

A profile of functionally impaired elderly persons living in the community

by Candace L. Macken

The Health Care Financing Administration, in cooperation with other agencies of the Department of Health and Human Services, conducted surveys in 1982 and 1984 designed to develop a better understanding of the number and circumstances of functionally impaired elderly persons living in the community. This report is based on data from the 1982 Long-Term Care Survey. There were approximately 5 million functionally impaired elderly persons living in the community in 1982. The data

show that functionally impaired persons in the community are older, are more often female, have lower incomes, and have a larger proportion of black people than the general elderly population. The data also provide baseline information on what functional impairments are prevalent among them, what means they use to cope with the limitations, and from whom they receive help. The baseline data gathered in 1982 will be supplemented by longitudinal data gathered in the 1984 Long-Term Care Survey.

Introduction

National data that provide a profile of functionally impaired aged persons living in the community are presented in this article. The data include demographic and socioeconomic characteristics of these persons and their functional capabilities.

The data were obtained during the 1982 Long-Term Care (LTC) Survey that was cosponsored by the Health Care Financing Administration (HCFA) and the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services. The 1982 LTC Survey was the first of a coordinated pair of surveys designed to improve our understanding of the dynamics of the institutionalization of elderly persons. A second LTC Survey was conducted in 1984 that was cosponsored by HCFA and the National Center for Health Services Research and Health Care Technology Assessment. This survey followed up on the 1982 sample and expanded the scope of the survey of aged persons to include those in nursing homes. This is the first time that such a longitudinal tracking of aged persons from community to nursing homes has been conducted. The findings of the two surveys will permit analyses of the factors that differentiate functionally impaired aged persons living in the community from those with similar impairments living in nursing homes. Findings from the 1982 Survey are presented in this article.

The support of these surveys by constituent agencies of the Department of Health and Human Services reflects concern about the long-range effects on public expenditures of providing for the long-term care needs of the aged. The growth in the numbers of the aged, their increasing longevity, and the accompanying rise in the number of persons with impairments in their ability to carry out the normal activities of everyday life will have significant impact on the social and financial resources required to meet their physical and social needs.

The impact on these trends is already apparent. The costs of long-term care are such that if aged persons begin institutional residence financially able to pay for their own care, the probability of early exhaustion of financial resources is substantial. Increasingly, recourse to public programs becomes necessary. Medicaid has become the primary public program that pays for the long-term care of the indigent aged, including persons who become indigent trying to meet the costs of long-term care. Thus, many Medicaid beneficiaries were formerly part of the middle class. In 1970, \$1.1 billion, or 59 percent of total Medicaid expenditures for the aged, was paid to nursing homes¹ (Fisher, 1980). By 1984, \$10.4 billion, or 68 percent of the Medicaid budget for the elderly, was spent for institutional care (Waldo and Lazenby, 1984).

Approximately 95 percent of the aged are covered by Medicare. Medicare pays for most of the expenses incurred by the aged for acute hospital and physician services. Although Medicare pays for up to 100 days of care in a skilled nursing facility during a spell of illness, it does not pay for care in a nursing home when skilled nursing care, as defined in regulations, is no longer required. If continued stay in a nursing home is required for intermediate levels of care, the costs must be borne by the patient. When patients are indigent and are unable to pay for their care, the patient may qualify for coverage under Medicaid. Medicaid covers costs for as long as the care is needed. It is for this reason that nursing home expenditures are so large a part of the Medicaid program.

A factor in the rising expenditures for long-term care has been the changing age composition of the American population. The rising proportion of persons 65 years of age or over is well known. Of greater significance, in terms of its implications for long-term care needs and expenditures, has been the rapid rate of increase in the numbers of persons 85 years of age or over, the population segment most

Reprint requests: Candace L. Macken, P.O. Box 221, College Park, Maryland 20740.

¹Nursing homes include intermediate care facilities, intermediate care facilities for the mentally retarded, and skilled nursing facilities.

immediately faced by the need for long-term care services from others.

The age trends are striking. In 1970, 20 million Americans were 65 years of age or over. By 1980, this number had increased almost 28 percent to 25.5 million, and the number of persons in the national population had risen about 12 percent. During the period that the number of persons 65 years of age or over increased by 28 percent (1970-1980), Medicare enrollees 85 years of age or over increased more than 60 percent, from 1.5 million to slightly more than 2.4 million. Also, the number of Medicare enrollees 85 years of age or over increased faster than the number for any other age group, including the age group 30-34 years. The latter group, which in 1980 represented the cohort born at the peak of the post-war baby boom, increased by 54 percent during this period.

Similar trends are apparent from institutional statistics. It was found during the 1970 census that 796,000 persons 65 years of age or over were in institutions (U.S. Bureau of the Census, 1973). By the 1980 census, the number of institutionalized persons 65 years of age or over had increased to 1.2 million (U.S. Bureau of the Census, 1984a). During this period, the number of persons 85 years of age or over in nursing homes increased from 249,000 in 1970 to almost 488,000 in 1980. Persons 85 years of age or over accounted for about 60 percent of the increase in the aged nursing home population during the 10-year period.

Population projections estimate that by 1990 the number of persons 85 years of age or over will rise to 3.5 million. By 2025, when the youngest baby boom cohort will be 65, the number of persons 85 years of age or over is expected to be about 7.7 million. These population projections have already affected the planning of social policies. One notable example is the provision of the Social Security Amendments of 1983 that increased the base age for retirement under social security to 67 years as of the year 2022. A key consideration in the raising of the base age was the increased longevity of Americans and the years of retirement. If the present relationship between use, expenditures, and population trends remain unchanged, the cost of nursing home services can be expected to become an increasingly burdensome expenditure for Federal, State, or local governments. This has generated major efforts to explore alternatives to providing long-term care in an institutional setting. One that has begun to be explored is the maintenance of individuals in need of long-term care in the community for as long as possible.

The interest in the functionally impaired living in the community is because they comprise a cohort from which new nursing home residents are likely to come. Therefore, to the extent that our understanding of the factors that promote the continued stay of these persons in the community can improve, the more likely it is that appropriate social policies could be initiated to support that goal.

Three benefits are readily apparent from helping aging persons remain in the community as long as possible. First, remaining in the community has the positive social and psychological effects of encouraging a maximum amount of independence despite functional limitations. Second, up to a certain point, community living is generally a less expensive alternative to institutionalization. Not only does it allow individuals to support themselves using personal resources longer, it also delays the need for use of public funds for support. Eventually, however, the point may be reached where the services required to support continued maintenance in the community (e.g., day care, meals on wheels, home nursing services) necessitate consideration of nursing home placement as a lower-cost alternative for the family, because many of the services are not covered by public programs. However, until this point is reached, the need to resort to nursing home services paid for by public programs can be deferred. Third, the reduced need for institutionalization could also contain the payments for capital expenditures made by the Government for the construction of nursing homes through the inclusion of depreciation in the costs of services.

