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Aging in the Eighties Functional Limitations of Individuals Age 65 Years and Over

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Introduction

As a cohort ages, the prevalence of functional limitations increases; that is, an increasing proportion of its members have difficulty performing personal care or home management activities. Whereas the increase in the prevalence of functional limitations tends to occur in all aging cohorts, its pace may differ among subgroups of the population and may change over time. The prevalence of functional limitations is an important indicator of quality of life and of the need for health and social services in the aging population. It is important, therefore, that the levels, differentials, and trends in prevalence of functional limitations be remeasured periodically.

The National Center for Health Statistics (NCHS) has measured the prevalence of functional limitations in several of its surveys.¹ The data presented in this report, which come from the 1984 National Health Interview Survey (NHIS), will be discussed in greater detail in a future NCHS publication.

The NHIS is a continuing nationwide survey of the civilian noninstitutionalized population of the United States. Each year, people in about 40,000 households are interviewed by the U.S. Bureau of the Census to obtain information about their health and use of health care. Demographic information needed to interpret the data is also obtained. The interviewers on this survey have special training in addition to their regular training. Response rates are high—about 97 percent.

The 1984 NHIS included a special questionnaire, the Supplement on Aging (SOA), aimed at elderly people living in the community. The SOA was designed to collect information about physical limitations, chronic conditions, housing, retirement status, interactions with family and organizations, use of community services, and other health-related information about

middle-aged and older people. The SOA sample consisted of 16,148 persons age 55 years and over—4,651 age 55–64 years and 11,497 age 65 years and over. Detailed descriptions of the sample, survey operations, and field procedures are presented in *The Supplement on Aging to the National Health Interview Survey*.² Selected results of the SOA have been published in numerous NCHS publications.^{3–7}

Background

This report describes the functional limitations of persons age 65 years and over in terms of their performance of selected daily activities. Two measures of limitation are presented: (a) The proportion of persons who have difficulty performing each activity and (b) the proportion of persons who receive help with each activity. All estimates are based solely on persons living in the community; institutionalized individuals, such as those in nursing homes, are excluded. To the extent that the institutionalized elderly have more functional limitations than their noninstitutionalized counterparts,⁸ the data in this report underestimate the extent of functional limitation for the total elderly population.

Seven of the 13 activities discussed in this report involve personal care: Bathing, dressing, eating, getting in and out of bed and chairs (designated as “transferring” in tables 1–8), walking, getting outside, and using the toilet, sometimes known as “activities of daily living” or ADL’s.⁹ The remaining six activities, which concern home management, elsewhere have been termed “instrumental activities of daily living” or IADL’s.¹⁰ Home management activities are preparing meals, shopping for personal items, managing money, using the telephone, doing heavy housework, and doing light housework.

For this report, persons are classified as having difficulty with an activity if they responded positively to the question, "Because of a health or physical problem, do you have difficulty _____ing?" Persons who did not perform certain activities for reasons unrelated to health, such as men who did not cook because their wives did so, were included in the groups whose total numbers formed the denominators of the proportions of persons having difficulty with each activity. Had the analysis been restricted to individuals who routinely performed each activity, that is, to those at risk of health-related problems in their performance, the proportions of persons experiencing difficulty would have been higher. Numbers of persons who refused or were unable to say whether they had health-related problems performing personal care and home management activities were also included in the denominators for proportions of persons having difficulty with those activities. Such individuals made up approximately 1 percent of the elderly population. Because some of the individuals in these two groups may have had unreported problems performing the activities in question, percents in tables 1-8 are conservative estimates of the extent of functional disability, and the proportions of persons with no difficulty performing any of the activities are slightly overstated.

In this report, persons were classified as receiving help with an activity if they responded positively to the question,

"Do you receive help from another person in _____ing?" Only those individuals who reported having health-related difficulty with an activity were asked if they received help with that activity. Thus, this measure excludes persons who may have received help with an activity despite being able to perform the activity without assistance. Among those excluded are persons who may have received help with activities for which they were not at risk of having health-related problems, for example, activities not performed for cultural reasons. Finally, numbers of persons who refused or were unable to answer the questions on receiving help with various activities were included in the denominators of the proportions of persons receiving help, further reducing those percents. The net effect of the counting procedures used was that the percents of individuals with functional limitation based on numbers receiving help with various activities are conservative.

Difficulties with personal care activities

Of 26.4 million persons age 65 years and over living in the community, 4.9 million or 19 percent had difficulty walking (table 1). The elderly were more likely to have problems with walking than with any other personal care activity. Difficulty bathing and difficulty getting outside were each experienced by 10 percent of persons age 65 years and over. Eight percent had

Table 1. Percent of persons 65 years of age and over who have difficulty performing selected personal care activities by sex and age: United States, 1984

