)		
	for each person with "Phone call" in 3b: many telephone calls were made about?			d.	Number of calls
<b>E2</b>	Add numbers in 1, 2d, and 3d for each person. Record	total number of visits and call	s in "2-WK. DV" bo	x in it	em CI.

Figure 17. Doctor contacts-Con.

plied concept used before 1982 but the concept had not been fully communicated to the respondent. Another change in 1982 was that specialists (for example, psychiatrists) to whom visits were underreported in the past were mentioned in the probes. Prior to 1982 interviewers were required to remember to reword questions about children to convey the concept that someone other than the child could have seen or talked to a doctor about the child.

Starting in 1982 the alternate question wording for children was printed on the questionnaire. More detail was obtained starting in 1982 on the doctor contacts concerning the type of person providing the care and the place of the visit. Another major change in the detailed questions was that a question on surgery or operations was added in 1982 because of the increasing rate of "in and out" surgery.

Based on the findings from the 1979 evaluation test, modifications in the doctor contact questions resulted in improved reporting of doctor contacts.<sup>28,29</sup> More contacts were reported, and a higher proportion of contacts were reported for nonmedical providers. Telephone and home contacts accounted for a larger proportion of the total contacts as a result of better classification of type of contact. (See appendix III.)

## 12-month doctor contacts and interval since last doctor contact

The questions on 12-month doctor contacts and interval since last doctor contact remained unchanged from 1975 through 1981 (figure 18). In the revised 1982 questionnaire, the wording

was altered to make it clear to the respondent that contacts to doctor's assistants should be included. These questions are used to classify persons according to ranges of doctor visits during the past 12 months and time since last doctor contact. The 12-month doctor contact question is not used to make estimates of the volume of doctor contacts because the 2-week recall question on doctor contacts produces more accurate estimates.<sup>30</sup>

Based on the evaluation experiment, the level of estimates was not affected by the slight rewording and relocation of the items within the questionnaire.<sup>28</sup> (See also appendix III.) The minor changes made in the questions after the experiment are not expected to change the level of estimates.

#### General health status

The general health status question was asked in the same way from 1975 through 1981 (figure 19). This variable is used to classify people according to their own or the respondent's perception of their health status. In 1982 major changes in the question were made. In the experimental questionnaire the wording of the question remained the same except that the response option of "very good" was added to be consistent with other NCHS surveys and to improve the ability to differentiate among people. The addition of this response category caused the distribution of responses to change. (See also reference 31 and appendix III.) After the evaluation test, another major conceptual change was made in the question. This was to remove the phrase "compared to other persons——'s age." Because

	F. 2-WEEK DOCTOR VISITS PAGE		DR VISIT 1		
	Refer to CI, "2-WK, DV" box.	Person number			
	Refer to age.	F۱	Under 14 (1b) 14 and over (1a)		
ъ,	On what (other) date(s) during those 2 weeks did ——see or talk to a medical doctor, nurse, or doctor's assistant?  On what (other) date(s) during those 2 weeks did anyone see or talk to a medical doctor, nurse, or doctor's assistant about ——?  Ask after last DR visit column for this person:	lo. ond b. c.	Month Date   7777   Last week   8888   Week before   1   Yes (Reask 1a or b and c)		
2.	Were there any other visits or calls for —during that period? Make necessary correction to 2-Wk. DV box in Cl.  Where did — receive health care on (date in 1), at a doctor's office, clinic, hospital, some other place, or was this a telephone call?  If doctor's office: Was this office in a hospital?  If hospital: Was it the outpatient clinic or the emergency room?  If clinic: Was it a hospital outpatient clinic, a company clinic, a public health clinic, or some other kind of clinic?  If lab: Was this lab in a hospital?  What was done during this visit? (Footnote)	2.	2 No (Ask 2-5 for each visit)  1 Telephone Not in hospital: 2 Home 3 Dector's office 4 Co. or Ind. clinic 5 Other clinic 6 Lab 7 Other (Specily)  2 No (Ask 2-5 for each visit) 4 Hospital: 5 O.P. clinic 6 O.P. clinic 7 Dector's office 10 Doctor's office 11 Lab 12 Overnight patient (Next DR visit) 88 Other (Specily)		
3a. b.	Did anyone actually talk to a medical doctor about?	3a. and b.	1 ☐ Yes (31) a ☐ DK if M.D. (3c) 2 ☐ No (3c) 9 ☐ DK who was seen (31)		
c.	What type of medical person or assistant was talked to?	c.	Type 99 DK		
ĺ	Does the ( <u>entry in 3c</u> ) work with ar for ONE doctor or MORE than one doctor?	d.	1  One (31) 3 None (4) 2  More 9 DK		
	For this [visit/call] what kind of doctor was the <u>(entry in 3c)</u> working with or for — a general practitioner or a specialist?  Is that doctor a general practitioner or a specialist?	e. and	1 GP (4) 2 Specialist (3g) 9 DK (4)		
	What kind of specialist?	g.	Kind of specialist		
	Ask 4b if under 14.  For what condition did —— see or talk to the [doctor/(entry in 3c]] on (date in 1)? Mark first appropriate box.	4а. and b.	1 ☐ Condition (Item C2, THEN 4g) 2 ☐ Pregnancy (4e) 3 ☐ Test(s) or examination (4c)		
	For what condition did anyone see or talk to the [doctor/(entry in 3c)] about —— on ( <u>date in 1</u> )? Mark first appropriate box.		8 Cher (Specify) (4g)		
d.	Was a condition found as a result of the [fest(s)/examination] ? Was this [test/examination] because of a specific condition —— had? During the past 2 weeks was —— sick because of —— pregnancy?	uidi.	☐ Yes (4h) ☐ No ☐ Yes (4h) ☐ No (4g) ☐ Yes ☐ No (4g)		
	What was the matter?	f.	(Item C2, Condition THEN 4g)		
	During this [visit/cal]] was the [doctor/( <u>entry in 3c]]</u> talked to about any (other) condition? What was the condition?	g. h.	Yes No (5) Pregnancy (4e)		
5a.	Mark box if "Telephone" in 2. Did —— have any kind of surgery or operation during this visit, including bone settings and stitches?	5a.	0 ☐ Telephone in 2 (Next DR visit) 1 ☐ Yes 2 ☐ No (Next DR visit)		
ь.	What was the name of the surgery or operation? If name of operation not known, describe what was done.	ь.	(1)(2)		
د.	Was there any other surgery or operation during this visit?	c.	Yes (Reask 5b and c) No		
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Figure 17. Doctor contacts—Con.

of this critical conceptual change, analysis of trends in selfperceived health status crossing the period 1981 through 1982 is inappropriate without major qualifications.

#### Height and weight

Height and weight questions were not included in the 1975 NHIS. In 1976 questions on height and weight were asked of all persons 17 years of age and over and, in 1977, questions were asked of only a one-third subsample of persons 19 years of age and over (figure 20). In 1978–83 the questions were asked with a modification to the weight question: "Without clothes" was removed from the question wording. No changes in the height-weight questions were made for 1982 and 1983 as part of the evaluation test (except the questionnaire location).

#### **Chronic conditions**

For purposes of making prevalence estimates of chronic conditions, a list of conditions is read to the respondent (figure

- 21). For each condition reported, detailed questions are asked. (See next section.) From 1968-77 the following six lists of conditions were used (one per year except in 1974 when no list was used):
- Conditions of the musculoskeletal system and skin: 1969, 1976.
- Conditions of the respiratory system: 1970.
- Impairments: 1971, 1977.
- Conditions of the cardiovascular system: 1972.
- Conditions affecting the nervous system, glandular disorders, and conditions of the genitourinary system: 1973.
- Conditions of the digestive system: 1968, 1975.

Starting in 1978 and continuing through 1983 a major change in interview procedures was made in which all six of the lists of conditions were included on the questionnaire. However, any specific household was asked only one list. The assignment of lists was made prior to the interviews by the U.S. Bureau of the

18a. During the past 12 months, (that is since <u>(date)</u> a year ago), about how many times did —— see or talk to a medical doctor? (Do not count doctors seen while a patient in a hospital.) (Include the —— visits you already told me about.)		18a. 000 Only when	
b. ABOUT how long has it been since LAST saw or talked to a medical doctor?		b. 1 2-week D	v
Include doctors seen while a patient in a hospital.		2 Past 2 we	eks
		(14 and 17	7)
		3 2 wks6	
		5 🔲 ! year	
		6 2-4 years	1
		8 Never	
1982–83			
3a. During the past 12 months, ABOUT how many times did L—-/anyone] see or talk to a medical doctor or assistant (about —-)? (Do not count doctors seen while an overnight patient in a hospital.) (Include the (number in 2-WK DV box) visit(s) you already told me about.)		000 None (3b) 000 Only when overn patient in hospit	
	_	No. of visits	<b>-</b> J
b. About how long has it been since [——/anyone] last saw or talked to a medical doctor or assistant (about ——)? Include doctors seen while a patient in a hospital.	ъ.	1 Interview week (	
(about ~-/: Include doctors seen withe a patient in a nospital:		2 Less than I yr. ( 3 I yr., less than 2	-
		4 2 yrs., less than 5 5 yrs. or more	5 yrs.
		0 Never	
1975-81  33. Compared to other persons's gge, would you say that his health is excellent, good, fair, or poor?		33. 1 F 2 G	3 F 4 P
1975—81  33. Compared to other persons ——'s age, would you say that his health is excellent, good, fair, or poor?		33. 1 E 2 G	3 F 4 P
		33. 1 E 2 G	3 F 4 P
33. Compared to other persons ——'s age, would you say that his health is excellent, good, fair, or poor?	4.	1 Excellent	3 F 4 P 4 ☐ Fair 5 ☐ Poor
33. Compared to other persons —'s age, would you say that his health is excellent, good, fair, or poor?  1982—83  4. Would you say — health in general is excellent, very good,	4.	1 Excellent 2 Very good	4 Fair
33. Compared to other persons's age, would you say that his health is excellent, good, fair, or poor?  1982-83  4. Would you say health in general is excellent, very good, good, fair, or poor?  Figure 19. General health status	4.	1 Excellent 2 Very good	4 Fair
33. Compared to other persons's age, would you say that his health is excellent, good, fair, or poor?  1982-83  4. Would you say health in general is excellent, very good, good, fair, or poor?	4.	1 Excellent 2 Very good	4 Fair
33. Compared to other persons's age, would you say that his health is excellent, good, fair, or poor?  1982-83  4. Would you say health in general is excellent, very good, good, fair, or poor?  Figure 19. General health status	120.	1 Excellent 2 Very good 3 Good	4 Fair
33. Compared to other persons's age, would you say that his health is excellent, good, fair, or poor?  1982-83  4. Would you say health in general is excellent, very good, good, fair, or poor?  Figure 19. General health status		1 Excellent 2 Very good 3 Good	4 ☐ Fair 5 ☐ Poor
33. Compared to other persons's age, would you say that his health is excellent, good, fair, or poor?  1982-83  4. Would you say health in general is excellent, very good, good, fair, or poor?  Figure 19. General health status  1976-77  12a. About how tall are you without shoes?	120.	1 Excellent 2 Very good 3 Good	4 ☐ Fair 5 ☐ Poor
33. Compared to other persons's age, would you say that his health is excellent, good, fair, or poor?  1982-83  4. Would you say health in general is excellent, very good, good, fair, or poor?  Figure 19. General health status  1976-77  12a. About how toll are you without shoes?  b. About how much do you weigh without clothes.or shoes?	120.	1 Excellent 2 Very good 3 Good	4 ☐ Fair 5 ☐ Poor

Figure 20. Height and weight

		H. CONDITI	ON LISTS 1	AND 2	
No	ed to respondent(s) and ask list ow I am going to read a list of me u have mentioned them before.	specified in A2: dical conditions. Tell me if anyon	e in the family	, has any of these conditions, eve	n if
1	A. PERMANENT stiffness or fingers, arm, or back? (Per not move at all.)      B. Paralysis of any kind?  1d. DURING THE PAST 12 MC	ve — in appropriate person's column. any deformity of the foot, leg, manent stiffness — joints will  ONTHS, did anyone in the family	2	A-L are conditions affect Conditions O-W are impair	in appropriate person's column.  Hearing Vision Speech
	have - If "Yes." ask le c e. Who was this? f. DURING THE PAST 12 MG	and f. ONTHS, did anyone else have —		A. Deafness in one or both	Reask 2a O. Palsy or Cerebral palsy? (ser'a-bral)
	1	in appropriate person's column. conditions affecting the bone		B. Any other trouble hearing with one or both ears?	P. Paralysis of any kind?
	Conditions O-U and W-Z  C. Arthritis of any kind or Rheumatism?	are conditions affecting the skin.  Reask Id		C. Tinnitus or ringing in the ears?	R. REPEATED trouble with
	D. Gout?	P. Eczema or Psoriasis? (ek'sa-ma) or (so-rye-uh-sis)		D. Blindness in one or both eyes?	S. Any TROUBLE with
	E. Lumbago?	Q. TROUBLE with dry or itching skin?	-	E. Cataracts?	fallen arches or flatfeet?
	F. Osteomyelitis? (os-tee-oh-my-uh-lye'tis)	R. TROUBLE with acne?		F. Glaucoma?	
	G. A bone cyst or bone spur?	S. A skin ulcer?		G. Color blindness?	U. PERMANENT stiffness or any deformity of the foot, leg, or back?
	H. Any other disease of the bone or cartilage?	T. Any kind of skin allergy?	_	H. A detached retina or any other condition of the retina?	(Permanent stiffness — joints will not move at all.)
	1. A trick knee?  J. A slipped or ruptured	U. Dermatitis or any other skin trouble?		Any other trouble seeing     with one or both eyes EYEN     when wearing glasses?	Y. PERMANENT stiffness or any deformity of the
	disc?	V. TROUBLE with fallen arches, flatfeet, or clubfoot?		J. A cleft palate or Harelip?	fingers, hand, or arm? W. Mental retardation?
	L. REPEATED trouble with neck, back, or spine?	W. TROUBLE with ingrown toenails or fingernails?		K. Stammering or Stuttering?	X. Any condition caused by an accident or injury
	M. Bursitis or Synovitis? (sin-a-vye'tis)	X. TROUBLE with bunions, corns, or calluses?		L. Any other speech defect?  M. A missing finger, hand,	3 months ago?  If 'Yes,' ask: What is the condition?
	N. Any disease of the muscles or tendons?	Y. Any disease of the hair or scalp?		or arm; toe, foot, or leg?	Y. Epilepsy?
	O. A tumor, cyst, or growth of the skin?	Z. Any disease of the lymph or sweat glands?		N. A missing (breast), kidney, or lung?	Z. REPEATED convulsions, seizures, or blackouts?

1 Version shown, used in 1982–83, contains some modifications of versions used 1975–81.

Figure 21. Condition lists

Census staff in such a way that each list was asked for a random one-sixth of the households. The results of asking each list for a one-sixth subsample of households is that for estimating prevalence of conditions for population subgroups and for estimating prevalence of less common conditions data must be cumulative over 2 or more years to provide enough cases for the survey estimates to be reliable. For the most common conditions, and for groupings of conditions, a one-sixth sample for 1 year of data collection is adequate for the production of reliable prevalence estimates.

The changes in the six lists made as a result of the NHIS evaluation were mainly the provision of more interviewer instructions. One change worth noting made the interviewer's job much easier: The introduction, read to the respondent before asking the list, states that the respondent should report conditions even if he or she reported them earlier in response to previous questions. Before 1982 the interviewer was responsible for noting if a condition had been previously mentioned. Although most other changes in 1982 were minor, some worth noting are that cancer of any kind was added to the list referred

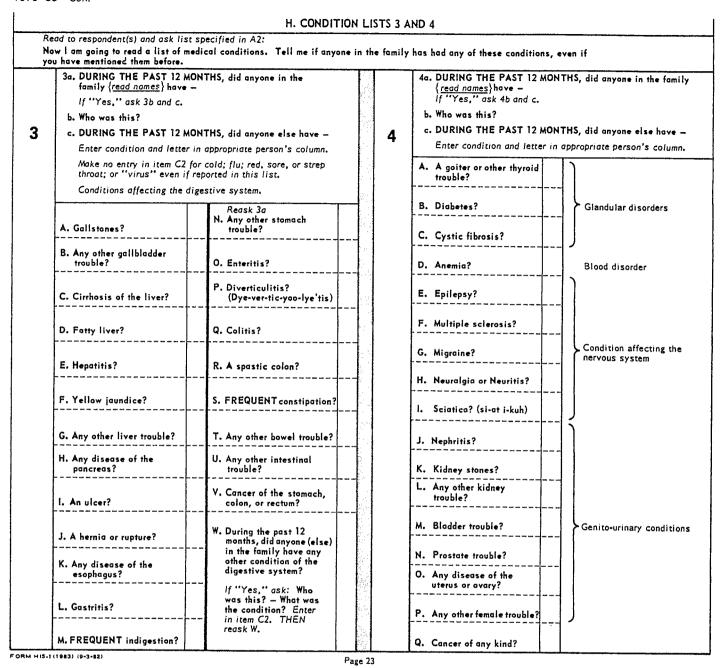


Figure 21. Condition lists-Con.

to as the "catch-all" list containing conditions of the nervous system, glandular disorders, and conditions of the genitourinary system (list 4 on the 1982 and 1983 questionnaires), and diabetes was removed from the conditions of the digestive system list and was asked only on list 4.

The reference periods used for the chronic conditions lists vary from list to list and condition to condition. The reference periods used include within the past 12 months, ever, and now. The additional questions asked on the detailed condition pages relating to onset and current status are needed to classify and code the conditions.

For the purposes of making prevalance estimates for chronic conditions, a chronic condition is counted for a household only

if that condition specifically was asked for in that household. For example, if a condition is recorded as a cause of limitation of activity but the condition is not a part of the condition list asked for that person, that condition and household are not included in making prevalence estimates for that condition. (The condition would be included, however, in the estimates of conditions causing limitation of activity.) These procedures are used because NHIS experience has indicated that, unless a condition is specifically asked for, generally there is likely to be underreporting of the condition. According to the evaluation test results<sup>28</sup> (see also appendix III), the modifications to the six condition lists did not have an effect on the number of conditions of selected types that were reported.

		H. CONE	DITION LISTS 5	AND 6						
Nov	d to respondent(s) and ask list 1 am going to read a list of m have mentioned them before.	specified in A2. edical conditions. Tell me if any	yone in the family	has had any of these condition	s, even if					
5	5a. Has anyone in the family of "Yes," ask 5b and c. b. Who was this? c. Has anyone else EVER has Enter condition and letter		6	6a. DURING THE PAST 12 MONTHS, did anyone in the family {read names} have -  If "Yes." ask 6b and c. b. Who was this?  c. DURING THE PAST 12 MONTHS, did anyone else have - Enter condition and letter in appropriate person's column.						
	Conditions affecting the h	eart and circulatory system.		throat; or "virus" even i						
	A. Rheumatic fever?  B. Rheumatic heart disease?	G. A stroke or a  Cerebrovascular accident (ser'a-bro vas ku-lar)	<b>+?</b>	Conditions affecting the A. Bronchitis?	Reask 6a. K. Emphysema?					
	C. Hardening of the arteries or Arteriosclerosis?	H. A hemorrhage of the		B. Bronchiectasis? (brong ke-ek tah-sis)	L. Pleurisy?					
	D. Congenital heart disease?	I. Angina pectoris? (pek'to-ris)	-+	C. Asthma?	M. Tuberculosis?  N. An abscess of the lung?.					
	E. Coronary heart disease?	J. A myocardial infarction?		D. Hay fever?  E. A nasal polyp?	O. A tumor, cyst, or growth of the throat, larynx, or					
	F. Hypertension, sometimes called High blood pressure?	K. Any other heart attack?		F. Sinus trouble?	trachea?					
	5d. DURING THE PAST 12 M family have — If "Yes," ask 5e and f.	ONTHS, did anyone in the		G. A deflected or deviated nasal septum?	P. Any work-related respira- tory condition such as dust onthe lungs, silicosis or pneu-mo-co-ni-o-sis?					
	e. Who was this?	ONTHS, did anyone else have —		H. *Tonsillitis or enlarge- ment of the tonsils or adenoids?	Q. During the past 12 months did anyone (else) in the family have any other					
		in appropriate person's columnater and circulatory system.		I. *Laryngitis?	respiratory, lung, or pulmo- nary condition? If "Yes," ask: Who was this?					
	L. Damaged heart valves?	R. Gangrene?		J. A tumor, cyst, or growth of the bronchial tube or lung?	What was the condition?  Enter in item C2, THEN reask Q.					
	M. Tachycardia or Rapid	S. Varicose veins?		*If reported in this list only,	ask: ave ( <u>condition</u> ) in the past 12 months?					
	N. A heart murmur?	T. Hemorrhoids or Piles?		If 2 or more times, enter of						
	O. Any other heart trouble?	U. Phlebitis or Thrombophlebitis?		2. How long did it last? If !	month or longer, enter in item C2.					
	P. An aneurysm? (an yoo-rizm)	V. Any other condition		If less than I month, do n  If tonsils or adenoids wer enter the condition causin	e removed during past 12 months,					
	Q. Any blood clots?	affecting blood circulation?		enter the condition causin	e came at the team was					

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Figure 21. Condition lists-Con.

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#### **Detailed condition questions**

NHIS produces estimates of the incidence of acute conditions, prevalence of chronic conditions, and disability caused by conditions. As described earlier, the disability or restricted activity day questions, in addition to the doctor contact questions, are used to elicit reporting of acute conditions; the lists of chronic conditions are used to elicit reporting of chronic conditions.

To produce data on the conditions reported throughout the interview, a series of questions related specifically to each one is asked on the condition page (figure 22). These items identify

(a) medical attention received, (b) the condition with a detailed description to facilitate medical coding, (c) condition onset to determine incidence and acute/chronic status, (d) 2-week disability due to specific condition, (e) a series of additional impact measures for chronic conditions having as their reporting source the chronic condition checklists, and (f) for injuries and impairments from injuries, information about the nature and cause of accidental injuries.

It should be noted that although NHIS attributes disability days to specific conditions, there is a reporting problem for many persons who have more than one condition in the 2-week recall period. For example, if a person had both chronic bron-

CONDITION 1	Except for eyes, ears, or internal organs, ask if there are any of
1. Person number Name of condition  2. When did last see or talk to a doctor about his?  1	the following entries in 3a-d:  Infection Sore Soreness  f. What part of the (part of body in 3e) is affected by the (infection/ sore/soreness) - the skin, muscle, bone, or some other part? Specify,  Ask if there are any of the following entries in 3a-d:  Tumor Cyst Growth  g. Is this (tumor/cyst/growth) malignant or benign?
Examine "Name of condition" entry and mark  Color blindness (NC) On Card C (A2) Accident or injury (A2) Neither (3a)  If "Doctor not talked to," transcribe entry from item 1.  If "Doctor talked to," ask:	1
3a. What did the doctor say it was? — Did he give it a medical name?	4. During the past 2 weeks, did his cause him to cut down on the things he usually does?
Do not ask for Cancer On Card C (A2)  b. What was the cause of?  Accident or injury (A2)	5. During that period, how many days did he cut down for as much as a day?  Days  Oo  None (9)
If the entry in 3a or 3b includes the words: Ailment Condition Disorder Rupture Anemia Cyst Growth Trouble	6. During that 2-week period, how many days did hiskeep him in bed all or most of the day?
Asthma Defect Measles Tumor Ask C: Attack Disease Problem Ulcer  c. What kind of is it?	Ask if 17+ years: 7. How many days did his keep him from work during that 2-week period? (For females): not counting work around the house?  Days (9)  On Days (9)
For allergy or stroke, ask: d. How does the allergy (stroke) affect him?	Ask if 6—16 years:  8. How many days did his keep him from school during that 2-week period?  Days  O None
If in 3a—d there is an impairment or any of the following entries:  Abscess Domage Paralysis Ache (except head or ear) Growth Rupture Bleeding Hemorrhage Sore(ness) Blood clot Infection Stiff(ness) Boil Inflammation Tumor	9. When did —— first notice his?  1
Concer Neuralgia Ulcer Cramps (except Neuritis Varicose veins menstrual) Pain Weak(ness)	1 Not an eye cond. (AA) 3 First eye cond. (6+ yrs.) 2 First eye cond. (10) (under 6) (AA) 4 Not first eye cond. (AA)
e. What part of the body is affected?  Show the following detail:  Head	10. Can — see well enough to read ordinary newspaper print WITH GLASSES with his left eye? 1 Y 2 N right eye? 1 Y 2 N FOOTNOTES

Figure 22. Detailed condition questions

chitis and a sprained ankle, it is frequently difficult for the respondent to report how many of the disability days were for the chronic bronchitis and how many were for the ankle. In fact, in the absence of chronic-bronchitis-related disability days, the respondent might not have reported any disability days for the ankle.

It is very important to note that in the processing of the NHIS data, acute conditions (by NHIS definition, conditions with onset within the past 3 months, resulting in no obvious permanent disability, and not on a list of conditions always considered chronic regardless of onset) are not counted unless the following criteria are met:

Onset during the 2-week recall period.

#### • Either:

- A doctor (or assistant) contact about the condition during the past 2 weeks
- One or more disability days (work loss, school loss, bed day, or other cut-down day) due to the condition during the past 2 weeks.