It is expected that the findings from the 1982 and 1984 Surveys will provide enriched insights into the process that leads to nursing home placement and the factors that prevent premature placements and support continued stay in the community. A number of factors influence the ability of an individual to stay in a community setting. Marital status and living arrangements have been thought to be strong indicators of the feasibility of maintaining a functionally impaired person in the community; each represents the potential stock of informal caregivers that can perform personal care or basic chore services. Functional capability and the need for personal services may be the prime indicators of whether an individual can be maintained in the home. Another indicator, income, represents a measure of an individual's or family's ability to pay for formal services or for adaptations of features in the home. The 1982 Survey was the first effort focused on ascertaining the size and characteristics of this group, and these indicators for the 1982 sample are described in this article.

There have been earlier studies dedicated to learning about which of these factors bear the strongest relation to the ability of an individual with functional impairments to remain in the community. One of the stumbling blocks in these efforts has been the lack of nationally representative data collected at the level of detail necessary to make statistically reliable analyses on individuals with functional impairments. Nationally based studies such as the National Health Interview Survey of the National Center for Health Statistics or the Survey of Income and Program Participation of the U.S. Bureau of the Census do not focus on the functionally impaired elderly in particular. As a result, the subset of functionally limited elderly found during the conduct of these

surveys is not large enough to carry out detailed analyses. Although State-specific studies do not preclude the provision of indicators of what characteristics seem to be instrumental in allowing functionally impaired persons to remain in the community, they are not broad-based enough to make decisions affecting the entire population 65 years of age or over.

Source of data

The 1982 LTC Survey was designed to produce a data base that would overcome the limitations mentioned earlier. Its target population was the functionally impaired aged living in the community; its sampling frame was a national list of Medicare enrollees.

The 1982 LTC Survey was conducted by the U.S. Bureau of the Census, under the cosponsorship of the Health Care Financing Administration and the Office of the Assistant Secretary for Planning and Evaluation, between June and October of that year. Because there was no existing sample frame that readily identified the functionally impaired aged living in the community, a sample of persons drawn from the Medicare enrollment files was screened by telephone to determine whether any had problems performing any of a set of activities of daily living (ADL's) or of instrumental activities of daily living (IADL's) for a period of at least 3 months. The set of activities incorporated into these scales produce a valid and reliable assessment of a person's overall functional capacity. The ADL's are a series of activities that are vital to independent personal functioning. They include activities such as eating, dressing, and bathing. The IADL's are a series of activities that represent the ability to live alone. They include activities such as doing housework, preparing meals, and grocery shopping among others. Partial or complete inability to carry out any of these activities without the use of special equipment or personal assistance was defined as a functional impairment.

The LTC sample of persons selected from the Medicare files covered all 50 States and the District of Columbia. Proportional representation of the groups of interest was achieved by stratifying the sample according to characteristics such as census geographic region, age, race, and original reason for Medicare entitlement. The resulting screening sample consisted of about 36,000 persons.

This large screening sample was chosen initially because 6,000 detailed interviews were desired and the exact rate at which persons would qualify for the detailed interview was unknown. This was primarily because the LTC definition of impairment was not identical to that used in previous surveys.

Methods and procedures

Each person in the screening sample was contacted by telephone to determine whether he or she had problems or expected to have problems performing

any of a set of activities known as the activities of daily living (ADL's) or any of another set of activities known as the instrumental activities of daily living (IADL's) for a period of at least 3 months. Persons who had long-term problems performing the ADL's or IADL's were scheduled for the second phase of the LTC Survey. Persons without problems were not contacted again. Persons found to be in institutions in either phase of the 1982 Survey were not contacted again.

Approximately 6,400 of the 36,000 persons originally screened were determined to have long-term problems with at least one of the ADL's or the IADL's and were interviewed by a personal visit in the second phase of the Survey. There were two data gathering instruments for the second phase: a control card requiring information on housing characteristics, on household composition, on the children of the sample person not living in the household, and on paid and unpaid persons ("helpers") who provided care to the sample person; and a detailed questionnaire, requiring information on the extent to which the sample person had problems performing the ADL's and IADL's, on the type of care provided by the helpers, on medical expenses, on income, and on other aspects that would affect the sample person's ability to remain in the noninstitutionalized community. A section of the detailed questionnaire consisted of a battery of 10 questions constituting the Short Portable Mental Status Questionnaire. This section was designed to measure the respondent's cognitive functioning. Where the respondent was a proxy, the mental status questionnaire was not administered. Approximately 26 percent of the interviews were conducted with proxies. Reasons necessitating the administration of the questionnaire to proxies were as follows:

- Sample persons were absent at time of interview.
- They were physically or mentally unable to participate in interview.
- They had difficulty with the English language.
- They had speech or hearing problems. A person could be accepted as a proxy for the sample person if the respondent was 15 years of age or over and was knowledgeable about the sample person's health care needs.²

Summary of tables

The data in the tables are essentially descriptive and are intended to convey an overview of the physical and cognitive limitations of functionally impaired persons living in the community and of the source of assistance that support continued community residence. Data have been rounded to the nearest

²The technical note pertaining to the 1982 LTC Survey provides additional details about the sampling and estimation procedures used, including reliability of estimates tables. It is available from the author on request.

percentage point when discussed in the text. A list of the tables and their contents follow:

- Table 1. The number and percent distribution of aged Medicare enrollees with ADL and/or IADL functional limitations.
- Table 2. The percent distribution of functionally impaired elderly by specified numbers of ADL limitations.
- Table 3. The percent distribution of functionally impaired elderly with specific types of ADL limitations.
- Table 4. The percent distribution of functionally impaired elderly with continence problems.
- Table 5. The percent distribution of functionally impaired elderly persons by specified numbers of IADL limitations.
- Table 6. The percent of functionally impaired elderly persons with specific types of IADL limitations.
- Table 7. The percent distribution of functionally impaired elderly persons by level of cognitive impairment.
- Table 8. The percent distribution of functionally impaired elderly persons by marital status.
- Table 9. The percent distribution of functionally impaired elderly persons by living arrangement.
- Table 10. The percent distribution of functionally impaired elderly persons by type of living quarters occupied.
- Table 11. The percent of functionally impaired elderly persons by special features in the homes that could aid ADL functioning.
- Table 12. The percent of functionally impaired elderly persons without such features in the home by special features identified as being potentially useful.
- Table 13. The percent distribution of functionally impaired elderly persons by family income.

Demographic characteristics

Data on age, race, and sex of the functionally impaired aged living in the community are presented in Table 1. In order to collect data on race, survey respondents were asked to classify themselves into one of five racial categories: white; black; Asian or Pacific islander; American Indian, Eskimo, Aleut; or other. The latter four groups are included under the all other category in Table 1. This was done to permit comparability with race data taken from the Medicare enrollment files. In subsequent tables, race data are shown only for white and black persons. The sample for the other race categories was too small to permit separate estimates.

The first two columns of Table 1 refer to 1982 mid-period Medicare enrollment; the next three columns refer to 1982 LTC Survey data for functionally impaired aged Medicare enrollees. The fifth column shows functionally impaired elderly persons as a percent of the Medicare enrollment in the particular demographic category.