| Sex and age | Personal care activity | | | | | | |
|-----------------------------|------------------------|----------|--------|--------------|---------|-----------------|--------------|
| | Bathing | Dressing | Eating | Transferring | Walking | Getting outside | Using toilet |
| Both sexes | | | | | | | |
| Percent | | | | | | | |
| 65 years and over | 9.8 | 6.2 | 1.8 | 8.0 | 18.7 | 9.6 | 4.3 |
| 65-74 years | 6.4 | 4.3 | 1.2 | 6.1 | 14.2 | 5.6 | 2.6 |
| 65-69 years | 5.2 | 3.9 | 1.2 | 5.3 | 12.2 | 4.9 | 2.2 |
| 70-74 years | 7.9 | 4.8 | 1.1 | 7.1 | 16.6 | 6.6 | 3.0 |
| 75-84 years | 12.3 | 7.6 | 2.5 | 9.2 | 22.9 | 12.3 | 5.4 |
| 75-79 years | 9.8 | 6.4 | 2.1 | 7.5 | 19.5 | 9.9 | 4.1 |
| 80-84 years | 16.8 | 9.7 | 3.2 | 12.4 | 29.0 | 16.8 | 7.8 |
| 85 years and over | 27.9 | 16.6 | 4.4 | 19.3 | 39.9 | 31.3 | 14.1 |
| Male | | | | | | | |
| 65 years and over | 7.6 | 5.8 | 2.0 | 5.6 | 15.5 | 6.3 | 3.1 |
| 65-74 years | 5.7 | 4.4 | 1.5 | 4.8 | 12.9 | 4.5 | 2.4 |
| 65-69 years | 5.3 | 4.1 | 1.7 | 4.7 | 11.5 | 4.3 | 2.3 |
| 70-74 years | 6.1 | 4.9 | 1.4 | 5.0 | 14.9 | 4.7 | 2.4 |
| 75-84 years | 9.2 | 7.3 | 2.5 | 6.0 | 18.3 | 7.5 | 3.6 |
| 75-79 years | 7.8 | 6.7 | 2.3 | 4.7 | 15.6 | 6.3 | 2.7 |
| 80-84 years | 12.3 | 8.5 | 3.0 | 8.7 | 24.2 | 10.2 | 5.6 |
| 85 years and over | 23.1 | 14.1 | 4.3 | 12.7 | 32.2 | 21.9 | 10.0 |
| Female | | | | | | | |
| 65 years and over | 11.2 | 6.5 | 1.7 | 9.7 | 20.9 | 11.8 | 5.1 |
| 65-74 years | 6.9 | 4.2 | 0.9 | 7.0 | 15.1 | 6.5 | 2.7 |
| 65-69 years | 5.1 | 3.7 | 0.9 | 5.7 | 12.9 | 5.3 | 2.2 |
| 70-74 years | 9.1 | 4.8 | 1.0 | 8.6 | 17.8 | 8.0 | 3.0 |
| 75-84 years | 14.2 | 7.7 | 2.4 | 11.2 | 25.7 | 15.3 | 6.0 |
| 75-79 years | 11.1 | 6.2 | 3.3 | 9.3 | 22.2 | 12.3 | 5.0 |
| 80-84 years | 19.2 | 10.2 | 3.4 | 14.3 | 31.4 | 20.2 | 9.0 |
| 85 years and over | 30.1 | 17.7 | 4.4 | 22.2 | 43.3 | 35.4 | 15.9 |

SOURCE: National Health Interview Survey, National Center for Health Statistics.

difficulty getting in and out of bed and chairs (transferring), and 6 percent experienced difficulty dressing themselves. Only 4 percent had any degree of difficulty using the toilet, including getting to the toilet. Eating was the personal care activity least often causing a problem. Only 2 percent of all persons age 65 years and over living in the community had difficulty eating.

More than three-fourths of the elderly, 77 percent of those age 65 years and over, did not have difficulty performing any of the seven personal care activities discussed in this report (table 2). Nine percent had difficulty performing one of the seven activities, 5 percent had difficulty with two activities, and 3 percent had difficulty with three activities. Six percent of all persons age 65 years and over living in the community had difficulty performing four or more of the seven personal care activities.

The proportion of elderly persons experiencing difficulty with each personal care activity increased with age. For example, 12 percent of persons age 65–69 years living in the community had difficulty walking, compared with 40 percent

of those 85 years and over. Whereas 85 percent of persons age 65–69 years had no difficulty with any of the seven personal care activities described in this report, almost half, 49 percent, of those 85 years and over had difficulty with one or more activities. The order of difficulty of the seven personal care activities, as indicated by the proportions of elderly experiencing problems in their performance, varied slightly by age; however, at all ages, walking was the most difficult and eating the least difficult.

A greater proportion of women than of men had difficulty bathing, transferring, walking, getting outside, and using the toilet. There were no statistically significant differences by sex in the percents of elderly persons who experienced difficulty dressing and eating. Twenty-five percent of women age 65 years and over had difficulty performing at least one of these seven personal care activities, compared with 19 percent of men age 65 years and over. When all persons age 65 years and over are considered, sex differentials in difficulty with personal care activities may reflect the fact that the women in this age group are older, on average, than the men. When more narrowly restricted age groups were considered, many of the differentials by sex were not statistically significant. For persons age 65–69 years, for example, there were no statistically significant differences between men and women in the proportions of individuals with difficulty performing any of the seven personal care activities described in table 1.

Table 2. Percent distribution of persons 65 years of age and over by number of personal care activities that are difficult, according to sex and age: United States, 1984