However, when making estimates of disability days due to acute conditions, the only criterion is that the disability occurred in the past 2 weeks regardless of when the condition began within the last 3 months. The detailed condition questions, for the most part, stayed the same from 1975–81. One exception was that in 1980 questions 3f and 3g shown in figure 22 were added because they were needed for medical coding with the new

1 Missing extremity (A4)	A4 Accident or injury Other (NC)							
AA 2 Condition in C2 does not have a letter as source (A4) 3 Condition in C2 has a letter as source, Doctor seen (II)	17a. Did the accident happen during the past 2 years or before that time?							
4 Condition in C2 has a letter as source, Doctor not seen (15)	During the past 2 years Before 2 years (18a)							
11s. Does NOW take any medicine or treatment	b. When did the accident happen?							
fer his? 2 N (12)	Last week Over 3-12 months							
b. Was any of this medicine or treatment recommended 1 Y by a dector?	☐ Week before ☐ I – 2 years ☐ 2 weeks–3 months							
	18a. At the time of the accident what part of the body was hurt?							
12. Has he ever had surgery for this condition? 1 Y 2 N	What kind of injury was it? Anything else?							
13. Was he ever hospitalized for this condition?	Part(s) of body Kind of injury							
2 N								
14. During the past 12 months, about how many times has  seen or talked to a dector about his?  Times								
(De not count visits while a patient in a hospital.) 000 🦳 None	If accident happened more than 3 months ago, ask:							
15a. About how many days during the past 12 months has this condition kept him in bed all or most of the day? Days	b. What part of the body is affected now? How is his —— affected? Is he affected in any other way?							
000 🔲 None	Part(s) of body Present effects							
Ask if 17+ years:								
b. About how many days during the past 12 months has Days this condition kept him from work?								
For females: Not counting work around the house? 000 🗀 None								
<b>lós.</b> Hew eften does his bother him — all of the time, often, ence in a while, or never?	19. Where did the accident happen? 1							
1 All the time 2 Often 3 Once in a while	2 At home (adjacent premises)							
o Never (16c) a Other — Specify	a ☐ Street and highway (includes roadway and public sidewalk) 4 ☐ Farm							
b. When it does bother him, is he bothered a great deal, some, or very little?	s ☐ Industrial place (includes premises) 6 ☐ School (includes premises)							
1 Great deal 2 Some 3 Very little	7 Place of recreation and sports, except at school							
4 Other - Specify	e 🔲 Other Specify 🔏							
All the time in 16a OR condition list 4 asked (A4)								
c. Dees still have this condition?	20. Was at work at his job or business when the accident happened?  1 Y 3  While in Armed Services							
1 Y (A4) N	2 N 4 Under 17 at time of accident							
d. Is this condition completely cured or is it under control?	21a. Was a car, truck, bus, or other motor vehicle involved in the accident in any way?  1 Y 2 N (NC)							
2 Cured 3 Under control (A4)	involved in the accident in any way? 1 Y 2 N (NC)							
4 🗀 Other — Specify	b. Was more than one vehicle involved? Y N							
e. About how long did have this condition before it was cured?								
o Less than one month Months Years	c. Was it (either one) moving at the time? 1 Y 2 N							

Figure 22. Detailed condition questions-Con.

medical coding system based on the International Classification of Diseases, 9th Revision. Another minor change was made in 1978 because of the conversion to the use of all six condition lists each year: an interviewer instruction was added before the question on whether the person still had the condition to skip that question if the condition list of impairments was asked for that household. Questions 16c-e for 1975-81 shown in figure 22 were deleted for 1977 only because in that year all households were asked the impairments condition list.

As a result of the evaluation, major changes were made in the detailed condition questions on the 1982 questionnaire. No additional changes were made in 1983. One significant deletion was the questions on medications and surgery or treatment for the conditions. (See questions 11 and 12 of figure 22 for 1975–81.) These questions were removed to reduce the length of the interview with the view that these items were more appropriate for supplements. A question was added for conditions reported as being cured to determine whether the condition was present at any time during the past 12 months (question 12d in figure 22 for the 1982–83 questionnaire).

Many of the changes starting in 1982 were made to simplify the interview procedure to make the interviewer's job easier. For example, in the previous questionnaire interviewers were instructed not to ask the cause of the condition if it was listed on card c, a flashcard listing a set of conditions for which medical coding did not require ascertaining the cause. So that inter-

A2 ASK CONDITION LIST	ard to determine Samp	e Person(s). Mark "SP" box(es).		
CONDITION 1	Person No	Ask 3g if there is an impairm	ent (refer to Card (	CP2) or any of the
1. Name of condition		following entries in 3b-f:	_	_
t 2-wk. ref. pd. 6 5		Abscess Ache (except head or ear) Bleeding (except menstrual) Blood clot Boil Cancer Cramps (except menstrual) Cyst	Damage Growth Hemorrhage Infection Inflammation Neuralgia Neuritis Pain	Palsy Paralysis Rupture Sore(ness) Stiff(ness) Tumor Ulcer Varicose veins Weak(ness)
3 6 mos., less than l yr. e Di	( if Dr. seen (3b)	g, What part of the body is affec	ted?	Specify
3a. (Earlier you told me about — (condition)) D call the (condition) by a more technical or sp  1  Yes	ecific name?  DK  condition name from  Specify	Show the following detail:  Head	,	upper, middle, lower left or right ter; left, right, or both left, right, or both rist; left, right, or both nly; left, right, or both kle; left, right, or both
c. What was the cause of ( <u>condition in 3b</u> )?	(Specify)	Except for eyes, ears, or into following entries in 3b-f: Infection Sore h. What part of the (part of body	Soreness	
Mark box if accident or injury. o Accident of Did the (condition in 3b) result from an accident of Yes (5) 2 No  Ask 3e if the condition name in 3b includes of Ailment Cancer Disease Anemia Candition Disarder Asthma Cyst Growth Attack Defect Measles Bad	ent or injury?	Specify  Ask if there are any of the for Tumor Cyst  4. Is this [tumor/cyst/growth] n	llowing entries in Growth	3b-f:
e. What kind of ( <u>condition in 3b</u> ) is it?  Ask 3f anly if allergy or stroke in 3b—e:  f. How does the [allergy/stroke] NOW affect —	Specify -? (Specify)	5  Ask probes as necessary: (Was it on or since (first date or was it before that date?)	2 0 3 0 ary in 4 0 5 0	wk. ref. pd, ver 2 weeks to 3 months ver 3 months to 1 year ver 1 year to 5 years ver 5 years
For Stroke, fill remainder of this condition p effect. Enter in item C2 and complete a sep each additional present effect.	age for the first present grate condition page for	(Was it less than 3 months or (Was it less than 1 year or m (Was it less than 5 years or m	ore than I year ag	0?)

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Figure 22. Detailed condition questions-Con.

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viewers would not have to remember the conditions on card c or have to interrupt the interview to look them up, this instruction was eliminated. A couple of the conditions for which it would have been awkward for the interviewer to ask the cause were listed on the questionnaire with the instruction to skip the cause question.

Other modifications made to the detailed condition questions for 1982 include:

 Questions referring to a doctor were amended to include a doctor's assistant.

- The interviewer was required to ask (unless already reported) for each condition whether it was a result of an accident or injury.
- "Bad" and "cancer" were added to the list of words used by respondents requiring the interviewer to ask kind of condition.
- In the question on disability occurring during the 2-week recall period the concept of "more than half of the day" was introduced to be consistent with the disability day questions.
- To reduce redundancy in the questionnaire, the 2-week

Relet to RD and C2.  "Yes" in "RD" box AND more than 1 condition in C2 (6)  6a. During the 2 weeks outlined in red on that calendar, did — (condition) cause — to cut down on the things — usually does?  Yes No (K2)  b. During that period, how many days did — cut down for more than half of the day?  00 None (K2)  7. During those 2 weeks, how many days did — stay in bed for more than half of the day because of this condition?  00 None  Days  Ask if "Wa/Wb" box marked in C1:  8. During those 2 weeks, how many days did — miss more than half of the day from — job or business because of this condition?	13. Is this (condition in 3b) the result of the same accident you already told me about?  Yes (Record condition page number where accident questions first completed.)  No  14. Where did the accident happen?  At home (inside house)  At home (adjacent premises)  Street and highway (includes roadway and public sidewalk)  Farm  Industrial place (includes premises)  School (includes premises)  Place of recreation and sports, except at school  The condition in 3b) the result of the same accident you already told means to see the same accident you already told means to see the same accident you already told means to
Ask if age 5-17:  9. During those 2 weeks, how many days did — miss more than half of the day from school because of this condition?  OO None Days  K2 Condition has "CL LTR" in C2 as source (10) Condition does not have "CL LTR" in C2 as source (K4)  10. About how many days since (12-month date) a year ago, has this condition kept — in bed more than half of the day? (Include days while an overnight patient in a hospital.)  OOO None Days  11. Was — ever hospitalized for — (condition in 3-)?	Mark box if under 18. Under 18 (16)  15a. Was — under 18 when the accident happened?  1 Yes (16) No  b. Was — in the Armed Forces when the accident happened?  2 Yes (16) No  c. Was — at work at — job or business when the accident happened?  3 Yes 4 No  16a. Was a car, truck, bus, or other motor vehicle involved in the accident in any way?  1 Yes 2 No (17)  b. Was more than one vehicle involved?  1 Yes 2 No  c. Was [it/either one] moving at the time?  1 Yes 2 No
Missing extremity or organ (K4)	17a. At the time of the accident what part of the body was hurt?  What kind of injury was it?  Anything else?  Part(s) of body * Kind of injury  Ask if box 3, 4, or 5 marked in Q.5: b. What part of the body is affected now?  How is —— (part of body) affected? Is —— affected in any other way?  Part(s) of body * Present effects ***
K4     First accident/injury for this person (14)  a Other (13)	* Enter part of body in same detail as for 3g.  ** If multiple present effects, enter in C2 each one that is not the same as 3b or C2 and complete a separate condition page for it.

Figure 22. Detailed condition questions—Con.

disability day questions were not asked if the respondent had not already reported any 2-week disability or if the respondent had only reported one condition causing 2-week disability. (See check item K1 in figure 22 for 1982-83.)

- To the 12-month bed day question (see item 10 in figure 22 for 1982-83) the statement "include days while an overnight patient in a hospital" was added to reduce interviewer and respondent confusion.
- The questions on when the accident happened for accidental injuries, questions 17a and 17b shown in figure 22 for 1975-81, were incorporated into the onset question (question 5 of figure 22 for the 1982-83 questionnaire).

Before, the onset questions asked when the condition was first noticed; in the revised questionnaire for injuries the question is "When did ——— (name of injury)?" (For example, when did Mr. Doe break his arm?) In other words, in the pre-1982 version the onset question asked when the injury was first noticed, which could have been later than when the accident occurred; and in the 1982-83 questionnaire the interviewer asked when the accident happened. For a condition that was the present effect of an accident occurring 3 months ago or longer, for the entire period 1975–83, the interviewer asked when the condition first was noticed.

A question was added to determine whether the accident

happened while the individual was in the Armed Forces (question 15b in figure 22 for 1982–83). In the previous questionnaire the information had to be volunteered by the respondent to be reported.

## Supplements to the basic core NHIS guestionnaire

Starting in 1959, supplementary topics have been included in the NHIS. These supplements have changed from year to year in response to current interest in special health topics. Suggestions and requests for special supplements are solicited and received from many sources, including other parts of the Department of Health and Human Services, university-based researchers, and administrators of national organizations and programs in the private and public health sectors. As always, the final decisions on which topics to include rested with the Director of NCHS. Following is a discussion of the procedures used for adding supplemental topics, the content of the supplements for 1959–83, and the methods, such as subsampling, that have been used for the supplements.

#### Procedures for addition of supplemental topics

In the early years of the NHIS a large panel of advisors was formed to review the activities of the survey and to make recommendations in many areas. One of these areas was supplemental topic selection. The NHIS continued to solicit input on topics from these advisors until the mid 1970's. In addition to soliciting input from those advisors, content advice was requested from other organizations within the Public Health Service and other components within NCHS.

One of the charges to the Technical Consultant Panel (created in 1977 by the National Committee on Vital and Health Statistics) was to make recommendations on supplemental topics. NHIS relied on this panel for priority ranking of potential topics that were included in the survey from 1978 through 1983. In its final report<sup>8</sup> the panel made recommendations on procedures for adding items to the NHIS in the future.

These recommendations of the panel led to somewhat more formalized procedures for selecting supplemental topics. In 1981 advertisements for soliciting topic suggestions were published in professional journals and newsletters. In addition, letters were mailed to individuals and organizations asking for topic suggestions. Information packets containing a brief description of the survey and guidelines for submitting suggestions were distributed to persons who indicated an interest in making topic suggestions.

It was hoped that after an initial screening of proposals by an NCHS panel the major review of submissions would be conducted by outside consultants. Because of budget constraints, however, this was not possible. The major review was performed by the NCHS panel and the American Public Health Association (APHA) Committee on Federal Statistics for Public Health.

Based on recommendations of the NCHS panel and the APHA committee, final decisions were made by the Director of NCHS on the NHIS topics for 1984 and 1985.<sup>32</sup>

#### Supplement content and location of copies

Table C shows the major supplemental topics covered in NHIS from 1959 through 1983. Some topics included only a few questions whereas other topics included batteries of questions lasting up to 20–25 minutes. Some topics included several subsets of questions. For example, although the table shows only one topic in 1981 on child health, that supplement was very comprehensive and covered many major areas including medicine use, family structure, behavior problems, child care, chronic conditions, birth and prenatal events, breastfeeding, and motor and social development. Another example of a large subset of questions included in a major topic was the set of questions on number of siblings, how many were still living, and whether parents were still living included in the 1976 Diabetes Supplement.

Several supplements, such as personal health expenses and special aids, have been repeated several times; other supplements have been used only one time. The repetition of supplemental topics has permitted the analysis of trends in various health-related areas. Sometimes the identical set of questionnaire items and survey procedures was used when topics were repeated. Other times questions and/or survey procedures were changed. Whenever any changes in questions and/or procedures were made, extreme care must be exercised in the interpretation of trends. For example, if a definition of a questionnaire term was changed from one year to another, there could have been a resulting change in the level of the estimates produced.

Over the years there have been many additional important supplemental questionnaire items that are not included in table C. Some of these have been repeated several times. For example, receipt of medicaid was asked in each calendar year from 1977 through 1982.

Copies of specific questionnaire items may be located in the following manner:

- Core questionnaire: Vital and Health Statistics Series 10 report on "Current Estimates" for the particular year of interest.
- Supplements 1957–74: Vital and Health Statistics Series 1, No. 11, "Health Interview Survey Procedure 1957–74," appendixes I and II.
- Supplements 1975–83
  - If not in bold in table C of this report, appendix IV.
  - If in bold in table C of this report, in "Current Estimates" for the particular year of interest.

Some of the supplemental items not listed in table C as major supplements are contained in the "Current Estimates"; others are contained within the major supplements and may be found in either reference 3 or in appendix IV of this report.

#### Supplement procedures

As described earlier, the core portion of the NHIS questionnaire is asked about all members of the sampled households of a household respondent and interviews are conducted each week of the year. However, the procedures used for supplements differ sometimes from the procedures used for the

Table C. Major supplemental topics covered: National Health Interview Survey, 1959-83

	Fiscal year 19—								Calendar year 19—																
Supplemental topic	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
Health insurance					Х					х		х		X		Х	x	x		х		х		X	X
Hearing impairments					Χ								Х						X						
Loss of income										Х						X									
Home care and/or nursing care	Х								Х	Χ											X	X			
Special aids	Х										Х								X		X	X			
Personal health expenses					Х			Х					Х				X	Χ		Х					
Medicines							X								X										
Smoking habits							Х	Х				Х				Х		X		Х	Х	Х			
Corrective lenses					Х			Х					Х						X		X	X			
Vision impairment					Х								Х						X						
X-ray visits			Х			X						Х													
Acute conditions																Х									
Arthritis											Х														
Blood donorship															Х					Х					
Diabetes							Х											X							
Hypertension																Х									
Medical care availability/barriers to																									
care																Х			X						
Motor vehicle accidents										Х															
Dental care														Х		Х									>
Pregnancy															Х										
Preventive care															Х									Х	
Specialist's services and routine																									
checkups						Х																			
Disability/functional limitation									Х	Х	Х		Х	Х					X		Х	Х			
Usual source of care																Х	Х			Х					
Accidents													X	Х			X								
Health maintanance organizations																	X								
Exercise																	X								
Health habits																		X	х						>
Influenza																		X	X						
Stroke																			X						
Medicaid/AFDC																			X	х	х	х	х	х	1)
Armed Forces disability																				X					
Immunization for children																				X	Х				
Eye care visits																					X				
Residential mobility																					X	Х			
Retirement income																					X	x			
Longest job																						x			
Child health																						^-	х		
Alcohol/health practices																							•		3
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<sup>&</sup>lt;sup>1</sup>Became part of the core questionnaire.

NOTE: For supplements 1975–83 a bold X indicates that a copy of the supplement may be found in the Vital and Health Statistics, Series 10 publication "Current estimates" for the year the supplement was fielded. For supplements 1975–83 a standard X indicates that a copy of the supplement containing the topic may be found in appendix IV of this publication.

core. Described in this section are the timing of supplements, subsampling procedures, respondent rules, mode of interview, and placement of supplement items in the interview.

The NHIS sample is designed so that each week's sample is an independent national probability sample. This design feature permits using only a part of a year for making estimates. The survey takes advantage of this design feature in that supplements are not always included for the entire fiscal year or calendar year but rather are included for only part of the year. For example, the Influenza Supplement was included in the last quarter of calendar year 1976 and the first quarter of calendar year 1977. This timing was intended to allow tracking of influenza immunizations and influenza cases during the expected "swine flu" epidemic. Another example of a supplement not being included for an entire calendar year is the Personal Expense Supplement. The last few times the expense supplement was included (1971, 1975, 1976, and 1978) it was administered during only the first quarter of the calendar year. Respondents were asked to report their health expenditures for the previous calendar year.

Supplements are not always asked for the entire NHIS sample. Rather for some supplements a subsample of the main sample is selected, For some supplements, such as Smoking and Eye Care Visits, a one-third subsample was selected. For the 1981 Child Health Supplement questions were asked about only one child per family. A major reason for asking questions for only a subsample is the respondent rules for the supplement and their commensurate survey costs. Where more stringent respondent rules requiring additional interviewer followup were used, fewer sample cases have been selected to keep survey costs down. For several supplements, including the 1976-1980 Smoking and 1983 Alcohol/Health Practices, a self-respondent rule was used because it was determined that only a selfrespondent could give sufficiently accurate answers. For some other supplements a "preferred" respondent rule was employed. For example, in the 1981 Child Health Supplement a biological parent was interviewed. In cases in which neither of those parents was available during the interviewing period, the interviewer was allowed to interview a person identified by the household responding as being most knowledgeable about the child.

For supplements using a one-in-three subsample scheme, interviewers are provided three random selection tables. (See appendix V for subsampling tables.) Each table shows which household members to select according to the number of persons in the household. During the preparation of interviewer assignments each questionnaire is stamped to indicate which of the three tables the interviewer is to use. The assignment of tables

is made so that each of the three tables is used a random third of the time. Each table is designed so that each person in the target population has a one-in-three chance of selection.

For the 1981 Child Health Supplement, computer-generated labels were affixed to the questionnaires (also shown in appendix V) to show the interviewer which one child in each family to select according to how many children there were in the family. The labels were created in such a way that in a family of n children (n = 1 through 10) each child had an equal chance of selection (p = 1/n). Whenever a subsampling scheme for a supplement is used, appropriate weights are created for use with that supplement.

The core NHIS interview is always conducted in person in the household. For supplements, the telephone is frequently used where callbacks are required. That is, at the time of the initial interview the interviewer administers the supplement to all eligible respondents who are at home, and makes most of the callbacks by telephone to persons not originally available. In the case of the Family Medical Expense Supplement, a self-administered form was left with respondents who were requested to mail the form back; the telephone was used to follow up on nonresponses.

Starting in 1981, all supplement questions were put after the entire core set of questions. This decision was made after an increasing amount of evidence and analysis indicated that supplemental questions had a potential biasing effect on core items. For instance, in 1974 there was a supplement on acute conditions that may have caused a dramatic drop in the NHIS estimates of acute conditions based on core items.33 Interviewers were required to complete a supplement for each condition having an onset during the 2 weeks prior to interview. The first year the supplement was added there was a drop in the estimate of the incidence per 100 persons per year of about 10 percent. The second year the supplement was included the rate was the lowest ever reported in the history of the survey (about 22 percent lower than the year before the supplement was included). After the supplement was dropped, the rate reverted to the approximate level it was before the supplement.

Other supplemental effects have been noted in other NHIS years as well as on other surveys. Several have been discussed. 34,35 Not integrating supplemental questions with core items sometimes creates awkward questions. For example, in the 1981 Child Health Supplement condition section, respondents are told, "Some of the following conditions were asked about earlier, but tell me whether or not ——— EVER had any of the conditions even if they have been mentioned before." However, it is believed that an occasional awkward question is a lesser evil than increased response error.

### **Chapter 4: Survey operations**

#### Introduction

Since the beginning of the National Health Interview Survey (NHIS) in 1957 the U.S. Bureau of the Census has served as the data collection agent for the survey. Each year since 1957 a new Federal interagency agreement has been signed between the U.S. Bureau of the Census and the National Center for Health Statistics (NCHS). Once survey supplemental topics have been determined and NHIS staff has prepared a first draft of the questionnaire, U.S. Bureau of the Census staff joins the NHIS staff in developing the survey procedures and refining the questionnaire. The U.S. Bureau of the Census is responsible for the data collection, including hiring, training, and supervising interviewers and carrying out quality control programs on the fieldwork. Starting in 1968, NCHS assumed responsibility for data coding and machine editing, but before that time the U.S. Bureau of the Census performed these functions also. This chapter first presents a number of procedures related to the interview. These include the advance household letter, the postinterview "thank you" letter, interviewer's introduction to respondent, use of interviewing tools (flashcards and calendars), reference periods, callbacks for noninterviews, and respondent rules. The use of a subsampling scheme for selection of persons for some NHIS supplements is discussed in the section entitled "Supplements to the basic core NHIS questionnaire" in the previous chapter. Next the flow of the NHIS field activities is described, and a description of these activities is presented.

#### Interview procedures, 1975–83

#### Respondent letters

Approximately 1 week before interview week each sample household is mailed a letter from the regional office of the U.S. Bureau of the Census. A copy of the letter is shown in appendix VI. In accordance with the Privacy Act of 1974 (5 U.S.C. 552a) the letter informs the household of the purpose of the survey, the sponsorship of the survey, the authorization of the survey, the fact that the data will be treated confidentially, that participation in the survey is voluntary, and that there is no penalty for not responding. (For a description of procedures to insure confidentiality of interview responses including the Privacy Act requirements, see the last subsection of this chapter entitled "Confidentiality provisions.") Starting in 1983 a telephone number was provided for the respondents to call the regional office of the U.S. Bureau of the Census to ask questions about the survey.

For sample households for which there is no address accurate enough to send the advance letter and for households that deny receiving the letter, interviewers are required to provide a copy of the letter at the beginning of the interview.

At the close of the interview, the interviewer gives the respondents a "thank you" letter from the Director of NCHS. (See appendix VII for a copy of the "thank you" letter.)

#### Interviewer identification

After locating the sample household, interviewers identify themselves to the respondent by showing their U.S. Bureau of the Census picture (ID) card. They must ask whether the respondent received the advance letter and, if not, they must give the respondent a copy. The time the interview started is entered on the front of the questionnaire (see item 15 of figure 23, a copy of the front page of the questionnaire) when a person in the household opens the door or is first greeted by the interviewer. After the introduction, the interviewers verify the exact address of the dwelling unit to insure that the correct sample unit has been identified (item 6 in figure 23). Other items are asked (items 7–10) to ascertain the type of dwelling unit and to determine whether dwelling units may have merged with other units or divided into more than one household since the sample listing was prepared.

#### Respondent rules

After obtaining a listing of household members, the interviewer determines who is eligible to respond to the questions. The basic respondent rule for the core questionnaire is that any adult household member (person 19 years or over or any age if ever married) may respond for himself or herself and for any other related household member not present. All persons 17 years old or over in the household are asked to take part in the interview if they are at home. (See item 5 in figure 3 for 1982–83.) Never married persons 17 or 18 years old may respond for themselves but are not permitted to answer questions about other family members. Answers for children must be obtained from a related family member who is at least 19 years of age or who has been married. Unrelated household members (for example, a roomer) or unrelated families must be interviewed separately on a separate questionnaire.

Different respondent rules are sometimes used. For example, for some supplemental questions a self-respondent rule is used. These procedures are explained in the section entitled "Supplements to the basic core NHIS questionnaire."

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Figure 23. National Health Interview Survey, page 1

#### Volunteered conditions

From 1975-81 interviewers were instructed to record any condition reported, regardless of where in the interview the condition was reported. Then for each condition, the detailed condition questions were asked. Starting in 1982, interviewers were not required to record a condition reported when asking about disability days or doctor contacts unless there was some disability or a doctor contact associated with the condition. However, the interviewers still were required to record any condition reported while asking the condition lists.

#### Callbacks

If no one is at home, callbacks in person are made. The exact number of interviewer callbacks is not specified because factors such as travel costs are considered by the interviewer's supervisor in determining how many times a household should be revisited. Because the interviewer is not restricted in the number of callbacks she makes, in some cases there are many (5-10). The times of callbacks are entered in item 15 of figure 23.

#### Late interviews

In some cases a household may be interviewed the week after the week for which the household was assigned to be interviewed. In such cases the household is counted in the week for which it was originally assigned. In administering the interview, however, the interviewer changes the reference periods to correspond to the week in which she is interviewing. This procedure aids in recall by not allowing a full out-of-scope week between the end of the reference period and the interview week.

#### **Noninterviews**

If attempts to obtain an interview are ended, the reason for the noninterview is entered in item 14 of figure 23. Noninterviews are divided into three types labeled A, B, and C. Type A noninterviews are those not conducted in eligible, occupied sample households. Types B and C are sample units not eligible for the survey. (Table D shows the NHIS noninterview rates for 1975–83.)

#### Flashcards and calendar

The interviewer's flashcard booklet consists of cards used for reference during the interview. Some cards are shown to the respondents as an aid in answering certain questions (for example, see figure 7) while others are an aid to the interviewer only and are not shown to the respondents (for example, an age-verification chart to complete the person's age from the date of birth). For each card shown to the respondent there is an English and a Spanish version.

The calendar card is furnished to the respondent with the appropriate 2-week reference period (for 2-week disability and doctor contacts questions) marked in red (figure 24). The dates for the 2-week reference periods as well as the dates for the other reference periods are stamped on each questionnaire and change with each week's new assignment.

#### Additional callbacks

For some supplemental items requiring a self-response, additional contacts must be made when the person is not at home at the time of the initial interview. A record of these additional contacts is made in item 17 of figure 23. In item 16 of figure 23 the interviewer indicates the column numbers and sections requiring additional contacts. (For 1983, these topics were "Dental care" and "Alcohol/health practices." These topics change each year.) Usually callbacks may be done either in person or over the telephone.

#### End of interview

At the end of the interview the interviewer thanks the respondent, provides him or her with a copy of the "thank you" letter (appendix VII) and asks the respondent for the household telephone number in case additional contact is required (item 11 of figure 23). The interviewer marks whether the interview was observed (for instance, by a supervisor) in item 12 and puts his or her name and interviewer code in item 13.