During the 1982 Survey, it was determined that there were about 5 million functionally impaired Medicare enrollees living in the community, about 19 percent of the total Medicare enrollment. This proportion is similar to that found by Nagi (1976). Nagi found that 17 percent of aged persons needed assistance in independent living or personal care. This small difference may reflect either the different years in which the two studies were conducted or sampling variation. Nagi's study focused on persons 18 years of age or over, and a detailed analysis of the characteristics of the aged was not carried out.

The criterion used during the 1982 Survey to define the existence of a functional limitation appears to account for the difference of this finding from that found in some other surveys. In the National Health Interview Survey (NHIS), for example, the percent of functionally limited aged persons living in the community was about 9 percent (Feller, 1983). One of the main factors contributing to this difference is that the LTC Survey screened for problems that lasted or were expected to last at least 3 months before or after the date of the interview, but the NHIS screened for problems that existed at least 3 months prior to the week of interview. If a person's problems lasted less than 3 months prior to the week of interview, even though they were expected to last 3 months altogether, the person was excluded from the NHIS count of functionally impaired persons.

During the 1982 Survey, it was found that the percent of persons who were functionally impaired increased at each age interval—rising to 35 percent of persons 85 years of age or over. As can be derived from Table 1, the median age of the functionally impaired was 77 years compared with 73 years for all Medicare enrollees. A greater proportion of persons who were not white than of those who were, were functionally impaired at each age interval. The median age of functionally impaired white persons was 77 years compared with 75 years for all other races. Overall, 29 percent of persons who were of other races were functionally impaired compared with 19 percent of white persons. Among persons living in the community, functional impairments appeared more widespread among elderly persons of all races other than white.

The rates of impairment among white females were slightly higher than those for white males across all age categories. Overall, the rate for aged white females was 21 percent compared with 17 percent for white males. Among other races, the difference in the rate for impairment between females and males was wider than that for white males and females, with 33 percent of females and 24 percent of males of other races reporting impairments.³

³The tables in this article do not show age-sex or age-race breakdowns, although such breakdowns are sometimes referred to in the text when they are deemed noteworthy. In fact, large differences by race and sex are not usually seen as often as differences by age. Differences by age-sex or age-race exhibit trends similar to those by age of the total population. Tables showing age-sex and age-race are available on request from the author.

Table 1

Number and percent distribution of Medicare enrollees and of functionally impaired elderly persons, with functionally impaired persons as a percent of the Medicare population, by age, sex, and race: 1982

Age, sex, and race	Total Medicare enrollment as of July 1, 1982		Persons with functional impairments		
	Number in thousands	Percent distribution	Number in thousands	Percent distribution	As a percent of Medicare population
Total	26,539.9	100.0	5,073.9	100.0	19.1
Age					
65-69 years	8,652.1	32.6	1,108.5	21.8	12.8
70-74 years	7,021.6	26.5	1,108.2	21.8	15.8
75-79 years	5,063.9	19.1	1,066.0	21.0	21.1
80-84 years	3,184.9	12.0	885.5	17.5	27.8
85 years or over	2,617.4	9.9	905.7	17.9	34.5
Sex					
Male	10,652.8	40.1	1,822.5	35.9	17.1
Female	15,887.4	59.9	3,251.5	64.1	20.6
Race					
White	¹ 23,396.5	² 88.2	4,377.9	86.3	18.7
All other ¹	2,371.5	² 8.9	696.1	13.7	28.5

¹Persons of unknown race are not included.

²Based on total Medicare enrollment which includes persons of unknown race.

The increase in the proportion of functionally impaired persons at the upper limit of the age scale, shown in Table 1, highlights the problem presented by the growing proportion of persons 85 years of age or over. Recent U.S. Bureau of the Census (1982) estimates show that about 1.1 percent of the total U.S. population is 85 years of age or over and that the percent is expected to rise to about 5.2 percent by 2050. Because persons in this age category currently represent the group with the largest proportion of persons with functional impairments, and the total number of persons in this age group is expected to increase, it can then be expected that the number of aged persons with functional impairments will increase in absolute terms over time.

Functional limitations

Data on the number of functional limitations among aged persons living in the community who reported any limitation of at least 3-months duration are shown in Tables 2-4. Persons were asked about the degree to which any of the activities of daily living (ADL's) could be performed. The ADL's are comprised of the following:

- Bathing.
- Dressing.
- Getting to the bathroom or using the toilet.
- Getting in or out of bed.
- Getting around outside.
- Eating.
- Continence.

The questions were designed to cover the continuum from total independence in performing an activity (i.e., needing no assistance to perform an activity) to

total dependence (i.e., not being able to perform the activity at all).

Among the 5 million aged persons living in the community who reported a limitation in ADL's or instrumental activities of daily living (IADL's) about one-third reported no ADL limitation (Table 2). The absence of a limitation in ADL's decreased with age and the existence of multiple limitations increased with age. This pattern was more pronounced at the younger ages among females than among males. Only about 36 percent of the females had no ADL limitations at 65-69 years of age, and about 44 percent of the males had no ADL limitations at 65-69 years of age. The differences narrow as females and males grow older, however. For persons 85 years of age or over, 21 percent of the females and 25 percent of the males had no problems. The data point to the greater need for assistance by females and the greater likelihood of females being institutionalized. This is reflected in the sex distribution among institutionalized persons, of which about 70 percent were females. Among institutionalized persons 65 years of age or over, 73 percent were females (U.S. Bureau of the Census, 1984a). This sex difference will be discussed again in relation to the marital status and living arrangements of elderly females.

The degree of dependency in each of the ADL's by age, race, and sex is shown in Tables 3 and 4. As shown in earlier studies by Katz and Akpom (1976), loss of independence is likely to occur most often in bathing and least often in eating. The findings of the 1982 LTC Survey are consistent with this finding, 42 and 6 percent, respectively.

Except for dressing and eating, a smaller proportion of aged males than of aged females in the community reported functional limitations in ADL's. Although

the reason for this difference is unclear, it may be related to the fact that a lower proportion of males than of females in these age groups are without spouses because of the greater longevity of females. As shown in Table 8, approximately 73 percent of the functionally impaired males living in the community were married as opposed to about 28 percent of the functionally impaired females. The data in Table 9, which will be discussed later in more detail, lends further support to this supposition. It is shown that 40 percent of the functionally impaired females lived alone and only 14 percent of the functionally impaired males lived alone. Thus, a functional limitation may not be as apparent to males whose spouses are available to provide needed support. Widowed females, however, may be more aware of a functional limitation because of the extra effort involved in obtaining care from someone outside their own household.