| Sex and age | Number of personal care activities that are difficult | | | | | |
|-------------------|-------------------------------------------------------|------|------|------|-----|------|
| | Total | None | 1 | 2 | 3 | 4–7 |
| Percent | | | | | | |
| Both sexes | | | | | | |
| 35 years and over | 100.0 | 77.3 | 9.2 | 4.7 | 2.8 | 5.9 |
| 65–74 years | 100.0 | 82.9 | 7.8 | 3.7 | 1.9 | 3.7 |
| 65–69 years | 100.0 | 85.3 | 6.8 | 3.1 | 1.5 | 3.2 |
| 70–74 years | 100.0 | 79.9 | 9.1 | 4.4 | 2.4 | 4.2 |
| 75–84 years | 100.0 | 72.2 | 11.2 | 5.4 | 3.7 | 7.4 |
| 75–79 years | 100.0 | 75.9 | 10.8 | 4.3 | 3.3 | 5.7 |
| 80–84 years | 100.0 | 65.6 | 12.1 | 7.4 | 4.6 | 10.4 |
| 85 years and over | 100.0 | 51.2 | 12.8 | 10.2 | 6.7 | 19.2 |
| Male | | | | | | |
| 65 years and over | 100.0 | 81.3 | 8.8 | 3.5 | 2.0 | 4.5 |
| 65–74 years | 100.0 | 84.6 | 7.6 | 2.7 | 1.8 | 3.2 |
| 65–69 years | 100.0 | 86.5 | 6.6 | 2.1 | 1.5 | 3.2 |
| 70–74 years | 100.0 | 82.1 | 9.0 | 3.6 | 2.2 | 3.1 |
| 75–84 years | 100.0 | 77.6 | 10.6 | 4.2 | 2.2 | 5.4 |
| 75–79 years | 100.0 | 80.3 | 10.1 | 2.9 | 2.4 | 4.4 |
| 80–84 years | 100.0 | 71.8 | 11.6 | 7.2 | 1.9 | 7.6 |
| 85 years and over | 100.0 | 60.1 | 13.2 | 8.3 | 3.5 | 14.9 |
| Female | | | | | | |
| 65 years and over | 100.0 | 74.6 | 9.5 | 5.6 | 3.4 | 6.9 |
| 65–74 years | 100.0 | 81.6 | 7.9 | 4.4 | 2.0 | 4.0 |
| 65–69 years | 100.0 | 84.4 | 7.0 | 3.9 | 1.5 | 3.2 |
| 70–74 years | 100.0 | 78.3 | 9.1 | 5.0 | 2.6 | 5.0 |
| 75–84 years | 100.0 | 68.9 | 11.6 | 6.2 | 4.7 | 8.6 |
| 75–79 years | 100.0 | 73.0 | 11.2 | 5.4 | 3.9 | 6.6 |
| 80–84 years | 100.0 | 62.4 | 12.3 | 7.5 | 5.9 | 11.9 |
| 85 years and over | 100.0 | 47.2 | 12.6 | 11.1 | 8.1 | 21.1 |

NOTE: Figures may not add to 100.0 because of rounding.
SOURCE: National Health Interview Survey, National Center for Health Statistics.

Difficulties with home management activities

About 6.3 million persons age 65 years and over living in the community had difficulty with heavy housework. Almost one-fourth, 24 percent, of elderly individuals experienced problems with this aspect of home management (table 3). This proportion is more than twice as great as for any other home management activity. In comparison, 11 percent of individuals age 65 years and over living in the community experienced difficulty managing money and using the telephone.

Twenty-seven percent of the population age 65 years and over had difficulty with at least one of the six home management activities described above (table 4). As age increased, so did the proportion of elderly who had difficulty with these activities. Less than one-fifth (18 percent) of persons age 65–69 years had difficulty with one or more home management activities, compared with more than half (55 percent) of those age 85 years and over. At all ages, the elderly experienced somewhat more difficulty with these six activities than with the seven personal care activities discussed previously.

Women of age 65 years and over were significantly more likely than men in the same age range to have difficulty performing most home management activities. For two activities, managing money and using the telephone, the differentials by sex were not statistically significant at most ages 65 years and over. For the other activities—preparing meals, shopping, and doing heavy and light housework—elderly men experienced fewer problems than women at almost all ages 65 years and over. These differentials may reflect, in part, the fact that for cultural reasons many elderly men do not routinely perform

Table 3. Percent of persons 65 years of age and over who have difficulty performing selected home management activities by sex and age: United States, 1984

| Sex and age | Home management activity | | | | | |
|-----------------------------|--------------------------|----------|----------------|-----------------|-----------------------|-----------------------|
| | Preparing meals | Shopping | Managing money | Using telephone | Doing heavy housework | Doing light housework |
| Both sexes | | | | | | |
| | Percent | | | | | |
| 65 years and over | 7.1 | 11.3 | 5.1 | 4.8 | 23.8 | 7.1 |
| 65-74 years | 4.0 | 6.4 | 2.2 | 2.7 | 18.6 | 4.3 |
| 65-69 years | 3.5 | 5.4 | 1.9 | 2.1 | 16.4 | 3.8 |
| 70-74 years | 4.7 | 7.7 | 2.6 | 3.4 | 21.3 | 5.0 |
| 75-84 years | 8.8 | 15.0 | 6.3 | 6.0 | 28.7 | 8.9 |
| 75-79 years | 7.1 | 11.8 | 5.2 | 5.0 | 25.7 | 7.1 |
| 80-84 years | 11.9 | 21.0 | 8.2 | 7.8 | 34.0 | 12.0 |
| 85 years and over | 26.1 | 37.0 | 24.0 | 17.5 | 47.8 | 23.6 |
| Male | | | | | | |
| 65 years and over | 4.7 | 7.3 | 4.4 | 5.6 | 13.7 | 4.9 |
| 65-74 years | 3.0 | 4.6 | 2.8 | 3.5 | 11.2 | 3.5 |
| 65-69 years | 2.6 | 4.1 | 2.6 | 3.0 | 9.8 | 3.5 |
| 70-74 years | 3.6 | 5.3 | 3.1 | 4.3 | 13.0 | 3.4 |
| 75-84 years | 6.0 | 9.6 | 5.4 | 7.9 | 15.9 | 6.2 |
| 75-79 years | 5.1 | 7.6 | 5.2 | 6.3 | 14.6 | 5.2 |
| 80-84 years | 7.8 | 13.9 | 5.8 | 11.3 | 18.9 | 8.2 |
| 85 years and over | 18.5 | 26.8 | 19.0 | 18.4 | 33.3 | 15.2 |
| Female | | | | | | |
| 65 years and over | 8.7 | 14.1 | 5.5 | 4.2 | 30.8 | 8.7 |
| 65-74 years | 4.8 | 7.8 | 1.8 | 2.0 | 24.3 | 5.0 |
| 65-69 years | 4.2 | 6.4 | 1.4 | 1.3 | 21.8 | 4.0 |
| 70-74 years | 5.5 | 9.4 | 2.3 | 2.8 | 27.3 | 6.2 |
| 75-84 years | 10.5 | 18.4 | 6.8 | 4.8 | 36.4 | 10.5 |
| 75-79 years | 8.3 | 14.5 | 5.2 | 4.1 | 33.2 | 8.4 |
| 80-84 years | 14.0 | 24.7 | 9.3 | 6.0 | 41.7 | 14.0 |
| 85 years and over | 29.5 | 41.6 | 26.2 | 17.1 | 54.2 | 27.4 |