#### Flow of NHIS field activities

All interviewers are thoroughly trained; after interviewer training, assignments prepared by staff of the regional office of the U.S. Bureau of the Census are given to the interviewers. Approximately 1 month prior to the assignment of a group of households, interviewers go into the field to list the addresses of households requiring such listing. (See chapter 1.) After completing a week's assignment, including manually editing his or her own work, the interviewer mails the assignment to the regional office of the U.S. Bureau of the Census. The NHIS office clerk in the regional office then checks in the assignment and performs a manual edit to insure that all required information is recorded. Approximately 2 weeks after the questionnaires are received in the regional office they are mailed to the NCHS data processing center in Research Triangle Park, N.C. (RTP). After they are checked against a master sample listing they are edited for completeness, coded, keypunched, and the information is put on tape. The resulting computer data files are retained at RTP. The questionnaires generally are kept at RTP until the computer files are processed, which includes computer editing. After computer editing of the files, the paper questionnaires are

Table D. Response rates and noninterview rates by type: National Health Interview Survey, 1975-83

ltem	1975	1976	1977	1978	1979	1980	1981	1982	1983
Percent of eligible households responding	96.9	96.2	96.7	96.2	96.6	97.2	97.1	97.1	96.8
Percent of noninterviews	3.1	3.8	3.3	3.8	3.4	2.8	2.9	2.9	3.2
Percent of refusals of net eligible households	1.6	2.1	1.9	2.0	1.9	1.7	1.8	1.8	2.0

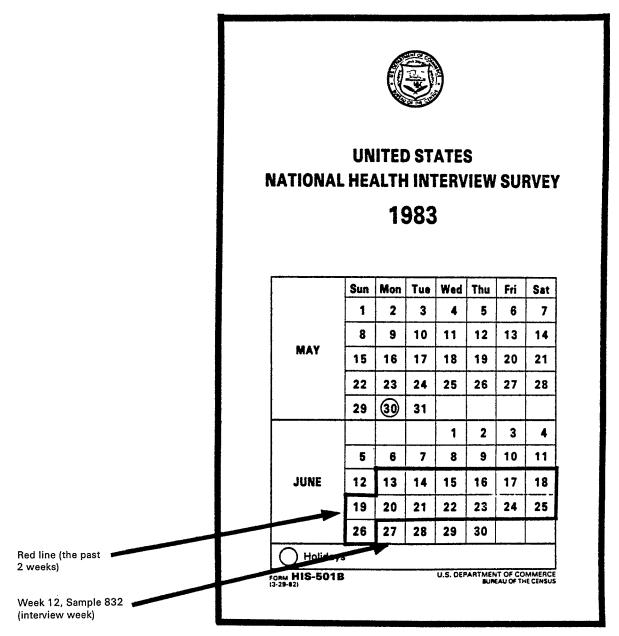


Figure 24. Interviewer calendar card showing 2-week reference period

sent to a storage facility in Atlanta, Ga. After 5 years the questionnaires are destroyed and only the computer files are retained.

Figure 25 is an organizational chart of a typical regional office of the U.S. Bureau of the Census with respect to the NHIS activities. The Director of that regional office has responsibility for all demographic and economic census and survey field activities in his or her regional area. These activities include the Decennial Census, the Current Population Survey, and the Annual Retail Trade Survey. The Demographic Coordinator has responsibility for coordinating demographic surveys in the regional office.

The interviewer training program and the field quality control procedures, including a manual edit of questionnaires, interviewer observation, and a reinterview program, have been thoroughly described.<sup>36</sup> The most up-to-date field quality control procedures are described in detail in the U.S. Bureau of the

Census National Health Interview Survey Office Manual, which is continuously updated.<sup>37</sup> In this chapter only an overview of the field procedures and noteworthy changes in these field procedures and quality control programs occurring during 1975–83 are described. Also covered in this chapter are the NHIS data processing procedures, including coding, keying, and computer editing.

#### Interviewer training

The interviewers' initial training consists of five stages: preclassroom training, classroom training, postclassroom training, on-the-job training, and editing of questionnaires by the interviewer supervisor. The preclassroom training is self-study at home. The classroom training consists of 4–5 days of instruction and covers the interviewer's manual, the questionnaire and related forms, and interviewing techniques. This training is

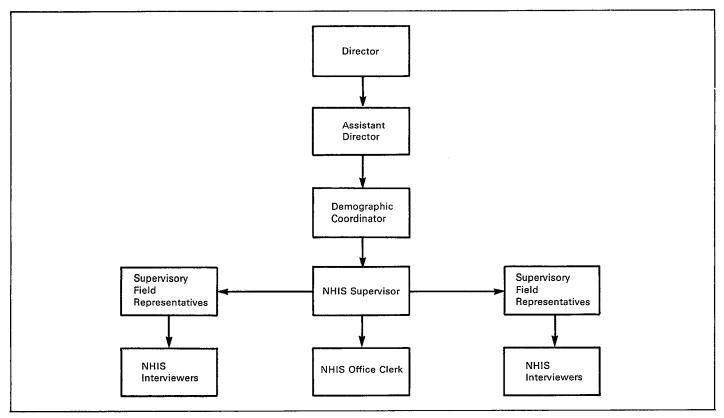


Figure 25. Organization chart of National Health Interview Survey (NHIS) activities at a typical regional office of the U.S. Bureau of the Census

conducted in one of the 12 regional offices of the U.S. Bureau of the Census. The training consists of formal lectures by the trainer, reading portions of the interviewer's manual, answering questions, participating in group discussions, completing written exercises, and practice interviews. After the classroom training there are self-study programs that review classroom topics and that also help the interviewer understand sample unit coverage in area segments, the use and background of the address lists taken from the decennial census, and the procedures to be followed at special dwelling places such as motels or boarding houses. The interviewer receives on-the-job training during the first two assignments and her first listing assignment. This type of training is also referred to as initial observation. The work of all new interviewers for their first four assignments is also edited by their supervisor.

There is a relatively low turnover rate among NHIS interviewers. Many have worked continually on the survey for several years. Several types of continued training are used. Group classroom training usually occurs twice each year in each of the regional offices of the U.S. Bureau of the Census. In the first session, which is usually held in January prior to fielding the new year's questionnaire, the interviewers are refreshed on the core questionnaire procedures and are trained on new supplement procedures. In the second session, which is usually held about midyear, the interviewers are refreshed on both core and supplement procedures. In addition to the classroom study, occasionally a home study is sent to the interviewers to insure that the interviewers have mastered the materials that were covered in class. Another part of the continued training process

is the feedback of errors by the interviewer's supervisor based on the manual regional office edit of questionnaires, the supervisory observations made, and the reinterview program.

#### Interviewer listing of housing units

The design of the NHIS sample is based on housing unit address information obtained during the most recent Decennial Census. Because new construction, conversion of structures to dwelling units, and so forth, can occur between the time of the Decennial Census and the conduct of an NHIS interview, interviewers make a record or "list" housing units in sample segments wherever required before conducting interviews. The purpose of listing is to insure that all eligible household units have a chance for selection in the survey. In addition, if in conducting an interview an interviewer discovers another housing unit in the dwelling, she is required to record the housing unit and to conduct an interview in it.

#### Observation of interviewers

The in-the-field observation program for all interviewers is considered one of the most important quality control programs for the survey because the majority of interviewer problems can be detected only through direct observation.

There are three types of field observations conducted by the interviewer's supervisor: initial, systematic, and special needs. Initial observations are conducted for each new interviewer for 2 days on her first interviewing assignment, for 1 day on her second assignment, for part of a day on the first listing assignment, for 1 day on the third assignment, and for 1 day between the fifth and eighth assignments. In addition, systematic observation assignments are made by the regional offices. One-half of the experienced interviewers are observed each quarter. Special needs observations are scheduled if an interviewer's work is rejected in reinterview or if an interviewer's work falls below certain minimum performance standards in the areas of production, noninterview rate, number of recording errors and omissions on the questionnaires, or performance on recent observation.

In conducting the observation the supervisor fills in an observation form to record various aspects of the interviewer's performance. A revised observation form was introduced in 1980. Appendix VIII contains a copy of the new form. It is basically the same as the previous form with a few modifications, such as the addition of the item "Follow Privacy Act Procedures."

#### Reinterview program

In the NHIS reinterview program, the initial interview responses are compared with responses obtained from a subset of the same questions asked a short time later by the interviewer supervisor for a small subsample of households. This comparison provides a check on interviewer problems. In addition, the measurement obtained of reliability of response, also referred to as the simple response variance, is useful in gauging the quality of the survey data.

The reinterview assignments are made on the basis of interviewer workload. There have been changes in the methods of assignments over the period from 1975 through 1983 that will be described later in this section. Overall, the level of NHIS households reinterviewed decreased from 10 to 5 percent between 1975 and 1983. The reinterview is scheduled for the week following the original interview and must be completed no later than 2 weeks after the data of the original interview. Because the questions on the NHIS refer to specific time periods, such as "last week or the week before," the reinterviewer must be certain to get the information for the same time period used in the original interview. (See appendix IX.) One part of the reinterview is a coverage check to see if all households and household members have been properly included in the survey. Another part of the reinterview reports personal and health characteristics. The reinterview fieldwork also includes verifying the original interviewer's work in the listing of segments.

The reinterview sample is divided into two parts: an 80-percent subsample and a 20-percent subsample. In the 80-percent subsample, the supervisor carries out a reconciliation of reinterview results with the results of the original interview. If the reinterviewer finds that differences exist, he/she attempts to determine from the respondent the proper response and any possible reasons for differences. The reconciliation form provides space for recording reasons for differences. (See appendix IX.) The data from the 80-percent sample are used to estimate response bias and to assess interviewers. No reconciliation is carried out for persons in the 20-percent subsample. The data from the 20-percent group are used to estimate gross reporting differences that should be unaffected by the accessibility of original responses to the reinterviewer.

The reinterviewer is instructed not to look at the original interview results before the reinterview. In the 80-percent subsample, the NHIS reconciliation record containing the transcribed information from the original interview is given to him/her in a sealed envelope. The reinterviewer does not open this envelope until the reinterview is completed.

After a reinterview assignment has been completed, the reinterviewer compiles a summary report of the NHIS reinterview showing the number of differences for five categories of the interviewer's work: listing, household composition, personal characteristics, characteristics of conditions and hospitalizations, and the number of conditions, hospitalizations, and injuries. An interviewer's work is evaluated by the number of differences in any classification compared with the number given in a table of acceptability. Supervisors initiate retraining, observations, and so forth for interviewers whose work is unacceptable.

Several changes were made from 1975 through 1983 in the NHIS reinterview program described in reference 36. These changes occurred in the interviewer sample selection, mode of reinterview, listing checks, and the method of interviewer evaluation.

Interviewer sample selection for reinterview—Between 1975 and 1980 interviewers with eight or more assignments per quarter were selected three times for reinterview for the calendar year. Interviewers with fewer than eight assignments per quarter were selected two times for reinterview. In 1981, interviewers were selected two times for the calendar year regardless of assignment size. In 1982, the method of selecting interviewers was changed to a more randomized approach, and interviewers were selected an average of 1.5 times for the calendar year. In 1983, the more randomized selection approach was retained but interviewers were selected an average of two times during the calendar year.

Mode of reinterview—In the beginning years of the reinterview program all reinterviews were done face to face in the respondent's household. From 1969–72 the primary mode of reinterview was face to face but the use of the telephone was permitted for followup of those not at home. From January 1973 through June 1973 all reinterviews were conducted by telephone; if a household had no telephone it was eliminated from the reinterview sample. From July 1973 through December 1974 the initial attempt at reinterview was made face to face, but the telephone mode was permitted for followup of nonresponses. From January 1975 through 1983 the telephone mode was acceptable for initial contact and the face to face mode was used only if the household had no telephone.

Listing checks for reinterview—From 1975 through 1981 listing checks were made each time an interviewer was selected for reinterview in sample addresses or segments that were last listed or updated by that interviewer. In 1982–83 listing checks were made once per calendar year in sample addresses or segments that were listed or updated by that interviewer.

Method of interviewer evaluation in the reinterview program—From 1975 through 1978 interviewers either passed or failed in the various content areas according to a "tolerance" table of acceptable number of errors. Also from 1975 through 1978, 90 percent of the reinterview sample was used to evaluate

interviewer performance. (Reconciliation between the original responses and the reinterview responses was carried out for 90 percent of the reinterview sample.) From 1979 through 1983, the original interviewer's performance was evaluated based on the reinterview using a "levels of concern" table of acceptable number of errors as a guideline. The "pass/fail" concept was eliminated. Also from 1979 through 1983, 80 percent of the reinterview sample was used to evaluate interviewer performance.

#### Manual editing of questionnaires

All interviewers are instructed to edit their own completed work before submitting it to the regional office. When the questionnaires are received in the regional office, one of three types of additional editing is performed:

- Initial—A complete (100 percent) edit of all questionnaires in a new interviewer's first four assignments and a complete edit of the first assignment in a new calendar year for experienced interviewers.
- Systematic—A complete edit of a sample of questionnaires in each interviewer's assignment.
- Special needs—A complete edit of all (or some) of the questionnaires in an assignment of an interviewer not performing at least satisfactorily.

From 1975 through 1981, the determination of whether to perform the systematic or special needs edit was left to the regional office NHIS editor's judgment. The guidelines for making this determination were to conduct the special needs edit if "an interviewer's work appears less than satisfactory," in which case a "sufficient number of questionnaires" were to be fully edited until the editor was "satisfied with the interviewer's performance."

Beginning with the 1982 data year, a qualified edit (QE) procedure was initiated to standardize the qualifications and activities involved with the systematic versus the special needs edits. To attain QE status initially, an interviewer must maintain a "satisfactory" or better (7 percent or less) error rating for four consecutive assignments. A complete edit is conducted on all questionnaires in the assignments until this qualification is met. Once QE status is achieved, the systematic edit is performed as long as the error rate does not fall into the "needs improvement" (7.01–9.00 percent) range for three consecutive assignments or does not fall into the "unsatisfactory" range for any one assignment. If either of these occurs, a complete (special needs) edit is performed on each assignment until the error rate is "satisfactory" or better for two consecutive assignments.

In selecting the sample for the systematic edit, enough questionnaires must be edited to provide a reasonable base for rating the interviewer. For some interviewers this means editing their entire assignments. For most interviewers only a sample of each assignment is edited. The sample is a systematic one and is based on the number of assignments made to the interviewer in the calendar quarter and the number of units in each assignment.

Throughout the period 1975-83, the regional office edit could be conducted by the NHIS supervisor, NHIS alternate supervisor, NHIS clerks, or, if necessary, supervisory field representatives, or regular NHIS interviewers. However, at the

beginning of the period most, if not all, of the editing was performed by the clerical staff. Because the edit program is an important part of the supervisor's responsibilities and it is essential to the survey that each supervisor be actively involved in and knowledgeable about all facets of the project, beginning with the third quarter of 1976 each NHIS supervisor was required to edit at least one assignment in 6 of the 13 weeks each quarter. These six required editing assignments are preselected by the staff at the U.S. Bureau of the Census in Suitland, Md., at the beginning of each quarter to provide each supervisor with a variety of interviewers and/or primary sampling units to edit.

In an effort to improve the quality of the NHIS data through timely feedback of problems to the regional office editors, a reedit of a sample of questionnaires from each office is conducted by the Washington staff of the U.S. Bureau of the Census. During this reedit, three types of errors are identified:

- Interviewer errors not found in the regional office edit.
- Errors charged incorrectly to the interviewers by the regional office editor.
- Regional office editor errors.

The results of the reedit are routinely reported to the regional offices for use in evaluating editors' performance and to improve the editors' proficiency. This review of completed questionnaires also assists the Washington staff in identifying frequent or consistent interviewer errors that need to be covered and corrected through group training sessions and/or periodic self-study programs.

The actual editing procedures have remained fairly consistent through this period. The changes that have occurred generally resulted either for clarification of procedures or to accommodate changes in the NHIS questionnaires. Copies of the forms used for recording interviewer errors found during the regional office editing are in appendix X.

#### Measures of interviewer performance

In the preceding sections of this chapter the activities for controlling the quality of survey results have been presented. Results from these quality control activities are combined with other data to provide an overall evaluation of interviewer performance.

The measurement of interviewer performance in the NHIS is a combination of subjective ratings by supervisors and quantitative measures based on an examination of an interviewer's completed work. Minimum standards of performance on the quantitative measures are established and a cumulative record of performance for each interviewer is maintained in the regional office of the U.S. Bureau of the Census. If, at any time, this record indicates that an interviewer's work has fallen below the minimum standard, corrective action is taken. This corrective action may consist of retraining, observation, or, in some cases, replacement of the interviewer. In practice the evaluation of interviewer performance is based on the pattern of performance over time and on different aspects of the interviewing job rather than performance on any single aspect.

In the NHIS, three quantitative measures of performance are computed on a continuing basis. They are the edit error score, the noninterview rate, and the production ratio. The edit error score is computed as follows: (number of errors)/(number of questionnaires edited + total conditions, doctor visits, and hospitalizations reported). The numerator is the number of errors identified during editing. Errors include omitted entries, missed conditions, missed hospitalizations, and diagnostic errors. Missed conditions and missed hospitalizations are those identified in the early or probing section of the interview but not followed up for additional information in the latter sections of the interview. Diagnostic errors occur when the interviewer fails to record sufficient information to allow a medical coder to assign diagnostic codes.

The noninterview rate is computed as follows: (number of type A noninterview households)/(number of interviewed households + number of noninterviewed households). The type A noninterview households are households eligible to be included in the NHIS, but for which no interview was conducted. Included as noninterviews are those the interviewer has reported as "refusals," "no one at home," "temporarily absent," and so forth.

The production ratio is calculated as follows: (estimated time based on production standards)/(actual payroll time charged by the interviewer). The numerator is estimated from an equation that takes into account such factors as the average time per household, the number of assigned households, and the distance to area of assignment from interviewer's home. The production guide is shown in appendix XI. Appendix XII contains a copy of Form 11–39 (NHIS), Summary of HIS Interviewer Performance

In addition to quantitative measures used to evaluate interviewer performance, the results of supervisory reinterviews and observations are used as much as possible. Also, if specific individual interviewer errors are discovered during the editing, they are noted and forwarded to the regional supervisor. He or she in turn informs the interviewer of these errors and suggests means of eliminating them.

After a probationary period of 6 months, each interviewer receives a report on her performance over the past quarter. See appendix XIII for a copy of Form 11–40, Notification of Interviewer Performance. The report contains a descriptive rating and a numerical score. The descriptive ratings are "Excellent," "Satisfactory," "Needs improvement," or "Unsatisfactory." If an interviewer receives a rating of "Needs improvement" or "Unsatisfactory," she will receive a warning notice and face possible termination unless, in the judgment of her supervisor, there are extenuating circumstances.

#### Coding, keying, and computer editing of data

After checking interviewer assignments and performing manual edits on the questionnaires the regional offices of the U.S. Bureau of the Census send the forms to NCHS for processing. After a check-in process to determine that all units are accounted for, questionnaires are coded onto transcription sheets. (See appendix XIV for an example of a transcription sheet.) Detailed coding instructions and coding keys are prepared for the purpose of translating the questionnaire responses into numbers. The codes on the transcription sheet are then keyed and transferred to computer files. The transcription sheet was not used for the 1978–79 Smoking Supplements and the

1983 Alcohol Supplement; in these cases the questionnaires were precoded (that is, numerical codes for response categories were printed on the questionnaires beside the responses) and the questionnaires were directly keyed.

There are quality control procedures for coding and keying. As for keying, the transcription sheet is keyed by a contractor with 100 percent dependent verification performed with the keystroke verifier correcting any wrong keystrokes made by the entry operator. The supplement books, which are directly keyed (bypassing the coding) onto a transcription sheet, are 100 percent dependently verified, which provides keystroke verification and coding verification on all items. Errors are recorded and error rates assigned for both keystroke and coding errors.

From 1975 through 1981 the quality check on the coding process involved having a systematic 10-percent sample of the questionnaires recoded independently by two additional coders. A "majority concept" was employed in which error rates were computed assuming that if one coder's work was different from that of the other two coders, the disagreeing code was in error. If the error rate for a batch of questionnaires (about 95) exceeded 5 percent, the entire batch was adjudicated by a fourth person (adjudicator). If the error rate for a particular type of page exceeded 12 percent, the pages involved were adjudicated. Coder error rates by page type and overall item error rates were computed and reviewed by the coding supervisor to verify that no coders needed remedial action, such as retraining. Starting in 1982, the coding quality control check was changed so that only 5 percent of the work was recoded independently by only one other coder. This meant that discrepancies were coded by a third coder, who is a senior coder, to determine whether code 1 or 2 was in error. Again, batches with error rates in excess of 5 percent and page types in excess of 12 percent were adjudicated by a fourth person. The cutback to a 5-percent verification by only one coder was made for budgetary reasons.

As mentioned above, detailed written instructions are provided to coders for assigning codes to questionnaire responses. The coding of medical conditions is based on the World Health Organization's International Classification of Diseases (ICD). From 1969 through 1978 the Eighth Revision International Classification of Diseases was used to develop codes for the NHIS.<sup>38</sup> Beginning with the data collected in 1979, the 9th Revision<sup>39</sup> of the ICD was used. Although the ICD is used as the benchmark for coding conditions reported in the NHIS, NHIS must provide coders with a great deal of additional instruction because lay responses must be converted into the codes reflecting the medical terminology in the ICD. An additional coding manual for medical conditions is also used by NHIS coders.<sup>40</sup>

After the NHIS data are coded and keyed, a substantial amount of processing by computer occurs before the data are analyzed. A major portion of this processing falls into the area of editing for inconsistencies in data items. For inconsistent codes other available data on the data tape are used to make corrections. Where there is insufficient additional information on the data tape, the inconsistent code is usually assigned to the unknown category. Unless there are major patterns or large numbers of inconsistencies, the source documents (the ques-

tionnaires) are not referenced to resolve problems. This procedure is used because, with the large volume of data processed in the NHIS, individual record correction at this stage of processing is very expensive. This procedure results in all records being handled in the same manner so that all problems of the same type are resolved in a consistent way. "Decision logic" tables are prepared to guide the programming of the editing steps. These decision logic tables become a part of the permanent record of the processing of data.

Another large task in the processing of the data is the matching and merging of the data files (for example, the supplement data for an individual with the core data for the same individual) and the resolution of "mismatches" or cases in which part of the data appears to be missing. Still another major task is the assignment of weights and the adjustments for non-response. (See chapter 2 in section I for an explanation of the weighting and adjustment procedures.)

Once the data files are considered complete and cleaned, individual identifiers are removed and public-use tapes with accompanying documentation are prepared.

#### Confidentiality provisions

Since its inception NCHS has worked diligently to maintain the confidentiality of its records. This effort has succeeded; there is no known case of this confidentiality having been breached. While it is a matter of principle for NCHS to maintain the confidentiality of records, a set of laws and regulations exists that requires and/or permits NCHS to do so.<sup>41</sup>

Section 308(d) of the Public Health Services Act (42 U.S.C. 242m) provides the basic legal requirements for protecting the Center's records. It reads in part:

No information, if an establishment or person supplying the information or described in it is identified, obtained in the course of activities undertaken or supported under section 304, 305, 306, 307, or 309 may be used for any purpose other than the purpose for which it was supplied unless such establishment or person has consented (as determined under regulations of the Secretary) to its use for such other purpose and (1) in the case of information obtained in the course of health statistical or epidemiological activities under section 304 or 306, such information may not be published or released in other form if the particular establishment or person supplying the information or described in it is identifiable unless such establishment or person has consented (as determined under regulations of the Secretary) to its publication or release in other form . . .

Whenever the Center requests information, it apprises the person or agency supplying the information as to the uses to be made of it. (Normally, the specified uses are limited to statistical research and reporting.) The first clause of Section 308(d) guarantees that thereafter the Center will be limited to those uses so specified to the supplier. Moreover, the information obtained may be used only by staff of NCHS, or its qualified agents, in the pursuit of such stated purposes, and by them *only* in activities *directly* aimed at achieving those specific purposes.

The second clause states that the Center may never release identifiable information without the advance, explicit approval of the person or establishment supplying the infor-

mation or by the person or establishment described in the information.

The Privacy Act of 1974 (5 U.S.C. 552a.) also provides for the confidential treatment of records of individuals maintained by a Federal agency according to either the individual's name or some other identifier. This law also requires that such records in NCHS are to be protected from uses other than those purposes for which they were collected. It further requires agencies to (a) collect only that information necessary to perform agency functions, (b) publish descriptions of existing data systems (called "systems of records") so that the public can learn what records are maintained by the agency, (c) inform individuals at the time of data collection as to the legislative authority under which it is requested, whether the request is mandatory or voluntary, the consequences, if any, of nonresponse, and the purposes and uses to be made of the data, (d) maintain no records on how an individual exercises his or her rights under the first amendment except with special legal authorization, (e) with certain exceptions, permit individuals to examine records maintained about themselves and to challenge the accuracy of those records, (f) establish rules of conduct governing persons involved in collecting and maintaining records, and (g) establish appropriate administrative, technical, and physical safeguards to protect records. Employees of agencies and their contractors subject to the act who willfully disclose personal information contrary to the law, or who fail to give notice of a system of records, may be fined up to \$5,000, and the agency may be sued for damages. Finally, the act places severe restrictions on the use of an individual's Social Security number.

The Department of Health and Human Services has allowed NCHS to have a "K-4 exemption" for its statistical systems, as permitted under the Privacy Act. This means that NCHS does not have to allow subjects of its data files to have access to the records about themselves in those files. This exception to Privacy Act requirements is permitted because NCHS does not have in its data files any records that are used in any direct way to affect the persons whose records exist in these files; rather, the files are used strictly for statistical and related purposes. NCHS, however, must comply with all other requirements of the Privacy Act.

The Federal Law Governing Federal Employees' Behavior (18 U.S.C. 1905) includes the following provision, which is also relevant to the maintenance of confidentiality for NCHS records:

#### Disclosure of Confidential Information

Whoever, being an officer or employee of the United States or any department or agency thereof, publishes, divulges, discloses or makes known in any manner or to any extent not authorized by law any information coming to him in the course of his employment or official duties or by reason of any examination or investigation made by, or return, report or record made to or filed with, such department or agency or officer or employee thereof, which information relates to trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation or asso-

ciation; or permits any income return or copy thereof or any book containing any abstract or particular thereof to be seen or examined by any person except as provided by law, shall be fined not more than \$1,000 or imprisoned not more than one year, or both; and shall be removed from office or employment.

The Freedom of Information Act (5 U.S.C. 552), which was first passed in 1967 and amended in 1974, requires Federal agencies to make their records available to persons who request them. Some have speculated that this law undoes the privacy protection required under the laws just cited. However, such a view is mistaken, because several kinds of records are specifically exempted from the disclosure requirements of the

Freedom of Information Act. Two exclusions provided in section 552(b) of the act are of special relevance: Subsection (6) exempts "personal and medical files and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy" and subsection (3) provides that matters "specifically exempted from disclosure by statute" are also excluded from the disclosure requirement. Thus no records that are protected from disclosure are required by the Freedom of Information Act to be released to anyone.

Because the U.S. Bureau of the Census is the data collection agent of NCHS, it is required to abide by the above laws and regulations. In addition, it is bound by the confidentiality provisions of Titles 13 and 42.

#### References

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<sup>2</sup>U.S. Bureau of the Census: The Current Population Survey, a report on methodology. *Technical Paper No. 7*. Washington. U.S. Government Printing Office, 1963.

<sup>3</sup>National Center for Health Statistics: *Health Interview Survey Procedure*, 1957–1974. DHEW Pub. No. (HRA) 75–1311. Health Resources Administration. Washington. U.S. Government Printing Office, 1975.