The most noteworthy finding with respect to ADL limitations appears to be the reliance on the use of special equipment. The use of special equipment, with or without personal help, ranged from 1 percent of those functionally limited in feeding themselves to about 36 percent of those who could not get around the house without some assistance. For four of the ADL's—getting in or out of bed, getting around inside, bathing, and getting to the bathroom or using the toilet—the use of special equipment only (i.e. without personal assistance) in the performance of these activities was the most frequent form of assistance used. This is the first time that the data highlight the importance of access to and use of special equipment by functionally impaired persons to facilitate continued stay in the community. With the exception of bathing and getting to the bathroom or using the toilet, a combination of special equipment and personal help was the next most frequent form of assistance used. For eating and dressing, the most

frequent form of assistance used was personal help only. The use of special equipment may be underestimated for eating and dressing, however, because what was defined as special equipment may not have been perceived as such by the respondents. For example, the use of a partitioned dinner plate or the use of snap fasteners or velcro strips on clothing may not have been reported because the wide commercial availability of these items in retail outlets may decrease the perception of these as being special equipment. A wheelchair, on the other hand, is more likely to be considered special equipment because its need is often associated with a severe degree of limitation in mobility, and it is usually acquired in specialized retail outlets.

Data on the number of IADL limitations reported are presented in Table 5. The IADL's are those activities in the home and community that enable a person to live alone. They include the following:

- Heavy housework.
- Light housework.
- Laundry.
- Preparing meals.
- Shopping for groceries.
- Getting around outside.
- Going places outside of walking distance.
- Managing money.
- Making telephone calls.
- Taking one's own medicine.

In designing the conceptual framework for these items, an effort was made to remove role or lifestyle implications from this series. For example, if individuals responded that they did not usually perform an activity, they were then asked if they could do it if they had to. Thus, the possible bias in response caused by males who said that they did not do housework because their wives perform this function was, in theory, reduced. Similarly, the

Table 2
Percent distribution of functionally impaired elderly persons reporting limitations in activities of daily living, by number of limitations, age, sex, and race: 1982

Age, sex, and race	Total persons	Number of limitations reported							
		0	1	2	3	4	5	6	7
		Percent distribution							
Total	100.0	33.3	22.7	14.9	9.8	7.4	6.0	3.8	2.1
Age									
65-69 years	100.0	39.2	22.6	13.5	8.2	7.0	5.1	2.5	1.8
70-74 years	100.0	37.6	23.4	13.5	7.9	6.3	6.4	3.7	1.2
75-79 years	100.0	34.3	23.1	13.5	10.3	7.1	5.7	4.2	1.8
80-84 years	100.0	30.4	22.5	16.8	9.9	7.3	6.1	4.5	2.5
85 years or over	100.0	22.1	21.6	18.3	13.4	9.5	7.1	4.4	3.5
Sex									
Male	100.0	37.5	22.9	11.9	8.4	7.4	6.4	3.6	1.9
Female	100.0	30.9	22.6	16.7	10.6	7.4	5.8	3.9	2.2
Race									
White	100.0	33.0	23.3	14.7	10.2	7.1	6.1	3.8	1.9
Black	100.0	35.2	18.2	16.9	7.4	9.4	5.6	3.6	3.8

possible response bias would be reduced for females who said that they did not manage their own money because their husbands or children did.

Unlike ADL limitations, where only one-third of the persons with functional limitations reported one or more ADL problems, about 90 percent reported having at least one IADL limitation. Males reported having no IADL limitations (13 percent) more often than females (9 percent). This more closely reflected the pattern among white persons but not among black persons. For both races, however, a smaller percent of males than of females reported three to seven IADL limitations. Again, this pattern may be attributable to the fact that there are fewer aged widowed males than females. Males may be underreporting IADL limitations because a spouse is available to provide support. Males with eight or more IADL limitations may be remaining in the community because their spouses are available to provide support.

Data on the type of IADL limitations found among

the elderly living in the community are shown in Table 6. In decreasing frequency, doing heavy work like moving furniture or washing walls, shopping for groceries, going places outside walking distance, and doing laundry were the most commonly reported problems; all were reported by at least 40 percent of those surveyed. Doing laundry, doing light work like dusting and straightening up, and preparing meals were reported as problems more often for males than for females. This is likely to be a result of a rôle bias for men who do not usually perform such tasks. Similarly, shopping for groceries and going places outside of walking distance were reported as problems more often for females than for males, which may be because females in these age groups frequently do not drive. The IADL's were reported as problems at very much the same rates for black persons and for white persons. Black females reported managing money, taking medicine, and making telephone calls as problems more often than white females, however.

Table 3

Percent distribution of functionally impaired elderly persons reporting limitations in activities of daily living, by type of activity, degree of limitation, age, sex, and race: 1982

Activity, age, sex, and race	Total persons	Degree of limitation				
		No assistance	Special equipment only	Personal help only	Special equipment and personal help	Completely dependent
Bathing						
Percent distribution						
Total	100.0	57.9	14.3	13.7	8.4	5.7
Age:						
65-69 years	100.0	66.4	12.2	11.0	6.4	4.0
70-74 years	100.0	62.4	13.7	11.6	7.8	4.5
75-79 years	100.0	58.5	14.5	12.6	7.8	6.5
80-84 years	100.0	52.4	16.7	15.1	9.5	6.3
85 years or over	100.0	46.8	15.0	19.4	11.0	7.8
Sex:						
Male	100.0	62.1	10.5	13.7	9.6	4.1
Female	100.0	55.6	16.4	13.7	7.6	6.6
Race:						
White	100.0	57.0	15.2	13.1	8.7	6.0
Black	100.0	64.2	8.1	17.7	6.1	3.9
Dressing						
Total	100.0	80.5	1.3	15.2	1.0	2.1
Age:						
65-69 years	100.0	80.8	1.4	15.2	1.0	1.5
70-74 years	100.0	82.3	1.2	13.3	1.0	2.3
75-79 years	100.0	79.9	2.0	15.4	(¹)	1.9
80-84 years	100.0	80.8	1.3	15.3	1.0	1.5
85 years or over	100.0	78.1	(¹)	16.9	1.2	3.2
Sex:						
Male	100.0	78.0	(¹)	18.0	1.0	2.2
Female	100.0	81.9	1.6	13.6	1.0	2.0
Race:						
White	100.0	81.0	1.3	14.7	1.0	2.0
Black	100.0	77.2	1.0	18.3	(¹)	2.7

See footnote at end of table.