SOURCE: National Health Interview Survey, National Center for Health Statistics.

home management activities. Thus, they are at reduced risk of having health-related difficulties in their performance.

Help with personal care activities

Of elderly persons age 65 years and over living in the community, 1.6 million or 6 percent received help with bathing themselves (table 5). As noted previously, these numbers exclude persons who may have received assistance not related to health-related problems with bathing themselves. Five percent each received help getting outside and walking, and 4 percent got help dressing. The proportions who received assistance with transferring, using the toilet, and eating were 3, 2, and 1 percent, respectively. At the oldest ages, 85 years and over, the proportion of individuals receiving help with personal care increased sharply, reaching 21 percent each for bathing and getting outside, 15 percent for walking, and 13 percent for dressing.

Only 25 percent of the elderly individuals who had difficulty walking received help with that activity. (This proportion was estimated by comparing the percents who had difficulty and received help with walking.) In contrast, 70 percent of those who had difficulty dressing received help, as did roughly 60 percent each of persons who experienced difficulty

bathing and eating. The numbers of persons receiving help using the toilet and getting outside represented 52 and 56 percent, respectively, of those who had difficulty performing those activities. Thirty-five percent of elderly persons who had difficulty transferring received help with that activity. The proportion of persons in need of assistance who received help with personal care increased with age for each of the seven activities examined in this report. For example, of persons having difficulty bathing, 75 percent of those age 85 years and over received help, compared with 56 percent of those age 65-69 years.

Overall, 10 percent of persons age 65 years and over living in the community were functionally limited in the sense that they received help with one or more personal care activities (table 6). This proportion increased with age from 5 percent of individuals age 65-69 years to 31 percent of those age 85 years and over. Of persons age 65 years and over who had difficulty with one or more aspects of personal care, 42 percent received help with at least one activity.

There were no statistically significant differences by sex in the proportions of persons 65 years and over receiving help with dressing, eating, or using the toilet. When all ages 65 years and over were considered, women were significantly more likely than men to receive help bathing and transferring. However, these differences were a function of the different age

Table 4. Percent distribution of persons 65 years of age and over by number of home management activities that are difficult, according to sex and age: United States, 1984

| Sex and age | Number of home management activities that are difficult | | | | | |
|----------------------|---------------------------------------------------------|------|------|-----|-----|------|
| | Total | None | 1 | 2 | 3 | 4-6 |
| Both sexes | | | | | | |
| 65 years and over... | 100.0 | 73.1 | 14.3 | 4.3 | 2.4 | 6.0 |
| 65-74 years..... | 100.0 | 79.5 | 13.0 | 2.9 | 1.5 | 3.2 |
| 65-69 years..... | 100.0 | 81.9 | 11.5 | 2.5 | 1.3 | 2.8 |
| 70-74 years..... | 100.0 | 76.3 | 14.8 | 3.4 | 1.7 | 3.7 |
| 75-84 years..... | 100.0 | 67.0 | 16.6 | 5.8 | 3.2 | 7.5 |
| 75-79 years..... | 100.0 | 70.8 | 15.9 | 4.8 | 2.6 | 5.8 |
| 80-84 years..... | 100.0 | 60.0 | 17.9 | 7.5 | 4.1 | 10.6 |
| 85 years and over... | 100.0 | 44.8 | 15.2 | 9.3 | 6.6 | 24.2 |
| Male | | | | | | |
| 65 years and over... | 100.0 | 81.9 | 9.7 | 2.5 | 1.5 | 4.3 |
| 65-74 years..... | 100.0 | 85.8 | 8.6 | 1.9 | 1.1 | 2.7 |
| 65-69 years..... | 100.0 | 87.5 | 7.4 | 1.6 | 0.8 | 2.6 |
| 70-74 years..... | 100.0 | 83.5 | 10.1 | 2.1 | 1.4 | 2.8 |
| 75-84 years..... | 100.0 | 77.8 | 11.7 | 3.0 | 2.0 | 5.5 |
| 75-79 years..... | 100.0 | 80.8 | 10.3 | 2.2 | 1.9 | 4.7 |
| 80-84 years..... | 100.0 | 71.3 | 14.8 | 4.5 | 2.2 | 7.3 |
| 85 years and over... | 100.0 | 56.8 | 12.5 | 8.1 | 4.9 | 17.8 |
| Female | | | | | | |
| 65 years and over... | 100.0 | 67.0 | 17.4 | 5.4 | 3.0 | 7.2 |
| 65-74 years..... | 100.0 | 74.6 | 16.3 | 3.7 | 1.9 | 3.6 |
| 65-69 years..... | 100.0 | 77.4 | 14.9 | 3.1 | 1.8 | 2.9 |
| 70-74 years..... | 100.0 | 71.3 | 18.0 | 4.3 | 2.0 | 4.4 |
| 75-84 years..... | 100.0 | 60.3 | 19.6 | 7.5 | 3.9 | 8.7 |
| 75-79 years..... | 100.0 | 64.1 | 19.7 | 6.6 | 3.1 | 6.6 |
| 80-84 years..... | 100.0 | 54.2 | 19.4 | 9.1 | 5.1 | 12.2 |
| 85 years and over... | 100.0 | 39.5 | 16.4 | 9.8 | 7.4 | 27.0 |

NOTE: Figures may not add to 100.0 because of rounding.