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<sup>5</sup>U.S. Bureau of the Census: The Current Population Survey, design and methodology. *Technical Paper No. 40.* Washington. U.S. Government Printing Office, Jan. 1978.

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## Appendix I Census regions, census divisions, and States

#### **Northeast Region**

**New England Division** 

Connecticut Maine Massachusetts

New Hampshire Rhode Island Vermont

Middle Atlantic Division

New Jersev New York

Pennsylvania

**North Central Region** 

**East North Central Division** 

Illinois Indiana Ohio Wisconsin

Michigan

**West North Central Division** 

Iowa Kansas Minnesota Nebraska North Dakota South Dakota

Missouri

**South Region** 

**South Atlantic Division** 

Delaware District of Columbia

Florida Georgia Maryland North Carolina South Carolina Virginia West Virginia

**East South Central Division** 

Alabama Kentucky

Mississippi Tennessee

**West South Central Division** 

Arkansas

Oklahoma

Texas

Louisiana

**West Region** 

**Pacific Division** 

Alaska California

Oregon Washington

Hawaii

Mountain Division

Arizona Colorado Idaho

Nevada New Mexico

Utah Montana Wyoming

## Appendix II Tabulation areas

Tabulation areas consist of the 11 sections, each divided into 3 parts, plus the largest self-representing standard metropolitan statistical areas (SMSA's). The number of sections and divisions has been constant over the course of the survey; the number of large self-representing SMSA's has changed.

#### **Eleven sections**

The 11 sections exclude self-representing SMSA's and each is divided into 3 parts:

New England
Aggregate of SMSA's
Other urban
Rural
Middle Atlantic
East North Central, Eastern Part
East North Central
West North Central
South Atlantic, Upper Part
South Atlantic, Lower Part
East South Central
West South Central
Mountain Section
Pacific Section

#### Large self-representing SMSA's

**Boston** 

	realisas City
New York <sup>b</sup>	St. Louis
Philadelphia	Houston
Pittsburgh	Dallas
Detroit	Washington, D.C.
Chicago <sup>c</sup>	Seattle-Everett
Cincinnati	San Diego
Los Angeles-Long Beach	Anaheim-Santa Ana-Garden Grove
San Francisco-Oakland	Miami
Baltimore	Denver
Atlanta	San Bernardino-Riverside-Ontario
Buffalo	Indianapolis
Cleveland	San Jose

**New Orleans** 

Portland, Oreg.

Tampa-St. Petersburg

Kansas City

Minneapolis-St. Paul

Milwaukee

<sup>&</sup>lt;sup>b</sup>Northeastern New Jersey Consolidated Area. <sup>c</sup>Northwestern Indiana Consolidated Area.

# Appendix III Control and experimental questionnaire data

Table I. Comparison of statistics produced by the control and experimental questionnaires, fourth quarter, 1979, unweighted data

[Caution should be exercised in drawing inferences from the comparisons of the experimental and control questionnaires to the final instrument fielded in 1982, especially on estimates coming from topics that had such changes. Estimates on disability days associated with conditions are not shown because the questionnaire approach was very different in the experimental questionnaire; this approach was changed after the evaluation test to be very similar to the way it was in the control questionnaire]

Topic and person characteristic	NHIS control questionnaire	Experimental questionnaire	Topic and person characteristic	NHIS control questionnaire	Experimental questionnaire
HOSPITAL DISCHARGES PER 100 PERSONS			PERSONS WITH ANY LIMITATION OF ACTIVITY, PERCENT		
All persons	14.0	13.9	All persons	14.4	13.8
Age			Male		
Under 17 years	6.6	6.9	All ages	14.8	13.5
17-24 years	15.2	12.4	Haday 17 years	4.7	5.3
25-34 years	15.4	15.5	Under 17 years	9.0	8.9
35-44 years	13.2	14.1	17–44 years		
45-64 years	16.4	17.5	45–64 years	25.8	24.8
65 years and over	25.8	25.6	65 years and over	48.5	36.7
Sex			Female		
Male	11.6	11.7	All ages	14.1	14.0
Female	16.2	15.8	Under 17 years	3.0	5.1
I chiale	10.2	13.0	17–44 years	8.3	8.8
			45–64 years	22.5	24.9
AVERACE LENGTH OF				43.2	32.7
AVERAGE LENGTH OF HOSPITAL STAY, DAYS			65 years and over	43.2	32.7
All persons	7.7	6.9	PERSONS WITH MAJOR ACTIVITY LIMITATION,1 PERCENT		
Sex			All persons	10.7	9.0
Male	9.1	7.1			
Female	6.8	6.7	Male		
· Cindio	5.5	<b></b>	All ages	11.2	9.0
			Under 17 years	2.5	3.4
PERSONS WITH ONE OR MORE			17–44 years	5.4	6.4
HOSPITAL EPISODES, PERCENT			II · · · · · · · · · · · · · · · · · ·		
A11	7.7	6.9	45–64 years	20.9	20.0
All persons	7.7	6.5	65 years and over	43.0	14.9
Sex			Female		
Male	9.1 6.8	7.1 6.7	All ages	10.3	9.0
Female	0.0	0.7	Under 17 years	1.3	3.0
			17–44 years	5.4	5.6
			45–64 years	16.9	18.4
NUMBER OF NIGHTS IN			1		17.6
HOSPITAL—PERCENT OF PERSONS REPORTING STAYS			65 years and over	35.2	17.0
Age			RESTRICTED ACTIVITY DAYS PER PERSON PER QUARTER		
•	20.5	20.0		4.0	4.0
1-3 years	36.5	36.8	All persons	4.9	4.6
4–5 years	20.2	20.8			
6-7 years	14.3	14.4	Male		× .
8-14 years	18.6	17.4	Alleges	4 2	4.2
15-21 years	5.4	5.3	All ages	4.3	44,4
22–30 years	2.4	2.3	Under 17 years	2.9	3.6
31 years and over	2.7	2.9	17-24 years	3.1	3.3

<sup>&</sup>lt;sup>1</sup>Questionnaire topic in which major changes were made after evaluation test.

Table I. Comparison of statistics produced by the control and experimental questionnaires, fourth quarter, 1979, unweighted data—Con.

[Caution should be exercised in drawing inferences from the comparisons of the experimental and control questionnaires to the final instrument fielded in 1982, especially on estimates coming from topics that had such changes. Estimates on disability days associated with conditions are not shown because the questionnaire approach was very different in the experimental questionnaire; this approach was changed after the evaluation test to be very similar to the way it was in the control questionnaire]

Topic and person characteristic	NHIS control questionnaire	Experimental questionnaire	Topic and person characteristic	NHIS control questionnaire	Experimental questionnaire
	questionnaire	questionnane	Topic and person characteristic		—————
RESTRICTED ACTIVITY DAYS PER PERSON PER QUARTER—Con.			DOCTOR VISITS PER 100 PERSONS		
Male—Con.			All persons	120	130
25~44 years	3.5	3.7	Age		
45-64 years	6.3	5.3	Under 17 years	110	110 .
65 years and over	8.9	6.1	17-24 years	100	120
Female			25-44 years	120 130	130 150
All ages	5.5	5.0	65 years and over	150	180
	3.1	4.2	_		
Under 17 years	4.0	3.6	Sex		
25-44 years	5.2	4.7	Male	100	110
45-64 years	7.1	5.9	Female	130	150
65 years and over	10.3	7.3			
	,		PERCENT INDICATING DOCTOR ACTUALLY SEEN		
BED DAYS			Yes	86	79
			No	12	19
All persons	1.8	1.8		12	10
Male			PLACE OF DOCTOR CONTACT, PERCENT AT—		
All ages	1.4	1.5	Doctor's office	69	E2
Under 17 years	1.2	1.2	Telephone	12	52 17
17–24 years	1.2	1.0	Home	0.3	2
25-44 years	1.0	1.3	Hospital	13	18
45-64 years	1.7	1.7	The second secon	,,	10
65 years and over	3.3	3.0	DOCTOR CONTACTS PER 100 PERSONS ACCORDING TO		
Female			PHYSICIAN SPECIALTY		
All ages	2.1	2.0	General practitioner	56.0	54.6
Under 17 years	1.5	1.6	Pediatrician	12.6	10.8
17-24 years	1.7	1.5	Obstetrician/gynecologist	7.7	7.9
25-44 years	2.3	1.9	Dermatologist	2.2	2.2
45-64 years	2.3	2.3	Psychiatrist	1.0 2.3	3.1
65 years and over	3.4	3.6	Other	23.6	4.1 37.7
WORK LOOG DAVO			12-MONTH BED DAYS		
WORK-LOSS DAYS			0	53	56
All persons	1.2	1.6	1-7	35	32
Male			8–30	9	9
	1.2	1.5	31 or more	2	2
All ages			12-MONTH DOCTOR VISITS,		
17–24 years	1.2	1.2	PERCENT REPORTING—		
25-44 years	1.0	1.3			
45-64 years	1.4	2.0	None	25.0	24.7
65 years and over	1.4	0.8	1-2	37.2	37.5
Female			3–4	15.9	15.1
			5–12	15.9 4.8	16.4
All ages	1.3	1.8	Other	4.8 1.2	4.3 1.9
17-24 years	0.9	1.6		• • • • • • • • • • • • • • • • • • • •	
25-44 years	1.5	1.9	HEALTH STATUS, PERCENT		
45-64 years	1.2	1.8	REPORTING-		
65 years and over	1.5	2.3	Excellent	48.0	36.0
			Very good	NA	28.0
0011001 1000 7110			Good	39.0	21.0
SCHOOL-LOSS DAYS			Fair	10.0	8.0
Persons under 17 years	1.6	1.5	Poor	3.0	3.0

Table I. Comparison of statistics produced by the control and experimental questionnaires, fourth quarter, 1979, unweighted data—Con.

[Caution should be exercised in drawing inferences from the comparisons of the experimental and control questionnaires to the final instrument fielded in 1982, especially on estimates coming from topics that had such changes. Estimates on disability days associated with conditions are not shown because the questionnaire approach was very different in the experimental questionnaire; this approach was changed after the evaluation test to be very similar to the way it was in the control questionnaire]

Topic and person characteristic	NHIS control questionnaire	Experimental questionnaire	Topic and person characteristic	NHIS control questionnaire	Experimental questionnaire
ACUTE CONDITION INCIDENCE, NUMBER PER 100 PERSONS			SELECTED CHRONIC CONDITIONS, NUMBER PER 100 PERSONS		
All persons	59	55	Chronic bronchitis	4 8 4	5 10 3
Under 6 years	97 77 63 34	99 68 53 36	Hernia	2 12 2	2 13 2

## Appendix IV Selected supplements 1975-83

accident happened?

O.M.B. No. 68-R1600; Approval Expires March 31, 1976 FORM HIS-1A(AS) NOTICE - All information which would permit identification of the individual will be held in strict confidence, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to others for any purposes. U.S. DEPARTMENT OF COMMERCE SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION BUREAU OF THE CENSUS ACTING AS COLLECTING AGENT FOR THE U.S. PUBLIC HEALTH SERVICE b. Segment c. Serial d. Person e. Name of person ACCIDENT SUPPLEMENT U.S. HEALTH INTERVIEW SURVEY Complete a separate column for each accident in question 3 of the INJURY PAGE, HIS-1, page 30. Date Date 1a. You told me that — had \_\_\_\_ accidents since \_\_\_\_\_\_\_. On about what date did he have the (last, next) accident? 197 197 b. Did —— have any other accidents since
(date) that caused him to see or talk Y (1a)
to a doctor or cut down for as much as a day? N 1+ conditions circled in item C(2) No conditions circled in item C(B) Ask for each condition circled in item C Which of these accidents caused the . . . you told me about earlier? (Record the number of the Condition in the appropriate column.) Condition number \_ Condition number Condition number in 2 (9) Condition number in 2 (9) No condition number in 2 (3) No condition number in 2 (3) 3a. How many times did —— see or talk to a doctor as a result of the accident on \_\_\_(date) \_\_? \_ Visits (4) ooo ☐ None \_ Visits (4) ooo 🔲 None b. How many days did -- cut down for as much as a day? — Days (5b) . Days (5b) ooo None (Next acc.) 000 🔲 None (Next acc.) o While inpatient in hospital 4a. Where did -- FIRST see or talk to the doctor - at a clinic, hospital, doctor's office, or some o While inpatient in hospital 1 Doctor's office (group practice or Doctor's office (group practice or doctor's clinic) other place? doctor's clinic) 2 Telephone ] Telephone a Hospital outpatient clinic If hospital: Was it a hospital outpatient clinic or the emergency room? ₃ ☐ Hospital outpatient clinic 4 Home If clinic: Was it a hospital outpatient clinic, 5 Hospital emergency room (5) s Hospital emergency room (5) a company clinic, or some other kind of clinic? 6 Company or industry clinic 6 Company or industry clinic 7 Other - Specify\_ 7 [7] Other - Specify b. As a result of this accident, did —— ever go to a hospital emergency room? 5a. How many days did -- cut down for as much Days Days 000 🗀 None (6) 000 🔲 None (6) b. How many days did this accident keep him in bed all or most of the day? Days ooo 🔲 None ooo 🗀 None c. How many days did this accident keep — from work? (For females): not counting work around the house? Days (6) Days (6) 000 🔲 None (6) 000 🔲 None (6) d. How many days did this accident keep --from school? ooo 🔲 None ooo 🗀 None Part of body Kind of injury Part of body Kind of injury 6a. At the time of the accident, what part of the body b. What kind of injury was it? c. Did he have any other injuries in this accident? 1 At home (inside house) 7. Where did the accident happen? 1 At home (inside house) 2 At home (adjacent premises) 2 At home (adjacent premises) a ☐ Street and highway (includes roadway and public sidewalk) 3 Street and highway (includes roadway and public sidewalk) 4 🔲 Farm 4 T Farm s \overline Industrial place (includes premises) 5 🔲 Industrial place (includes premises) e ☐ School (includes premises) 6 ☐ School (includes premises) 7 Place of recreation and sports, except school 7 Place of recreation and sports, except school B Other - Specify a 0ther - Specify 3 While in Armed Services (12) 4 Under 17 at time of accident (12) ₃ While in Armed Services (12) Was -- at work at his job or business when the

Continue on reverse side

2 N (12)

2 N (12)

4 Under 17 at time of accident (12)

C. What kind of motor vehicle was in (getting in or out of)?   Car   Truck     Car   Truck   Ca					
at a click, pospilal, decire softer, or same other place?  If hespital: Was it a bospital outpatient clinic or the energency reno?  If clinic: Was it a hospital outpatient clinic or the energency reno?  If clinic: Was it a hospital outpatient clinic or the energency reno?  If clinic: Was it a hospital outpatient clinic or clotic of clinic?  a company clinic, or stone other that of clinic?  Doublet accounts of the energency renor.  If secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  It secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The secident happened in past 2 weeks, go to 12.  Dys  Company crinically clinic  The sec	How many times did ——see or talk to a doctor as a result of the accident on <u>(date)</u> ?	Visits	000 None (11)	Visits	000 [ ] Nоле (11)
It objects was it a should adjusted cliaic, a client. Was It a house of a client of the exergency room?  It client. Was It a houself and objected cliaic, a company of inclusive client of the exergency room?  B. As a result of this accident, did — ever go to a houself client of the exergency room?  B. As a result of this accident, did — ever go to a houself client of the exergency room?  If accident largency in past 2 weeks, go to 12.  11. How many days did — cut down for as much as a day?  B. For many days did this accident keep Inin in bed all or most of the day?  If accident largency room and the house?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and the should be day?  If accident largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a largency room and and the should be day?  If a lar	at a clinic, hospital, doctor's office, or some	Doctor's office (g or doctor's clinic	roup practice	1 Doctor's office or doctor's clin	(group practice
It clinic? Was it a hospital captalised clinic?  a company influstry clinic  7		a Hospital outpatie	nt clinic	э 🗔 Hospital outpat	ient clinic
a hospital energency room?  If y z N  If secident happend in past z eveks, go to 12.  11a. Novement yets of the — cost down for an much sea defer the past day?  b. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Now many days did this accident keep — now work?  c. Was it (either ene) moving at the time?  1. Y 2. N 149  Y N N  Y N N  1. Y 2. N 149  Y N N  1. Nat kind of motor vehicle was — in (getting in or out of II, 2 month of the control of	If clinic: Was it a hospital outpatient clinic, a company clinic, or some other kind of clinic?	s Hospital emergen		5 Hospital emerge	ustry clinic
11a. Now many days did — out down for as much as a day?  b. Her many days did this accident keep — from word?  if 17 = ask:  c. Now many days did this accident keep — from word?  if 6 = 15, ask:  d. Now many days did this accident keep — from word?  if 6 = 15, ask:  d. Now many days did this accident keep — from word?  if 6 = 15, ask:  d. Now many days did this accident keep — from word?  if 6 = 15, ask:  d. Now many days did this accident keep — from word?  if 6 = 15, ask:  d. Now many days did this accident keep — from word?  if 6 = 15, ask:  d. Now many days did this accident keep — from word?  if 6 = 15, ask:  1 Y 2 N 7/9  1 N 1 Y 2 N 7/9  1 N 2 N (44)  1 Y 2 N 7/9  1 N 1 Y 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N 2 N 1 Y 2 N (44)  1 N N N 2 N 1 Y 2 N (44)  1 N N N 2 N 1 Y 2 N (44)  1 N N N 2 N 1 Y 2 N (44)  1 N N N 2 N 1 Y 2 N (44)  1 N N N 2 N 1 Y 2 N (44)  1 N N N 1 Y 2 N (44)  1 N N N N 1 Y 2 N (44)  1 N N N N N N 1 Y 2 N (44)  1 N N N N N N N N N N N N N N N N N N		1 Y	2 N	1 Y	2 N
all or mask of the day?  If 17 + ask:  If 17 + ask:  If 17 + ask:  If 16 - 15, ask:  If 18 - 15, ask:  If 18 - 15, ask:  If 18 - 15, ask:  If 19 - 15, ask:  If 10 - 15, ask:  If 18 - 15, ask:  If 19 - 15, ask:	11a. How many days did cut down for as much				
c. How many days did this accident keep — from work?    For fending in coloring was wounded house?   Days   Coo   Days   C	b. How many days did this accident keep him in bed all or most of the day?			,	
d. How many days did this accident keep — Days oo  None	c. How many days did this accident keep from work?				
involved in the accident in any way?  1 Y 2 N / 4 N Y N  13s. Was aree than one vehicle involved?  Y N 1 Y 2 N  13s. Was — outside the vehicle, getting in or out of it, a passeager, or was — the driver?  b. What kind(s) of motor vehicle was involved?  c. Was it (either one) moving at the time?  1 Outside (b) 3 Passeager (c) 2 Getting in or out of 2 M Diver (c) 2 Getting in or out (c) 4 Diver (c) 2 Getting in or out (c) 4 Getting in or out (c) 5 Getting in or out (c) 4 Getting in or	d. How many days did this accident keep				
C. Was it (either one) moving at the time?  1 Y 2 N  1 Y 2 N  1 Y 2 N  1 Y 2 N  1 Y 2 N  1 Outside (n) 3 Passenger (n) 2 Getting in or out (n) 4 Getting in or out (n) 5 Getting in or out (n) 5 Getting in or out (n) 5 Getting in or out (n) 6 Getting in or out (n) 7 Getting in or out (n) 8 Getting in or out (n) 9 Getti	12a. Was a car, truck, bus or other motor vehicle involved in the accident in any way?	1 Y	2 N (14)	1 Y	2 N (14)
13a. Was outside the vehicle, getting in or out of it, a passenger, or was the driver?   1	b. Was more than one vehicle involved?	Y	N	Υ	N
a passenger, or was — the driver?  b. What kind(s) of motor vehicle was involved?  c. What kind of motor vehicle was — in (getting in or out of)?  c. What kind of motor vehicle was — in (getting in or out of)?  c. What kind of motor vehicle was — in (getting in or out of)?  c. What kind of motor vehicle was — in (getting in or out of)?  1				1 Y	2 N
C. What kind of motor vehicle was in (getting in or out off?   Car	13a. Was — outside the vehicle, getting in or out of it, a passenger, or was — the driver?				
in or out oft?    2	b. What kind(s) of motor vehicle was involved?	2 Taxi > (14)	5 Motorcycle	2 Taxi > (14)	5 Motorcycle (14)
15. How did the accident happen?  16. What product or object came into contact with — and actually caused the injury?  1. 2. 2. 2. 3. 3. 3. 17. What other products or objects were involved in the accident? Anything else?  1. 2. 3. 3. 3. 18. Did anything else contribute to the accident, such as weather, lighting conditions, and so forth?  Y (Specify) N (Next Acc.)  Y (Specify) N (Next Acc.)  Y (Specify) N (Next Acc.)	c. What kind of motor vehicle was — in (getting in or out of)?	2 Taxi	s	2 Taxi	s Motorcycle
16. What product or object came into contact with — and actually caused the injury?  1. 2. 2. 3. 3. 3. 3. 17. What other products or objects were involved in the accident? Anything else?  1. 2. 2. 3. 3. 18. Did anything else contribute to the accident, such as weather, lighting conditions, and so forth?  Y (Specify) N (Next Acc.)  Y (Specify) N (Next Acc.)	14. What was doing at the time of the accident?				
and actually caused the injury?  1.	15. How did the accident happen?				
17. What other products or objects were involved in the accident? Anything else?  1.		2		2	
18. Did anything else contribute to the accident, such as weather, lighting conditions, and so forth?  Y (Specify)  N (Next Acc.)  Y (Specify)  N (Next Acc.)		1		1	
as nearier, righting conditions, and so total:				3	
FORM HIS-1A(ASI (9-12-74)		Y (Specify)	N (Next Acc.)	Y (Specify)	N (Next Acc.)
	FORM HIS-1A(AS) (9-12-74)	1			

O.M.B. No. 68-R1600; Approval Expires March 31, 1977

NOTICE - All information which would permit identification of the in only by persons engaged in and for the purposes of the survey, and w	ndividual will be held ill not be disclosed or	in strict confidence, v	vill be used or any purposes.	1. Book	ofbooks
FORM HIS-1(F) (8-24-76)	2. R. O. number	3. Sample	4. Control numb		
U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS ACTING AS COLLECTING AGENT FOR THE U.S. PUBLIC HEALTH SERVICE		1	PSU	Segment	Serial
INFLUENZA SUPPLEMENT	5. Interviewer's na	me		·	Code
U. S. HEALTH INTERVIEW SURVEY					
FOOTNOTES					
			_		
			-		
					ļ
					İ

A. Enter names and ages of all household members from HIS-1.	A.	First name 1 Age
B. Refer to all completed Condition pages — questions I and 3a only. Mark the first appropriate box for each person and indicate condition number.	審	(Influenza)
If "None of the above" marked in B go to NP; Otherwise ASK:  1. Earlier you told me had (condition marked in B) in the past two weeks.  When had the did he have a fever?	1.	1 Y 2 N
2. Did —— have a headache, muscle ache, cough, sore throat or runny nose?	2.	1 Y 2 N
3. Did have diarrhea?	3.	1 Y 2 N
If "Flu" or "Grippe" marked in B go to NP; Otherwise ASK:  4. During the past two weeks (the two weeks outlined in red on the calendar) did —— have the flu (influenza) or grippe?	4.	1 Y 2 N (NP)
5. When did —— first notice his ?  (Was it during the past two weeks or before that time?)	5.	1 Last week 2 Week before 3 Past 2 weeks — DK which 4 2 weeks—3 months 5 Over 3 months
6. When had the did he have a fever?	6.	1 Y 2 N
7. Did have a headache, muscle ache, cough, sore throat or runny nose?	7.	1 Y 2 N
8. Did have diarrhea?	8.	1 Y 2 N
9. Has had a flu shot since August 1?	9.	1 Y 2 N (NP)
10. When was this shot received?  (Was it during the past two weeks or before that time?)  ENTER ANSWER FOR FIRST SHOT IF MORE THAN ONE RECEIVED	10.	1   In interview week (Reask 10) 2   Last week 3   Week before 4   Past 2 weeks - DK which 5   2 weeks -1 month 6   Over 1-3 months 7   Over 3-6 months 8   Over 6 months 9   Never
11. Where did —— receive the flu shot?	11.	1 Doctor's office (Group Practice or Doctor's Clinic) 2 Hospital outpatient Clinic or Emergency Room 3 Public Health Clinic 4 Work 5 School 6 Military Installation 7 Other — Specify
12. How much did pay for the shot?	12.	(Dollars) (Cents)
13. Was this shot for the swine flu?	13.	1 Y 2 N 9 DK
C. Transcribe for each person after leaving household 1. Race $(Qla)$	C. 1.	1 W 2 B 3 OT
2. Sex (Q/a)	2.	1 M 2 F
3. Number of bed days (Q6 Cond. Page specified in B)	3.	Days 00 [ None 99 [ Cond. not spec. in B (NP)
4. Onset (Q9 Condition Page specified in B)	4.	1
FORM HIS-1(F) (8-24-76)		