Table 3—Continued

Percent distribution of functionally impaired elderly persons reporting limitations in activities of daily living, by type of activity, degree of limitation, age, sex, and race: 1982

Activity, age, sex, and race	Total persons	Degree of limitation				
		No assistance	Special equipment only	Personal help only	Special equipment and personal help	Completely dependent
Getting to the bathroom or using toilet						
Percent distribution						
Total	100.0	79.1	10.1	4.1	4.5	2.1
Age:						
65-69 years	100.0	84.2	6.1	4.2	3.7	1.7
70-74 years	100.0	81.6	9.3	3.8	3.8	1.5
75-79 years	100.0	80.3	9.7	3.2	4.7	2.2
80-84 years	100.0	77.4	11.2	4.7	4.7	2.0
85 years or over	100.0	70.2	15.6	4.9	5.7	3.5
Sex:						
Male	100.0	85.4	7.2	(¹)	4.1	2.4
Female	100.0	77.3	11.9	4.1	4.7	2.0
Race:						
White	100.0	79.1	10.5	4.0	4.5	2.0
Black	100.0	79.5	7.8	5.3	4.3	3.1
Getting in or out of bed						
Total	100.0	74.0	13.5	4.6	7.0	(¹)
Age:						
65-69 years	100.0	76.2	11.2	5.2	6.6	(¹)
70-74 years	100.0	76.2	13.2	4.2	6.1	(¹)
75-79 years	100.0	74.5	12.9	4.5	7.3	(¹)
80-84 years	100.0	73.6	14.8	3.9	7.1	(¹)
85 years or over	100.0	68.5	16.3	5.3	8.2	1.7
Sex:						
Male	100.0	75.3	18.2	4.2	7.1	(¹)
Female	100.0	73.3	14.1	4.9	7.0	(¹)
Race:						
White	100.0	73.8	13.4	4.4	6.9	(¹)
Black	100.0	72.2	14.1	5.5	7.6	(¹)
Getting around inside						
Total	100.0	59.9	28.1	3.1	8.2	(¹)
Age:						
65-69 years	100.0	67.6	21.8	3.2	7.0	(¹)
70-74 years	100.0	64.5	25.1	2.5	7.4	(¹)
75-79 years	100.0	61.0	27.6	3.0	7.9	(¹)
80-84 years	100.0	56.0	31.5	3.0	8.4	1.1
85 years or over	100.0	47.5	37.1	3.7	10.9	(¹)

See footnote at end of table.

Table 3—Continued

Percent distribution of functionally impaired elderly persons reporting limitations in activities of daily living, by type of activity, degree of limitation, age, sex, and race: 1982

Activity, age, sex, and race	Total persons	Degree of limitation				
		No assistance	Special equipment only	Personal help only	Special equipment and personal help	Completely dependent
Getting around inside		Percent distribution				
Sex:						
Male	100.0	61.4	27.7	2.3	7.8	(¹)
Female	100.0	59.1	28.4	3.5	8.4	(¹)
Race:						
White	100.0	60.5	27.7	2.9	8.3	(¹)
Black	100.0	55.9	30.8	4.0	7.9	1.3
Eating						
Total	100.0	94.0	(¹)	4.5	(¹)	(¹)
Age:						
65-69 years	100.0	94.1	(¹)	4.4	(¹)	(¹)
70-74 years	100.0	95.7	(¹)	2.9	(¹)	(¹)
75-79 years	100.0	94.7	(¹)	4.4	(¹)	(¹)
80-84 years	100.0	93.9	(¹)	4.9	(¹)	0.0
85 years or over	100.0	91.1	(¹)	6.5	1.2	(¹)
Sex:						
Male	100.0	93.0	(¹)	5.3	(¹)	(¹)
Female	100.0	94.5	(¹)	4.1	(¹)	(¹)
Race:						
White	100.0	94.2	(¹)	4.3	(¹)	(¹)
Black	100.0	92.6	(¹)	6.3	(¹)	(¹)

¹ Less than 1 percent.

Table 4

Percent distribution of functionally impaired elderly persons reporting continence problems as an activities of daily living limitation, by age, sex, and race: 1982

Age, sex, and race	Total persons	Continence problems	None
Percent distribution			
Total	100.0	24.2	75.8
Age			
65-69 years	100.0	23.5	76.6
70-74 years	100.0	23.8	76.2
75-79 years	100.0	24.4	75.6
80-84 years	100.0	23.8	76.3
85 years or over	100.0	25.9	74.1
Sex			
Male	100.0	20.7	79.3
Female	100.0	26.2	73.8
Race			
White	100.0	23.6	76.4
Black	100.0	28.7	71.3

Impairment of cognitive functioning

Another important indicator of whether individuals can function in the community is the degree of cognitive functioning they possess. Cognitive functioning refers to individuals' awareness of time and place, including personal information like age and date of birth, awareness of events outside their own area of personal interaction both currently and in the recent past, and ability to maintain a reasonable attention span. The degree of cognitive functioning shown in Table 7 was measured by asking sample persons a battery of 10 questions known as the Short Portable Mental Status Questionnaire. The degree of impairment was rated in the following manner:

- No impairment was perceived if the respondent answered the questions with only one or no errors.
- Minor impairment indicates that between two and four questions were answered incorrectly.
- Moderate impairment indicates that between five and seven questions were answered incorrectly.
- Severe impairment indicates that eight or more questions were answered incorrectly.

Table 5
Percent distribution of functionally impaired elderly persons reporting limitations in instrumental activities of daily living, by number of limitations, age, sex, and race: 1982

Age, sex, and race	Number of limitations reported										
	0	1	2	3	4	5	6	7	8	9	10
Total persons	100.0	10.5	12.9	12.2	12.3	12.0	9.2	6.7	7.1	6.5	3.5
Age											
65-69 years	100.0	16.9	14.1	11.3	8.9	7.7	5.0	4.9	6.0	4.1	2.6
70-74 years	100.0	13.5	13.6	13.2	11.8	8.1	6.3	6.0	5.5	3.8	2.6
75-79 years	100.0	9.5	13.5	12.6	12.7	9.1	6.8	7.1	5.9	5.9	3.6
80-84 years	100.0	6.6	10.5	12.1	13.4	13.0	6.8	8.4	8.2	7.1	4.2
85 years or over	100.0	3.9	6.8	11.1	14.0	12.3	8.5	10.5	10.5	12.9	4.9
Sex											
Male	100.0	13.3	12.4	9.3	8.5	8.0	6.5	7.2	9.2	7.3	4.2
Female	100.0	8.9	12.1	14.0	13.9	9.9	6.7	7.3	5.9	6.1	3.1
Race											
White	100.0	10.8	12.1	12.6	12.5	9.1	6.6	6.8	6.9	6.3	3.3
Black	100.0	8.7	11.6	10.2	7.9	10.3	6.4	10.2	8.3	8.4	5.3

If the interview was conducted with a proxy, these items were skipped. As noted earlier, proxies accounted for about 26 percent of the interviews. Thus, no clear inferences can be drawn on the probable distribution of sources if the mental status questionnaire were administered to all sample persons.

At all age intervals, except for the interval 85 years of age or over, more than one-half of all persons had no impairment of cognitive functioning. The percent with no cognitive impairment decreased with age, from 68 percent at 65-69 years of age to 47 percent among those 85 years of age or over. The percent of functionally impaired persons with moderate and severe cognitive impairment increased notably after 75 years of age. The data appear to suggest that retention of cognitive functioning enables better coping with functional limitations. The combined effects of decreased cognitive functioning and increased functional limitations, both of which generally increase with age, increase dependency and the likelihood of nursing home placement.