SOURCE: National Health Interview Survey, National Center for Health Statistics.

structures for men and women and were not statistically significant within narrower age groups. Women were more likely than men to receive help walking within all 5-year age groups at age 75 years and over and to receive help getting outside within all age groups at age 70 years and over.

Of elderly persons who experienced difficulty bathing, dressing, eating, transferring, and using the toilet, the proportions receiving help with those activities were higher for men than women. For example, 77 percent of the men age 65 years and over who had difficulty dressing received help with that activity, compared with 65 percent of the women who had difficulty dressing. With respect to walking and getting outside, the situation was reversed, with women who had difficulty performing these activities more likely than men to receive help with them.

Help with home management activities

Of persons age 65 years and over living in the community, 5.1 million or 19 percent received help with heavy housework as a result of health-related problems performing that activity (table 7). This proportion increased with age, from 13 percent

of individuals age 65-69 years to 44 percent of those age 85 years and over. Smaller proportions of the elderly received health-related assistance with other aspects of household management. Eleven percent got help with shopping, 6 percent each with doing light housework and preparing meals, 5 percent with managing money, and 3 percent with using the telephone. For all these activities, the percent of individuals receiving help in their performance increased with age.

As shown in table 8, 22 percent of persons age 65 years and over received help in at least one home management activity, whereas 78 percent were independent in all activities. The proportion of individuals receiving help with at least one aspect of household management increased from 14 percent of persons age 65-69 years to 51 percent of those age 85 years and over.

The majority of older individuals who had difficulty with home management activities received help with those chores. Of persons age 65 years and over who experienced problems using the telephone, 62 percent received help with this activity. More than 80 percent of individuals who had difficulty preparing meals, shopping, managing money, and doing heavy and light housework received help with those aspects of their lives.

There were no statistically significant differences in the overall proportions of men and women age 65 years and over who received help managing money and using the telephone. When all ages 65 years and over were combined, women were more likely than men to get help with preparing meals and doing light housework; however, these differences were not significant within 5-year age categories. At all ages, however, women were more likely than men to receive help with heavy housework, and they more frequently got help with shopping within all 5-year age groups at age 70 years and over.

When only individuals who had difficulty with home management activities were considered, men got help with preparing meals and doing light and heavy housework more often than did women, while women were the more likely to get help using the telephone. Men and women in need of assistance with shopping and managing money were equally likely to get help with those activities.

Conclusion

When the prevalence of functional limitations was measured by the proportion of individuals who had any difficulty in performing personal care activities, about 23 percent (6 million) of the noninstitutionalized Americans 65 years and over were functionally limited. Whereas difficulty in performing a personal care activity may indicate some loss in the quality of life, it does not indicate, necessarily, a present or imminent need for health and social services. A better measure of that need is the proportion who receive help with a personal care activity, a subset of those who have difficulty with the activity. According to this measure of prevalence, about 2.5 million persons or 10 percent of all noninstitutionalized Americans 65 years and over were functionally limited.

If the prevalence of functional limitations is measured by the proportion of persons who experience any difficulty in performing home management activities, about 27 percent (7 million) of the noninstitutionalized Americans 65 years and

Table 5. Percent of persons 65 years of age and over who receive help performing selected personal care activities by sex and age: United States, 1984

| Sex and age | Personal care activity | | | | | | |
|------------------------|------------------------|----------|--------|--------------|---------|-----------------|--------------|
| | Bathing | Dressing | Eating | Transferring | Walking | Getting outside | Using toilet |
| Both sexes | | | | Percent | | | |
| 65 years and over..... | 6.0 | 4.3 | 1.1 | 2.8 | 4.7 | 5.3 | 2.2 |
| 65-74 years..... | 3.3 | 2.9 | 0.6 | 1.8 | 2.9 | 2.7 | 1.2 |
| 65-69 years..... | 2.9 | 2.4 | 0.6 | 1.5 | 2.7 | 2.4 | 1.1 |
| 70-74 years..... | 3.8 | 3.5 | 0.7 | 2.1 | 3.2 | 3.1 | 1.4 |
| 75-84 years..... | 7.7 | 5.1 | 1.5 | 3.6 | 5.7 | 6.9 | 2.9 |
| 75-79 years..... | 5.9 | 4.4 | 1.3 | 2.9 | 4.6 | 5.4 | 2.3 |
| 80-84 years..... | 10.9 | 6.4 | 1.9 | 4.7 | 7.8 | 9.6 | 3.8 |
| 85 years and over..... | 21.0 | 13.3 | 2.7 | 9.0 | 15.3 | 21.2 | 8.2 |
| Male | | | | | | | |
| 65 years and over..... | 5.1 | 4.5 | 1.2 | 2.3 | 3.4 | 3.2 | 1.9 |
| 65-74 years..... | 3.3 | 3.3 | 0.9 | 1.7 | 2.8 | 2.2 | 1.4 |
| 65-69 years..... | 3.3 | 2.9 | 0.9 | 1.9 | 2.8 | 2.3 | 1.4 |
| 70-74 years..... | 3.3 | 3.8 | 0.8 | 1.6 | 2.8 | 2.1 | 1.3 |
| 75-84 years..... | 6.6 | 5.7 | 1.8 | 2.7 | 3.7 | 3.7 | 2.3 |
| 75-79 years..... | 5.5 | 5.4 | 1.6 | 2.3 | 3.0 | 3.3 | 2.1 |
| 80-84 years..... | 8.9 | 6.2 | 2.1 | 3.7 | 5.2 | 4.6 | 2.7 |
| 85 years and over..... | 18.4 | 12.6 | 2.4 | 6.7 | 9.0 | 11.8 | 5.6 |
| Female | | | | | | | |
| 65 years and over..... | 6.5 | 4.3 | 1.0 | 3.2 | 5.5 | 6.8 | 2.5 |
| 65-74 years..... | 3.3 | 2.7 | 0.5 | 1.8 | 2.9 | 3.1 | 1.1 |
| 65-69 years..... | 2.6 | 2.1 | 0.4 | 1.2 | 2.6 | 2.5 | 0.8 |
| 70-74 years..... | 4.2 | 3.4 | 0.6 | 2.5 | 3.4 | 3.8 | 1.5 |
| 75-84 years..... | 8.4 | 4.7 | 1.4 | 4.1 | 6.9 | 8.8 | 3.2 |
| 75-79 years..... | 6.2 | 3.7 | 1.2 | 3.4 | 5.6 | 6.8 | 2.5 |
| 80-84 years..... | 12.0 | 6.5 | 1.8 | 5.2 | 9.0 | 12.1 | 4.4 |
| 85 years and over..... | 22.1 | 13.5 | 2.9 | 9.9 | 18.0 | 25.4 | 9.3 |