Page 2

First name (2) Age	A.	First name (3) Age	First name (4) Age	A.	First name (5) Age	First name (6) Age
Last name	ł	Last name	Last name	ł	Last name	Last name
	ĺ		ĺ			
1 🗆 Flu	1	ı 🗀 Flu	ı □ Fiu	В.	1 Tele	1 Flu
(Influenza)		(Influenza) 2 Grippe Cond	(Influenza)		(Influenza)	(Influenza)
3 Virus Cond.	l	3 ☐ Virus No.	3 ☐ Virus Cond.		3 Virus No.	3 Virus Cond.
4 Cold 5 Bronchitis	İ	4 ☐ Cold 5 ☐ Bronchitis	4 Cold 5 Bronchitis		4 Cold 5 Bronchitis	4 Cold 5 Bronchitis
6 None of the above		6 None of the above	6 ☐ None of the above		6 None of the above	6 None of the above
				40	an a the a graph	A. 200 200
1 Y 2 N	1.	1 Y 2 N	1 Y 2 N	l 1.	1 Y 2 N	1 Y 2 N
						2 "
1 Y 2 N	2.	1 Y 2 N	1 Y 2 N	2.	1 Y 2 N	1 Y 2 N
1 Y 2 N	3.	1 Y 2 N	1 Y 2 N	3.	1 Y 2 N	1 Y 2 N
				1.3		
1 Y 2 N (NP)	4.	1 Y 2 N (NP)	1 Y 2 N (NP)	4.	1 Y 2 N (NP)	1 Y 2 N (NP)
I - abaal	_	4 □ t oot week	A D I ash week	١	4 [ ] ] - oh!-	. 571
t  Last week 2  Week before	5.	1  Last week 2  Week before	1  Last week 2  Week before	5.	1 [] Last week 2 [] Week before	1 Last week 2 Week before
Bast 2 weeks -		3 ☐ Past 2 weeks — DK which	3 Past 2 weeks - DK which		∃ ☐ Past 2 weeks - DK which	3 Past 2 weeks DK which
4 🔲 2 weeks-3 months		4 2 weeks-3 months	4 2 weeks-3 months		4 2 weeks-3 months	4 🔲 2 weeks-3 months
5 Over 3 months	6.	5 Over 3 months	5 Over 3 months	6.	5 Over 3 months	5 Over 3 months
1 Y 2 N 1 Y 2 N	7.	1 Y 2 N	1 Y 2 N	7.	1 Y 2 N	1 Y 2 N
1 Y 2 N	8.	1 Y 2 N	1 Y 2 N	8.	1 Y 2 N	1 Y 2 N
11 214		11 21		- O.	11 2N	TT 2N
1 Y 2 N (NP)	9.	1 Y 2 N (NP)	1 Y 2 N (NP)	9.	1 Y 2 N (NP)	1 Y 2 N (NP)
1 in interview week (Reask 10)	10.	t In interview week (Reask 10)	1  n interview week (Reask 10)	10.	1 In interview week (Reask 10)	1  n interview week (Reask 10)
2 Last week		2 Last week	2 🔲 Last week		2 Last week	2 Last week
3 Week before 4 Past 2 weeks -		3 Week before	3 Week before 4 Past 2 weeks —		3 Week before 4 Past 2 weeks -	3 Week before 4 Past 2 weeks —
DK which		DK which	DK which		DK which	DK which
5 2 weeks-1 month 6 Over 1-3 months		s 2 weeks-1 month G Over 1-3 months	5 2 weeks-1 month 6 0ver 1-3 months		5 2 weeks—1 month 6 0ver 1—3 months	5 2 weeks-1 month 6 0ver 1-3 months
7 Over 3-6 months		7 Over 3-6 months	7 Over 3-6 months		7 Over 3-6 months	7 Over 3–6 months
s Over 6 months  S Never		s ☐ Over 6 months s ☐ Never	a ☐ Over 6 months □ Never		s ☐ Over 6 months ∍ ☐ Never	8 Over 6 months 9 Never
1 Doctor's office	11.	1 Doctor's office	1 Doctor's office	11.	1 Doctor's office	1 Doctor's office
(Group Practice or Doctor's Clinic)		(Group Practice or Doctor's Clinic)	(Group Practice or Doctor's Clinic)		(Group Practice or Doctor's Clinic)	(Group Practice or Doctor's Clinic)
2 Hospital outpatient Clinic or Emergency		2 Hospital outpatient Clinic or Emergency	2 Hospital outpatient Clinic or Emergency		2 Hospital outpatient Clinic or Emergency	2 Hospital outpatient Clinic or Emergency
Room 3 — Public Health Clinic		Room 3 Public Health Clinic	Room 3 Public Health Clinic		Room 3 Public Health Clinic	Room 3 Public Health Clinic
4 Work	]	4 Work	4 Work		4 🗀 Work	4 🔲 Work
s School  G Military Installation		s School 6 Military Installation	5 C School	1	5 School	5 School
			6 Military Installation		6 Military Installation	6 Military Installation
7 Other Specify		7 Other - Specify	6		6  Military Installation 7  Other — Specify	7 Other - Specify
7 Other Specify	12.	7 Other -	7 TOther	12.	7 Other -	7 Other -
s	12.	7 Other -	7 TOther	12.	7 Other -	7 Other - Specify \$ \$ \$
\$   Cents   Cents		7 Other - Specify  \$ (Dollars) (Cents) 0000 No charge	7  Other Specify		7 Other - Specify	7  Other
\$ [Dollars] (Cents)	12.	7 Other - Specify (Conts)	7 Other - Specify (Cents)	12.	7 Other - Specify (Conts)	7 Other - Specify
Specify  \$ (Dollars) (Cents) cocc No charge  1 Y 2 N 9 DK	13. C.	7 Other - Specify  \$ (Dollars) (Cents) 0000 No charge 1 Y 2 N 9 DK	7 Other— Specify  \$ [Dollars] . [Cents] 0000 No charge 1 Y 2 N 9 DK	13. C.	7 Other Specify	7 Other
\$   (Cents)   (C	13. C. 1.	7 Other - Specify  \$ (Dollars) (Cents) 0000 No charge 1 Y 2 N 9 DK	7 Other - Specify  \$ (Dollars) (Cents) (Conts) (Con	13. C.	7 Other - Specify	7 Other - Specify
\$   (Cents)   (C	13. C. 1.	7 Other - Specify  \$ (Dollars) (Cents) 0000 No charge 1 Y 2 N 9 DK	7 Other—  \$ (Oollars) (Cents)	13. C. 1. 2.	7 Other - Specify   (Cents)   (Conts)   (Conts)   (Cents)   (Cents	7 Other - Specify
\$ Conts (Cents) (Cents	13. C. 1.	7 Other - Specify	7  Other - Specify - Qonts) 0000  No charge 1  Y	13. C.	7  Other - Specify	7  Other - Specify
\$   (Cents)   (C	13. C. 1. 2.	7 Other - Specify - (Cents)	7 Other—  \$[Collars]   (Cents)   0000   No charge  1 Y 2 N 9 DK  1 W 2 B 3 OT  1 M 2 F  Days 00   None 99   Cond. not spec. in B (NP)	13. C. 1. 2. 3.	7 Other— Specify  \$ (Dollars) (Cents) 0000 No charge  1 Y 2 N 9 DK  1 W 2 B 3 OT  1 M 2 F  Days 00 None 99 Cond, not spec, in B (NP)	7 Other— Specify  \$ (Dollars) (Cents) 0000   No charge  1 Y 2 N 9 DK  1 W 2 B 3 OT  1 M 2 F  Days 00   None 99   Cond, not spec, in B (NP)
\$ (Dollers) (Cents) 0000 \( \begin{array}{cccccccccccccccccccccccccccccccccccc	13. C. 1.	7 Other - Specify	7 Other—  \$[Ooltars]. (Cents) 0000 No charge  1 Y 2 N 9 DK  1 W 2 B 3 OT  1 M 2 F  Days 00 None 99 Cond. not spec.	13. C. 1. 2.	7 Other—  \$	7 Other - Specify

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(F) (8-24-76)

FAMILY MEDICAL EXPENSE



## U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE HYATTSVILLE, MARYLAND 20782

NATIONAL CENTER FOR HEALTH STATISTICS

## Dear Friend:

Your household has just taken part in a health interview conducted by the Bureau of the Census for the U.S. Public Health Service. We greatly appreciate your cooperation in providing us with this information.

As you know there is a great concern in our country about providing health care to persons who need it. There is also an urgent need to know how much money persons are spending for medical care. Only you can provide accurate information about the amount you pay for medical expenses. We, therefore, are asking you to tell us the amount of money you and your family have spent for medical care during 1977 by answering the few questions on this form. If you cannot give the exact amounts from your records, give the best estimate you can.

The survey is authorized by title 42, United States Code, section 242K. The information collected in this voluntary survey is confidential and will be used only to prepare statistical summaries. No information that will identify an individual or a family will be released.

Because this is a sample survey, your answers represent not only your household, but also hundreds of other households like yours. For this reason, your participation is extremely important to ensure the completeness and accuracy of the final results. Each unanswered question reduces the accuracy of the information collected.

Please answer all the questions as soon as possible, preferably within FIVE DAYS, and return the questionnaire in the enclosed postage-paid envelope.

Thank you for your cooperation.

Sincerely yours,

Robert R. Fuchsberg

Director

Division of Health Interview Statistics

Robert R. Fuchsberg

FOR OFFICE USE ONLY:

a. PSU	b. Segment	c. Serial	d. Col. of head	e. Interviewer's name	code	f. Follow-up

HRA-74-2a

O.M.B. No. 68-R1600 Approval Expires March 31, 1979

# HEALTH CARE EXPENSES PAID FOR PERSONS IN THIS FAMILY

<ul> <li>For each person listed please enter the amount you or this family paid for that per medical care. Subtract any amount you got back from health insurance.</li> <li>Count only the amount you paid between January 1, 1977 and December 31, 197</li> </ul>							
Subtract any amount you got back from health insurance during this period.  Please check your bills, receipts or checkstubs.  If you do not have bills, receipts or checkstubs, please enter your best estimate.		1	2	3	4	5	6
• If the person did not have any expenses, mark the "none" box with an "X."		first name	first name	first name	first name	first name	first name
		last name	last nāme	last name	last name	last name	last name
I. AMOUNT PAID FOR <b>DOCTOR EXPENSES</b> nclude all expenses related to doctor office visits <u>and</u> the amounts paid or doctors and surgeons while this person was a patient in the hospital.		\$ or: none	s or: none	\$ or: none	s none	s or: none	or: nóne
2. AMOUNT PAID FOR HOSPITAL EXPENSES Include all hospital charges except doctor and surgeon fees while this person was a patient in the hospital.		\$ or: none	\$ or: none	\$ or: none	s none	\$ or: none	\$ or: none
3. AMOUNT PAID FOR <b>DENTAL EXPENSES</b> nclude all expenses related to dental office visits for this person.		\$ none	\$ or: none	\$ or: none	\$ or: none	\$ or: none	\$ or: none
4. AMOUNT PAID FOR OPTICAL EXPENSES  nclude all expenses for having this person's eyes examined for glasses  slus the cost of eyeglasses or contact lenses.		or: none	or: none	or: none	or: none	or: none	s or: none
5. AMOUNT PAID FOR <b>PRESCRIPTION MEDICINES</b> Include all expenses for medicine obtained with a doctor's or dentist's prescription for this person.		s none	\$ or: none	s or: none	\$ or:  one	\$ or: none	\$ or: none
6. AMOUNT PAID FOR OTHER MEDICAL EXPENSES					[ <b>s</b>	s	\$
nclude any other medical expenses which are not included above.  Do this for each person.	>	or: none	or: none	or: none	or: none	or: none	or: none
	Г			LEACE CO T	' O NEXT PAG	· · E	
			P	LEASE GO I	U NEXT PAG	ie 	

INSURANCE III 1977 10	r persons listed on pa	HEALTH age 2?	
<ul> <li>Include:</li> <li>paycheck deductions for</li> <li>Social Security check deductions</li> <li>amounts paid directly to for Medicare</li> </ul>	ductions for Medicare	o Social Security	\$ or: none
Do <u>not</u> include:  • accident insurance • amounts your employer	or union pays for your hea	th insurance	
		\ \	
B. DURING 1977 DID THIS F EXPENSES FOR <b>PERSON</b>		X0000000000	☐ YES 🛶
Some examples: <ul> <li>persons living here now,</li> <li>anyone who lived here in</li> <li>children now away at sch</li> <li>parents, other relatives, o</li> <li>parents, other relatives, o</li> </ul>	n 1977, but does not live he nool or elsewhere or friends in nursing homes		Please go to question 9.  NO  Please go to question 10.
		$\neg /$	
DICACE ENTED THE TO	TAL AMOUNT THE	S FAMILY	
PAID DURING 1977 FOR EXPENSES FOR <b>PERSO</b>	R ALL TYPES OF ME		\$ or: none
PAID DURING 1977 FOR	R ALL TYPES OF ME	N PAGE 2.	>
PAID DURING 1977 FOR EXPENSES FOR PERSO (Remember to subtract amount	R ALL TYPES OF ME INS NOT LISTED O	h insurance.)  Checked ramounts e	or: none  ecords for all dollar entered on this form. ecords for some amounts.
PAID DURING 1977 FOR EXPENSES FOR PERSO (Remember to subtract amount	R ALL TYPES OF ME INS NOT LISTED O	h insurance.)  Checked ramounts e	or: none ecords for <u>all</u> dollar ntered on this form.
PAID DURING 1977 FOR EXPENSES FOR PERSO (Remember to subtract amount)	AND THE NAMES OF MELPED YOU ANSWE	Checked ramounts e	or: none  ecords for all dollar entered on this form. ecords for some amounts.
PAID DURING 1977 FOR EXPENSES FOR PERSO (Remember to subtract amount)  10. MARK ONE BOX WITH  11. ENTER YOUR NAME A ALL PERSONS WHO HE	ALL TYPES OF ME  INS NOT LISTED O  INS NOT LISTE	Checked ramounts e	or: none  ecords for <u>all</u> dollar ntered on this form. ecords for <u>some</u> amounts. neck records.

O.M.B. No. 68-R1600: Approval Expires March 31, 1981

BUREAU OF THE CENSUS  ACTING AS COLLECTING AGENT FOR THE U.S. PUBLIC HEALTH SERVICE  2. R.O. number 3, 4 3. Sample 5-7 4. Control number PSU 8-10 Segment 11-14 Serial 15, 16  U.S. HEALTH INTERVIEW SURVEY SMOKING SUPPLEMENT  5. Interviewer's name  Code 17, 18 6. Telephone (Q 15) 19 1 Y 2 N  INTERVIEWER - For this supplement, interview sample persons ONLY. However, if SP is unable to respond because of health, accept household respondent as proxy. Footnote reason and column number of respondent.
U.S. HEALTH INTERVIEW SURVEY SMOKING SUPPLEMENT  Segment 11-14 Serial 15, 16  17, 18 6. Telephone (Q 15) 19 1 Y 2 N  INTERVIEWER - For this supplement, interview sample persons ONLY. However, if SP is unable to respond because of health, accept household respondent as proxy. Footnote reason and column number of respondent.
SMOKING SUPPLEMENT  S. Interviewer's name  17, 18  6. Telephone (Q 75)  1 Y  2 N  INTERVIEWER – For this supplement, interview sample persons ONLY. However, if SP is unable to respond because of health, accept household respondent as proxy. Footnote reason and column number of respondent.  Code   17, 18  6. Telephone (Q 75)  1 Y  2 N  Code Blank  20–23
SMOKING SUPPLEMENT  S. Interviewer's name  17, 18  6. Telephone (Q 75)  1 Y  2 N  INTERVIEWER – For this supplement, interview sample persons ONLY. However, if SP is unable to respond because of health, accept household respondent as proxy. Footnote reason and column number of respondent.  Code  17, 18  6. Telephone (Q 75)  1 Y  2 N  Code Blank  20–23
INTERVIEWER – For this supplement, interview sample persons ONLY. However, if SP is unable to respond because of health, accept household respondent as proxy. Footnote reason and column number of respondent.  Code Blank  20-23
INTERVIEWER - For this supplement, interview sample persons ONLY. However, if SP is unable to respond because of health, accept household respondent as proxy. Footnote reason and column number of respondent.  Code Blank  20-23
accept household respondent as proxy. Footnote reason and column number of respondent.
FOOTNOTES
· ·
· ·

\$1. For each sample person enter name, person number, age, and sex from HIS-1.	Firs	st name	24, 25 Person No.		st name	24, 25 Person No.		st name	Person No.
	Las	st name		Las	t name	1	Las	st name	
	Age	e 26, 27 Sex 28 C	oders use 29	Age	26, 27 Sex 28	Coders use 29	Age	26, 27 Sex 28	Coders use   29
		1 M 2 F			1 M 2 F			1 M 2 F	
S2	\$2	1 Under 17 (NP) 2 17+ callback req. ( 3 17+ available	•	\$2	1 Under 17 (NP) 2 17+ callback req. 3 17+ available		\$2	1 Under 17 <i>(NP)</i> 2 17+ callback req. 3 17+ available	30 (NP)
Have you smoked at least 100 cigarettes in your entire life?	1.	1 Y 2 N (NP)	31	1.	1 Y 2 N (NP)		1.	1 Y 2 N (NP.	31
2a. About how old were you when you first started smoking cigarettes fairly regularly?	2a .	V (0)	32, 33	2a .	V (0)	32, 33	2a.		32, 33
January and an arrange and arrange and arrange and arrange and arrange and arrange arr		Oo Never smoked regul	larly		Years (3)	ulariv		———Years (3) oo □ Never smoked reg	oulariv
b. Do you smoke cigarettes now?	Ь.		34	Ь.	1 Y 2 N (NP.	124	Ь.		194
c. On the average, about how many cigarettes	c.	Number (NP)	35, 36	c.	Number (NP	35, 36	c.		35, 36
a day do you smoke?	<del> </del> -		127.00	_	Number (/VP	·	_	Number (NP	
During the period when you were smoking the most, about how many cigarettes a day did you usually smoke?	3.	Number	37, 38	3.	Number	37, 38	ა.	Number	37, 38
4a. Do you smoke cigarettes now?	4a.	1 Y (5) 2 N	39	4a.	1 Y (5) 2 N	39	4a.	1 Y (5) 2 N	39
b. About how long has it been since you last smoked cigarettes fairly regularly?	ь.	2 Days 3 Weeks Number 4 Months 5 Years	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	b.	2 Days 3 Week Number	hs S3	Ь.	2	ks ths
5. On the average, about how many cigarettes a day do you now smoke?	5.	Number	43, 44	5.	Number	43, 44	5.	Number	43, 44
S3	\$3	1 ''Y'' in 4a (6) 2 Less than 1 year in 3 1+ years in 4b (NP)		\$3	1 ''Y'' in 4a (6) 2 \to Less than 1 year 3 \to 1+ years in 4b (N		<b>S</b> 3	1 "Y" in 4a (6) 2 Less than 1 year 3 1+ years in 4b (N	
6a. What brand of cigarettes do (did) you usually smoke?	6a.	Brand name(s)	45	6a.	Brand name(s)	45	6a.	Brand name(s)	
If more than one brand ask:		Brand name	46-48		Brand name	46-48		Brand name	46-48
b. Which brand do (did) you smoke the most?	Ь.			Ь.			Ь.		
7. What type of cigarettes are the ( <u>brand</u> ) that you smoke (smoked)? Are they:			49			49			49
a. Filter tip OR Non-filter tip?	7a.	1		7a.	1 FT 2 NFT		7a.	1 FT 2 NFT	
b. Plain OR Menthol?	ь.	1 P 2 M	50	Ь.	1 P 2 M	50	ь.	1 P 2 M	50
c. Hardpack OR Softpack?	c.	1 HP 2 SP	51	c.	1	51	c.	1 HP 2 SP	51

d. Regular OR King size OR 100 Millimeter?	d.	1 🔲 R 2 🔲 K	3 100 52	d.	1 🗌 R 2 🔲 K	з 100 52	d.	1 🗌 R	2 [ K	3 100 52
S4	S4	1 [ "N" in 4a (NP) 2 [ "Y" in 4a	53	\$4	1 [''N'' in 4a <i>(NP)</i> 2 [''Y'' in 4a		<b>S4</b>	1 [] "N" ir 2 [] "Y" ir	1 <b>4</b> a (NP)	53
8a. Have you ever made a serious attempt to stop smoking cigarettes?	8a.	1 Y 2 N (NP)	54	8a.	1 Y 2 N (NP)	54	8a.	1 Y	2 N (NP)	54
b. About how many times would you say you made a fairly serious attempt to stop smoking cigarettes entirely?	Ь.	o Never (NP)  1 2 3 4 5	55	ь.	o Never (NP) 1 2 3 4 5+	55	ь.	0	(NP) 3 4 5+	55
c. During the past 12 months, that is since ( <u>date</u> ) a <u>year</u> ago, about how many times would you say you made a fairly serious attempt to stop smoking cigarettes entirely?	c.	0 1 2 3 4		,	0 1 2 3 4	56	ů	0 1	2 3 4	<b>56</b> 5+
<ol><li>How long ago was the START of the LAST time you tried to stop entirely?</li></ol>	9.	2	s		2	57-59	9.	Number	2 Days 3 Weeks 4 Months 5 Years	57-59
10. How long did you actually stay off cigarettes the last time?	10.	2	s	10.	2	60-62	10.	Number	2 Days 3 Weeks 4 Months 5 Years ot stay off	60-62
			60.64			T				
<b>\$5.</b> Transcribe for each sample person 17+ after leaving household.	<b>S</b> 5	oo 🔲 None	63, 64	\$5	oo 🔲 None	63, 64	<b>\$</b> 5	00 🔲 None		63, 64
la. Highest grade attended in school (Q 2a, p. 48)	la.	Elem: 1 2 3 4  High: 9 10 11  College: 1 2 3 4	12	1α.	Elem: 1 2 3 4 High: 9 10 11 1 College: 1 2 3 4	2	la.	High: 9	2 3 4 5 10 11 12 1 2 3 4 5	
b. Finished grade (Q 2b, p. 48)	Ь.	1 Y 2 N	65	Ь.	1 Y 2 N	65	Ь.	1 Y	2 N	65
2. Racial background (Q 4a, b, p. 48) (If single entry in 4a, transcribe that entry. If multiple entry in 4a, transcribe entry in 4b.)	2.	1 2 3 4 5 — Specia		2.	1 2 3 4 5 — Specify	¥ <u>66</u>	2.	1 2 3 4	5 – Specify	66
3. Family income (Q 12, p. 52)	3.	01 🔲 B 05 🗍 F (	08   1   67, 68 09   J 10   K							
<b>\$6.</b> Final Status	\$6	1 Complete—Persona 2 Complete—telephor 3 Refused 4 Not at home—Repe 5 Temporarily absen 8 Other — Specify	ne ated calls	S6	1 Complete—Personal 2 Complete—telephon 3 Refused 4 Not at home—Repea 5 Temporarily absent a Other — Specify	e tept calls	\$6	2 Compl 3 Refuse 4 Not at	home—Repeat rarily absent	

FORM HIS-1(5) (3-26-80)



## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

# PUBLIC HEALTH SERVICE HEALTH RESOURCES ADMINISTRATION ROCKVILLE, MARYLAND 20852

NATIONAL CENTER FOR HEALTH STATISTICS

Dear Friend:

Your household has just taken part in a health interview conducted by the Bureau of the Census for the U.S. Public Health Service. We greatly appreciate your cooperation in providing us with this information.

Another area of great concern today is the cost of health care in our country. We, therefore, ask you to provide us with information about the amount of money you, your family, and other relatives living with you spent for medical care during 1974 by answering the few questions on this form. Please use any records such as bills, receipts, or check stubs, that would help you in answering the questions. If you cannot supply the exact amounts from your records, give the best estimate you can.

We would appreciate your completing the attached questionnaire within FIVE DAYS, and returning it in the enclosed preaddressed envelope which requires no postage. If a delay cannot be avoided and you cannot answer and return your form during this time, please fill in the information and return it as soon as possible. Since this study is based on a scientific sample of the total population, it is important that each household return a completed questionnaire.

Please be assured that the Bureau of the Census and the U.S. Public Health Service hold as confidential all the information you provide. Thus, the results of this voluntary survey will be issued only in the form of statistical totals from which no individual can be identified.

Thank you for your cooperation.

Sincerely yours,

Robert R. Fuchsberg

Director

Division of Health Interview Statistics

ASSURANCE OF CONFIDENTIALITY: All information which would permit identification of the individual will be held in strict confidence, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to others for any purposes.

## FOR OFFICE USE ONLY:

a. PSU	b. Segment	c. Serial	d. Col. of head	e. Interviewer's name	Code
					[

HRA-74 (10/74)

### GENERAL INSTRUCTIONS

- 1. Fill a separate page for the family member whose name is entered at the top. Answer all questions on the page even though the person may not have had any medical or dental expenses in 1974. If the person did not have any expense of a certain kind during 1974, mark the "No bills paid" box. The amounts you give should only include what THIS FAMILY paid, NOT any payments made by health insurance or some other person or agency. IF EXACT AMOUNTS ARE NOT KNOWN, PLEASE ENTER YOUR BEST ESTIMATE.
- 2. Do not include any amounts paid (or to be paid) by:

Health insurance
Workmen's compensation
Non-profit organizations such as the "Polio
Foundation"
Charitable or Welfare Organizations
Military Services
Veterans Administration
Federal, State, City, or County Governments

3. If there are any babies in the household who were born during the past 12 months, the hospital and doctor bills relating to the baby's birth should be reported on the page for the mother. All other medical expenditures relating to the baby's health should be reported on the page for the baby.

lease answer the foll	owing question	ns for			Per	on No.
		DE	NTAL BILLS PAID			
How much did THIS I January 1,1974, to [			r this person during 19	74, that is, from	DOLLARS \$	CENTS
INCLUDE omount: Cleanings Fillings	s spent for: Straightening X-rays	Dental surgery Extractions	Bridgework Dental laboratory fees	Other services from a dentist or hygienist	or No dental for this p	. 1
		DOC	TORS' BILLS PAID			•
How much did THIS	FAMILY spend	on doctor bills fo	r this person during 197	74?	DOLLARS	CENTS
INCLUDE amounts Routine doctor vis Treatments Check-ups	its Docto	or fees while a tient in a hospital	Deliveries Pregnancy care Laboratory fees	Shots Other services by a medical doctor	Na doctor	
		HUZI	PITAL BILLS PAID			
How much did THIS I	FAMILY spend		for this person during 1	974?	DOLLARS	CENTS
INCLUDE amounts	s spent for:				\$ or	
Room and board Operating and delivery rooms	- spe	Anesthesia Tests X-rays	Special treatme Any other hosp		No hospit	
	PA	YMENTS MADE	FOR PRESCRIPTION	N MEDICINE		
About how much did purchased on a DOC			e for this person during PTION?	1974 that was	DOLLARS \$	CENTS
INCLUDE omount Medicines only if		ibed by a doctor or	dentist		No prescr cines bou person	ibed medi- ght for this
PAYMEN	NTS MADE FO	R EYEGLASSE	S, CONTACT LENSE	S OR OPTOMETRIST	'S BILLS	
During 1974 how muc fees for this person?		MILY spend on ey	reglasses, contact lens	es, or optometrists'	DOLLARS \$	CENTS
•					or No amoun these item	
	PA'	YMENTS MADE	FOR "OTHER" MED	DICAL BILLS		
. How much did THIS	FAMILY spend	l on other medica	l expenses for this pers	son during 1974?	DOLLARS	CENTS
Do not include any ex medicines of any kind	penses which yo	u have already reco	orded. <u>Do not include</u> amo	unts spent for	or No amoun	
INCLUDE amoun Chiropractors' or Hearing aid Special braces, t or artificial lin	Podiatrists' fee: russes, wheelcho	• •	Special nursi	Speech Theropy ng care e or Convalescent	these item	ns
. What type of medica	al expense did t	his person have?				
		T	644 Pro-15			
		Тур	pe of Medical Expense			
Check one of the fo	llowing boxes:					
1 Referred to rec	ords for all dolla	r amounts entered (	on this page.			
2 Referred to rec	ords for some bu	t not all dollar amo	unts entered on this page,			

HRA-74 (10/74)

## **HEALTH INSURANCE**

1. During 1974, how much did THIS FAMILY spend on health insurance premiums for plans that pay for any part of a hospital bill or a doctor's bill?

DOLLARS \$	CENTS	
This family pay any ins premiums	did not	

Include:

Amount deducted from paycheck for health insurance premiums

Amount deducted from Social Security check for Medicare

Amount paid directly to health insurance plans or to Social Security for Medicare

Do not include:

Health insurance plans that pay only in the case of accidents Employer or union contributions

## PAYMENTS MADE FOR PERSONS NOT LISTED ON THIS QUESTIONNAIRE

2. During 1974, did THIS FAMILY pay any medical expenses for anyone whose name does NOT appear on this questionnaire?

This might include expenses for children now away at school or parents, other relatives or friends now in nursing homes or elsewhere, or who are deceased.