Males and females in the community showed similar patterns of cognitive functioning. There were notable differences by race in the pattern of impairment in cognitive functioning in the community. For white persons, 62 percent of the sample persons had no cognitive impairment and 32 percent had minor problems. For black persons, only 38 percent of the

sample persons had no cognitive functioning problems and 46 percent had minor problems. Moderate cognitive impairment was present for about 5 percent of white persons and 14 percent of black persons. This difference may be attributable to several factors. As was shown earlier, black persons reported ADL and IADL problems more often than white persons, so differences in cognitive functioning may be related to poorer health. Differences in educational attainment may also be partly responsible for the difference in cognitive functioning. Data not presented separately show that for black persons 65-69 years of age the distribution of cognitive functioning problems is similar to that of white persons, and this may reflect increased educational attainment for persons at the lower age intervals. It may be that a further narrowing of such differences will occur as younger cohorts of black persons age.

Socioeconomic characteristics

This section presents data on the socioeconomic characteristics of functionally disabled persons in the community. Factors such as marital status, type of living arrangement, type of living quarters, and income may provide an environment that is conducive to allowing a functionally impaired individual to remain in the community.

Table 6

Percent of functionally impaired elderly persons reporting limitations in instrumental activities of daily living, by type of limitation, age, sex, and race: 1982

Age, sex, and race	Type of limitation reported								
	Heavy work	Light work	Laundry	Preparing meals	Shopping for groceries	Getting around outside	Going places outside walking distance	Managing money	Taking medicine
Total	73.9	22.9	40.7	30.1	57.3	8.9	46.5	25.7	23.6
Age					Percent				
65-69 years	70.0	19.3	32.3	22.9	44.9	6.3	36.5	17.6	18.0
70-74 years	72.6	20.2	36.4	24.5	50.0	8.5	40.1	18.9	18.9
75-79 years	73.6	21.9	38.3	28.8	57.0	7.6	47.3	24.6	23.3
80-84 years	74.3	23.7	44.8	32.8	62.1	10.1	53.4	30.5	26.4
85 years or over	80.3	31.3	55.2	44.7	77.1	13.2	59.0	40.6	33.9
Sex									
Male	71.7	29.3	43.8	36.0	50.7	6.8	36.8	26.7	28.4
Female	75.1	19.4	39.0	26.8	61.1	10.2	51.9	25.2	20.9
Race									
White	74.7	22.8	40.4	29.7	57.8	9.0	46.8	25.2	23.2
Black	76.6	26.6	47.6	36.4	60.3	10.1	49.0	32.6	29.2

Table 7
Percent distribution of functionally impaired elderly persons reporting impairment in cognitive functioning, by degree of impairment, age, sex, and race: 1982

Age, sex, and race	Total persons ¹	None	Minor	Moderate	Severe
		Percent distribution			
Total	100.0	58.6	34.3	6.3	(²)
Age					
65-69 years	100.0	67.7	29.2	3.0	(²)
70-74 years	100.0	61.7	34.2	3.4	(²)
75-79 years	100.0	57.1	35.1	6.8	1.0
80-84 years	100.0	51.7	38.6	9.0	(²)
85 years or over	100.0	47.4	36.9	13.5	2.2
Sex					
Male	100.0	61.5	31.5	6.3	(²)
Female	100.0	57.1	35.7	6.3	(²)
Race					
White	100.0	61.5	32.5	5.3	(²)
Black	100.0	38.3	46.3	13.6	1.8

¹Total does not include responses by proxies.

²Less than 1 percent.

Marital status

Data on the marital status of functionally impaired elderly persons in the community are presented in Table 8. Persons classified as not married were either widowed, divorced, separated, or never married on the date of interview. The percent of married persons decreased at each age interval. The decrease was steady over the first four intervals, and then it dropped sharply to 20 percent for persons 85 years of age or over. The largest and most notable change over all age intervals was for females. More than one-half were not married by 65-69 years of age, and slightly more than 92 percent were not married by 85 years of age or over. In contrast, only about 19 percent of males were not married by 65-69 years of age, and almost one-half were still married by 85 years of age or over. By race, the percent of married persons was greater for white persons than for black persons at all age intervals except 85 years of age or over, where the percent was greater for black persons.

Marital status may be an important determinant of whether a functionally impaired person may be maintained in the community. As noted, more males had spouses at each age interval than did females. The fact that a spouse is available for support may contribute to the lower prevalence of ADL problems reported by men (Table 2). A male whose spouse is available to help with ADL's may not perceive himself as having an ADL limitation. A readily available source of support, a spouse can provide the help with ADL's or IADL's that may not be otherwise provided in a community setting if paid help is the only alternative. A functionally impaired female may be placed in a nursing home because there is no source of support available in her own household and paid help is the only alternative.

Table 8

Percent distribution of functionally impaired elderly persons, by marital status, age, sex, and race: 1982

Age, sex, and race	Total persons	Married	Not married
		Percent distribution	
Total	100.0	43.8	56.2
Age			
65-69 years	100.0	61.8	38.2
70-74 years	100.0	54.7	45.3
75-79 years	100.0	43.9	56.1
80-84 years	100.0	31.9	68.1
85 years or over	100.0	19.8	80.2
Sex			
Male	100.0	72.6	27.4
Female	100.0	27.6	72.4
Race			
White	100.0	45.2	54.8
Black	100.0	34.2	65.9

Living arrangement

Data on the living arrangement in the household in which the sample person lived is shown in Table 9. The data provide information on whether the sample person lived alone, with a spouse, with children, with other relatives, or with nonrelatives. The data presented are not intended to show that the sample person was the householder in all cases.

The majority of functionally impaired persons lived either by themselves or with a spouse only. The percent of individuals living by themselves increased with age, from 22 percent for persons 65-69 years of age to 36 percent for persons 80 years of age or over, probably reflecting increased widowhood. The percent of sample persons living with spouse only decreased

from 49 percent for persons 65-69 years to 14 percent for those 85 years of age or over. The next category for which there was a noticeable difference by age was living with a son or daughter. This occurred more frequently as age increased, from 9 percent for persons 65-69 to 34 percent for those 85 years of age or over.

The majority of black persons and white persons lived either by themselves or with a spouse. Black persons, however, seemed to draw on a more extended range of relationships in their living arrangement than white persons did. About two-thirds of the white persons lived alone or with a spouse only compared with only about one-half of the black persons.

Nearly 71 percent of males lived with a spouse, but only about 27 percent of females lived with a spouse. The more common living arrangement for females was living alone (40 percent). Living with children was more common among females (23 percent) than among males (8 percent).

Living quarters

Data on type of living quarters occupied by functionally impaired aged persons are presented in Table 10. In Table 10, "House" refers to detached, duplex, or row houses. "Rented room" refers to a room in a rooming or boarding house, in a hotel or motel, or to a rented room in a private house. "Other" includes permanent or mobile trailers and any other type of living quarters not classified separately. Shown in this table is the percent distribution of persons by living quarters only, not by ownership status. The data does not show whether the

house was owned by the sample person, by a family member, or whether it was rented; conversely, there is no indication that an apartment may have been owned as a condominium.

Across all age, race, and sex classifications, the majority of persons lived in houses. A higher percent of males than of females lived in houses, about 79 and 72 percent, respectively. A higher percent of females than of males lived in apartments, 22 percent compared with about 13 percent. Although not shown here, the increasing percent of males who lived in apartments at each age interval may reflect increasing widowhood among them as they age. When the spouse dies, the individual is likely to move to smaller, more manageable living quarters.