SOURCE: National Health Interview Survey, National Center for Health Statistics.

over were functionally limited. The proportion of noninstitutionalized Americans 65 years and over who received help with a home management activity was 22 percent, or about 5.9 million persons. If doing heavy housework had been eliminated from the list, the overall prevalence of functional limitation would have been substantially reduced. Regardless of which measure of functional limitation was used, its prevalence increased with age. Women were more likely than men to be limited in these activities, in part because of their older age distribution. Also, because men do not perform many of these activities for cultural reasons, they were at reduced risk of having difficulty or receiving health-related help with them.

Most older persons who had difficulty with various aspects

of home management received help with those activities. They were slightly less likely to receive assistance with personal care activities that posed problems for them, especially walking and getting into and out of chairs.

The ability or inability of the elderly to get help with difficult activities may be an important factor in determining which individuals are able to remain in the community and which must enter nursing homes or other institutions for needed care and assistance. Comparison of the data presented in this report with data for the institutionalized elderly may prove helpful in developing programs to aid older persons in their attempts to remain active and independent for as long as possible.

Table 6. Percent distribution of persons 65 years of age and over by number of personal care activities for which help is received, according to sex and age: United States, 1984

| <i>Sex and age</i> | <i>Number of personal care activities for which help is received</i> | | | | | |
|------------------------|----------------------------------------------------------------------|-------------|----------|----------|----------|------------|
| | <i>Total</i> | <i>None</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4-7</i> |
| Both sexes | | | | | | |
| | | | Percent | | | |
| 65 years and over..... | 100.0 | 90.4 | 3.9 | 1.9 | 1.1 | 2.8 |
| 65-74 years..... | 100.0 | 94.0 | 2.8 | 1.1 | 0.6 | 1.5 |
| 65-69 years..... | 100.0 | 94.7 | 2.4 | 1.0 | 0.7 | 1.2 |
| 70-74 years..... | 100.0 | 93.2 | 3.2 | 1.2 | 0.6 | 1.9 |
| 75-84 years..... | 100.0 | 88.1 | 4.5 | 2.4 | 1.5 | 3.5 |
| 75-79 years..... | 100.0 | 90.5 | 3.3 | 2.0 | 1.4 | 2.8 |
| 80-84 years..... | 100.0 | 83.6 | 6.7 | 3.2 | 1.7 | 4.8 |
| 85 years and over..... | 100.0 | 68.9 | 10.9 | 6.2 | 3.1 | 10.8 |
| Male | | | | | | |
| 65 years and over..... | 100.0 | 92.2 | 3.3 | 1.4 | 0.8 | 2.3 |
| 65-74 years..... | 100.0 | 94.2 | 2.6 | 1.0 | 0.5 | 1.6 |
| 65-69 years..... | 100.0 | 94.6 | 2.3 | 0.9 | 0.5 | 1.7 |
| 70-74 years..... | 100.0 | 93.7 | 3.1 | 1.2 | 0.6 | 1.5 |
| 75-84 years..... | 100.0 | 90.6 | 3.6 | 1.8 | 1.0 | 3.0 |
| 75-79 years..... | 100.0 | 91.5 | 3.1 | 1.9 | 1.1 | 2.3 |
| 80-84 years..... | 100.0 | 88.6 | 4.7 | 1.6 | 0.7 | 4.4 |
| 85 years and over..... | 100.0 | 76.6 | 9.0 | 4.1 | 2.4 | 7.9 |
| Female | | | | | | |
| 65 years and over..... | 100.0 | 89.1 | 4.3 | 2.2 | 1.3 | 3.1 |
| 65-74 years..... | 100.0 | 93.9 | 2.8 | 1.1 | 0.7 | 1.5 |
| 65-69 years..... | 100.0 | 94.8 | 2.5 | 1.0 | 0.8 | 0.9 |
| 70-74 years..... | 100.0 | 92.8 | 3.3 | 1.2 | 0.6 | 2.2 |
| 75-84 years..... | 100.0 | 86.5 | 5.1 | 2.7 | 1.9 | 3.8 |
| 75-79 years..... | 100.0 | 89.8 | 3.4 | 2.0 | 1.6 | 3.2 |
| 80-84 years..... | 100.0 | 81.0 | 7.8 | 4.0 | 2.3 | 4.9 |
| 85 years and over..... | 100.0 | 65.5 | 11.7 | 7.2 | 3.5 | 12.1 |

NOTE: Figures may not add to 100.0 because of rounding.