These expenses may include bills from doctors, dentists, optometrists, hospitals, nursing homes, health insurance premiums, cost of prescription medicine, eyeglasses, and so forth.

∏ No	(Check one box)	Yes	TYPE OF MEDICAL EXPENSE	Amount This Fami Paid DOLLARS CEI	-
			THE OF MEDICAL EXPENSE	DOLLARS \$	CENTS
				DOLLARS \$	CENTS
				DOLLARS \$	CENTS

3. Please print below the name of the person or persons who completed this form.

Name	
Name	

NOTE: Before returning this questionnaire, please check to see that you have filled in an answer for EACH question for EACH person listed on the questionnaire, even though the person did not have any medical or dental expenses during 1974.

HRA-74 (10/74)



## U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE HYATTSVILLE, MARYLAND 20782

NATIONAL CENTER FOR HEALTH STATISTICS

### Dear Friend:

Your household has just taken part in a health interview conducted by the Bureau of the Census for the U.S. Public Health Service. We greatly appreciate your cooperation in providing us with this information.

Another area of great concern today is the cost of health care in our country. We, therefore, ask you to provide us with information about the amount of money you, your family, and other relatives living with you spent for medical care during the past 12 months, that is, from January 1, 1977 to December 31, 1977, by answering the few questions on this form. Please use any records such as bills, receipts, or check stubs, that would help you in answering the questions. If you cannot supply the exact amounts from your records, give the best estimate you can.

We would appreciate your completing the attached questionnaire within FIVE DAYS, and returning it in the enclosed preaddressed envelope which requires no postage. If a delay cannot be avoided and you cannot answer and return your form during this time, please fill in the information and return it as soon as possible. Since this study is based on a scientific sample of the total population, it is important that each household return a completed questionnaire.

Please be assured that the Bureau of the Census and U.S. Public Health Service hold as confidential all the information you provide. Thus, the results of this voluntary survey will be issued only in the form of statistical totals from which no individual can be identified.

Thank you for your cooperation.

Sincerely yours,

ROBERT R. FUCHSBERG

Director

Division of Health Interview Statistics

Robert R. Fuchsberg

ASSURANCE OF CONFIDENTIALITY: Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

FOR INTERVIEWER	FCR INTERVIEWER USE ONLY:				
a. PSU b. Segment	c. Serial	d. Col. of head	e. Interviewer's name	code	f. Follow-up
		1	1	1	i I
1 - 5	•			E	
<u> </u>	<u> </u>	<u> 1</u>	L	•	<u> </u>

O.M.B. No. 68-R1600 Approval Expires March 31, 1979

### **GENERAL INSTRUCTIONS**

- 1. Fill a separate page for the family member whose name is entered at the top. Answer all questions on the page even though the person may not have had any medical or dental expenses during the past 12 months. If the person did not have any expense of a certain kind during that period, mark the "No bills paid" box. The amounts you give should only include what THIS FAMILY paid, NOT any payments made by health insurance or some other person or agency. IF EXACT AMOUNTS ARE NOT KNOWN, PLEASE ENTER YOUR BEST ESTIMATE.
- 2. Do NOT include any amounts paid (or to be paid) by:

Health insurance
Workmen's compensation
Non-profit organizations such as the "Polio Foundation"
Charitable or Welfare Organizations
Military Services
Veterans Administration
Federal, State, City, or County Governments

- 3. If there are any babies in the household who were born during the past 12 months, the hospital and doctor bills relating to the baby's birth should be reported on the page for the mother. All other medical expenditures relating to the baby's health should be reported on the page for the baby.
- 4. PLEASE COMPLETE THE BACK PAGE BEFORE MAILING.

Please answer the	following questions for			Person No.
· 45	-45 <u>-24</u> -	DENTAL BIL	LS PAID	
	THIS FAMILY spend on inuary 31, 1977 to Dec		n during the past 12 months,	DOLLARS CENTS
INCLUDE amo Cleanings Fillings		ntal surgery Bridgewor ractions Dental lab	k Other services from	
35.74	1.40	DOCTORS' BI	LLS PAID	
2. How much did	THIS FAMILY spend on	doctor bills for this perso	n during the past 12 months?	DOLLARS CENTS
INCLUDE amo Routine doctor Treatments Check-ups	ounts spent for: visits Doctor fees w patient in a Operations			or No doctor bills paid for this person
*		HOSPITAL BI	LLS PAID	
3. How much did	THIS FAMILY spend on	hospital bills for this pers	on during the past 12 months?	DOLLARS CENTS
INCLUDE ama Room and boa Operating and delivery roor	Tests	Special treatm Any other hos	ents pital services	or No hospital bills paid for this person
	PAY	MENTS MADE FOR PRE	SCRIPTION MEDICINE	
4. About how muc	h did THIS FAMILY spe ased on a DOCTOR'S OF	nd on medicine for this pe R DENTIST'S PRESCRIPT	rson during the past 12 months	DOLLARS CENTS
	ounts spent for: LY if they were prescribed	by a doctor or dentist		No prescribed medi- cines bought for
Р	AYMENTS MADE FOR	R EYEGLASSES, CONTA	ACT LENSES OR OPTOMET	RIST'S BILLS
5. During the past or optometrists	12 months, how much d 1 fees for this person?	id THIS FAMILY spend or	eyeglasses, contact lenses,	DOLLARS CENTS
	·			or No amount paid for these items
	PAY	MENTS MADE FOR "OT	THER" MEDICAL BILLS	
6a. How much did '		other medical expenses fo	r this person during the	DOLLARS CENTS
	.UDE any expenses which icines of any kind.	you have already recorded.	DO NOT 'NCLUDE amounts	or No amount paid for these items
Chirop Hearin Specia	IDE amounts spent for suc tractors' or Podiatrists' fea ag aid il braces, trusses, wheelch lificial limbs	s Physi Specia air Nursii	cal or Speech Therapy il nursing care ig Home or Convalescent e care	
6b. What type of m	edical expenses did this	person have?		
		Type of Medica	1 Expense	
344		REFERRED TO		
	ne following boxes:	ounts entered on this same		I 🗀 All
		ounts entered on this page.	d. r.	
- ·		ail dollar amounts entered on	mis page.	2 Some
3 Did NOT re	efer to ANY records.			3 None

1.	During the past	12 months,	that is, fror	n January 1	, 1977 to	December 3	1, 1977	how much did	THIS F	AMILY
	spend on health	insurance o	premiums fo	r plans that	pay for a	ny part of a l	hospital	bill or doctor's	bill?	

DOLLARS \$	CENTS
o j This family pay any ins premiums	did not

## INCLUDE:

Amount deducted from paycheck for health insurance premiums

Amount deducted from Social Security check for Medicare

Amount paid directly to health insurance plans or to Social Security for Medicare

### DO NOT INCLUDE:

Health insurance plans that pay only in the case of accidents Employer or union contributions

## PAYMENTS MADE FOR PERSONS NOT LISTED ON THIS QUESTIONNAIRE



2. During the past 12 months, that is, from January 1, 1977 to December 31, 1977 did THIS FAMILY pay any medical expenses for anyone whose name does NOT appear on this questionnaire?

This might include expenses for children now away at school or parents, other relatives or friends now in nursing homes or elsewhere, or who are deceased.

These expenses may include bills from doctors, dentists, optometrists, hospitals, nursing homes, health insurance premiums, cost of prescription medicine, eyeglasses, and so forth.

∭ No	(Check one box)	TYPE OF MEDICAL EXPENSE	Amount This Family Paid
		TITE OF MEDICAL EXPENSE	DOLLARS CENTS
			DOLLARS CENTS
			DOLLARS CENTS
	-		s

3. Please print below the name of the person or persons who completed this form

Name	
Name	

NOTE: Before returning this questionnaire, please check to see that you have filled in an answer for EACH question for EACH person listed on the questionnaire, even though the person did not have any medical or dental expenses during the past 12 months, that is, from January 1, 1977 to December 31, 1977.

# Appendix V Subsample selection interviewer aids

7. Use Flashcard X, Y, or Z as indicated on HIS-1 Household Composition Page.

Circle that letter below. Also, circle the total number of persons.

20

	CARD X
If the number of persons is —	the following person(s) will be the sample person(s):
1	****
2	1
3	3
4	2
5	1 and 4
6	3 and 6
7	2 and 5
8	1, 4, and 7
9	3, 6, and 9
10	2, 5, and 8
11	1, 4, 7, and 10
12	3, 6, 9, and 12
13	2, 5, 8, and 11
14	1, 4, 7, 10, and 13
15	3, 6, 9, 12, and 15

	CARD Y
If the number of persons is —	the following person(s) will be the sample person(s):
1	_
2	2
3	1
4	3
5	2 and 5
6	1 and 4
7	3 and 6
8	2, 5, and 8
9	1, 4, and 7
10	3, 6, and 9
11	2, 5, 8, and 11
12	1, 4, 7, and 10
13	3, 6, 9, and 12
14	2, 5, 8, 11, and 14
15	1, 4, 7, 10, and 13

CARD Z					
If the number of persons is —	the following person(s) will be the sample person(s):				
1	1				
2	_				
3	2				
4	1 and 4				
5	3				
6	2 and 5				
7	1, 4, and 7				
8	3 and 6				
9	2, 5, and 8				
10	1, 4, 7, and 10				
11	3, 6, and 9				
12	2, 5, 8, and 11				
13	1, 4, 7, 10, and 13				
14	3, 6, 9, and 12				
15	2, 5, 8, 11, and 14				

If more than 15 persons, call your regional office for sample person selection instructions.

NUMBER OF CHILDREN

IN FAMILY: 1 2 3 4 5 6 7 8 9+

SELECT THE: 1 2 2 4 2 2 5 4 6

045824

# Appendix VI Preinterview letter to sample households

HIS-600 (DETROIT)



## UNITED STATES DEPARTMENT OF COMMERCE Bureau of the Census

Washington, D.C. 20233

OFFICE OF THE DIRECTOR

## FROM THE DIRECTOR BUREAU OF THE CENSUS

The Bureau of the Census is conducting the National Health Interview Survey for the National Center for Health Statistics, which is part of the U.S. Public Health Service. This program is a major part of the National Health Survey, authorized by Congress because of the urgent need for up-to-date statistics on the health of our people.

The National Health Interview Survey collects current information on the occurrence of illness and disease, injuries, hospitalizations, and visits to the doctor, as well as information on age, occupation, education, and related information used in analyzing the health data. This vital information will help the U.S. Public Health Service and other health-related organizations plan more effectively for the health needs of our Nation. In a few days a representative of the Bureau of the Census, who will show you an official identification card, will call upon you for this survey.

The survey is authorized by title 42, United States Code, section 242k. Participation is voluntary and both agencies will treat the information collected as confidential. No information reported in this survey that could identify an individual or family will be released by either agency.

Because this is a sample survey, your answers represent not only you and your household, but also hundreds of other households like yours. For this reason, your participation in this survey is extremely important to ensure the completeness and accuracy of the final results. Although there are no penalties for failure to answer any question, each unanswered question substantially lessens the accuracy of the final data. Your cooperation in this important survey will be appreciated greatly.

On the other side of this letter are answers to some of the questions most frequently asked about the survey.

gunar

Sincerely,

**BRUCE CHAPMAN** 

Further information may be obtained from:

Mr. Robert G. McWilliam Regional Director Bureau of the Census Federal Bldg. & U.S. Courthouse 231 W. Lafayette, Room 565 Detroit, Michigan 48226

Telephone: (313) 226-7742

## 1. Why is a National Health Survey needed?

The needs of the Nation and its responsibility to protect the health of its citizens require knowledge of the number of people with health problems, the nature of their illnesses or disabilities, the extent and type of care they are receiving, and the cost and financing of this care.

Today, chronic illness and disability constitute our greatest public health challenge. They lower the earning power, living standards, and the general well-being of individuals and families. They burden individuals, families, and communities with high costs of care and assistance. Accidental injuries in the home and on the highways are also extremely costly to society. Better information on chronic illness and disability, as well as on accidental injuries, will assist in the development of more effective prevention programs.

Healthy people are one of the Nation's greatest resources. Comprehensive health statistics are needed to keep track of this vital resource. Data from the National Health Interview Survey provide information for many purposes including:

- a. Statistics to help government, university, and private health planners and researchers recognize health problems and how best to use the available money and people to attempt to solve these health problems.
- b. Statistics to study how age, sex, education, marital status, and income are related to disease, disability, and the use of health services.
- c. Measurement of time lost from work because of illness or injury and its effect on the economy of the Nation.
- d. Statistics to show how people use doctors, dentists, hospitals, and other medical services so that these services can be provided as efficiently as possible.
- e. Statistics on the number of persons with specific diseases and how these diseases arfect people.

Information collected in the National Health Interview Survey is used to direct health research efforts to areas where needs are greatest, to provide sufficient health workers and facilities to deal with the problems, and to see that each person receives the best medical care and preventive health services possible.

## 2. How are specific households chosen to be interviewed by the National Health Interview Survey?

Every month several thousand addresses are chosen by scientific sampling methods to represent a cross section of the whole United States, and the people at those addresses are interviewed to obtain the necessary information. The household at each sample address represents thousands of households throughout the country. Each person in the sample represents approximately 1,800 persons within our Nation.

## 3. Why not interview the house across the street?

For the National Health Interview Survey, about 42,000 households or approximately 130,000 people are interviewed in any one year. Since the population of the Nation is over 200 million, our relatively small sample cannot be used to represent all the various types of persons unless each address, which is originally selected, is retained in the sample. For example, the house across the street or next door, where the people are usually at home, may be representative of persons who are older or sicker than those at the sample address, where perhaps all family members are working. If we made this type of substitution, our statistics might be representative of the people who are usually at home, but not of the total population. Therefore, we would not obtain the kinds of information we need from the survey.

## 4. I'm not sick - why should I be included in the survey?

If we are to measure the amount of illness in the United States, the sample must be representative of the entire civilian population — both the well and the sick. We must determine how many people are sick or lose time from work in relation to the total population.

## 5. Will the data be held confidential?

All information obtained in this survey which would permit identification of any individual or establishment is collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 U.S.C. 242m).

HIS-600 (1-83)

# Appendix VII Postinterview letter to sample households

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Public Health Service National Center for Health Statistics 3700 East-West Highway Hyattsville, Maryland 20782 (301) 436-7016



Thank you

... for the assistance you have given the Census Bureau interviewer who just visited you.

It is only through the cooperation of you and others who are being visited that a health survey such as this one can be carried on, and we thought you would like to know how the information you have given will be used.

It will, of course, be held in confidence. When combined with information given by other persons in this and other communities, it will reflect health conditions throughout the United States and provide new knowledge to improve the health of the American people. It is because such knowledge was lacking that Congress authorized the National Health Survey—of which the interviewing in this area is a part.

The National Health Survey will be collecting information on other aspects of health, and it is possible that we may wish to ask for your further cooperation at some time in the future. Meanwhile, thank you for your help today.

Manning Feinleib, M.D., Dr. P.H.

Director

National Center for Health Statistics

# Appendix VIII Observation Report

HIS-103 (January 1982)

-	RM HIS-406 U.S. DEPARTMENT OF COMM -23-80) BUREAU OF THE CE	ERCE 1	_	1 .	•	go-		2. Date ob:	served
	OBSERVATION REPORT HEALTH INTERVIEW SURVEY	3	. Nam	e of i	nterv	iewer	Code H-17	HIS EOD 5/71	PSU 308
	REASON FOR OBSERVATION Initial General Performance Review	, 5.	eriod	Тур	e A	Error Rate	Pro-	6. TIME O	SERVED
	N-1 N-3 Other - Specify		Last Qtr.	+		1.54	+	r-rom a.m.	1
1	□ N-2 □ N-4	<b></b> ├	Prior Qtr.	0.	9	1.21	,97	p.m.	<u>:</u>
1	REFERENCE NOTES FOR SPECIAL ATTENTION - 6.5., note from last observation, transmittal record, etc.  Person pages # 4 + 5 asks nee for family.		y		enter or up A A Si	numbers dated) ddress. rea pecial P	and circ		type(s),
					c	EN-SUP			
				-	TAL		HOUSEHO	LDS OBSE	RVED B or C
				linee	STVIE	wed	or callba		Borc
(	SPECIFIC PERFORMANCE AREAS (Evaluate each item for the entire observation) Did interviewer correctly —		YES	(Ex	plair		lo" answe	or each item ers in Remar emarks	
A	Use maps, locate segments, locate sample addresses?								
~					-				
	List and update?								
В	List and update?  Verify listing in address and permit segments?			$\dashv$					
B C D	Verify listing in address and permit segments? Follow area segment procedures (check boundaries,								
B C D	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?								
B C D	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?								
B C D E G	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?								
B C D E	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?  Plan efficient itinerary?								
B C D E	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?  Plan efficient itinerary?  Gain cooperation, display business-like attitude?								
B C D E G	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?  Plan efficient itinerary?  Gain cooperation, display business-like attitude?  Listen carefully, allow reasonable time for reply?								
B C D E F G H	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?  Plan efficient itinerary?  Gain cooperation, display business-like attitude?  Listen carefully, allow reasonable time for reply?  Ask questions as worded?								
B C D E G H	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?  Plan efficient itinerary?  Gain cooperation, display business-like attitude?  Listen carefully, allow reasonable time for reply?  Ask questions as worded?  Understand HIS concepts?								
B C D E G H	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?  Plan efficient itinerary?  Gain cooperation, display business-like attitude?  Listen carefully, allow reasonable time for reply?  Ask questions as worded?  Understand HIS concepts?  Plan callbacks?  Handle noninterviews?								
B C D E F G H I J K	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?  Plan efficient itinerary?  Gain cooperation, display business-like attitude?  Listen carefully, allow reasonable time for reply?  Ask questions as worded?  Understand HIS concepts?  Plan callbacks?  Handle noninterviews?  Have current revised pages inserted in manual?								
B C D E F G H I J K L	Verify listing in address and permit segments?  Follow area segment procedures (check boundaries, canvass, determine year built, etc.)?  Handle extras and mergers?  Handle other listing or coverage activity?  Plan efficient itinerary?  Gain cooperation, display business-like attitude?  Listen carefully, allow reasonable time for reply?  Ask questions as worded?  Understand HIS concepts?  Plan callbacks?  Handle noninterviews?  Have current revised pages inserted in manual?								

# Appendix IX HIS reinterview forms

O.M.B. No. 68-R1600: Approval Expires March 31, 1980 NOTICE — Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m). books FORM HIS-R-1 (1979) 2. R.O. 5. Control number number U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS ACTING AS COLLECTING AGENT FOR THE U.S. PUBLIC HEALTH SERVICE [ ] Permit PSU Segment Serial []] Address [ ] Cen-Sup REINTERVIEW QUESTIONNAIRE Special place U.S. HEALTH INTERVIEW SURVEY

6a. What is your exact address? (Include house No., Apt. No., or other identification and ZIP code)
Listing
Sheet U.S. HEALTH INTERVIEW SURVEY 18. Noninterview reason Sheet 1 [ Refusal - Describe in a footnote Čity State ZIP code  $\mathbf{z} \ \square$  No one at home — repeated calls Line No. 3 [ ] Temporarily absent 4 Other - Specify- Is this your mailing address?
 Mark box or specify if different. Include ZIP code. TYPE B City ZIP code State ı 🔲 Vacant – nonseasonal 2 🔲 Vacant - seasonal c. Special place name Sample unit number | Type code 3 Usual residence elsewhere 4 🗀 Armed forces 7. YEAR BUILT | Ask -5 Other - Specify-When was this structure originally built? After 4-1-70 (Go to 9c, complete (Continue interview) if required and end interview) TYPE C 1 🔲 Unused line of listing sheet Type of living quarters -→ 1 🔲 Housing unit 2 OTHER unit 2 Demolished 9. Area segments ONLY з <u></u> Merged a. Are there any occupied or vacant living quarters besides your own in this building? 4 🔲 Outside segment Y (Fill Table X) s 🖂 Built after April 1, 1970 6 Other - Specify \_ b. Are there any occupied or vacant living quarters besides your own on this floor? Y (Fill Table X) \_\_ c. Is there any other building on this property for people to live in -- either occupied or vacant? Y (Fill Table X) 19. Reinterviewer's name Code d. None 20. Record of calls Com Date Personal 21a. We have listed as living here: (Read only names and relationships) Relationship to Race (W, B, OT) Age (a) (c) (d) (4) b. Is there anyone else who usually lives here who is away now? Y (Add to item 21a) N Y (Add to item 21a) c. Is there anyone else staying here now? Y (If not a household member, draw a Ñ line through name in item 21a) d. Do any of these people have a home anywhere else? Check on personal characteristics of each household member as shown in item 21a. e. I have the head of the household listed as (Read age.)
Is this information correct or incorrect? (Cross through incorrect entries and record correct information.) Continue to check age for each member of household. Check race and sex by observation whenever possible.

	Ask Condition list	BED DAYS	$\exists$	DV	,	HOSP.
	Record the number of Bed Days, Doctor Visits and Hospitalizations.	☐ None		☐ None		☐ None
C		Number	٠		Number	Number
	2. Record each condition with the question number(s) where it was reported.		+	Q. No.		l Condition
			1			
	Reference dates		ŀ	-		<del></del>
	2-week period,		-	+		${}$
	12-month Bed Days and Doctor Visit probe		-	_	····	
	Hospital probe					
						\
Ţ	his survey is being conducted to collect information on the Nation's health. I will ask about visits to		1			
	octors, illnesses, and other health related items. (HAND CALENDAR) he next few questions refer to the 2-weeks outlined in red on that calendar,			ı		
l	eginning Monday, (date) , and ending Sunday, (date)	}	ĺ			
	uring those 2 weeks, did stay in bed because of any illness or injury?	5	ā.	00 N	(5b) N	(f age:
			-		`}	17 + (6) 6-16 (7)
	uring that 2-week period, how many days did —— stay in bed all or most of the day?		ь.		Days J	Under 6 (9)
	uring those 2 weeks, how many days did illness or injury keep —— from work? For females): not counting work around the house?	6.		—— ¥	VL days (	(8)
-			$\dashv$			<del></del>
7. D	uring those 2 weeks, how many days did illness or injury keep —— from school?	7.	,	S	SL days	
⊢—	one or more days in 5b, ask 8; otherwise go to 9.		+			
8. 0	n how many of these —— days lost from $\left\{egin{array}{ll} {\sf work} \\ {\sf school} \end{array} ight\} { m did}$ —— stay in bed all or most of the day?	8.	,	00 🗆 N	Days	
<u> </u>	( School )		4			
0- (	NOT COUNTING the day(s) { in bed   lost from work   lost from school } )					
		9	ا٠٠'	1 Y		
W.	ere there any (other) days during the 2 weeks outlined in red on that calendar that —— cut down n the things he usually does because of illness or injury?			2 N	1 (10)	
-			-			
Ь. (А	Again , not counting the day(s)   in bed lost from work	ļ	ь.	г	Days	
	lost from school Juring that period, how many (other) days did he cut down for as much as a day?					
	one or more days in 5–9, ask 10; otherwise go to 11.		$\dashv$			
				Ente	r conditi Ask	ion in item C
10a. W	hat condition caused to \begin{cases} stay in bed \\ miss work \\ miss school \\ cut down \end{cases} \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	100	۵٠		7.5%	
-						
ъ. D	id any other condition cause him to   stay in bed during that period?		ь.	Y	,	
_	miss school cut down			N	(11)	
c. W	hat condition?		<u>.</u> ]	Enter c	ondition	in item C (10b)
F	ill Item C, (Bed days), from 5b		_			
11a. D	During the 2 weeks outlined in red on that calendar did —— have	111	a.	Y		
<u> </u>	ny (other) accidents or injuries?			N Injury	(14)	
c. W	that was the injury?		c.	,,		
-			}	<u>-</u>	' (Reask	k 11c)
d. D	id have any other accidents or injuries during that period?		d.	N		
	''accident or injury,'' ask:			Y		injury of tem C1
e. A	s a result of the accident, did —— see a doctor or did he cut down on the things he usually does?		e.		•	
14. D	uring the 2 weeks outlined in red on that calendar how many times did —— see a medical doctor?	14.	,	00 □ N	one	
D	o not count doctors seen while a patient in a hospital.	'"	.	N	lumber of	f visits
	Besides those visits)	1,5	. T	Y		
	uring that 2-week period did —— go to a doctor's office or inic for shots, X-rays, tests, or examinations?	15	a.	N	. (16) 	
	"Yes," ask:					
d. H	ow many times did visit the doctor during that period?		d.	N	lumber of	f visits

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16a. During that period, did —— get any medical advice from a doctor over the telephone?	16a.	
If "Yes," ask;		Y N (17)
d. How many telephone calls were made to get medical advice about?	d.	Number of calls
Fill item C, (Doctor visits), from 14-16.  Ask 17a if reinterview sample person has visits in DV box.		Condition (Irem C THEN 17d)
		Pregnancy (17e)
17a. For what condition did —— see or talk to a doctor during the 2 weeks outlined in red on that calendar?	17a.	[] No condition
b. Did see or talk to a doctor about any specific condition?	ь.	Y N 1861
c. What condition?	с.	Enter condition in item C and ask 17d
d. During that period, did see or talk to a doctor about any other condition?	d.	Y (17c) N (18b)
e. During the 2 weeks outlined in red on that calendar was —— sick because of her pregnancy?	e.	Y N /17d1
f. What was the matter?	f.	Enter condition in item C (17d)
18b. Prior to (date of interview week), ABOUT how long was it since LAST saw or talked to a medical doctor?	18ь.	1 📋 2-week DV
Include doctors seen while a patient in a hospital.		2 Past 2 weeks not reported (14 and 17)
		3 2 weeks-6 months
		4 [] Over 6-12 months
		5
		7 📋 5+ years
		8 [] Never
FCOTNOTES		