Widowhood among females may already be reflected in their living arrangement, however. More females are already in apartments because more are alone in all age intervals under consideration. There were no large differences by race.

Data are presented on the special features that functionally impaired persons have in their homes in Table 11. To a large extent, these features are used to increase mobility. Percents are calculated over the total number of persons included in each age, race, and sex classification. An individual may have responded to more than one of the first six items listed, but only one entry was allowed if the response was "None."

About one-quarter of the males and about one-third of the females had special features that support mobility. Of the special features reported, extra hand rails or grab bars were reported most often. These were reported by about 19 percent of males and by about 23 percent of females.

Table 9
Percent distribution of functionally impaired elderly persons, by type of living arrangement, age, race, and sex: 1982

Age, race, and sex	Total persons	Type of living arrangement						
		Live alone	Live with spouse only	Live with spouse and other relatives	Live with son or daughter	Live with other relatives	Live with an employee	Live with non-relative
Total	100.0	30.6	35.6	6.9	17.6	6.7	(¹)	1.9
Age								
65-69 years	100.0	22.4	49.4	11.5	8.5	6.7	(¹)	1.2
70-74 years	100.0	28.4	45.3	7.7	10.4	6.1	(¹)	1.9
75-79 years	100.0	32.1	36.4	6.1	16.7	5.8	(¹)	2.3
80-84 years	100.0	36.1	26.6	4.3	22.1	8.3	(¹)	1.8
85 years or over	100.0	36.2	14.4	3.9	34.3	7.1	1.8	2.3
Race								
White	100.0	31.0	37.4	6.6	16.9	5.8	(¹)	1.5
Black	100.0	28.2	22.7	9.6	22.3	13.1	—	4.2
Sex								
Male	100.0	13.9	58.2	12.8	8.2	4.6	(¹)	1.9
Female	100.0	40.0	22.9	3.7	22.9	7.9	(¹)	1.9

¹ Less than 1 percent.

Table 10

Percent distribution of functionally impaired elderly persons, by type of living quarters, age, sex, and race: 1982

Age, sex, and race	Total persons	Type of living quarters			
		House	Apartment	Rented room	Other
Total	100.0	74.3	18.4	(¹)	6.7
Percent distribution					
Age					
65-69 years	100.0	76.8	14.8	(¹)	7.7
70-74 years	100.0	73.8	18.3	(¹)	7.6
75-79 years	100.0	73.7	18.8	(¹)	7.3
80-84 years	100.0	74.0	20.5	(¹)	4.9
85 years or over	100.0	72.8	20.6	1.9	4.8
Sex					
Male	100.0	79.0	12.7	(¹)	7.5
Female	100.0	71.7	21.6	(¹)	6.1
Race					
White	100.0	73.5	18.4	(¹)	7.4
Black	100.0	79.7	18.6	(¹)	(¹)

¹ Less than .1 percent.

Table 11

Percent of functionally impaired elderly persons, by special features in the homes, age, sex, and race: 1982

Age, sex, and race	Special feature						
	Extra handrails or grab bars	Ramps	Elevators or stair lifts	Extra wide doors or hallways	Push bars on doors	Raised toilet	None
Total	21.8	3.6	3.6	4.4	1.0	5.7	69.9
Percent							
Age							
65-69 years	17.3	3.5	2.5	3.7	(¹)	4.3	74.4
70-74 years	20.6	3.8	4.2	4.1	1.0	5.2	71.0
75-79 years	22.9	4.2	3.6	4.5	1.1	5.4	69.1
80-84 years	24.4	3.5	4.0	5.3	1.5	6.5	66.7
85 years or over	24.7	3.1	3.8	4.8	(¹)	7.5	66.9
Sex							
Male	19.3	3.3	2.4	3.8	1.0	3.5	74.4
Female	23.2	3.8	4.3	4.8	1.1	6.8	68.0
Race							
White	23.3	4.0	3.8	4.7	1.1	6.3	69.1
Black	11.9	26.4	2.1	2.9	(¹)	1.9	74.9

¹ Less than 1 percent.

NOTE: Sum of items is greater than 100.0 percent because more than one feature may be present in home.

All persons were asked which additional features would make things easier or more comfortable for them. Data on the features that would make things easier or more comfortable if there were no special features reported in the residence are presented in Table 12. The response most often given (about 69 percent) was "None." Of the special features identified, about one-fifth cited extra handrails or grab bars as potentially being the most helpful. The next most often reported feature (about 7 percent) was a raised toilet.

The data from Table 12 indicate that only a few of the special features in the home were felt to make things easier for persons. This may mean one of two things: either individuals are not aware of the advantages of special features in the home and how to obtain them, or their problems are not severe enough that special features are perceived as useful. If individuals do not have any of the features in their homes, they may have adapted to what is there, e.g., by holding onto walls for support or by relying on someone else to get things from another floor of the

home. Thus, they may not be aware of the advantages offered by special adaptations to the home. A review of the data in Table 3, however, shows that most functionally impaired persons did not have severe mobility problems. Persons in the community may remain there not because of adaptations to the home but because the problems are not severe enough to require adaptations to the home.

Income

Data on family income, which includes the income of the sample persons and all members of the family

living with them, are presented in Table 13. Income of unrelated persons living with the sample person was not included. Income was asked for the 12 months prior to interview and included wages and salary, net income from a business or farm, pensions, dividends, interest, net income from rent, social security payments, and any other money income such as welfare.

At the time of the 1982 Survey, 60 percent of functionally impaired aged persons and their families had total family incomes of less than \$10,000. In contrast, only 25 percent of all households headed by an aged person reported family income of less than

Table 12
Percent of functionally impaired elderly persons, by special features that would facilitate performing activities of daily living or instrumental activities of daily living, age, sex, and race: 1982

Age, sex, and race	Special feature						
	Extra handrails or grab bars	Ramps	Elevators or stair lifts	Extra wide doors or hallways	Push bars on doors	Raised toilet	None
Total	22.8	3.0	3.5	1.5	1.7	7.3	69.4
Age				Percent			
65-69 years	21.4	2.4	3.1	1.8	2.1	6.9	71.3
70-74 years	23.6	3.6	3.3	1.9	1.8	7.4	68.5
75-79 years	24.0	2.5	3.6	1.3	1.3	7.4	69.0
80-84 years	22.1	3.0	3.6	1.1	1.2	7.1	69.8
85 years or over	23.1	3.6	4.0	1.0	2.0	7.7	67.9
Sex							
Male	20.8	3.2	2.9	2.9	1.7	5.8	73.1
Female	22.2	2.7	3.6	1.3	1.6	7.6	62.0
Race							
White	21.4	2.7	3.2	1.3	1.4	6.9	72.2
Black	32.9	5.0	5.6	2.7	3.8	10.3	59.0

NOTE: Sum of items is greater than 100.0 percent because more than one feature may be needed.