SOURCE: National Health Interview Survey, National Center for Health Statistics.

Table 7. Percent of persons 65 years of age and over who receive help performing selected home management activities by sex and age: United States, 1984

| <i>Sex and age</i> | <i>Home management activity</i> | | | | | |
|------------------------|---------------------------------|-----------------|-----------------------|------------------------|------------------------------|------------------------------|
| | <i>Preparing meals</i> | <i>Shopping</i> | <i>Managing money</i> | <i>Using telephone</i> | <i>Doing heavy housework</i> | <i>Doing light housework</i> |
| Both sexes | | | | | | |
| Percent | | | | | | |
| 65 years and over..... | 6.0 | 10.5 | 4.8 | 3.0 | 19.3 | 6.2 |
| 65-74 years..... | 3.3 | 5.8 | 2.1 | 1.5 | 14.5 | 3.6 |
| 65-69 years..... | 2.9 | 4.9 | 1.7 | 1.2 | 12.8 | 3.2 |
| 70-74 years..... | 3.8 | 6.9 | 2.5 | 1.9 | 16.6 | 4.2 |
| 75-84 years..... | 7.1 | 14.1 | 5.8 | 3.9 | 23.1 | 7.6 |
| 75-79 years..... | 5.9 | 10.9 | 4.8 | 3.3 | 20.5 | 6.0 |
| 80-84 years..... | 10.9 | 19.8 | 7.5 | 5.0 | 27.8 | 10.4 |
| 85 years and over..... | 23.7 | 35.9 | 23.5 | 11.7 | 44.1 | 21.6 |
| Male | | | | | | |
| 65 years and over..... | 4.4 | 6.9 | 4.2 | 3.3 | 11.4 | 4.5 |
| 65-74 years..... | 2.8 | 4.3 | 2.6 | 2.0 | 9.3 | 3.2 |
| 65-69 years..... | 2.4 | 3.9 | 2.3 | 1.7 | 8.4 | 3.3 |
| 70-74 years..... | 3.4 | 4.9 | 2.9 | 2.4 | 10.4 | 3.1 |
| 75-84 years..... | 5.4 | 8.9 | 5.0 | 5.0 | 12.7 | 5.7 |
| 75-79 years..... | 4.6 | 7.1 | 4.9 | 4.3 | 11.4 | 4.7 |
| 80-84 years..... | 7.0 | 12.7 | 5.2 | 6.5 | 15.5 | 7.8 |
| 85 years and over..... | 17.7 | 26.4 | 19.0 | 10.9 | 30.0 | 14.4 |
| Female | | | | | | |
| 65 years and over..... | 7.1 | 13.0 | 5.2 | 2.7 | 24.7 | 7.3 |
| 65-74 years..... | 3.7 | 6.9 | 1.7 | 1.1 | 18.5 | 4.0 |
| 65-69 years..... | 3.3 | 5.7 | 1.3 | 0.7 | 16.3 | 3.1 |
| 70-74 years..... | 4.1 | 8.2 | 2.1 | 1.5 | 21.0 | 5.0 |
| 75-84 years..... | 8.2 | 17.2 | 6.3 | 3.2 | 29.4 | 8.7 |
| 75-79 years..... | 6.6 | 13.4 | 4.8 | 2.7 | 26.6 | 6.9 |
| 80-84 years..... | 10.8 | 23.4 | 8.7 | 4.2 | 34.0 | 11.7 |
| 85 years and over..... | 26.3 | 40.1 | 25.6 | 12.1 | 50.3 | 24.8 |

SOURCE: National Health Interview Survey, National Center for Health Statistics.

Table 8. Percent distribution of persons 65 years of age and over by number of home management activities for which help is received, according to sex and age: United States, 1984

| <i>Sex and age</i> | <i>Number of home management activities for which help is received</i> | | | | | |
|------------------------|------------------------------------------------------------------------|-------------|----------|----------|----------|------------|
| | <i>Total</i> | <i>None</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4-6</i> |
| Both sexes | | | | | | |
| | | | Percent | | | |
| 65 years and over..... | 100.0 | 77.8 | 11.4 | 3.5 | 2.4 | 5.0 |
| 65-74 years..... | 100.0 | 83.9 | 9.8 | 2.3 | 1.6 | 2.4 |
| 65-69 years..... | 100.0 | 85.9 | 8.6 | 2.0 | 1.5 | 2.1 |
| 70-74 years..... | 100.0 | 81.4 | 11.3 | 2.7 | 1.7 | 2.9 |
| 75-84 years..... | 100.0 | 72.4 | 13.9 | 4.7 | 3.0 | 6.0 |
| 75-79 years..... | 100.0 | 75.7 | 13.4 | 3.8 | 2.3 | 4.8 |
| 80-84 years..... | 100.0 | 66.3 | 14.8 | 6.4 | 4.3 | 8.2 |
| 85 years and over..... | 100.0 | 48.6 | 14.6 | 8.7 | 6.2 | 22.0 |
| Male | | | | | | |
| 65 years and over..... | 100.0 | 85.4 | 7.2 | 2.0 | 1.6 | 3.8 |
| 65-74 years..... | 100.0 | 88.6 | 6.5 | 1.5 | 1.2 | 2.3 |
| 65-69 years..... | 100.0 | 89.7 | 5.8 | 1.4 | 1.0 | 2.2 |
| 70-74 years..... | 100.0 | 87.1 | 7.4 | 1.6 | 1.4 | 2.5 |
| 75-84 years..... | 100.0 | 82.6 | 8.4 | 2.3 | 1.9 | 4.8 |
| 75-79 years..... | 100.0 | 84.9 | 7.4 | 1.8 | 2.0 | 4.0 |
| 80-84 years..... | 100.0 | 77.9 | 10.5 | 3.5 | 1.7 | 6.4 |
| 85 years and over..... | 100.0 | 61.4 | 10.4 | 7.2 | 4.5 | 16.5 |
| Female | | | | | | |
| 65 years and over..... | 100.0 | 72.5 | 14.3 | 4.6 | 2.9 | 5.8 |
| 65-74 years..... | 100.0 | 80.3 | 12.3 | 3.0 | 1.9 | 2.5 |
| 65-69 years..... | 100.0 | 82.8 | 10.9 | 2.5 | 1.8 | 2.0 |
| 70-74 years..... | 100.0 | 77.4 | 14.0 | 3.5 | 1.9 | 3.2 |
| 75-84 years..... | 100.0 | 66.1 | 17.2 | 6.2 | 3.7 | 6.8 |
| 75-79 years..... | 100.0 | 69.6 | 17.4 | 5.2 | 2.5 | 5.3 |
| 80-84 years..... | 100.0 | 60.3 | 17.0 | 7.9 | 5.6 | 9.2 |
| 85 years and over..... | 100.0 | 42.8 | 16.5 | 9.4 | 6.9 | 24.4 |