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Ages 17+ Ages 6-16	19a. What was — doing MOST OF THE PAST 12 MONTHS — (For males): working or doing something else?  If "something else," ask: (For females): keeping house, working, or doing something else?  If 45+ years and was not "working," "keeping house," or "going to school," ask:  c. Is —— retired?  d. If "retired," ask: Did he retire because of his health?  20a. What was —— doing MOST OF THE PAST 12 MONTHS — going to school or doing something else?  If "something else," ask:  b. What was —— doing?	19. & 20.	1
under 6			o Under 1 (22)
21a. Is ab	le to take part at all in ordinary play with other children?	21 a.	Y 1 N (28)
b. Is he lim	ited in the kind of play he can do because of his health?	ь.	2 Y (28) N
c. Is he lim	ited in the amount of play because of his health?	c.	2 Y (28) N (27)
22a. Is lin	nited in any way because of his health?	22a.	1 Y 5 N (29)
b. In what v	ray is he limited? Record limitation, not condition.	ь.	(28)
23a. Does	health now keep him from working?	23a.	1 Y (28) N
.b. Is he lim	ited in the kind of work he could do because of his health?	ь.	2 Y (28) N
c. Is he lim	ited in the amount of work he could do because of his health?	_c.	2 Y (28) N
d. Is he lim	ited in the kind or amount of other activities because of his health?	d.	3 Y (28) N (27)
24a. Does	NOW have a job?	24a.	Y (24c) N
b. In terms	of health, is NOW able to (work - keep house) at all?	Ь.	Y 1 N (28)
c. Is he lim	ited in the kind of (work — housework) he can do because of his health?	с.	2 Y (28) N
d. Is he lim	ited in the amount of (work — housework) he can do because of his health?	<u>a.</u>	2 Y (28) N
e. Is he lim	ited in the kind or amount of other activities because of his health?	e.	3 Y (28) N (27)
25. In terms	of health would —— be able to go to schoo!?	25.	Y 1 N (28)
26a. Does (wa	uld) —— have to go to a certain type of school because of his health?	26a.	2 Y (28) N
b. Is he (wo	ould he be) limited in school attendance because of his health?	<u>_ ь.</u>	2 Y (28) N
c. Is he lim	ited in the kind or amount of other activities because of his health?	c.	3 Y (28) N
27a. Is lir	nited in ANY WAY because of a disability or health?	27a.	4 Y 5 N (29)
b. In what v	vay is he limited? Record limitation, not condition.	ь.	
28a. About ho	w long has he \begin{cases} \text{been limited in} \text{been unable to} \text{had to go to a certain type of school?} \end{cases}	28a.	000 Less than I month  1 Mos. 2 Yrs.
b. What (oth	er) condition causes this limitation?	ъ.	Enter condition in item C
If "old a	ge" only, ask: Is this limitation caused by any specific condition?	<u>                                     </u>	Old age only (29)
c. If this li	mitation caused by any other condition?	c.	Y (Reask N 28b and c)
Mark box	or ask:		Only I condition
d. Which of	these conditions would you say is the MAIN cause of his limitation?	d.	Enter main condition

d. Which of these

						-		
29a. ₩	as a patient in a hospital at any time since	(date) a year ago?			29 a.	<del></del>	N (Item C)	
ь. н	ow many times was in a hospital since	(date) a year ago?			ь.	Times	(Item C)	
30a. W	as in a nursing home, convalescent home, or si	nilar place since <u>(date)</u> a year (	go?		30a.	Y	N (31)	
c, D	uring that period, how many times was —— in a nurs	ing home or similar place?			c.	Times	(Item C)	
If baby I year or under is listed and either the mother or baby is the reinterview sample person,								
1	sk 3 a if date of birth is on or after reference date.  as —— born in a hospital?				31a.	Y	N (32)	
ŀ	"Yes," and no hospitalizations entered, enter "I"	'in 29b and item C.						
	"Yes," and a hospitalization is entered, ask 31b.							
	this hospitalization included in the number you ga "No," correct entries in 29 and item C.	ve me?			ь.	Y	N	
		· · · · · · · · · · · · · · · · · · ·		50,	11.		. 252	
	32a. DURING THE PAST 12 MONTHS, did	A. Gallstones?		O. Any of	her s	omach trouble?		
,	Enter name of condition and letter of line where reported in item C.	B. Any other gallbladder trouble?		P. Enterif	is?			
,	Conditions affecting the digestive system.	C. Cirrhosis of the liver?		Q. Diverti	culit	is?		
	Make no entry in item C for cold, flu, or grippe even if reported in question 32.	D. Fatty liver?		R. Colitis	?			
		E. Hepatitis?		S. Spastic	colo	n?		
1		F. Yellow jaundice?		T. FREQ	JENT	constipution?		
		G. Any other liver trouble?		U. Any of	her b	owel trouble?		
:		H. Diabetes?		V. Any of	her in	testinal trouble?		ļ.,
		I. Any disease of the pancreas?		colon	or rec			
	•	J. Ulcer?		did	have	ast 12 months, any other conditi tive system?		
		K. Hernia or rupture?		the con	ditio	sk: What was n? (Enter in item	(C)	
		L. A disease of the esophagus?						
		M. Gastritis?						
		N EDECUENT : It is a	]					

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	32a. Does NOW have -  Enter name of condition and letter of line where reported in item C.	A. Permanent stiffness or any deformity of the (Permanent stiffness — joints will not move the control of the c	e foot, e at a	leg, fingers, arm or back?	
	32d. DURING THE PAST 12 MONTHS, did	C. Arthritis of any kind or Rheumatism?		O. A tumor, cyst or growth of the skin?	-
	have -	D. Gout?		P. Eczema or psoriasis? (so-rye-uh-sis)	
	Enter name of condition and letter of line where reported in item C.	E. Lumbago?		Q. TROUBLE with dry or itching skin?	
2	Conditions C-N and V are conditions affecting the bone and muscle.	F. Osteomyelitis? (os-tee-oh-my-uh-lite-iss)		R. TROUBLE with acne?	
-	Conditions O-U and W-Z are conditions	G. A bone cyst or bone spur?		S. A skin ulcer?	1
	affecting the skin.	H. Any other disease of the bone or cartilage?		T. Any kind of skin allergy?	
1		1. Trick knee?	1 1	U. Dermatitis or any other skin trouble?	١
		J. A slipped or ruptured disc?		V. TROUBLE with fallen arches, flatfeet or clubfoot?	
		K. Curvature of the spine?	1	W. TROUBLE with ingrown toenails or fingernails?	
		L. REPEATED trouble with neck, back, or spine?		X. TROUBLE with bunions, corns, or calluses?	
		M. Bursitis or Synovitis? (sin-uh-vite-iss)		Y. A disease of the hair or scalp?	
	1	N. Any disease of the muscles or tendons?	-	Z. Any disease of the lymph or sweat glands?	
2000	2572-907			ooc. granto.	
					· /, s
	32a. DURING THE PAST 12 MONTHS, did	A. Goiter or other thyroid trouble?			1.
	32a. DURING THE PAST 12 MONTHS, did	A. Goiter or other thyroid trouble?		Glandular	
	32a. DURING THE PAST 12 MONTHS, did	A. Goiter or other thyroid trouble?		Glandular	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?		Glandular	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?		Glandular disorders	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?		Glandular disorders  Blood disorder  Conditions affecting	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?  E. Epilepsy?		Glandular disorders Blood disorder	
3	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble? B. Diabetes? C. Cystic fibrosis? D. Anemia? E. Epilepsy? F. Multiple sclerosis?		Glandular disorders  Blood disorder  Conditions affecting the nervous system  Conditions affecting the	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?  E. Epilepsy?  F. Multiple sclerosis?  G. Migraine?  H. Neuralgia or neuritis?  I. Sciatica?		Glandular disorders  Blood disorder  Conditions affecting the nervous system	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?  E. Epilepsy?  F. Multiple sclerosis?  G. Migraine?  H. Neuralgia or neuritis?		Glandular disorders  Blood disorder  Conditions affecting the nervous system  Conditions affecting the	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?  E. Epilepsy?  F. Multiple sclerosis?  G. Migraine?  H. Neuralgia or neuritis?  I. Sciatica?		Glandular disorders  Blood disorder  Conditions affecting the nervous system  Conditions affecting the	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?  E. Epilepsy?  F. Multiple sclerosis?  G. Migraine?  H. Neuralgia or neuritis?  I. Sciatica?  J. Nephritis?		Glandular disorders  Blood disorder  Conditions affecting the nervous system  Conditions affecting the	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?  E. Epilepsy?  F. Multiple sclerosis?  G. Migraine?  H. Neuralgia or neuritis?  I. Sciatica?  J. Nephritis?  K. Kidney stones?		Glandular disorders  Blood disorder  Conditions affecting the nervous system  Conditions affecting the	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?  E. Epilepsy?  F. Multiple sclerosis?  G. Migraine?  H. Neuralgia or neuritis?  I. Sciatica?  J. Nephritis?  K. Kidney stones?  L. Any other kidney trouble?  M. Bladder trouble?		Glandular disorders  Blood disorder  Conditions affecting the nervous system  Conditions affecting the nervous system	
	32a. DURING THE PAST 12 MONTHS, did have -  Enter name of condition and letter of	A. Goiter or other thyroid trouble?  B. Diabetes?  C. Cystic fibrosis?  D. Anemia?  E. Epilepsy?  F. Multiple sclerosis?  G. Migraine?  H. Neuralgia or neuritis?  I. Sciatica?  J. Nephritis?  K. Kidney stones?  L. Any other kidney trouble?  M. Bladder trouble?		Glandular disorders  Blood disorder  Conditions affecting the nervous system  Conditions affecting the nervous system	

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	32a, Does NOW have	A. Deafness in one or both ears?	N. A missing (breast), kidney or lung?
	Enter name of condition and letter where reported in item C.	B. Any other trouble hearing with one or both ears?	O. Palsy or cerebral palsy?
	()	C. Tinnitus or ringing in the ears?	P. Paralysis of any kind?
	A-L are conditions affecting speech	D. Blindness in one or both eyes?	Q. Curvature of the spine?
	Speech	E. Cataracts?	R. REPEATED trouble with back or spine
4	Conditions O-W are impairments.	F. Glaucoma?	S. Any TROUBLE with fallen arches or flatfeet?
	Conditions X and Y affect the nervous system.	G. Color blindess?	T. A clubfoot?
	(Permanent stiffness — joints will not move at all)	H. A detached retina or any other condition of the retina?	U. PERMANENT stiffness or any deformity of the back, foot, or leg?
		I. Any other trouble seeing with one or both eyes even when wearing glasses?	V. PERMANENT stiffness or any deformity of the fingers, hand, or arm?
		J. A cleft palate or harelip?	W. Mental retardation?
		K. Stammering or stuttering?	X. Any condition caused by an old acciden or injury? If "Yes," ask: What is the condition?
		L. Any other speech defect?	Y. Epilepsy?
		M. A missing finger, hand, or arm, toe, foot,	Z. REPEATED convulsions, seizures, or
			blackouts?
		or leg?	blackouts?
	32a. Has EYER had		blackouts?  G. Stroke or a cerebrovascular accident?
	32a. Has EYER had -  Enter name of condition and letter of line where reported in item C.	or leg?	blackouts?
	Enter name of condition and letter of line where reported in item C.  Conditions affecting the heart	A. Rheumatic fever?	G. Stroke or a cerebrovascular accident?
	Enter name of condition and letter of line where reported in 'tem C.	A. Rheumatic fever?  B. Rheumatic heart disease?  C. Hardening of the arteries	G. Stroke or a cerebrovascular accident?  H. Hemorrhage of the brain?
	Enter name of condition and letter of line where reported in item C.  Conditions affecting the heart	A. Rheumatic fever?  B. Rheumatic heart disease?  C. Hardening of the arteries or arteriosclerosis?	G. Stroke or a cerebrovascular accident?  H. Hemorrhage of the brain?  I. Angina pectoris?
5	Enter name of condition and letter of line where reported in item C.  Conditions affecting the heart	a. Rheumatic fever?  B. Rheumatic heart disease?  C. Hardening of the arteries or arteriosclerosis?  D. Congenital heart disease?	Blackouts?  G. Stroke or a cerebrovascular accident?  H. Hemorrhage of the brain?  I. Angina pectoris?  J. Myocardial infarction?
5	Enter name of condition and letter of line where reported in item C.  Conditions affecting the heart	or leg?  A. Rheumatic fever?  B. Rheumatic heart disease?  C. Hardening of the arteries or arteriosclerosis?  D. Congenital heart disease?  E. Coronary heart disease?	Blackouts?  G. Stroke or a cerebrovascular accident?  H. Hemorrhage of the brain?  I. Angina pectoris?  J. Myocardial infarction?
5	Enter name of condition and letter of line where reported in item C.  Conditions affecting the heart and circulatory system.	or leg?  A. Rheumatic fever?  B. Rheumatic heart disease?  C. Hardening of the arteries or arteriosclerosis?  D. Congenital heart disease?  E. Coronary heart disease?  F. High blood pressure?  L. Damaged heart valves?  M. Tachycardia or rapid heart?	blackouts?  G. Stroke or a cerebrovascular accident?  H. Hemorrhage of the brain?  I. Angina pectoris?  J. Myocardial infarction?  K. Any other heart attack?
5	Enter name of condition and letter of line where reported in 'tem C.  Conditions affecting the heart and circulatory system.  32a. DURING THE PAST 12 MONTHS, did —— have — Enter name of condition and letter of	or leg?  A. Rheumatic fever?  B. Rheumatic heart disease?  C. Hardening of the arteries or arteriosclerosis?  D. Congenital heart disease?  E. Coronary heart disease?  F. High blood pressure?  L. Damaged heart valves?	blackouts?  G. Stroke or a cerebrovascular accident?  H. Hemorrhage of the brain?  I. Angina pectoris?  J. Myocardial infarction?  K. Any other heart attack?  R. Gangrene?
5	Enter name of condition and letter of line where reported in tem C.  Conditions affecting the heart and circulatory system.  32a. DURING THE PAST 12 MONTHS, did —— have —  Enter name of condition and letter of line where reported in item C.  Conditions affecting the heart	or leg?  A. Rheumatic fever?  B. Rheumatic heart disease?  C. Hardening of the arteries or arteriosclerosis?  D. Congenital heart disease?  E. Coronary heart disease?  F. High blood pressure?  L. Damaged heart valves?  M. Tachycardia or rapid heart?	blackouts?  G. Stroke or a cerebrovascular accident?  H. Hemorrhage of the brain?  I. Angina pectoris?  J. Myocardial infarction?  K. Any other heart attack?  R. Gangrene?  S. Yaricose veins?

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	32a. DURING THE PAST 12 MONTHS, did	A. Bronchitis?	J. Tumor, cys bronchial t			
	Enter name of condition and letter of line where reported in item C.	B. Bronchiectasis? (brong ke-ek tah-sis)	K. Emphysemo			
	Conditions affecting the	C. Asthma?	L. Pleurisy?			1
	respiratory system.	D. Hay fever?	M. Tuberculos	is?		1
	Make no entry in item C for cold; flu; red, sore, or strep throat; or "virus"	E. Nasal polyp?	N. Abscess of			
6	reported in answer to question 32.	F. Sinus trouble?	O. Tumor, cys throat, lary	t, or	growth of the	
		G. Deflected or deviated nasal septum?	such as du	st on	d respiratory condition the lungs, u-mo-co-ni-o-sis?	
		H. * Tonsillitis or enlargement of the tonsils or adenoids?	anv other re	espire	12 months did have atory, lung, ndition? What was the	
		l. * Laryngitis?	ondition?	ask: (Ente	What was the er in item C)	
		* If reported in question 32 only, ask:				
		I. How many times did have in the pa	st 12 months? — If 2	+ ente	er in item C.	
		If only I time, ask:				
		2. How long did it last? - If I month or longer If less than I month, do not record.	r, enter in item C.			
		If tonsils or adenoids removed during the pa	st 12 months, enter c	onditi	ion causingremovalin item	n C.
		Make no entry in item C for cold; flu; red, s in answer to question 32.	sore, or strep throat;	or "v	rirus" reported	
		no responded for (or was present during the askin	g of) Q.'s 5-32.		t Responded for self-en	-
Q.'s 5	in person to being an annual	er entirely or partly. For person under 17, show w	who	R	2 Responded for self-pa	
				乚	Personwas responde	ent
FOOT	NOTES					
						ı

FORM HIS-R-1 (12-5-78)

CONDITION 1	Ask remaining questions as appropriate for the condition entered in:
1. Person number   Name of condition	A2
2. When did —— last see or talk to a doctor about his?  1. In interview   1     Past 2 wks. (Hom ( )   5     2-4 yrs.	4. During the 2 weeks outlined in red on that calendar did his cause him to cut down on the things he usually does?
3     Over 6-12 mos. 7     Never 4       1 yr. 8     DK if Dr. Seen	5. During that period, how many days did he cut down for as much as a day?  One (9)
9     DK when Dr. seer    Examine ''Name of condition'' entry and mark   A1   [-] Color blindness (NC)   [-] On Card C (A2)	his keep him in bed all or most of the day?
[] Accident or injury (A2) [] Neither (30)  If "Doctor not talked to," transcribe entry from item 1.	Ask if 17+ years: 7. How many days did his keep him from work during that 2-week period? (For females): not counting week ground the house?  Of [] None (9)
If ''Doctor talked to,'' ask:  30. What did the doctor say it was? — Did he give it a medical name?	counting work around the house?  Ask if 6-16 years:  8. How many days did his keep him from school during that 2-week period?
Do not ask for Cancer	9. When did — first notice his?  1
If the entry in 3a or 3b includes the words:  Ailment Condition Disorder Trouble	(Was it during the past 3 months or before that time?)  (Was it during the 2 weeks outlined in red on that calendar or before that time?)
	(was it during the 2 weeks outlined in red on that calendar or before that time!)
Asthma Defect Measles Ulcer S Ask c Attack Disease Rupture	A4 Accident or injury Other (NC)
c. What kind of is it?	17a. Did the accident happen during the past 2 years or before that time?  During the past 2 years Before 2 years (18a)
For allergy or stroke, ask: d. How does the allergy (stroke) affect him?	b. When did the accident happen?
If in 3a—d there is an impairment or any of the following entries:	Last week Over 3–12 months
Abscess Damage Paralysis	☐ Week before ☐ 1-2 years
Ache (except head or ear) Growth Rupture Bleading Hemorrhage Sore Blood clot Infection Soreness	2 weeks-3 months
Boil Inflammation Tumor Ask e: Cancer Neuralgia Ulcer Cramps (except Neuritis Varicose veins menstrual) Poin Weak	18a. At the time of the accident what part of the body was hurt? What kind of injury was it? Anything else?
Cyst Palsy Weakness	Part(s) of body Kind of injury
e. What part of the body is affected?	
Show the following detail:	If accident happened more than 3 months ago, ask:
Head skull, scalp, face Back/spine/vertebra upper, middle, lower	b. What part of the body is affected now? How is his —— affected? Is he affected in any other way?
Ear or eye one or both Arm one or both; shoulder, upper	Part(s) of body Present effects
elbow, lower, wrist, hand  Leg	
lower, ankle, foot	1

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FORM HIS-R-1 (12-5-75)

CONDITION 2  1. Person number Name of condition	Ask remaining questions as appropriate for the condition entered in:
2. When did —— last see or talk to a doctor about his?  1 [] In interview	4. During the 2 weeks outlined in red on that calendar did his cause him to cut down 1 Y 2 N (9) on the things he usually does?
week (Rcosk 2) 2 [] 2 wks6 mos. 6 [] 5+ yrs. 3 [] Over 6-12 mos. 7 [] Never 4 [] I yr. 8 [] DK if Dr. seen	5. During that period, how many days did he cut down for as much as a day?  Days  Oc \( \subseteq \text{None} \( (9) \)
9 [] DK when Dr. seen Examine "Name of condition" entry and mark	6. During that 2-week period, how many days did his keep him in bed all or most of the day?  ODAYS OD None
A1 Color blindness (NC) On Card C (A2) Accident or injury (A2) Neither (3a)  If "Doctor not talked to," transcribe entry from item 1.	Ask if 17+ years:  7. How many days did his keep him from work during that 2-week period? (For females); not
If "Doctor talked to," ask:	counting work around the house? oo None (9)  Ask if 6-16 years:
3a. What did the doctor say it was? — Did he give it a medical name?	8. How many days did his keep him from school during that 2-week period?  Days  None
Do not ask for Cancer On Card C (A2)  b. What was the cause of?  [ Accident or injury (A2)	9. When did — first notice his?  1
	(Was it during the past 12 months or before that time?)
If the entry in 3a or 3b includes the words:  Ailment Condition Disorder Trouble	(Was it during the past 3 months or before that time?)  (Was it during the 2 weeks outlined in red on that calendar or before that time?)
Anemia Cust Growth Tumor	(rus it during the 2 weeks obtained in red on that calendar of before that times)
Asthma Defect Measles Ulcer Attack Disease Rupture	A4 Accident or injury Other (NC)
c. What kind of is it?	17a. Did the accident happen during the past 2 years or before that time?
	☐ During the past 2 years ☐ Before 2 years (18a)
For allergy or stroke, ask: d. How does the allergy (stroke) affect him?	b. When did the accident happen?
	☐ Last week ☐ Over 3—12 months
If in 3a—d there is an impairment or any of the following entries: Abscess Domoge Paralysis	☐ Week before ☐ I —2 years
Ache (except head or ear) Growth Rupture Bleeding Hemorrhage Sore Blood clot Infection Soreness	2 weeks-3 months
Boil Inflammation Tumor Ask e: Cancer Neuralgia Ulcer Cramps (except Neuritis Varicose veins	18a. At the time of the accident what part of the body was hurt? What kind of injury was it? Anything else?
menstrual) Poin Weak Cyst Palsy Weakness	Part(s) of body Kind of injury
e. What part of the body is affected?	
Show the following detail:	If accident happened more than 3 months ago, ask:
Head skull, scalp, face Back/spine/vertebra upper, middle, lower	b. What part of the body is affected now? How is his —— affected? Is he affected in any other way?
Ear or eye one or both	Part(s) of body Present effects
Arm one or both; shoulder, upper, elbow, lower, wrist, hand	
Leg one or both; hip, upper, knee lower, ankle, foot	·
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	,	ı	CONDITION	3			Ask remaining quest	ions as appropriate f	or the			
1. Pers	ion number	Name of co	ndition			A2	☐ Item I ☐ Q. 3a	☐ Q. 3b ☐ Q. 3c				
1	n did la ] In Intervie week (Rec	ew 1	k to a doctor ab 	(Item C)			Puring the 2 weeks outla alendar did his ca n the things he usually	use him to cut down		1 Y 2 N (9)		
		3	☐ Over 6–12 n	ios.	7 DK if Dr. seen		Ouring that period, how own for as much as a	lay?		Days 00		
ΓA		"Name of c	ondition'' entry :		DK when Dr. seen	- h	oring that 2-week periods keep him in bed			00 None		
lf If	☐ Accid	lent or injury	(A2) Ne	ither (3a)	·	Ask if 17+ years:  7. How many days did his keep him from work during that 2-week period? (For females): not counting work around the house?  Oo  None (9						
			t was? — Did he	give it a m	edical name?	Ask if 6—16 years:  8. How many days did his keep him from school during that 2-week period?  ODays  O One						
Do not ask for Cancer							Then did —— first notice    Last week	4 [ 5 5 K which 6 [ 12 months or before th 3 months or before th	Ove More hat time	e?)		
	Anemia Asthma Attack iat kind of	Cyst Defect Disease	Growth Measles Rupture	Tumor Ulcer	Ask c:	A4	Accident or in			er (NC)		
 Fo	or allergy o	r stroke, as				17a. Did the accident happen during the past 2 years or before that time?  During the past 2 years  Before 2 years (18a)  b. When did the accident happen?						
7.7							Last week		Over 3	-12 months		
lf	Abscess Ache (except Bleeding Blood clot	ere is an imp	Dairment or any of Damage Growth Hemorrhage Infection	of the follow Paralysis Rupture Sore Sores			☐ Week before ☐ 2 weeks—3 months	_	i –2 ye	ears		
	Boil Concer Cramps (ex	cept	Inflammation Neuralgia Neuritis	Tumor Ulcer Varicose v	Ask e:		t the time of the accide hat kind of injury was		ody w	as hurt?		
menstrual) Pain Weak Cyst Palsy Weakness  e. What part of the body is affected?						F	Part(s) of body	Ki	nd.of i	njury		
•• •••	Pull 01 .	ne body 13 d	ilecied.			-						
Show the following detail:  Head							accident happened mor	affected now?		2		
	Ear or eye		• • • • • • • • • • • • • • • • • • • •	one or	both both; shoulder, upper,		Part(s) of body		sent el			
	Leg		• • • • • • • • • • • • • • • • • • • •	, one or	lower, wrist, hand both; hip, upper, knee, ankle, foot							

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1. Person number		NDITION	4		A2	Ask remaining questicondition entered in:	Q. 3b	e Q. 3d Q. 3e		
2. When did las	w 1 :	Past 2 wks. /	Item C) 5		c 0	l During the 2 weeks outli alendar did his ca n the things he usually	use him to cut down does?	1 Y 2 N (9)		
	3	Over 6-12 mo	s. 7	Never		own for as much as a d		Days 00  None (9)		
		dition" entry ar	nd mark	DK when Dr. seen	6. D	Days				
Accide	blindness (NC ent or injury (,				Ask if 17+ years: 7. How many days did his keep him from work during that 2-week period? (For females): not					
If "Doctor tall 3a. What did the d	ked to," ask:	·			counting work around the house? 00 None (5					
		as. – sia ne g	17C 11 G ()	arear numer	s	low many days did his a chool during that 2-wee	ek period?	00 None		
	cause of? or injury (A2)				9. When did —— first notice his?  1					
Anemia Asthma	Cyst Defect	Growth Measles	T	Ask c:	A4	Accident or in		her (NC)		
Attack c. What kind of .	Discoseis it?	Rupture		,			during the past 2 years a			
					☐ During the past 2 years ☐ Before 2 years (18a)					
For allergy or d. How does the		e) affect him?			b. When did the accident happen?					
						Last week	Over	3-12 months		
Abscess		rment or any of Domage Growth	the follow Paralysis Rusture	ring entries:		☐ Week before	☐ I-2 ;	years		
Bleeding Blood clot	ŀ	lemorrhage nfection	Sore Soreness	Ask e:		2 weeks—3 months				
Boil Cancer Cramps (exc menstrual)	cept h	nflammation Veuralgia Veuritis	Tumor Ulcer Varicose v			t the time of the accide hat kind of injury was	ent what part of the body it? Anything else?	was hurt?		
Cyst	Ī	Pain Palsy	Weak Weakness	J		Part(s) of body	Kind of	f*injury		
e. What part of th	he body is affe	ected?			-					
Show the follo		····					re than 3 months ago, ask	::		
Back/spine	e/vertebra		. upper,	scalp, face middle, lower		hat part of the body is ow is his —— affected?	affected now? 'Is he affected in any ot	her way?		
•			. one or	both; shoulder, upper,		Part(s) of body	Present	effects		
Leg , , , ,	• • • • • • • •		. one or	lower, wrist, hand both; hip, upper, knee, ankle, foot	-					

