

Appendix D. Data Quality and Related Data

Data Quality

Two principal determinants of the quality of data collected in household surveys are the magnitude of the imputed responses and the accuracy of the responses that are provided. This appendix provides information on the imputation rates and evaluates the quality of need for assistance data from SIPP.

Imputed responses are required when responses for specific questions are missing or when responses are rejected in the editing procedure because they are invalid. The estimates in this report were produced after edit and imputation procedures were completed. The imputation procedure used persons with valid responses as "donors" of data to persons with missing or invalid responses. An attempt was made to find donors who had characteristics similar to the person with the missing or invalid data by controlling on such variables as age, sex, marital status, and employment status.

Imputation rates for this supplement are shown in table D-1. The rates are calculated by dividing the total number of missing or invalid responses by the total number of responses that should have been provided.

The imputation rates for the items on need for assistance in "personal care", "doing housework", "preparing meals", and "getting around outside the house"

Table D-1. Imputation Rates for Items on Need for Assistance

Question	Percent of responses imputed
3a. Did ... need help from others in looking after personal needs such as dressing, undressing, eating, or personal hygiene?	2.3
4a. Because of ...'s health, did ... need help with housework such as washing dishes, straightening up, or light cleaning?	1.6
5a. Because of ...'s health condition did need help to prepare meals?	1.6
6a. Did ... need help from another person in order to get around outside the house?	2.3
7a. Did ... need the help of another person for keeping track of money and bills? ...	7.2

were less than three percent. The rate for "keeping track of money and bills" was somewhat higher at 7.2 percent, but was still of a reasonable magnitude.

Related Data

A number of Federal household surveys have obtained data on the need for assistance. A comprehensive list of these data sources is contained in a recent report of the Interagency Forum on Aging-Related Statistics entitled "Measuring the Activities of Daily Living Among the Elderly: A Guide to National Surveys".

Household surveys on this topic have differed in terms of population coverage and in the coverage of activities with which assistance might be needed. The Home Care Supplement to the 1979 National Health Interview Survey (NHIS), for example, counted the number of persons who needed the help of another person by using the following categories (see "Americans Needing Home Care", Series 10, Number 153, National Center for Health Statistics):

- Need or receive the help of another person in one or more of the following seven activities: walking, going outside, bathing, dressing, using the toilet, getting in or out of a bed or a chair, or eating;
- "Doesn't do" one or more of the seven activities listed above (these people were assumed to need the help of another person);
- Need or receive the help of another person in one or more of the following four activities: shopping for personal items, doing routine household chores, preparing their own meals, or handling their own money;
- Usually stays in bed all or most of the time (these people were assumed to need the help of another person);
- Need or receive the help of another person with a device to control bowel movement or urination.

A more recent NHIS supplement that obtained data on the need for assistance was the 1984 Supplement on Aging. That survey obtained data on the number of persons 65 years old and over who were "dependent" (see "Physical Functioning of the Aged: United States,

1984", Series 10, Number 167, National Center for Health Statistics). The following criteria were used to identify dependent persons:

- Needed the help of another person with specific home management activities including preparing meals, shopping for personal items, managing money, using the telephone, doing heavy housework (also included persons who were unable to perform the activity).
- Needed the help of another person with specific personal care and mobility activities including bathing, dressing, using the toilet, getting in and out of bed or a chair, and eating (also included persons who were unable to perform the activity).
- Partial or total incontinence or needed a device to control bowel movement or urination.

Some comparative data from the 1979 and 1984 NHIS surveys and the SIPP survey are shown in table D-2. The universe is restricted to persons 65 years old and over because the 1984 NHIS survey asked the function and need for assistance questions for this group only.

Table D-2. **Percent of Persons 65 Years Old and Over Needing Assistance With Selected Activities**

Activity	Survey		
	1979 NHIS	1984 NHIS	1985/86 SIPP
Personal care	NA	5.0	6.6
Outside mobility.....	¹ 6.3-8.2	² 2.1-7.3	11.3
Preparing meals	4.9	3.8	9.1
Doing housework	7.3	³ 4.4-15.3	11.2
Managing money.....	3.4	3.4	7.2

¹The lower figure is for "going outside"; the higher figure is for "shopping for personal items."

²The lower figure is for "getting outside"; the higher figure is for "shopping for personal items."

³The lower figure is for "doing light housework"; the higher figure is for "doing heavy housework."

Table D-2 shows that SIPP estimates of the proportion of persons needing assistance are somewhat higher than the NHIS estimates. Some of the difference is in the treatment of missing responses. The SIPP survey imputed values for missing responses while the NHIS surveys did not. Differences in survey procedures and the wording of questions presumably account for much of the remaining difference, but it is not possible to quantify the effect of these factors.