NOTE: Figures may not add to 100.0 because of rounding.

SOURCE: National Health Interview Survey, National Center for Health Statistics.

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Technical notes

Data presented in this report were obtained from household interviews of the 1984 National Health Interview Survey (NHIS). These interviews were conducted among a probability sample of the civilian noninstitutionalized population of the United States. During 1984, approximately 105,000 persons living in about 41,000 households were included in the sample. The total noninterview rate for the NHIS was 3.6 percent.

The Supplement on Aging (SOA) was designed to be administered to all individuals of age 65 years and over who were included in the 1984 NHIS sample, and to one-half of the individuals of age 55–64 years. Interviewers strongly encouraged the people selected to answer the SOA questions to respond for themselves. As a result, 90 percent of the responses to the SOA were completely self-responses. A negative result of the added emphasis on self-response in the SOA was that no information was collected for some individuals even though other household members had provided information for them on the core NHIS questionnaire. Fortunately, this defect occurred infrequently; the effective response rate for the SOA was 93 percent of the NHIS sample. Interviews were conducted for 4,651 persons of age 55–64 years and 11,497 persons of age 65 years and over.

This analysis was restricted to persons of age 65 years and over. The 11,497 NHIS sample cases represented a national population of 26.4 million persons. The distribution of this population by sex and age is shown in table I.

The estimates in this report are based on a sample rather than the entire population of age 65 years and over. Therefore, the estimates are subject to sampling error. In addition, the complex sample design of the NHIS has the effect of making the sampling errors larger than they would be had a simple random sample of equal size been used. Standard errors for percents (x/y) where the denominator (y) is all men, women,

or persons of age 65–74 years or 65 years and over can be calculated using this formula:

$$SE\left(\frac{x}{y}\right) = \frac{x}{y} - 0.0000184 + \frac{3,691.285}{x}$$

Standard errors for percents (x/y) where the denominator (y) is some other population group, for example, all persons of age 85 years and over, can be calculated using this formula:

$$SE\left(\frac{x}{y}\right) = \frac{3,691.285x/y(1 - x/y)}{y}$$

The values of y are presented in tables 2, 4, 6, and 8. Values of x can be derived by multiplying the y values by the percents presented in tables 1, 3, 5, and 7.

To better understand the limitations of the estimates presented in this report, data users are encouraged to familiarize themselves with the survey design, the method used in estimation, and the general qualifications of the data, which are described in appendix I of *Current Estimates From the National Health Interview Survey: United States, 1984*.¹¹ The questionnaires for the 1984 core survey and the SOA are presented in appendix III of the report.

Also important for interpreting the data presented in this report is a thorough understanding of what this, or any other, cross-sectional survey can provide. There are two issues—one important for any cross-sectional analysis and the other for analysis of older people.

First, the NHIS is a point-in-time study. Associations at one point in time do not necessarily indicate causality. The differences among the age groups, for example, could be the result of aging or, alternatively, they could be the result of different cohorts moving through time. Based on external knowledge, a difference in the proportions of persons experiencing difficulty with a specific activity could be interpreted as the result of aging, but the data from a cross-sectional survey may not enable one to make that distinction.

Second, this is a study of people who were living in the community at the time they, or proxy respondents, were interviewed. All of the elderly people who had left the population through institutionalization are excluded. The exclusion of these individuals, who may be expected to have demonstrated a different level of functional limitation than the SOA respondents, creates a bias in the estimates that must be borne in mind when interpreting the survey results.

Table I. Estimated number of persons 65 years of age and over by sex and age: United States, 1984

| Age | All persons | Sex | |
|-----------------------------|-------------|--------|--------|
| | | Male | Female |
| Number in thousands | | | |
| 65 years and over | 26,433 | 10,787 | 15,645 |
| 65–74 years | 16,288 | 7,075 | 9,213 |
| 65–69 years | 9,088 | 4,081 | 5,007 |
| 70–74 years | 7,200 | 2,994 | 4,206 |
| 75–84 years | 8,249 | 3,128 | 5,121 |
| 75–79 years | 5,320 | 2,137 | 3,183 |
| 80–84 years | 2,929 | 991 | 1,938 |
| 85 years and over | 1,897 | 585 | 1,312 |

SOURCE: National Health Interview Survey, National Center for Health Statistics.

NOTE: A list of references follows the text.

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