Table 13
Percent distribution of functionally impaired elderly persons, by income of the elderly and their families who live with them, age, sex, and race: 1982

Age, sex, and race	Total persons	Percent distribution				
		Less than \$3,000	\$3,000 to \$6,999	\$7,000 to \$9,999	\$10,000 to \$19,999	\$20,000 or more
Total	100.0	3.6	36.5	20.2	26.8	12.9
Age						
65-69 years	100.0	1.8	31.7	20.0	34.5	11.9
70-74 years	100.0	2.8	36.6	21.5	29.5	9.6
75-79 years	100.0	5.2	39.3	20.2	22.4	13.0
80-84 years	100.0	3.7	39.5	19.6	23.1	14.1
85 years or over	100.0	5.2	36.4	19.2	22.0	17.3
Sex						
Male	100.0	1.5	29.2	23.1	32.8	13.3
Female	100.0	4.9	40.9	18.4	23.2	12.6
Race						
White	100.0	3.1	34.1	20.6	28.1	14.1
Black	100.0	7.4	53.5	17.2	17.5	4.5

\$10,000 (U.S. Bureau of the Census, 1984b). The comparable percent for incomes under \$20,000 were 87 percent and 62 percent, respectively. Thus, the functionally impaired elderly in 1982 were living under more straitened financial circumstances than the aged in general.

Summary and conclusions

Slightly more than 5 million persons, or 19 percent of the total aged Medicare population, were functionally impaired and living in the community in 1982. Relative to the total aged population, they were older, more of them were female, more were black, and they lived in more financially straitened circumstances.

Functional impairments increased with age and multiple impairments increased notably after 75 years of age. The maintenance of cognitive functioning ability despite increasing functional impairment appears related to continued maintenance in the community. Cognitive functioning among functionally impaired persons in the community was found to be relatively intact until 85 years of age or over. Only at that age bracket did more than 10 percent of the functionally impaired persons show moderate to severe impairment in cognitive functioning. The combined effects of functional impairments in key areas of daily living and impaired cognitive functioning appear to provide a strong impetus toward the need for full-time nursing home care. About 20 percent of persons 85 years of age or over were in nursing homes and about 35 percent of persons aged 85 years of age or over who were living in the community were functionally impaired.

The data indicate a pattern of progression in impairments in the capacity to carry out the functions of daily living. The progression seems to be one that moves from an inability to perform heavy work or carry out activities related to social functioning outside the home to increasing impairments in the ability to carry out activities inside the home, and eventually to impairments in caring for one's self. Three-fourths of the functionally impaired elderly persons reported difficulty with doing heavy work around the house and about one-half had problems with shopping for groceries and going places outside walking distance. These suggest an initial contraction in the range of activities involving the acquisition of goods and services outside the household followed by a decline in the ability to manage one's household and in the ability to live alone. About 30 percent of the functionally impaired elderly reported problems in one or more of the following activities which point to a diminishing ability to live alone:

- Preparing meals.
- Managing money.
- Taking medicine.
- Doing light work around the house.
- Making telephone calls.
- Getting around outside in one's own yard.

The 1982 Long-Term Care Survey confirmed earlier findings that, among persons with impairments in the ability to perform activities of daily living (ADL's), most have problems in bathing and fewest in eating. Males tended to report the absence of ADL limitations more frequently than females. This may be attributable to the fact that a smaller percent of males than of females lived alone. In fact, 71 percent of the functionally impaired males still lived with their spouses compared with only 27 percent of the females. This suggests that functional limitations in ADL's may not be as apparent to males whose spouses are available to provide needed support. Females living alone may be more aware of functional limitations in ADL's because of the effort required to obtain care from someone outside their own household.

Race differences were found in the distribution of functional limitations. A higher proportion of black persons than of white persons showed ADL impairments at each age. The data also suggest that the onset of ADL limitations begin to appear at younger ages among black persons. In addition to the higher prevalence of ADL limitations among black persons, they showed greater prevalence of impairment in cognitive functioning.

The fact that a higher proportion of black persons were functionally and cognitively impaired and remained in the community is of interest. The data suggest the use of a more extended support system among black persons than among white persons. Although the proportion of white persons living with a spouse was greater than for black persons, the proportion of black persons living with children, other relatives, or nonrelatives was much higher.

The data, however, generally point to the continued viability of filial and kinship ties as a source of help to functionally impaired persons. Among functionally impaired persons 80-84 years of age, 47 percent of the persons not living alone with a spouse were living with their children or other relatives. Similarly, among those 85 years of age or over, where the degree of functional impairment and the need for assistance were probably even greater, 52 percent were living with their children or other relatives. Thus, it is clear that there is a great reservoir of informal help based on kinship available to functionally impaired persons. One could speculate that programs that offer respite to caregivers might increase access to this source of community support.

Another significant finding of this study is the widespread use of special equipment to promote the performance of ADL's. It is unclear to what extent the greater use of special equipment would facilitate continued community residence of functionally impaired persons, but it does seem that this is an area in which greater public awareness should be promoted. This and the finding that children and relatives provide a significant reservoir of help and support to functionally impaired aged persons are probably the two areas to which future policies might be directed to mobilize forces to facilitate continued

stay in the community. As an example, some special equipment could be covered in whole or part under the Medicare program as an extension of the durable medical equipment benefit.

Data in this article show that functional and cognitive limitations increased with age. To the extent that cognitive functioning remains relatively unimpaired, large numbers of persons appear able to cope with functional limitations. Functional capacity in both spheres declines with age, so that by the time persons reach 85 years of age a greater proportion require nursing home care. Though 20 percent of these persons receive nursing home care, the vast majority do not (U.S. Bureau of the Census, 1984a). Respite care services to informal caregivers and the partial or complete coverage of special equipment under Medicare could be helpful in forestalling premature nursing home placement. It still needs to be recognized, however, that the joint progression of functional and cognitive impairments may reach the point where the community retention of the aged person can be achieved only at great financial, social, and physical costs. At the appropriate time, placement in a nursing home may be the most viable option.

To obtain further insights into the incidence and the progression of functional impairments among the aged, the 1984 LTC Survey followed up on the 1982 sample and incorporated persons who became 65 years of age in the interim and were found to be functionally impaired. This survey was designed with both a cross-sectional and a longitudinal component. The cross-sectional component included a sample of all functionally disabled persons 65 years of age or over as of April 1, 1984, whether living in the community or in institutions. The longitudinal component was a subset of the cross-sectional component and included all persons in the 1982 Survey, whether living in the community, in institutions, or deceased in 1984.

Data from the cross-sectional component should lend some insight into the prevalence of functional limitations at a point in time and will allow comparison of persons in the community and in institutions. Data from the longitudinal component should provide estimates of the incidence of functional and cognitive impairments of persons between 1982 and 1984. These data should provide

some basis for estimating the probability of transition from community-based living to institutionalization to death. A logical extension of this type of analysis would be to identify the combinations of ADL and cognitive functioning limitations, the degree of limitation, and accompanying social factors that are associated with institutionalization.

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