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			İ	1
2-WEEKS DOCTOR VISITS PAGE	1.	Person number	1.	Person number
Earlier, you told me that —— had seen or talked to a doctor during the 2 weeks beginning Monday, (date), and ending Sunday, (date).  2a. On what (other) dates during that 2-week period did —— visit or talk to a doctor?	20.	Month Date  OR {7777	20.	Month Date  OR 7777 Last week 8888 Week before
b. Were there any other doctor visits for him during that period?	b.	Y (Reask 2a N (Ask 3-6 for and b) each visit)	ь.	Y (Reask 2a N (Ask 3–6 for and b) each visit)
3. Where did he see the doctor on the (date), at a clinic, hospital, doctor's office, or some other place?  If Hospital: Was it the outpatient clinic or the emergency room?  If Clinic: Was it a hospital outpatient clinic, a company clinic, or some other kind of clinic?	3.	0 While inpatient in hospital (Next DV)  1 Doctor's office (group practice or doctor's clinic)  2 Telephone  3 Hospital Outpatient Clinic  4 Home  5 Hospital Emergency Room  6 Company or Industry Clinic  7 Other (Specify)	3.	O While inpatient in hospital (Next DV)  Doctor's office (group practice or doctor's clinic)  Telephone  Hospital Outpatient Clinic  Home Home Company or Industry Clinic  Other (Specify)
6a. Why did he visit (call) the doctor on (date)? Write in reason  Mark appropriate box(es)	6a.	1 Diag. or treatment (6c) 3 General checkup (6b) 2 Pre or Postnatal care 4 Eye exam. (glasses) 5 Immunization 6 Other	60.	1 Diag. or treatment (6c) 3 General checkup (6b) 2 Pre or Postnatal care 4 Sye exam. (glasses) 5 Immunization 6 Other
b. Was this for any specific condition?	p.	Y (Enter condition N (Next DV) in 6a and change to "Diag. or treatment")	b.	Y (Enter condition N (Next DV) in 6a and change to "Diag., or treatment")
Mark box or ask:  c. For what condition did visit (call) the doctor on (date)?	c.	Condition reported in 6a	e.	Condition reported in 6a
A Condition page is required for the condition in question 6. If the fill a page for it after completing columns for all required doctor v	ere is isits.	no Condition page, enter condi	ition	in item C and
FOR(1 HIS-R-1 - 12-5-78)  Page 13				

FOR:1 HIS-R-1 -12-5-78:

Į		1	1		
L	HOSPITAL PAGE	1.	Person number	1.	Person number
	Washington and the ball of the New York		USE YOUR CALENDAR - I	Make	
2.	You said that was in the hospital (nursing home) during the past year. When did enter the hospital (nursing home) (the last time)?	2.	Month Date Year	2.	Month Date Year
3	What is the name and address of this hospital (nursing home)?	3.	Name Street	,	Name
,	mild is the name and address of this pospital (nursing name):		City (or county)	3.	City (or county)
		$\perp$	State		State
4.	How many nights was —— in the hospital (nursing home)?	4.	Nights	4.	Nights
5Ь.	Complete 5b from entries in 2 and 4; if not clear, ask the question.  How many of these —— nights were during the 2 weeks outlined in red on that calendar?	5b.	Nights	5ъ.	Nights
6.	do you know the medical name? If medical name unknown, enter an adequate description.  Show CAUSE, KIND, and PART OF BODY in same detail as required	6.	Normal delivery Normal at birth Condition	6.	Normal delivery Normal at birth Condition
	for the Condition page.  For delivery, ask:		Cause On Card C Acc. or Inj.		Cause On Card C Acc. or Inj.
	Was this a normal delivery?		Kind		Kind
	For newborn, ask: Was the baby normal or birth?		Part of body		Part of body
7a,	Were any operations performed on —— during this stay at the hospital (nursing home)?	70.	Y o N (P2)	7a.	Y o N (P2)
ь.	What was the name of the operation? If name of operation is not known, describe what was done.	ь.		ь.	
			Y (Describe) 7 N		Y (Describe) 7 N
ς.	Any other operations during this stay?	c,		с,	<del></del>
FO	A Condition page is required if there is an entry of "1" or more nights in item C and fill a page for it after completing columns for all required			nter d	condition
	THOTES				

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FOOTNOTES	
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n o n		E	If this questionnaire is for EXTRA unit, enter Contro				REA SEGM		Sheet	LISTING SHEET Sheet number   Line number				
Ĭ.		L	of original sample unit —		·			listed	on property	<del></del>				
ORM HIS-R-1 112-5-78				TA	BLE X - LIVING QUARTERS D	ETERMINATIONS	AT LISTED ADDRESS							
2	ľ	L	OCATION OF UNIT				USE OI	R CHAR	ACTERIST	ics		CLASSIFICATION		
-78:		Enter exact	hese quarters located?	If listed, enter sheet and line number, STOP Table X and continue	If outside AREA SEGMENT boundary; mark box below, STOP and —  Go to next line of Table X,	Are these (specify location) quarters for more than one group of people?	Do the occupants of		Do thes	QUARTERS e quarters in ocation) hav		UI pe	N - Not a separate unit, add occu- pants to this questionnaire. (Complete a	
	After entering description or loc  o in Area Segment, go to (3)  in other types of Segments,  if living quarters are not wi the same specific sample ac		egment, go to (3) ypes of Segments, g quarters are not within ne specific sample address ructure, if Permit Segment) — TABLE X	interview for original sample unit.  If unlisted, and Area Segment, go to 4. and another type of Segment, go to (5)	if additional quarters determined.  OR  Go to Household page, item 9, or Probe page, question I (as applicable).	If "Yes," fill one line for each group.	these (specify location) quarters live and eat with any other group of people?	Dire from or th	Direct access from the outside or through a common hall?		kitchen for only?	ti ed	separate que tionnaire for each unreld person or family grou	
1,,	.	Otherw		(3)	(4)	(5)	(6)		(7)	(8	)		(9)	113-K-1
''			(2)	s L	Outside segment boundary	Yes No		o Y	es No	Yes	No	N	HU	ОТ
1	2			s L	Outside segment boundary	Yes No	Yes — Go to (9) N and circle N	lo Y	es No	Yes	No	N	ни	ОТ
Page 16	3			s L	Outside segment boundary	Yes No	Yes — Go to (9) N and circle N	Y	es No	Yes	No	N	HU	ОТ
_		E: Be sure	to confinue interview for orig	inal sample unit.										

	·							O.M.B. P	Vo. U93	7-0021: App	roval Expire	s June 30, 198	
BUREA	MENT OF COMMERCE U OF THE CENSUS		ment has bee stated for this	nformation conta n collected with s study, and will t in accordance v	a guara not be d	ntee tha lisclose	et it will be d or relea:	e held in s sed to oth	trict co ers with	nfidence, will hout the cons	be used onle	ly for purposes	
ACTING AS CO	LECTING AGENT FOR THE IC HEALTH SERVICE		1.	2. R.O.	<b>3.</b> S	ample	4. Seg	ment ty	ре	5. Contro	l number		
			Book	numbe	er			Area					
RECONCIL	IATION RECORD	)	of		1		☐ Permit			PSU   Segment   Seria			
U.S. HEALTH	INTERVIEW SURVE	Y	l	-1			☐ Address ☐ Cen Sup				! !		
			boo	OKS	1			Special:			; ! !	i	
7. When was this	structure originally i	ouilt?	11. Telepho	ne number	13.	Interv		wer name Code <b>b.</b> Date of origin					
☐ Before April 1	, 1970						i	interv					
☐ After April 1,				None						į			
14. Noninterview re	ason												
TY	PE A			ТҮРЕ В						TYP	E C		
01 ☐ Refusal			os 🗆 Vacant	- nonseaso	nal			15 □	Unu	sed line of	listing she	eet	
02 🗆 No one at ho	ome repeated call	s	o6 ☐ Vacant					ı _		olished			
os 🗆 Temporarily	absent			ed entirely by s with URE					_	se or traile:			
o4 ☐ Other — Spe	ecify/		os 🗌 Occupi	ed entirely by	Arme	d				ide segme verted to p			
	×		og Unfit or	members to be demoli	shed			_	busii	ness or sto	rage		
			10 Under o			ady		l	Mer	-			
		-	11 Conver	ted to tempo	ary bu	ısines	s			demned after April	1 1970		
			12 Unoccu		or trai	iler site	e			r – Specii	-		
			13 Permit	granted, cons							<b>∠</b>		
			not star 14 🗆 Other –	ted - Specify /									
				2									
4F December 1													
15. Record of calls a	t nousenoia	r						1"					
Date											Ì		
D-vi-vi-vi-vi	a.m.		a.m.	a.m.			a.m.			а.п	a.m.		
Beginning time	p.m.		p.m.		p.m.		p.m.			p.n	1.	p.m.	
Ending time	a.m. p.m.		a.m. p.m.		a.m. p.m.			a.m. p.m.		a.m. a.m p.m. p.m			
<b>16.</b> Original respond (from HIS-1, pag	ent for reinterview s	sample	person				17			ew origina			
o 🗆 Under 17	e 44, item n/		N		_					of noninterview?	erview at 1	time of	
1 🗆 Present for	all questions		name of perinformation,	son providing '	nonin	tervie	w						
2 Present for		OR	∡⁄							in item 17			
з 🗌 Not presen	t								ali p	ersons wh	o live her	е	
								□B					
Person number	(s) of respondent(s)	_					1	□c					
Comments													
Comments													

	SECTION FOR REST ionnaire showed an ation?	IGE	B. RECONCILIATIO FOR CONDITION HOSPITALIZATI REPORTED IN OF VIEW BUT NOT B INTERVIEWS	S AND ONS VE INTER-							
Orig	inal	I	iliation	1							
2b. Work — loss days	☐ None	2b. Work — loss days	☐ None	We are interested more about condi	tions and						
3b. School - loss days	□ None	3b. School - loss days	☐ None	hospitalizations v reported at one til another. Can you	me but not at						
4b. Bed days	☐ None	4b. Bed days	□ None	explanation for been reported in (	. not having the original						
6b. Cut-down days	None	6b. Cut-down days	☐ None	interview/our interview today)?							
		RENCES WITHIN MA d I have, what is th									
Person Match Check ite No. Only origin recon Other	m for matched condition  1 condition reported in al OR reinterview — Do not cile 2, 5—9  - Reconcile 2, 5—9	Person Match Check Its No. Only origin recor Othe	em for matched condition 1 condition reported in 1al OR reinterview — Do not 1cile 2, 5—9 1 — Reconcile 2, 5—9	Person Natch Check Item for matched condition No.  Only 1 condition reported in original OR reinterview — Do reconcile 2, 5—9  Other — Reconcile 2, 5—9							
Original	Reconciliation	Original	Reconciliation	Original	Reconciliation						
Orig. Cond. No.	Reint. Cond. No.	Orig. Cond. No.	Reint. Cond. No.	Orig. Cond. No.	Reint, Cond. No.						
2-1	2 · 1	2-1 2-wk. ref. pd. 2 2 weeks - 6 mos. 3 0ver 6 - 12 mos. 4 1 1 - 2 years 5 2 - 5 years 6 5 5 years 7 0r. seen, DK when	2 · 1  2 · 2 · 2 · 2 · 2 · 2 · 3 · 2 · 3 · 3	2-1     2-wk. ref. pd.   2     2 weeks - 6 mos.   3	2-1 2-wk. ref. pd. 2 2 weeks—6 mos. 3 0ver 6—12 mos. 4 1 1—2 years 5 2—5 years 6 5 5+ years 7 0 Dr. seen, DK when						
8 DK if Dr. seen	8 DK if Dr. seen	8 DK if Dr. seen	8 DK if Dr. seen	8 DK if Dr. seen	8 DK if Dr. seen						
9 Dr. never seen	9 Dr. never seen	9 Dr. never seen	9 Dr. never seen	9 Dr. never seen	9 Dr. never seen						
3b.		3b.		3b.							
d.		d.		d.							
0.		•.		e.							
f.		f.		f.							
g.		g.		g.							
5. 1 2-wk. ref. pd. 2 0ver 2 wks. –3 mos. 3 0ver 3 mos. –1 yr. 4 0ver 1 yr. –5 yrs. 5 0ver 5 yrs.	5. 1 2-wk. ref. pd. 2 0ver 2 wks3 mos. 3 0ver 3 mos1 yr. 4 0ver 1 yr5 yrs. 5 0ver 5 yrs.	5. 1	5. 1 2-wk. ref. pd. 2 0ver 2 wks3 mos. 3 0ver 3 mos1 yr. 4 0ver 1 yr5 yrs. 5 0ver 5 yrs.	3  Over 3 mos. — 1 yr. 4  Over 1 yr. — 5 yrs. 5  Over 5 yrs.	3 Over 3 mos. – 1 yr. 4 Over 1 yr. – 5 yrs. 5 Over 5 yrs.						
Yes No	6b Yes No	6b  Days	☐ Yes ☐ No	Yes No	Yes No						
None Days	None	None	☐ None I	None	None						
None Days	□ None	None Days	□ None □	□ None □	□ None □						
∐ None I	□ None	□ None	L None	☐ None	☐ None I						
9. Days	9. Days	9. Days	9. Days	9. Days	9. None Days						
Comments  FORM HIS-R-1-T (1983) (1-10-83)	comments										

Name of condition		Name of condition							
				10					
Date of hospitalization	Person number	Date of hospitalization		Person number					
Explanation		Explanation		I .					
Explanation									
	nterview only — Sustained	☐ Original only — Sustain ☐ Original only — Deleted		nterview only - Sustained					
☐ Original only — Deleted ☐ Rei	nterview only — Deleted	Original only — Deleted	neii neii	Iterview only — Deleted					
Person Match Check Item for matched condition  Only 1 condition reported in	No. Only	em for matched condition 1 condition reported in	No. Only	em for matched condition 1 condition reported in					
original OR reinterview — Do not reconcile 2, 5—9	recor	nal OR reinterview — Do not naile 2, 5—9	recor	nal OR reinterview — Do not notice 2, 5—9					
Original Reconcile 2, 5 – 9  Original Reconciliation	Original Othe	r — Reconcile 2, 5—9  Reconciliation	Original	r — Reconcile 2, 5—9  Reconciliation					
Orig. Cond. No Reint. Cond. No	Orig. Cond. No	Reint, Cond. No	Orig. Cond. No	Reint. Cond. No.					
2. 1	2. 1 2-wk. ref. pd. 2 2 weeks - 6 mos.	2. 1 2-wk. ref. pd. 2 2 weeks – 6 mos.	2. 1 2-wk. ref. pd. 2 2 weeks – 6 mos.	2. 1 2-wk. ref. pd. 2 2 weeks - 6 mos.					
3 Over 6-12 mos. 3 Over 6-12 mos.	3 ☐ Over 6−12 mos.	3 ☐ Over 6 – 12 mos.	3 ☐ Over 6 – 12 mos.	3 🔲 Over 6 – 12 mos.					
4 ☐ 1 − 2 years	4	4	4	4					
6 🗆 5+ years 6 🗀 5+ years	6 🔲 5+ years	6 🔲 5+ years	6 🔲 5+ years	6 D 5+ years 7 Dr. seen, DK when					
7 Dr. seen, DK when 7 Dr. seen, DK when	7 Dr. seen, DK when 8 DK if Dr. seen	7 Dr. seen, DK when	7 U Dr. seen, DK when 8 DK if Dr. seen	8 DK if Dr. seen					
8 U DK if Dr. seen 8 DK if Dr. seen 9 Dr. never seen 9 Dr. never seen	9 Dr. never seen	9 Dr. never seen	9 Dr. never seen	9 Dr. never seen					
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2  Over 2 wks. – 3 mos. 3  Over 3 mos. – 1 yr. 3  Over 3 mos. – 1 yr.	3 ☐ Over 3 mos. — 1 yr.	3 Over 3 mos. – 1 yr.	3 ☐ Over 3 mos. – 1 yr.	3 ☐ Over 3 mos. −1 yr.					
4 Over 1 yr. – 5 yrs. 4 Over 1 yr. – 5 yrs. 5 Over 5 yrs. 5 Over 5 yrs.	4 ☐ Over 1 yr. – 5 yrs. 5 ☐ Over 5 yrs.	4 Over 1 yr. – 5 yrs. 5 Over 5 yrs.	4 Over 1 yr. – 5 yrs. 5 Over 5 yrs.	4 Over 1 yr. – 5 yrs. 5 Over 5 yrs.					
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9. Days 9. Days	9. Days	9. Days	9. None Days	9. Days					

Name of condition						Name of condition	•				
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(2)						(2)					
(3)			*			(3)				3	
6.Name of hospital  Number and street			6.Name of hospi			6. Name of hospital Number and stree	 t		6. Name of hosp	<del>-</del>	
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State			State			State			State		
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FORM HIS-R-401	A (1983)		U.S	DEPT. OF CO	им. 1. in	1. Interviewer name Co					de Telephone number					
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	(CC	OVER	AGE)		5. 8	einterviev	v date				ervisory Field ( ner	Кер.	6. Sample			
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			Page	r			and I	in Condition Hospitalizat	ions	2.4		Same		
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	;	Enter " " if Group I	Differ- ences	Enter ''' if Group 2	Differ- ences	Number of (√) checks	Differ- ences	Number of (√) checks	Differ- ences	Accept- ability base	Differ- ences	Accept- ability base	Differ- ences	
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Action tak	en or to be to	aken:		<b>⊢</b>	Section (A		Votes							
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# INSTRUCTIONS FOR FILLING SECTION III - CONTENT CHECK

Columns (1) Enter the segment number and household serial number for each unit and (2) interviewed in reinterview, except Omit Content Reconciliation (OCR) cases.

# Part A - Restricted Activity Page

Column (3) Enter "1" if a Group I case — that is, the Same Adult is NOT interviewed in both visits (includes different parents responding for children under 17). Otherwise leave blank.

Column (5) Enter "1" if a Group 2 case — that is, the Same Adult IS interviewed in both visits for themselves, for other adult sample persons, or for children under 17. Otherwise leave blank.

Columns (4) Fill column (4) if "1" is in column (3) on same line. ond (6)

Fill column (6) if "I" is in column (5) on same line.

Include differences found in Section A of the HIS-R-I-T when the reinterview answer is correct, or neither the original nor reinterview answer is correct. Do not include differences where original interview answer is correct. The maximum number of differences is 3 for each person.

# Part B - Characteristics Within Conditions and Hospitalizations

Columns (7) Fill column (7) if "1" is in column (3) on same line.

Fill column (9) if "1" is in column (5) on same line.

Enter the total number of Match boxes checked ( $\checkmark$ ) in section C with the "Other" box marked in the Check Item and the Match boxes checked ( $\checkmark$ ) in section D of the HIS-R-I-T. This total represents the number of Matched Conditions and/or Hospitalizations reported in both the original interview and reinterview, for which characteristics are reconciled.

Columns (8) Fill (8) if there is an entry in (7). and (10)

Fill (10) if there is an entry in (9).

Count only differences between original interview and reinterview for certain items within matched ( $\checkmark$ ) Conditions which have the "Other" box marked in the Check Item (items 2, 5, 6a or b, 7, 8 or 9) and within matched ( $\checkmark$ ) Hospitalizations (items 2,3,and6). The maximum number of differences for each Condition is 5, and for each Hospitalization is 3.

# Part C — Number of Conditions and Hospitalizations

Column (11) Fill column (11) if "!" is in column (3).

Enter the number of checks ( $\vee$ ) from column (7), plus those Conditions and Hospitalizations reported in only one interview (original or reinterview) and sustained.

Column (13) Fill column (13) if "I" is in column (5).

Enter the number of checks (  $\checkmark$ ) from column (9), plus those Conditions and Hospitalizations reported in only one interview (original or reinterview) and sustained.

Columns (12) Fill column (12) if "I" is in column (3). and (14)

Fill column (14) if "1" is in column (5).

Enter the number of Conditions and Hospitalizations reported in original interview only and deleted after reconciliation, plus the number reported in reinterview only and sustained after reconciliation.

FORM HIS-R-401 B (1983) -1-10-83

# Appendix X Forms for recording interviewer errors

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# Appendix XI HIS Production Guide

HIS-103 (Jan. 1979)

ORM 11-27-761	183C						J.S. DEPART BUR	MENT OF T	COMMERCE HE CENSUS	a. Intervi	rwef			Code	h. Regio	nal Office			c. Sample nu	mber d.	. Home PSU
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			Number of cases		<del> </del>		Number of s	cameurz	1			esidential goments	Supple	ments 2	This ass	signment	Cumulative				
iampie week	Stratum	Assigned PSU(s)	Personal visit interviews	CAI	Types A, B, and C noninter- views	CA3	Non-X visited for inter- viewing	CA4	X visited for inter- viewing	CA5	Visited solely for listing or updating?	CA6	Trips	CA7	Units	Allowed minutes per unit	Allowed minutes <sup>3</sup>	Claimed minutes	Allowed minutes	Claimed minutes	Production ratio  Col. 20  Col. 21
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	Driv	ing mileage	Remarks						······										<u> </u>		<del></del>

# Appendix XII Summary of HIS Interviewer Performance

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FORM 11-39 (3-30-78)	(HIS)	U.S. DEPARTMENT OF CO							MERCE CENSUS	1. R	24	al O	fice	レ			2. Year 1981
										3. N	ame						B-62
		SUMI	MARY OF	HIS INT	ERVIEWER	PERFORM	ANCE			5. 4	5	niveni	area	1		6. Date of HIS in 4/72	itial training
	(Fron	form HI	-403)	(Fr	om form HIS-70	6B)	(Fron	form 11-102C	)	(From form HIS-R-401)						(From ferm	HIS-406)
	1		l i		1											Observ	
	Total		Percent						Pro-							Туре	Results
Quarter	inter-	T	type A's	Number		Error	Allowed	Payroli	duction				5 - Systematic	E - Excellent VG - Very good			
	viewed and	Type A's	^*	errors	Base		minutes	minutes	ratio	Ι,	(Enter "A" or "R")				SN - Special	5 - Satisfactory	
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Copy distribution: WHITE - Regional Office

YELLOW - Chief, Field Division - after 3rd and 4th quarter information has been posted.

PINK - Chief, Field Division - after 1st and 2nd quarter information has been posted.

# Appendix XIII Notification of Interviewer Performance

HIS-103 (March 1981)

NOTIFICATION OF INTERVIEWER PERFORMANCE    Notification   Prepare an original and one copy at the end of each period covered for all interviewers who have had the prescribed experience. See the appropriate program manual(s) for detailed instructions for completion of this form. See the appropriate program manual(s) for detailed instructions for completion of this form. See the appropriate program manual(s) for detailed instructions for completion of this form. See the appropriate program manual(s) for detailed instructions for completion of this form. See the appropriate program manual(s) for detailed instructions and preformance folder in the Regional Office.    Survey	INTERVIEWER PERFORMANCE    From 7/13/81   Throyth 1   Atlanta	INTERVIEWER PERFORMANCE    From 7/13/81   Throyth 1/4/81   Atlanta	FORM 11-40 (3-30-76)	U.S. DE	PARTMENT OF COMMERCE BUREAU OF THE CENSUS	I. Interviewer name	B-62
INSTRUCTIONS - Prepare an original and one copy at the end of each period covered for all interviewers who have had the prescribed experience. See the appropriate program manual(s) for detailed instructions for completion of this form. Send the original to the interviewer and file the copy in the interviewer's appropriate performance folder in the Regional Office.  Survey  Rate  (a)  (b)  (c)  Performance rating  Adjective  (a)  (b)  CVS  QHS  Production  I,OD  Satisfactory  Adjective  (c)  CPS  CMS  Error  I,79  Satisfactory  Noninterview  I,O  Excellent  Remarks  Congratulations on your excellent  Type Arate. You've improved greatly  From last year.  Again error rate has increased recently,  Again error rate has increased recently,  Again error rate has increased recently,  When to omitting check items. Be some to field  Here to omitting check items. Be some to field  Here during the interview.	INSTRUCTIONS - Prepare an original and one copy at the end of each period covered for all interviewers who have had the prescribed experience. See the appropriate program manual(s) for detailed instructions for completion of this form. Send the original to the interviewer and file the copy in the interviewer's appropriate performance folder in the Regional Office.  Survey  Rate  (a)  (b)  (c)  Performance rating  Adjective  (a)  (b)  CVS  QHS  Production  I,OD  Satisfactory  Adjective  (c)  CPS  CMS  Error  I,79  Satisfactory  Noninterview  I,O  Excellent  Remarks  Congratulations on your excellent  Type Arate. You've improved greatly  From last year.  Again error rate has increased recently,  Again error rate has increased recently,  Again error rate has increased recently,  When to omitting check items. Be some to field  Here to omitting check items. Be some to field  Here during the interview.	INSTRUCTIONS - Prepare an original and one copy at the end of each period covered for all interviewers who have had the prescribed experience. See the appropriate program manual(s) for detailed instructions for completion of this form. Send the original to the interviewer and file the copy in the interviewer's appropriate performance folder in the Regional Office.  Survey  Rate  (a)  (b)  (c)  Performance rating  Adjective  (a)  (b)  CVS  QHS  Production  I,OD  Satisfactory  Adjective  (c)  CPS  CMS  Error  I,79  Satisfactory  Noninterview  I,O  Excellent  Remarks  Congratulations on your excellent  Type Arate. You've improved greatly  From last year.  Again error rate has increased recently,  Again error rate has increased recently,  Again error rate has increased recently,  When to omitting check items. Be some to field  Here to omitting check items. Be some to field  Here during the interview.		NOTIFICATION	ON OF	2. Period covered (Mo. da)	y, yr.) 3. Regional Office
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# Appendix XIV Transcription sheet

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1.	Race			8			ı										1						
1.	Sex			9												1							
2.	Type	of Family		10											1								
2.	Relati	onship		11												1							
2.	2. Family Structure Code for Children		12												1								
	2-4-		Month	13-14													]						
3.	Date of		Day	15-16													1						
1	Birth Year		Year	17-19																			
4.	4. Marital Status		20															-					
н.	Status at Initial Interview		21																				
	5a-b	Bed Disability Days		22-23																			
cted	6	Work-Loss Days		24-25													1						
testri	7	School-Loss	Days	26-27													1						
Days of Restricted Activity	8	Bed Days Coi With Time-Lo	nciding oss Days	28-29													1						
Jays	9a	Other Days		30			•																
	9b	Cut-Down [	Days	31-32													]						
12d.	No. o	f 2 Wk. Denta	l Visits	33-34																			
13.	Interv	al Since Last	Dental Visit	35											Г		_						
14.	2 Wee	k Doctor Visi	its	36-37													7						
15d.	Shots- Exams	X Rays—Tests —2 Weeks		38-39													1						
16d.	Phone	Calls to Doctor	in 2 Weeks	40-41													1_						
18a.	12 Mo	onth Doctor V	'isits	42-44											T								
18b.	Last C	Octor Visit		45																			
19/2	O. Usi	ual Activity S	tatus	46												]							
21/2	7a. Lir	nitation of A	ctivity	47																			
28a.	Duratio	on of Limitation	n of Activity	48-50																			
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34.	Bed D	ays Past 12 N	los.	53												]							j
R.	Respo	ndent		54													_						
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# Vital and Health Statistics series descriptions

- SERIES 1. Programs and Collection Procedures—Reports describing the general programs of the National Center for Health Statistics and its offices and divisions and the data collection methods used. They also include definitions and other material necessary for understanding the data.
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